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MILITARY ENGINEER SERVICES

BANGLADESH ARMED FORCES



MES SCHEDULE OF RATES-2010

Published by
AHQ, E in C's Br, Wks Dte, Dhaka Cantt.
By the order of E in C

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Published by:
AHQ, E in C's Br, Wks Dte, Dhaka Cantt

Approved by

HAMEED-AL-HASAN,ndc
Major General
Engineer in Chief

May 2010

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MILITARY ENGINEER SERVICES

BANGLADESH ARMED FORCES



MES SCHEDULE OF RATES-2010

FOR

BUILDINGS, ROADS, LANDING GROUNDS, WATER,
ELECTRIC SUPPLY, GAS, AIR CONDITION, FIRE
FITTING & CHLORINATION PLANT, FURNITURE,
STORES AND SUB SOIL INVESTIGATIONS

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PREFACE

1. MES Schedule of Rates 2010 (RATES AND SPECIFICATIONS) has been prepared under instructions and guidance of Engineer in Chief, Army Headquarters, Dhaka Cantonment to replace existing booklets - MES Schedule of Rates 2007 and Schedule for the Rate list of Furniture & the Rate list of conveyance of materials 2007. Besides updating the price, incorporation of modern technology was also taken into consideration to revise the schedule. Accordingly some items have been added/omitted. MKS system of measurement has been used in most of the places. Necessary conversion tables and data have been incorporated for consultation and ready reference.
2. The rates will be valid only if specifications given in the Schedule are strictly followed. However, if it is necessary to deviate from specifications, prior approval of the respective DW & CEs will be required. In case of disputes regarding application of any rate, the decision of E in C shall be final.
3. The specifications and rates will be valid till a new replacement is done. The rates will be reviewed from time to time. DW & CEs will forward proposed amendments with necessary data and analysis on 1st of January and July each year to E in C's Branch, who will arrange pre-audit, approval and will issue amendments, if considered necessary.
4. Reproduction in part or whole of this Schedule by any individual, Department, Contractor or Firm, etc. is prohibited. This Schedule may, however, be used by any individual, department, etc. provided the Contract Agreement makes a clear mention that the contract has been based on MES Schedule of Rates 2010.
5. We thank MES officers and staff who have worked whole heartedly to revise this book. We also thank to the officers of Defence Audit who worked in close association with MES staff and given their valued opinion on this Schedule of Rates.
6. This schedule is supported by a programmed analysis of rates as per item of works.
7. Special thanks to E in C for his valuable guidelines to modernize the MES construction works and the furniture, who has also been kind enough to approve the MES Schedule of Rates 2010, which will be effective from 1st July 2010.

Dhaka Cantonment
June 2010

Director of Works
Works Directorate
E in C's Branch,
Army Headquarters

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AND ITS SPECIFICATION-2010

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SCHEDULE OF RATES & SPECIFICATION-2010

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AMENDMENT RECORD SHEET

MES SCHEDULE OF RATES - 2010

Amendment List		By whom Amended	Date of Insertion	Initials
Number	Date			
(a)	(b)	(c)	(d)	(e)

ABBREVIATIONS

ABBREVIATIONS	MEANING
AAMA	Architectural Aluminium Manufacturers Association
AC	Alternating Current
AV	Average
BDS	Bangladesh Standard
BS	British Standard
BG	Birmingham Gauge
B/Q	Bill or Bills of Quantities
°C	Degrees Centigrade
CFL	Compact Fluorescent Lamp
cm	Centimetre
CRP	Cold Rolled Pipe
CC	Cement Concrete
CG	Cord Grip
CI	Cast Iron
CM	Cement Mortar
CMES	Commander Military Engineer Services
mm	Millimetre
km	Kilometre

ABBREVIATIONS	MEANING
LPM	Litre per minute
mg	Milligram
gm	Gram
kg	Kilogram
PCC	Plain Cement Concrete
RCC	Reinforced Cement Concrete
SDB	Sub-Distribution Board
S/F	Supply & Fixing
SDO	Sub-divisional Officer
SO	Supplied only
SP	Single Pole
SPT	Standard Penetration Test
STA	Steel Tape Armoured
T&P	Tools and Plant
TP	Triple Pole
X	Ten
XLPE	Cross Linked Poly Ethylene
Pint	Pint
cu.cm	Cubic Centimetre

ABBREVIATIONS	MEANING
cu.m	Cubic metre
M.Nos	Thousand Nos
MCB	Miniature circuit breaker
MCCB	Moulded case circuit breaker
MOCB	Minimum oil circuit breaker
MDB	Main distribution board
C.Nos	Hundred numbers
Dia	Diameter
DC	Direct current
DOL	Direct on line
DP	Double pole
DPC	Damp Proof Course
Drg	Drawing
E in C	Engineer in Chief
exc.	Exceeding
EHT	Extra-High Tension
ES	Edision Screw Cap
ET	Electric Thread
GE	Garrison Engineer

ABBREVIATIONS	MEANING
GI	Galvanized Iron
SWG	Standard wire gauge
VCB	Vacuum circuit breaker
HD	Hard Drawn
HT	High Tension
RH	Relative Humidity
TPN	Triple Pole and Neutral
TR	Ton Refrigeration
sq. mm	Square millimetre
sq. cm	Square centimetre
sq. m	Square metre
IC	Iron Clad
IEE	Institute of Electrical Engineers
MES	Military Engineer Services
MGO	Master General of ordnance
MB	Measurement Book (BAFW-2261)
MOD	Ministry of Defence
LBS	Load break switch
MS	Mild Steel

ABBREVIATIONS	MEANING
M & S	Manufacture and supply
n.exc	Not exceeding
PFI	Power factor improvement
MDF	Medium density fibre
PILC	Paper insulated and Lead covered
PVC	Polyvinyl Chloride
Wg	Water grain

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CHAPTER – I

BUILDING AND ROAD WORKS

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CHAPTER – I
BUILDING & ROADS
GENERAL RULES

General

1. Where alternative materials, processes, etc are specified the selection will depend on local conditions and discretion rests with the GE/Engineer-in-charge.
2. **Approved, Directed, Ordered.** Means the approval, etc. of the GE / Engineer-in-charge, unless otherwise stated.
3. **Carriage.** Implies conveyance by any reasonable means over any negotiable surface and includes load, unload, re-load, etc.
4. **Component Parts.** The component parts of this Schedule (the Specifications, method of Measurements, Clarification or Rates, etc.) shall be read together.
5. **Definitions.**
 - a. **Ditto** wherever used in this schedule includes the whole of the work described in detail in the preceding item, but with such modifications as may be specifically mentioned.
 - b. **Materials and Labour** includes the supply of all materials, including lead for any distance, labour and workmanship necessary for the complete execution of the item as described, together with the use of all tools, plant, scaffolding and appliances that may be required.
 - c. **Labour only or Except Materials** are to be understood as including the performance of all labour necessary for the proper carrying out of the particular service, complete together with the provision and use, without extra charge, of all tools, plants, scaffolding and appliances required.

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d. **Except Bricks, Except Cement,** etc. include all necessary labour, plant, etc., as described in the foregoing clause, and in addition, all materials required except those specifically exempted.

e. **Fixing, Fixing only, Laying only and Setting only** include the performance of all labour necessary for the proper execution of the items as described together with the provision and use, without extra charge, of all tools, plant, scaffolding, and appliances required. In addition to the foregoing, they also include provision, including lead for any distance. Without extra charge of all materials subsidiary to and not supplied as part of the principal material but necessary for the execution of the work, e.g., nails, screws, glue, packing pieces, jointing and bedding materials and the like.

f. **Fixing only in Repairs Add to if Fixed in R/R** similarly includes all labour and subsidiary material required in fixing and in addition all necessary labour, plant, tools, etc., that may be required for taking out the old materials and removing to store. These rates include obtaining access by raising covers to fittings etc., and replacing them, breaking up large trusses, etc., into parts and, where applicable, painting one coat paint on new wood work of all and such like.

g. **Stores** used in connection with the supply of materials, or the disposal of old materials shall be held to mean any MES store or place of deposit within the area of the contract. In cases where out stations are included under a main contract, the "Store" is to be understood as referring to the MES store at that out station for all work so executed.

6. **Rates.** The term Rates used in this schedule shall imply rates in this schedule and or contract rates based on this schedule of rates.

7. **Equal and Approved.** Where specific materials, processes, etc., are specified, the Engineer-in-Charge is at liberty to approve and accept suitable alternatives if the original is not available. This discretion does not rest with the contractor, and the necessary adjustments in price will be made under the appropriate sections of the schedule.

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8. **Full Provision.** The contract rates will include every allowance necessary, without extra measurement or charge, for any or all of the following matters :

- a. **Bad Work.** Remedy and make good all defective or bad work to the satisfaction of the GE/Engineer-in-charge.
- b. **Complete work.** Materials, labour, tools, plant, machinery, wages, overhead charges (Business expenses which are indirect cost like rent, site office, mobilization, salary of staff, depreciation cost of equipment / machine / tools / plants, insurance, managerial / engineering services etc.) profit, carriage, delivery, erection, laying, fixing, VAT, taxes, royalties, etc.
- c. **Contract Documents.** Full compliance with all matters in the contract documents including Schedules, Specifications, Drawings, particular specification, etc.
- d. **Curved Work etc.** Work of any quantity, size or shape whether level, inclined, straight, curved, battered, etc.
- e. **MOD Materials, Fittings, Fixtures, etc.**
 - (1) Load, remove from store, unload, unpack, assemble, prepare empty packages for return and return same to store.
 - (2) Any assumed loss or profit to the contractor for stores not supplied by him.
- f. **Difficult Position etc.** Accessibility or otherwise of site easy or difficult positions, foul, clean, wet or dry situation.
- g. **Dry Work etc.** Keep work clear of all water by pumping if required for which case extra payment shall not be admissible, extra payment shall be admissible for pumping out water (from powerful springs and subsoil water if soil test reports permits) by any means if specially ordered by the GE / Engineer in Charge.

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- h. **Errors.** Rectify all errors to the satisfaction of the GE / Engineer-in-charge (e.g., when excavations are carried out deeper than ordered or required the level shall be made up with CC).
 - j. **Handing Over.** Hand over the work clean, perfect and ready for use or occupation upto the general standard of all good MOD works.
 - k. **Makers Instructions.** Comply with the use of proprietary articles.
 - l. **Measurements.** Any contingencies (advantageous or disadvantageous) involved in the method of measurement herein set forth.
 - m. **Rubbish.** Removal and disposal of rubbish:
 - (i) Off MOD premises.
 - (ii) Anywhere on MOD premises within 4 km of site and any spreading, levelling, tacking, etc., as ordered by the Engineer-in-charge.
 - n. **Temporary Work, etc.** Provision of temporary roads, cart ways, fencing, handrails, lighting, watching also any cart ways, profiles, templates, gauges, measure, etc.
 - p. **Waste etc.** All waste, laps, seams, joints, cutting (rough or fair) straight, raking or circular and making good.
 - q. **Workers.** Provision of suitable skilled workers as required and all matters (accommodation, transport, sanitary services, etc.), in connection with the same.
9. **Generally.** Unless stated or specified elsewhere to the contrary these General Rules shall apply to all sections, where relevant.
10. **Identification of Items.** Items shall be identified by quoting the item number.

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11. **Materials Supplied only.** The rates for "Materials Supplied only" are the rates, which have been used in composing the rates for the various Schedule items. The materials supplied only Rates, inter alia, include lead for any distance upto the site of work and the cost of containers. If the contract provides the issue of any of the materials listed under "Materials Supplied only", to the contractor on payment, the rates to be charged to the contractor shall be the same as the Materials Supplied only Rates, subject to the following conditions:

- a. The delivery shall be made at the MES store (s) mentioned in the contract and the contractor shall, except where rates may otherwise specifically provide for removal in this Schedule (e.g., "Remove from store and fix-----") be deemed to have made due allowance in his contract price for loading and unloading transport to site, unpacking the stores, etc., as may be necessary.
- b. The containers will become the property of the contractor and will not be taken back by the MES.

12. **Old Materials.** No extra charge shall be allowed for handling, fixing, etc., old materials as compared with new.

13. **Orders.** In writing shall be given for all approved directions. No verbal instructions shall be deemed to be binding nor shall such work be measured.

14. **Raise (Rising).** Includes any hoisting or lowering.

15. **Remove from Stores.** It shall include removal from store to site of work or, if directed, anywhere within a 4 kilometer radius.

16. **Remove off MOD Premises.** It shall include as an alternative a distance of 4 kilometer if required.

17. **Remove to Store.** It shall include removal from site of work to store or, if directed, anywhere within a 4 kilometer radius.

18. **Specification or as Specified.** Refers to the specifications in this schedule.
19. **Store.** In Rules 11, 15 and 17 above implies :
- a. The MOD or MES store referred to in the contract.
 - b. Any MES store in the contract area.
- OR
- c. Any other stores or places n.exc. 4 kilometer from the site of work.
20. **Tools, Plants and Machinery.** Implies the use of all tools, plants and machinery required for the execution of the work and all charges in connection therewith.
21. **Uses.** This Schedule is intended to apply to every description or work that may be required in the construction and maintenance of buildings of all kinds belonging to or hired, or occupied by the Government of Bangladesh (MOD) also of Fortifications, roads, landing grounds, drainage, water supply, electrification, together with engineering works such as sea walls, groans, harbour and dock work, bridges, railways, etc., required by the several maintenance or special contracts.
22. **Water.** The water for the works may be obtained from MES supply system or Contractor may supply with his own arrangement with the permission of the Engineer-in-charge unless otherwise specified in the contract.

Measurements

23. **Money Unit.** The money unit (or rate) of each item is expressed in decimal coinage i.e., in Taka and paisa.
24. **Net.** Measurements shall be net as fixed with no allowances for cutting, waste, laps for joints, risk, etc. No allowance is to be made for large or small quantities, easy or difficult positions, or other exceptional circumstances except where specifically provided for in the schedule.

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25. **Other Method.** All work executed and paid for under this Schedule is to be measured in accordance with instructions and remarks detailed herein, without reference to any local custom or other practice, should these differ in any way from methods used in this schedule. Items, rates, descriptions of materials and workmanship, modes of measurements etc., contained in all previous schedules are to be considered as obsolete. They shall not constitute a precedence for purposes of comparison with (or interpretation of) the contents of this schedule.

26. **Removal.** This expression includes handle, load, convey by any means, unload, stack, weight, measure and in the case of MOD stores unpack, assemble, prepare and return empties to store in addition.

27. **Removal Distance.** This shall be measured by the shortest practicable route as approved.

28. **Tolerances.**

a. Unit of linear measurement shall be in metric system. Take dimensions to the nearest millimeter (except as otherwise indicated in the schedule) convert the measurement into meter and take two figures after the decimal. While rounding off 0.005 and below shall be ignored, 0.006 and above shall be taken as 0.01.

b. Workout the areas on the dimension mentioned in (a) above and take two figures after the decimal. Fraction 0.005 and below shall be ignored.

c. Workout cubic contents on the dimension mentioned in (a) and (b).

Note. Measurement shall not be taken in feet and inches and converted into Metric system by utilizing the conversion table given in the schedule.

29. **Inclusive Descriptions.** The following principles will apply to the whole Schedule:

a. Any description shall be assumed to comprehend any incidental processes.

b. No extra measurement or description shall be made for any matter already described elsewhere.

30. The Distance refers to the distance from the place of origin to the final position in the work, irrespective of the number of processes (or stages) involved.

31. The Rates throughout this schedule shall be deemed to include everything incidental to the complete work and the satisfaction of the GE/ Engineer-in-charge and include among other matters:

- a. **Generally.** Full compliance with General Rules, etc., where relevant specially sub-rules 8 (a) to (o) inclusive.
- b. **Particularly.** All relevant matters in the particular section in which an item and rate occur.
- c. **Additionally.** Any relevant matters in any section.
- d. **Omissions.** Any matters generally necessary for the complete performance and handing over in a clear, serviceable condition of all work whether specially mentioned or not.

32. Subject to the over-riding provisions of the Conditions of contract, payment for work not specifically mentioned herein shall be made as follows :

- a. **Proportional Rates.** If there are analogous items in the Schedule for articles or workmanship of similar character, then at prices equal to the prices of such items, if the articles or workmanship are of equivalent value, or if differing in particulars and value, at prices determined by the applicable trade variations, the schedule item on which a price is based is to be stated on the order.
- b. **Star prices.**

(1) If the articles or workmanship are so dissimilar as not admit direct assessment or proportionment as laid down in clause 32 (a) above, then at agreed prices, which shall be in conformity with the general standard of values in the schedule, and shall, whenever possible, be based upon suitable Schedule items.

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(2) If in special cases, prices have necessarily to be determined from the amount of labour expended and the value of the materials incorporated, payment will be made as follows:

(a) Labour at Schedule Rates, given in "Labour Rate" Section, to which contractor's profit 10% + overhead expense 3.5% than VAT 4.5% is to be added as shown in separate column in labour Rate in the schedule.

(b) Rates for Materials included in the Schedule or prevailing market rates for materials not included in the schedule to which contractor's profit 10% & overhead expense 3.5% (business expense which are indirect cost like rent, site office, mobilization, salary of staff, depreciation cost of equipment / machine / tools / plants incurrence managerial engineering services etc) and than VAT 4.5%. is to be added

(c) PPR-2008, clause -80, sub-clause-'kha' is to be followed where applicable.

(3) Prices shall be determined before the execution of the order. If a price should depend upon particulars, which cannot be ascertained before the order is put in hand, the procedure by which the actual price is to be arrived when the necessary particulars are known shall be previously settled.

(4) Should a star price (approved by the CMES) be inserted in an order, it will be understood that the contractor accepts it unless he objects in writing within six days from the receipt of the order.

c. Unless expressly stated in the order or agreement to be "Net" (in which case it must be so shown when billed) all special prices, other than those assessed from actual cost under (b) (2) above, shall be subject to the contract's percentage, if any.

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33. The following conversion factors shall be used, unless otherwise stated elsewhere :
- | | | | |
|----|---|-------|---------------|
| a. | Mound | 37.25 | kg |
| b. | Lime (Unslaked) | 962.5 | kg. per cu.m |
| c. | Dressing Hot or cold and
cut back Bitumen. | 4.546 | kg. per litre |
| d. | M.S. rods | 7850 | kg. per cu.m |
| e. | Water at 4° Celsius | 1000 | kg. per cu.m |
34. GE includes independent AGE.
35. Additional cost for lifting above ground floor for major items are applicable as shown against the relevant items.

SECTION-1
EXCAVATION AND EARTH WORKS

SPECIFICATIONS

General

1. **Following Measures to be adopted:**

- a. Solid measure: Materials in their natural state before excavation, etc.
- b. Packed measure: Materials which have been spread, levelled and/or filled., watered and rammed or equally consolidated (e.g. heaps, consolidated by exposure to weather, etc. for period exc 6 months). The following Table shows the factors to be used for multiplying loose and packed measure for converting earth and vitty sand into solid measure:

Measure	Multiplication factors for		Remarks
	Soils	Rocks	
Loose Measure	0.80	0.60	These figures accurate or otherwise shall bind all parties.
Packed Measure	0.89	0.67	
Solid Measure	1.00	1.00	

2. Top scrub and any vegetation matter shall be separated from soils excavated, if so directed.
3. Undergrowth, brushwood and trees shall not be cut without the previous specific order of the GE/Engineer-in-charge.
4. Borrow pits are to be made only in the areas and of the size and shape approved by the Engineer-in-Charge.
5. **Setting Out, Profiles etc.** All excavations, embankments, revetments, etc., are to be properly set out to the true line, curve, level or slopes required and the rates include the cost of all profiles, cross heads, boning rods, etc., as well as tools and plant.

6. **Classification of Excavation.** For the purpose of this section excavations shall be classified and priced under the following heads:

a. **Ordinary Soil.** This includes:

- (1) Spoil or rubbish of every description;
- (2) Rubbish tip materials etc.;
- (3) Earth, Sand, gravel, loam, mud;
- (4) Any other formation into which a shovel can be entered with foot pressure.

b. **Hard Soil.** This includes:

- (1) Stiff heavy clay;
- (2) Moor am Kanker;
- (3) Mud concrete;
- (4) Boulders which can be individually lifted by hand;
- (5) Conglomerate formations, shale, lime concrete, brick work in lime and stone masonry in lime;
- (6) Metalled surface of road, (tarred or untarred);
- (7) Hard core under floor and road bottoming;
- (8) Any other formation into which a shovel cannot enter with foot pressure and the excavation, which require the forcible application of a pick.

c. **Rock NOT Requiring Blasting.** This includes:

- (1) Cement concrete, brick work in cement mortar and stone masonry in cement mortar;
- (2) Large boulders which cannot be individually lifted by hand;
- (3) Rock or any other formation, which can be excavated by the use of jumpers wedges, hammers etc.

7. **Materials from Excavations.** Materials of any kind obtained from excavation, as also any finds made in the site such as antique, relics, coins, fossils etc, shall remain the property of the Govt. The rate include the separation of the above mentioned materials and finds from each other and depositing the same, all as directed by the GE / Engineer-in-charge.

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Any of these materials, if ordered by the GE/Engineer-in-charge to be used by the contractor, on the works shall be charged to him at the "Materials supplied only" rates in this schedule subject to the contractor's percentage or if these are not available from the schedule, then the rates to be mutually agreed upon between the GE/Engineer-in-charge. and the contractor before the materials are used.

8. In case of filling, other than brick bats is to be used, approval of GE/Engineer-in-charge. will be obtained in all cases.

Method of Measurements

9. Authorized quantities and not those actually excavated etc., be paid for the following are the authorized quantities:

- a. The lengths, widths and depths of foundation etc., as shown on drawings.
- b. The lengths and widths of concrete beds under drains and the depth from ground level, except as in (c) (ii) below:
 - (1) The necessary length of trenches for pipes, cable etc.
 - (2) The widths for excavation of trenches for pipes, cable etc., shall be external diameter of the pipes (not sockets), cable etc., plus 225 mm. For depths exc 1 metre a side slope allowance of 125 mm per metre in depth (for each side of the trenches) shall be made addition to the width specified for full depth of trench.
 - (3) The depths from ground level.

10. **Measurements for Excavation and Earthwork.** The measurements to be those of the voids from which the materials has been taken out and not of the resultant spoil. Where this is impracticable, the measurements shall be converted to "solid measure" in accordance with para 1 of SPECIFICATIONS. No allowance is to be made for slips or fails. Any pipes cables etc., met with during excavation is to be properly slung or otherwise supported without extra charge. In case these are damaged while excavating, the same will be repaired/replaced as directed by Engineer-in-Charge without extra cost. Excavations are to be restricted to the minimum dimensions necessary, and payment is to be made on the basis of net requirements.

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In excavation through varying strata the different layers are to be paid for at the rates for the respective formations. Measurement for pumping out of water from trenches (from powerful springs and sub soil water if soil test reports permits) shall not exceed 4 times in case of continues seepage of sub soil water with the approval of Engineer-in-Charge.

11. **Site Clearance, Roots, Trees, etc.** No extra measurements or allowances shall be made for clearing the site of grass, shrubs, brushwood, undergrowth, roots and small trees n.exc 225 mm, girth at the 600 mm from the ground. The realized material shall become the property of the contractor, if not otherwise specified elsewhere in the contract. Trees exc. 225 mm girth shall be cut down by other agency, as site clearance.

12. **Battering** (or contents thereof). Shall not be measured when timbering is ordered and battering is carried out to save timbering.

13. **Ignore the Following Measurements.**

- a. Steps in side of excavation to form platforms, etc. for raising earth.
- b. Any grips or pockets for joints of drainpipes, cable etc.
- c. Any slips or falls.

14. **Roots.** No extra measurements or allowances will be made for works intercepted by roots.

15. **Transport Spoil and Materials.**

- a. The following shall be considered equal to one cubic metre of spoil under the rates for "Soil":
 - (1) 290 liters of water.
 - (2) 2.50 Cubic Metre of scantling, boarding etc.
 - (3) 5.70 Cubic Metre of ashes, clinker, etc.
 - (4) 5000 Kg of any materials not elsewhere listed.
- b. Individual articles, which weight over 200 kg each, shall be paid for an extra of 10% over rocks.

16. **Surveyor's Level, Boning Rod.** All such instruments required for precision works, shall be arranged by the contractor and he shall make the required level and gradients of beds, embankments etc. The contractor shall be responsible for all errors and omissions.
17. **Embankments.** The height is to be based on the average lift from the average ground level of the embankments. The depth of the borrow pits is not to be included in calculating the lift.
18. **Specification for Anti-Termite**
- a. Anti-termite pesticide Dursban 20 EC or equivalent will be applied to the sides and bed of foundation trenches (except the areas for under ground reservoir). Dursban 20 EC or equivalent will be mixed as per ratio mentioned in the relevant items. Application will be made with compressed air sprayer for even distribution.
 - b. Anti-termite pesticide "Pestearthly" of Baral Chemical Company Ltd. (BCCL) chemicals will be applied to the sides and bed of foundation and trenches (except the areas for under ground reservoir). "Pestearthly" will be speared by hand. Every kg "Pestearthly" Can be used about 300 sft.
19. **Process of Anti-Termite.**
- a. A trench (450 mm wide 750 mm deep) will be dug around the plinth of the building. Rodding as per items will be done in the trench. Dursban 20 EC will be applied to the trench during back filling as per relevant items. Dursban 20 EC will be mixed with water 1:19 Solution to be sprayed @ 5 litres per sq.m. Application will be made in such a way that the soil in the trench get evenly mixed with pesticide solution. After the application a thin layer of soil will be applied.
 - b. A trenches (450 mm wide 750 mm deep) will be dug around the plinth of the building. Rooding as per items will be done in the trench. "Pestearthly" of Baral Chemical Company Ltd. (BCCL) will be speared by hand. The coverage for using Anti- termite Chemical in trench "Pestearthly" 1 (one) kg per 300 sft.

20. Anti-termite work shall not be carried out other than the Govt. approved agency and the contract for anti-termite of new building shall be concluded separately with approved agency / firm using approved pesticide by BCSIR

21. **Termite Controlling Treatment**

- a. Termite Controlling Treatment with Hvdro-Seal, Ef-32 Liquid-Felt at Inside Ground Floor of New Building.

Name of Chemical-Products	Coverage	Quantity
Pesterthy (termite controlling Powder)	90 sqm/kg	1 kg.

- b. Termite Controlling Treatment Before Soiling or C.C at Inside Ground Floor of New Building.

Name of Chemical-Products	Coverage	Quantity
Pesterthy (termite controlling Powder)	30 sqm/kg	1 kg.

- c. Termite Controlling Treatment Around New Building.

Name of Chemical-Products	Coverage	Quantity
Pesterthy (termite controlling Powder)	9.62 or 27.85 sqm	1 kg.

- d. Termite Controlling Treatment on Wooden Furniture, Door, Window, Cup-Board etc.

Name of Chemical-Products	Coverage	Quantity
Pesto-clea (termite controlling liquid)	100 sqm/kg	1 kg.

- e. Termite Controlling Treatment Electric Conduit.

Name of Chemical-Products

Pestocon Tube (used in Electric conduit)

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Gray Cementitious Alloy used for stopping running water-leakages:

Name of Chemical-Products	Coverage	Quantity
Gray Cementitious Alloy	700 cubic c.m	1 kg.

f. Termite Controlling Treatment with Hvdro-Seal,Ef-32 Liquid-Felt at Nside Ground Floor of Old Building.

Name of Chemical-Products	Coverage	Quantity
Pesterthy (termite controlling powder.)	90 sqm/kg	1 kg.

g. Termite Controlling Treatment Around the Old Building.

Name of Chemical-Products	Coverage	Quantity
Pesterthy (termite controlling powder.)	9.62 Metre or 27.85 sqm	1 kg.

h. Termite Controlling Treatment on Inside & Outside Wall of Old Building.

Name of Chemical-Products	Coverage	Quantity
Pestonol (termite controlling liquid)	150 sqm/kg	1 kg.

j. Termite Controlling Treatment on Wooden Furniture, Cup-Board, Door, Window, False-Ceiling etc.

Name of Chemical-Products	Coverage	Quantity
Pesto-clea (termite controlling liquid)	100 sqm/kg	1 kg.

Termite Controlling Treatment Electric conduit.

Name of Chemical-Products
Pestocon Tube(used in Electric conduit)

22. **Clarification of Rates**

The rates, inter alia, include particularly,

- a. Any slips or falls (to be made good).
- b. Works in excess of requirements and for making good to same as required.
- c. Clearing out sludge.
- d. Filling out in soft spots as required.
- e. Solid measurements or conversion into solid measure.
- f. Roads, landing grounds, buildings etc. of any description.
- g. Any other relevant matters stated elsewhere.
- h. In case of excavation in foundation trenches for forming side and bottom surfaces to required shape, level and slope and ramming bottom in case of ordinary and hard soil.

SECTION-1

EXCAVATION & EARTH WORK RATES

Item	Description of works	Rate in Taka	
		Soil	Rock not requiring blasting
<u>TRENCHES, WELLS etc.</u>			
Per Cubic metre			
1-1	Excavation in any soil upto 1.5 metre depth in foundation and pipe trenches upto 1.5 metre wide in shafts wells and independent holes up to 30 sq.m each and throw earth clear of edges of excavation within 10 metre timbering to be paid extra (Trenches over 1.5 metre width will be treated as areas)	119.20	346.00
<u>AREAS</u>			
1-2	Excavate over areas in any soil upto 1.5 metre depth to obtain earth for embankments or to clear building sites etc or for shafts, well etc exc 30 sq.m each throw earth clear of edges of excavation within 10 metre.	96.50	306.00
1-3	Add to item 1-1 for each additional 1.5 metre lift or part thereof.	37.40	56.00
1-4	Add to item 1-2 for –ditto-ditto-	9.10	12.50
1-5	Making embankments, filling under floor or around plinth etc 1.5 metre below or above ground level, with spoil obtained from cantonment area within 10 metres including watering and ramming in 15 cm layers and dressing to required profile and shape.	57.80	76.50
1-6	Add to item 1-2 if earth supplied by contractor from private land at his own cost excluding cutting.	126.00	-
1-7	Add to item 1-5 for additional 1.5 metre or part thereof above or below ground level	9.10	12.50

SECTION-1

EXCAVATION & EARTH WORK RATES

Item	Description of works	Rate in Taka	
		Soil	Rock not requiring blasting
	<u>LEAD</u>		
	Per Cubic metre		
1-8	Load excavated spoil on animal or into basket carts or lorries, carry beyond 10 metre (Specified in items 1-1 and 1-2) up to 100 metre unload and stack or spread and level.	76.50	-
1-9	Load materials on animal or into basket carts or lorries, carry up to 100 metre unload and stack or spread and level.	95.20	-
1-10	Add to item 1-8 and 1-9 for carrying beyond 100 metre but up to 200 metre (Excluding unload and stack or spread and level)	7.30	-
1-11	-Ditto-beyond 200 metre up to 1 km -ditto-	11.00	-
1-12	-Ditto-for each subsequent 1 km but up to 8 km	43.90	-
1-13	- Ditto - for each subsequent 1 km beyond 8 km but up to 24 km	29.80	-
1-14	Excavate hill side slips or similar loose materials of any description and remove to a distance not exceeding 25 metre and deposit where directed (To be converted into solid measure)	101.40	-
	Per Square metre		
1-15	Finish the surface of existing embankments in repairs to a neat and finished profile including making up where necessary (Earth utilized from borrow pits for making up to be paid for extra)	2.20	-

RESTRICTED

SECTION-1

EXCAVATION & EARTH WORK RATES

Item	Description of works	Rate in Taka	
		Rate Per cu.m	Rate per sq.m
	MISCELLANEOUS		
	Per Cubic metre / Per Square metre		
1-16	Ramming earth in 15 cm layers	28.10	4.20
1-17	Watering to above - ditto - (in 15 cm layer)	25.50	3.80
	Per Cubic metre		
1-18	Bricks bats or other approved filling in soakage pits etc.	2267.00	0.00
1-19	Taking out bricks bats, boulders, rubbish etc from soakage pits and dispose off as ordered (supply & filling of bricks bats or other approved filling not included)	113.90	0.00
1-20	Pumping water from trenches etc including all labour use of pumps plants etc, (The net quantity raised to be paid for the lift not to exceed 8 metre. Conversion factor 1000 litre=1.00 cu.m)	46.40	0.00
1-21	Vitty / Hill sand filling under floor/plinth protection / around building for site development including levelling & dressing complete (To be converted to packed / loose measure) Rate inclusive of any lead and lift.	520.00	0.00
	ANTI-TERMITE TREATMENT OF FOUNDATION		
	Per Square metre		Rate in Taka
1-22	Spraying anti termite chemical mixed with water (1: 19) on the sides and bottom of foundation trench, under floor and over plinth filling using Dursban 20 EC or equivalent chemical (solution to be sprayed @ 5 litres per sq.m)	-	178.00
1-23	Spreading anti termite chemical on the side and bottom of foundation trench, under floor and over plinth filling using pesticide pestearthly powder of Baral Chemical Co.(BCCL)	-	77.00

SECTION-1

EXCAVATION & EARTH WORK RATES

Item	Description of works	Rate in Taka
<u>ANTI-TERMITE TREATMENT AROUND BUILDING</u>		
Per Cubic metre		
1-24	Extra cost for using anti termite chemical in brick works in foundation using DURSBAN 20 EC or equivalent chemical (solution to be prepared with water in proportion 1:19) Chemical required 5 litre per 2.85 cu.m of brick works.	1295.00
1-25	Extra cost for using anti termite chemical in brick works in foundation using Pestearthly powder of Baral Chemical Co.(BCCL) required 1(one) kg per 4.11 cu.m	579.00
Per Square metre		
1-26	Extra cost for using anti termite chemical in brick works in foundation using DURSBAN 20 EC or equivalent chemical (emulsion to be sprayed in proportion 1:19) Chemical required 7.5 litre per sq.m	265.00
1-27	Extra cost for using anti termite chemical in brick works in foundation external surface using 'Pestearthly' powder of Baral Chemical Co.(BCCL) required 1 (one) kg per 27.87 sq.m .	83.00
Per Hole		Rate in Taka
1-28	Termite treatment in existing structures by making downwardly slanted holes at a depth of 225 mm from the existing finished GL/FL inside and outside the building and applying the emulsion of antitermite chemicals dursban 20 EC to be mixed with water at 1:19 ratio in to holes at rate of 25 ml per hole including making good the damages.	29.20
1-29	Termite treatment in existing structures by making downwardly slanted holes at a depth of 250 mm from the existing finished GL/FL inside and outside the building and applying the emulsion of antitermite chemicals pestonal A & B of Baral Chemical Co.(BCCL) to be mixed with water at 1:50 ratio in to holes at rate of 8 ml	34.00

SECTION-1

EXCAVATION & EARTH WORK RATES

Item	Description of works	Rate in Taka
	Per Metre	
1-30	Trench treatment for protect in coming termite by making trench around existing building structured at a depth of 600mm from GL and applying entitermite chemical "Pestearthly" of Baral Chemical Co.(BCCL) in three layers 600mm wide including earth filling in the trench etc chemical sprayed by hand.	290.00
1-31	Trench treatment for protect in coming termite by making trench around existing building structured at a depth of 750mm from GL and applying entitermite chemical "Dursban 20 EC" or quivalant chemical solution mixed with water at 1:19 ratio in three layers 450mm width including earth filling in the trench etc solution to be sprayed @ 5 litre per sq.m..	566.00
	<u>ANTI-TERMITE TREATMENT AROUND BUILDING</u>	Rate in Taka
	Per Cubic metre	
1-32	Fumigation treatment against mosquitoes, flies, spiders, silverfish, cockroaches, lizards and other harmful pests inside the buildings etc. using NEOCIDOL-60 or equivalent chemical as spd. Chemical to be Sprayed @ 7 ml per cum.	21.30
	Per Square metre	
1-33	Anti-Termite treatment of all wooden door frames, windows, wood panelling etc by using DURSBAN 20EC or equivalent emulsion at ratio of 1:19 (DURSBAN 20EC and kerosene)	110.00
1-34	Anti termite treatment of all wooden doors frames window, wood panalling etc by using pesto-clea chemicals of Baral Chemical Co.(BCCL) mixed with water at ratio of 1:16 per ltr Pesto-clea A & B canbe sprayed about 50 sqm.	87.00

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SECTION-1

EXCAVATION & EARTH WORK RATES

Item	Description of works	Rate in Taka
Per Board		
1-35	Anti-Termite treatment of electric and telephone system by inserting a plugging material (cotton foam etc.) with anti-termite chemical DURSBAN 20EC etc.	163.00
1-36	Anti-termite treatment of Electric & Telephone system by inserting & plugging materials with anti-termite chemical pestonol of Baral Chemical Co.(BCCL) .	98.00
Per Nest		
1-37	Destruction of termite nests with earth work (1.00 x 1.50 x 1.00 metre) and DURSBAN 20EC @ 1.10 litre	1345.00
1-38	Destruction of termite nests with earth work (1.00 x 1.50 x 1.00 meter) and pestearthy of Baral Chemical Co.(BCCL) chemical @ 0.25 kg.	1122.00

SECTION-2

ROAD WORK, HARD STANDINGS LANDING GROUNDS

SPECIFICATION

General

1. **Aggregate.** See concrete section.
2. **Boulders.** Means hard stone round or angular exc. 75 mm but not exc. 225 mm least dimension.
3. **Cement.** The cement shall be ordinary, normal setting cement of any brand, complying in all respects with BS No. 12. Cement, unless otherwise specified to be of any particular quality, shall mean this ordinary, normal setting cement.
4. **Sand** Shall be from approved source and free from clay, salt and organic matter.
5. **Hot Dressing** (Bitumen straight run), **cold dressing** (Bitumen emulsion), **Bitumen / Cut-back** (hot application) and **plastic bitumen No. 4**, shall be of approved manufacture. These materials shall be used strictly in accordance with the instructions of the manufacturer.
6. **Formation.** Form the ground to the proper gradients, camber and super-elevation, corresponding to those to the final finished surface required. Excavate and fill in all soft places with firm soil and well rammed. Roll (dry) the formation surface with 8 to 12 ton power roller. The actual weight of the roller shall be varied at the discretion of the Engineer-in-Charge, according to the nature of the sub-soil, fill in with hard soil, depressions which may appear during rolling and leave the finished surface perfectly consolidated to the required gradients, camber and super elevation.
7. **Bottoming.**
 - a. Use hard, suitable and approved locally used materials, unless otherwise specified. If boulders are used they shall be of full depth.
 - b. Lay to full depth, hand pack on edge, fill interstices with spoils of the bottoming material.

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- c. Lay to gradients, camber and super-elevation required and dry roll to a solid even finish with 8 to 12 tons power roller, the actual weight of the roller being varied at the discretion of the Engineer-in-Charge according to the nature of the sub-soil and the bottoming materials used.
- d. Make good with spoils of bottoming material, any hollows, which may appear during the process of consolidation and rolling so as to leave the finished surface solid and conforming to the required falls, levels etc.
- e. The thickness refers to the consolidated thickness after consolidation.
- f. If bricks are use, they shall be well burnt, whole bricks, closed laid flat, or on edge, spread sand to fill in voids and interstices at the following:

For 75mm thick @ 0.015 Cubic Metre per Sq. Metre.

For 125mm thick @ 0.021 Cubic Metre per Sq. Metre.

For 200mm thick @ 0.036 Cubic Metre per Sq. Metre.

8. **Water Bound Macadam Carpets.**

- a. Use approved suitable hard, tough and durable stone/bricks aggregate.
- b. Road metal to be 50mm graded, produced from broken or crushed quarried stone or large boulders of the least dimension not less than 150mm or over burnt bricks.
- c. Lay to gradients, camber and super-elevation required and dry roll, filling in depressions, which may appear during rolling.
- d. Roll wet and adds screenings 12mm or less and rolls on leaving the finished surface solid, smooth and conforming to the required falls, levels, etc.
- e. Cover surface with 12mm layer of approved grit (gravel or shingle or bricks/stone screenings) and open road to traffic.
- f. Keep the road watered under traffic for 14 days and made good damages.
- g. Roller to be 8 to 12 ton power roller.

9. **Pre-Mix-Carpets.**

a. Use the following materials for laying 1 Sq. Metre of 50mm thick (consolidated) carpet.

(1) Bitumen, straight run (Hot application) 0.488 kg for tack coat if the surface is bituminous and 0.976 Kg if the surface is non-bituminous.

(2) Bitumen (Hot application) for pre-mix 4.10 kg.

(3) Aggregate, 12mm gauze, consisting of broken or crushed stone, or gravel or shingle 0.061 cubic metres.

b. Rake all caked mud, dust, dirt or other deleterious matter by hand brushing with brushes and brooms and finally dust the surface with gunny bags to leave the surface perfectly clean. Allow the surface to be perfectly dry.

c. Apply tack coat of Bitumen straight run, heated to 150⁰C.

d. Lay the pre-mix carpet while the tack coat is still tacky. The aggregate and bitumen shall be mixed together in a suitable power driven mixer. The aggregate shall be loaded into the mixer first and coated with bitumen required for the batch. Mixing shall continue until all particles of aggregate are thoroughly coated with bitumen. The bitumen shall be maintained at a temperature of 150⁰C. The mixed materials when thoroughly coated shall be discharged from the mixer into wheelbarrows and transported to the site where the mixer shall be spread evenly on the base with rakes. The edges of the carpet shall be "tucked in" or protected with stone or concrete edging.

e. Consolidate the carpet thoroughly by rolling with 8 to 12 ton power roller.

f. Open the road to traffic 24 hours after consolidation.

10. **Pot-Holes.** Before laying PRE-MIX or applying surface dressing all pot-holes shall be properly repaired and humps removed.

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11. Where rolling is impracticable e.g. angles, recesses, corners, etc. Consolidation shall be done with iron rammers.

12. **Rolling.** If rolling/consolidation of various surfaces by mechanical rollers are done in a period less than that specified below with a tolerance of 10% both ways, an appropriate recovery adjusted by tendered percentage will be made from the contractor at the rates quoted against each.

Description of Surface	Area in sq.m specified per working hour for the following mechanical (Diesel) rollers		Rate of Recovery in Taka					
			Working hours with fuel		Working hours without fuel		Non-working hours	
	8 Ton	10/12 Ton	8 Ton	10/12 Ton	8 Ton	10/12 Ton	8 Ton	10/12 Ton
1. Formation surface	-	220.00	330.00	375.00	66.00	75.00	33.00	37.50
2. Soling/Bottoming 10cm	100.00	100.00	330.00	375.00	66.00	75.00	33.00	37.50
3. Do 15 cm	-	70.00	330.00	375.00	66.00	75.00	33.00	37.50
4. Do 22.5	-	46.50	330.00	375.00	66.00	75.00	33.00	37.50
5. Water bound macadam 7.5 cm	-	35.00	330.00	375.00	66.00	75.00	33.00	37.50
6. Do 10 cm	-	25.00	330.00	375.00	66.00	75.00	33.00	37.50
7. Do 15 cm	-	8.00	330.00	375.00	66.00	75.00	33.00	37.50
8. Do 30 cm	-	4.00	330.00	375.00	66.00	75.00	33.00	37.50
9. Premix carpet 2.5 cm	-	100.00	330.00	375.00	66.00	75.00	33.00	37.50
10. Do 3.75 cm	-	100.00	330.00	375.00	66.00	75.00	33.00	37.50
11. Do 5.00 cm	-	100.00	330.00	375.00	66.00	75.00	33.00	37.50
12. Seal coat	-	150.00	330.00	375.00	66.00	75.00	33.00	37.50

13. Cement concrete paving for roads, hard standings, landing grounds etc.:

- a. Use approved suitable, hard, tough and durable stone/bricks aggregate.
- b. Use 19mm graded aggregate of broken or crushed stone or ballast or shingle or gravel or bricks.

- c. Provide sand cushion and/or bottoming as required. Where bottoming is specified fill in interstices in the bottoming with sand.
 - d. Ensure that the surface, over which the concrete is to be laid, is finished to the required gradient, camber and super elevation.
 - e. Immediately before laying of the concrete wet the surface over which the concrete paving is to be laid.
 - f. Lay cement concrete of the mixes in one or two layers to the thickness, as required. If the work consists of two layers the second layer shall be laid directly over the first layer next day but not later than 24 hours after the bottom layer has been laid. The slabs shall be of the sizes ordered by the Engineer-in-Charge and shall be laid in alternate bays. The form work shall be of steel or timber as approved by the Engineer-in-Charge. If wooden form work is used, planks shall not be less than 25mm thick and the stays shall not be more than 30 cm apart.
14. **Expansion Joints.** Form expansion joints between the slabs to the full depth of the concrete. The expansion joints shall be 12 mm wide.

Method of Measurements

15. **Measurements for Road Materials.**
- a. Sand, bajri, shingle, broken stones, broken bricks, or the like shall be measured net when in box form or in carts or lorries at the site of work.
 - b. In measuring stacked sand, bajri, shingle, broken stone, broken bricks or the like a deduction of one-twelfth shall be made from the measurements to allow for unevenness in ground, loose stacking etc.
 - c. Boulders and quarried stone for road metal will be measured after breaking as in (b) above. Boulders and quarried stone for bottoming shall be measured net after incorporation in the work. Where either of the above methods of measurement of boulders and quarried stone is impracticable these materials shall be stacked in tightly packed stacks not less than one metre in height and a deduction of 15% made from the gross measurements to allow for voids.

- d. All 'Carpeting' materials for either new work or repairs shall be stacked in regular heaps, and measurements of it taken before spreading. In the case of pre-treated materials, before deliveries may be measured in the Lorries or carts.
- e. Thickness refers to consolidated thickness after consolidation.

16. **Pot-Holes.** Any pot-hole n.exc. 0.10 sq. metre shall be measured 0.10 sq. metre.

Clarification of Rates

17. **The rates, inter alia, include particularly following :**

- a. Rolling includes consolidating small area inaccessible to a roller, with iron rammer.
- b. Pot holes, each exceeding 0.10 sq. metre shall be paid for as new work under the relevant items.
- c. Formation surfaces and bottoming for concrete surfaces shall be paid for separately under the relevant rates in this section.
- d. Wetting surfaces before laying concrete in roads, hard standings and landing grounds etc.

SECTION-2**ROAD WORK, HARDSTANDINGS AND LANDING GROUNDS RATES**

Item	Description	Rate in Taka						
<u>COLLECTION OF MATERIALS</u>								
Per Cubic metre								
2-1	Collection of sand, bajri and shingle within a radius of 25 Metre and stacking to template (1/12th to be deducted from measurement of stacks for voids)				92.10			
2-2	Ditto, boulders ditto (15% to be deducted from measurement of stacks)				74.20			
2-3	Screening bajri, shingle or road metal as directed and stacking to template (measurement to be taken before screening).				57.10			
Rate in Taka								
Gauge in centimetre								
<table border="1"> <tr> <td>0.60 to 1.87</td> <td>2.50 to 3.75</td> <td>5.00</td> <td>6.25</td> </tr> </table>					0.60 to 1.87	2.50 to 3.75	5.00	6.25
0.60 to 1.87	2.50 to 3.75	5.00	6.25					
2-4	Breaking stone to gauge as ordered and stacking to template.	886.00	737.00	517.00	367.00			
<u>BOTTOMING</u>								
Per Square metre								
Spread thickness in centimetre								
<table border="1"> <tr> <td>7.50</td> <td>12.50</td> <td>15.00</td> <td>25.00</td> </tr> </table>					7.50	12.50	15.00	25.00
7.50	12.50	15.00	25.00					
2-5	Bottoming as specified, using well burnt brick (Without consolidation)	253.00	420.00	503.00	835.00			
Spread thickness in centimetre								
<table border="1"> <tr> <td>10 cm</td> <td>15 cm</td> </tr> </table>					10 cm	15 cm		
10 cm	15 cm							
2-6	Bottoming as specified, using boulders exc 75mm n.exc 255 mm dia as specified	427.00		679.00				
<u>WATER BOUND MACADAM CARPETS</u>								
Per Square metre								
Consolidated Thickness in mili metre								
<table border="1"> <tr> <td>75.00</td> <td>100.00</td> <td>150.00</td> </tr> </table>					75.00	100.00	150.00	
75.00	100.00	150.00						
2-7	Waterbound macadam carpets as specified using bricks aggregates	360.00	478.00	706.00				
2-8	Water bound macadam carpets as specified using Stone aggregates	442.00	591.00	907.00				

SECTION-2

ROAD WORK, HARDSTANDINGS AND LANDING GROUNDS RATES

Item	Description	Rate in Taka
<u>WATER BOUND MACADAM CARPETS</u>		
	Per Cubic metre	
2-9	Providing compacted aggregate & sand sub base course with 38 mm down well graded 1st class bricks chips and sand of FM 1.00 mixed in proportion 1:1 including mixing properly, watering, compacting mechanically to give compaction to 100%.	3276.00
2-10	Providing compacted aggregate & sand sub base course with 38 mm down well graded 1st class bricks chips and sand of FM 1.00 mixed in proportion 2:1 including mixing properly, watering, compacting mechanically to give compaction to 100%.	3800.00
2-11	Supply and filling of Khoa (38mm to 63mm graded) & sand (1.50 FM) in Proportion (1:1) mixed all properly, watering, and compacting mechanically to give compaction 100% as spd and direction of Engineer in charge.	3447.00

ROLLING

	Per Square metre	Rate in Taka
2-12	Roll and consolidate formation surface by animal or power rollers including filling in depressions with hard spoil.	3.90
2-13	Cut or fill in soft or hard soil n exc. 15 cm dry roll and consolidate formation surface by ditto including ditto.	19.00
2-14	Turfing with sods available within 125 metre lead including watering	14.70

		Rate in Taka	
		Spread Thickness in cm	
		10.00	15.00
2-15	Roll and consolidate bottoming (boulders) dry rolled to a solid even finish animal or power rollers including filling in depressions with spoils of bottoming materials.	6.40	8.20

SECTION-2

ROAD WORK, HARDSTANDINGS AND LANDING GROUNDS RATES

Item	Description		
<u>PREMIX CARPET</u>		Using shingle or Gravels	
	Per Square metre	Materials and Labour	except Bitumen
2-16	Premix carpet 25 mm thick consolidated on bituminous surface as specified including tack coat	340.00	194.00
<u>PREMIX CARPET</u>		Using shingle or gravels / Crushed stone	
	Per Square metre	Materials and Labour	except Bitumen
2-17	Premix carpet 38 mm thick consolidated on bituminous surface as specified including tack coat (Using shingle or gravel)	508.00	303.00
2-17A	- Ditto - but (Using crushed stone 19 mm)	553.00	348.00
2-18	Premix carpet 50 mm thick consolidated on bituminous surface as specified including tack coat (Using shingle or gravel)	631.00	367.00
2-18A	- Ditto - but (Using crushed stone 19 mm)	692.00	429.00
2-19	Premix carpet 25 mm thick consolidated on non-bituminous surface as specified including tack coat (Using shingle or gravel)	388.00	214.00
2-19A	- Ditto - but (Using crushed stone 19 mm)	418.00	244.00
2-20	Premix carpet 38 mm thick consolidated on non-bituminous surface as specified including tack coat (Using shingle or gravel)	538.00	305.00
2-20A	- Ditto - but (Using crushed stone 19 mm)	583.00	350.00
2-21	Premix carpet 50 mm thick consolidated on non-bituminous surface as specified including tack coat (Using shingle or gravel)	688.00	396.00
2-21A	- Ditto - but (Using crushed stone 19 mm)	749.00	457.00

SECTION-2

ROAD WORK, HARDSTANDINGS AND LANDING GROUNDS RATES

Item	Description		
<u>SEMI-GROUTING</u>			
Per Square metre			
2-22	75 mm thick (compacted) semi-grouting with brick aggregate and hot bitumen laying and spreading aggregate 113mm (loose) in two layers of 75mm and 38 mm to proper camber level, grade & super elevation and spreading hot bitumen @1.70 kg per square metre on the 1st layer and 2.50 kg per sq.m on the 2nd layer and rolling hard to full compaction with 8 to 12 M.Ton power driven roller including heating bitumen 175 ⁰ (degree) C to 190 degree C temperature complete as per direction of Engineer-in-charge including tack coat @1.00kg of bitumen per square metre of road surface.	763.00	464.00
2-23	-Ditto-ditto- but using stone aggt.-ditto- as specified.	624.00	326.00
<u>SEAL COAT</u>			
Per Square metre			
		Using shingle or Gravels	
		Materials and Labour	exc.ept Bitumen
2-24	Seal coat on freshly laid premix carpeting surface using 0.60 kg Bitumen and 0.01 cubic metre of sand (FM2.5) per sq.m of premixed surface incl. spreading with proper camber & grade & blinding with sand (FM0.80) @ 0.01 cubic metre including cost of all materials rolling with 8 to 10 M. Ton power driven roller (Tack coat not required)	87.80	53.40
2-25	Premix Bituminous, seal coat (Av. thickness 10 mm) with 0.015 cu.m of pea gravels mixed with 1.20 kg of bitumen (grade 80/100) and laid over 1 (one) sq.m of bituminous / non-bituminous road surface including spreading with proper camber and grade and blinding with dry sand @ 0.01 cu.m including cost of 8 to 10 M. Ton power driven roller etc complete (without Tack coat)	147.00	78.20
2-26	- Ditto - but using 60/70 grade bitumen with 75% pea gravel & 25% of sylhet sand FM 2.5 (without tack coat)	151.00	75.70
2-27	Add if applied bitumen as tack coat on old bituminous surface (For seal coat)	43.10	15.00
2-28	Providing tack coat on non-bituminous surface using bitumin grade 80/100 (For seal coat)	57.60	15.60
2-29	- Ditto - but using 60/70 grade bitumen	60.20	15.90

SECTION-2

ROAD WORK, HARDSTANDINGS AND LANDING GROUNDS RATES

Item	Description		
<u>REPAIRS ETC.</u>			
	Per Square metre	Materials and Labour	exc.ept Hot/cold Dressing
2-30	Scarifying water bound macadam surface by hand or by power roller n.exc 5 cm deep incl. removing n.exc 50 metre and stacking for re-use	17.40	-
2-31	Add to the last item for every 2.5 cm or part there of beyond 5 cm deep including ditto.	5.80	-
2-32	Repair to pot holes n.exc 0.10 sq.m each in surface of roads by scarifying surface cutting edges at least 2.50 cm deep sweeping free from dust and mud , coating surface with hot/cold dressing and filling with premix of shingle and hot/cold dressing and well ramming. Hot dressing (Using shingle or gravel)	373.00	199.00
2-32A	Repair to pot holes n.exc 0.10 sq.m each in surface of roads by scoring surface cutting edges at least 2.50 cm deep sweeping free from dust and mud , coating surface with hot/cold dressing and filling with premix of shingle and hot/cold dressing and well ramming. Hot dressing (using crushed stone)	403.00	229.00
<u>CONCRETE ROADS</u>			
<u>LANDING GROUNDS ETC</u>			
	Per Square metre	Concrete Mix	
		1:3:6	1:2:4
		Materials and Labour	exc.ept Cement
		Materials and Labour	exc.ept Cement
2-33	Cement concrete slabs for roads, hardstanding, landing grounds etc. 15 cm thick using crushed stone including use & waste of form work (Wooden or steel as ordered) and finished surface even and fair (Not smooth) using 50% sand FM 1.80 and 50% sand FM 2.5 and above	0.00	0.00
2-34	-Ditto-using gravel -ditto-	826.00	563.00
2-35	-Ditto-using brick aggt. -ditto-	774.00	511.00
2-36	Cement concrete slabs for roads, hardstanding , landing grounds etc. 20 cm thick using crushed stone including use & waste of form work (Wooden or steel as ordered) and finished surface even and fair (Not smooth) - Ditto -	1244.00	893.00
2-37	-Ditto-using gravel-ditto-	1075.00	723.00
2-38	-Ditto-using brick aggt. -ditto-	1005.00	654.00

SECTION-2**ROAD WORK, HARDSTANDINGS AND LANDING GROUNDS RATES**

Item	Description	
	Per Cubic metre	Taka
2-39	Sand cushion in layer as specified, under concrete roads, hardstanding, landings ground etc using sand FM 0.80	581.00

EXPANSION JOINTS

	Per Square metre	
2-40	Labour & necessary materials for forming expansion joint 12 mm wide & leaving the joints clear for filling (Length of joint multiplied by thickness of slab)	136.00
2-41	Filling expansion joint with hot bitumen mixed with sand @ 3.18 kg of bitumen per 0.028 cu.m of sand	274.00

BITUMEN PAINTING ON SEAL COAT

	Per Square metre	Rate in Taka
2-42	One coat bitumen applied hot on seal coat @ 7kg per 10 sq.m and blinded with sand 1.00 FM @ 0.122 cu.m. per 10 sq.m (including cleaning of surface)	71.50
2-43	- Ditto - but using 60/70 grade bitumen	74.00
2-44	Scarifying water bound macadam surface by hand or by power machine n. exc. 5 cm deep incl. removing to store.	27.20
2-45	Add to the last item for every 2.5 cm or part there of beyond 5 cm deep including -ditto-	9.10

SECTION-3**CONCRETE****SPECIFICATION****General**

1. Aggregate shall be of hard broken well-burnt bricks, crushed stone, gravel, shingle, ballast or bajri free from dust. For concrete work, it shall be clean, free from loam, clay, organic or other impurities and salt. All aggregate shall be known by their grade according to the following table subject to a 10 percent, excess or shortage of any materials of any gauge enumerated therein.

TABLE OF AGGREGATES

Class of aggregates	Proportional parts by volume											
	Gauges (See para 4 below)											
	60 mm	50 mm	38 mm	25 mm	19 mm	12 mm	9 mm	6 mm	3 mm	2.5 mm	2 mm	0.60 mm
Coarse aggregate												
60 mm graded	10	-	5	-	3	-	2	-	-	-	-	-
50mm graded	-	10	5	-	3	-	-	2	-	-	-	-
38mm graded	-	-	10	5	-	3	-	2	-	-	-	-
25mm graded	-	-	-	10	5	3	-	2	-	-	-	-
19mm graded	-	-	-	-	10	5	-	3	2	-	-	-
12mm graded	-	-	-	-	-	10	5	3	2	-	-	-
9mm graded	-	-	-	-	-	-	10	5	3	2	-	-
6mm graded	-	-	-	-	-	-	-	10	5	3	2	-
Fine aggregate 3mm graded coarse sand	-	-	-	-	-	-	-	-	10	5	3	2
2.5mm graded fine sand	-	-	-	-	-	-	-	-	-	10	5	5

Coarse aggregate not required to be uniformly graded as shown in the above table shall be known as mixed aggregate. Its size shall be specified in term of the largest gauge required, e.g. n.exc. 60mm graded n.exc. 50mm graded etc. and shall consists of the various gauge to correspond to the sample approved by GE / Engineer-in -charge.

RESTRICTED

2. Ballast, gravel or shingle in angular in shape naturally mixed with sand to various proportions, which will be graded as per table above. When used in substitution for a sand and stone mixture, it must be clean and must shown to the satisfaction of the inspecting officer a grading approximating to that of the mixture in lieu of which it is used, such material being added to or removed from the ballast or gravel as may be necessary to obtain the required grading.

3. Bajri is clean, round and smooth, where available ballast or gravel will be given preference over BAJRI.

4. **Gauge of Aggregates.** The following table shows what is implied by the term gauge used in this schedule, to specify the size of aggregates.

Gauge	Passing square mesh of (100%)	Retained on square mesh of (50%)
60 mm	75 mm	50 mm
50 mm	60 mm	38 mm
38 mm	50 mm	25 mm
25 mm	38 mm	19 mm
19 mm	25 mm	12 mm
12 mm	19 mm	9 mm
9 mm	12 mm	6 mm
6 mm	9 mm	3 mm
3 mm	6 mm	2.5 mm (7 mesh)
2.5 mm (7 mesh)	3 mm	1.2 mm (14 mesh)
1.2 mm (14 mesh)	2.5 mm (7 mesh)	0.6 mm (25 mesh)
0.6 mm (25 mesh)	1.2 mm (14 mesh)	0.2 mm (60 mesh)

Note : Maximum nominal size of coarse aggregate shall be the minimum of the following.

- a. 1/5 the narrowest dimension between sides of forms.
- b. 1/3 the depth of slabs
- c. $\frac{3}{4}$ the minimum clear spacing between individual reinforcing bars or bundles of bars or pre stressing tendons or ducts.
- d. The above limitations may be relaxed if in the judgment of the Engineer, workability and methods of consolidations are such that concrete can be placed without honeycomb or voids.

5. Alternative aggregate of hard broken bricks and broken cement concrete will NOT be permitted in RCC pre-stressed concrete in any position.

6. **Cement.** The cement shall be ordinary, normal setting cement of any brand, complying in all respect with BS No. 12.

Cement unless otherwise specified to be of any particular quality, shall mean this ordinary, normal setting cement.

7. **Lime Terracing (Specification).**

a. **Materials & Method.**

(1) The materials surki lime and aggregate are measured in the proportion 2:2:7 and spread over a nonporous ground platform. Aggregate be soaked thoroughly in water before use. A ground platform is essential for easy mixing and storing of ingredient.

(2) Aggregate are made out 1st class bricks of 19mm grading. Lime is unslaked/stone lime. Surki is out of first class bricks and insoluble in water.

(3) All ingredients are to be mixed thoroughly. The mixer is kept for about 10 (ten) days until an adhesive/semisolid bond is developed among the ingredients. During this period whole mixer is turned twice/thrice and lime water is added as per requirement. Precaution is taken to save the materials from sun & rain.

(4) Before applying the terracing, the surface of the roof is cleaned and lime concrete is laid in single layer about 20% thicker than specified for consolidation with slope towards gutter.

(5) The lime concrete is then thoroughly consolidated by beating with wooden mallet. The beating is to be systematic by lengthwise. Movement of labourers from one end to other end on the entire width of the roof.

(6) While the beating of concrete is going on the surface of concrete is frequently sprinkled with lime water and a mixer of molasses, Catechu and boiled solution of Methi seeds for 9 sq.m surface area of 75mm (av) thickness, 50 Litre solution is taken. Solution is prepared by dissolving 4.0 kg of lime, 4.50 kg molasses, 0.36 kg catechu, 0.75 kg of Methi seeds boiled in 15 Litre of water. The mixer is stirred thoroughly before use with a wooden stick. Consolidation by beating with mallet continued until the mortar set fully and mallet rebound from the surface. Special care taken not to allow lime concrete to dry before it is thoroughly consolidated.

(7) The roof surface is kept wet for about 10 (Ten) days by intermittently spraying water on gunny bags.

- b. Lime terracing (2:2:7)
Materials required per cu.m

Lime un-slaked	=	172.16	kg
Surki	=	0.2727	cu.m
Brick aggregate	=	0.9545	cu.m
Molasses	=	6.667	kg
Methi seeds	=	1.111	kg
Catechu	=	0.533	kg

8. **Lime Shall be.**

- Moderately hydraulic for concrete, brick work or stone works, except for mixed cement and lime concrete and mortar when it will be fat.
- Rendered hydraulic, if required by the addition of under burnt ground surki.
- Properly burnt in kilns, kept dry until slacked ground screened through 3mm-mesh screen and slacked at site.
- Deemed to weight 962.5 Kg per Cubic Metre, before slacking for purposes of estimating the proportion specified for use.

9. Sand shall be from approved source, free from dust and salt.

10. **Surki Shall be.**

- Hard, well burnt insoluble in water used in lieu of sand.
- Under burnt and soluble in water when used for imparting hydraulicity to lime mixtures and ground to pass a 1.5mm mesh/sieve and used in the proportion of:

(i) Lime : 0.50 Surki : 1.5 Sand for 1 : 2 mix

(ii) Lime and so : 1 Surki : 2 sand for 1 : 3 mix
on

11. **Proportions.** The proportions given are by bulk. The gauge boxes shall of such dimensions that a complete bag of cement forms a unit of 0.0345 cubic metre, when cement is re-bagged it will be done by weight so that a complete bag will weight 50 Kg.

12. **Mixing.** Concrete mixed by machinery, shall be mixed for at least 2 minutes. Hand mixing shall be done on a clean platform. the lime or cement and sand shall be thoroughly mixed together dry. The aggregate shall be first soaked with the prescribed quantity of water and the other mixed ingredients added and the whole turned over three times. Sufficient water being added through a rose to make the mixture workable. Hand mixing shall only be allowed if total quantity of cement concrete for the day work does not exceed 1.50 cubic metre. No hand mixing shall be allowed for RCC work.

13. **Depositing.** Concrete shall be used as mixed, deposited and well-consolidated in layers n.exc. 15cm thick cement concrete in which the initial set has taken place shall be rejected.
14. **Working up.** Carefully work up and put concrete against surfaces and around reinforcement so that the later is not displace.
15. **Aggregate.** All aggregates for PCC/ RCC works shall be 19mm graded unless otherwise shown in the drg.
16. **Size of Coarse Aggregates.** Maximum nominal size of coarse aggregate shall be the minimum of the following.
 - a. 1/5 the narrowest dimension between sides of forms.
 - b. 1/3 the depth of slabs
 - c. $\frac{3}{4}$ the minimum clear spacing between individual reinforcing bars or bundles of bars or pre stressing tendons or ducts
 - d. The above limitations may be relaxed if in the judgement of the Engineer workability and methods of consolidations are such that concrete can be placed without honeycomb or voids
17. **Form Work.** Includes rough wrought casings, forms, mould, centering of any shape, size or section all struts, supports, spikes, bolts, dogs, etc. together with erection, easing, striking, removal, use and waste up to 6 months. Form work shall be paved over with soap, grease or lime wash to prevent adhesion of concrete.
18. **Reinforcement.** For concrete shall be measured separately as supplied and fixed under "Steel and Iron works" section.
19. Exposed faces of cast in situ pre-cast and reinforced concrete shall be brought to fair and even surface by through punning (by working the concrete against the casings and the centering) and tamping, whilst the concrete is being poured in, and also by working over the surface with a trowel immediately after the removal of the casings, or centering, in order to remove any irregularities and stop up any air holes, using where necessary, cement mortar which will give a similar appearances to the original concrete. Separate plaster after the initial set shall not be allowed.
20. **Channels.** Formed in concrete shall be finished fair to proper falls with all bends, stopped ends, etc., required.
21. **Pointing.** The joints of concrete block walling shall be raked out as the work proceeds and the surface cleaned and brushed. Flush pointing in addition shall be executed as required.
22. **Linear Girth (Small).** Refer to chamfers, splays rounded angles, coved angles, beads, grooves, rebates, n. exc. 10 cm girth, and mouldings, n.exc. 15 cm girth.
23. **Incidental Labours.** Refer to stops, returns, rounded ends, junctions, dishing, etc. in connection with linear superficial labours.

24. **Curing and Protection.** Concrete shall be kept wet for 10 days after laying and protected with sand, sawdust, gunny bags etc., as required. Protect concrete from frost of any other damage.

25 **Unless.** Unless otherwise stated fair finish shall imply even, fair but not smooth finish.

26. **Piling.**

a. **Boring/ Drilling of Cast in Situ Pile.** Boring/ drilling for cast in situ pile up to the required depth and diameter with temporary steel casing, true to vertical, providing bentonite slurry and maintaining water level in the hole, washing the hole for at least 30 minutes, clean the bore-hole and make the bore-hole ready for placing steel cage and except concreting but including charge of rig set with winch machine, tripod stand, trimie pipe, cost of fuel, lubricant, mobilization, demobilization, maintenance, spares, stand-byes, water, electricity & other charges all complete as per design and direction of Engineer-in-Charge.

b. **Casting of Cast in Situ Pile.** Reinforced cement concrete works (1:1.5:3) in bore-hole for making cast-in-situ pile having minimum compressive strength 20 Mpa at 28 days or as shown in the drg. on standard cylinder with cement conforming to BDS 232 & ASTM standard mixed with best quality coarse sand (FM 2.5), 19 mm down well graded crushed stone chips including breaking chips, screening through proper sieves, making, placing re-bar cage in position, placing & removing tri-pod as per requirement, pouring the concrete in bore-hole, maintaining the trimie pipe immersed in concrete by at least 1 meter throughout the period of concreting, maintaining required slump etc. mixing the aggregates with mixer machine with hopper, casting in forms, all complete in water, electricity, testing of materials and concrete etc & other as per design, drawing and direction of Engineer-in-Charge.

c. **Conducting Static Load Test.** Conducting static load test for the cast-in-situ/ pre-cast pile providing required scaffolding, bracing, jacks, pressure test gauge, loading unloading, Kent ledge and other plants and equipment including staging, mobilization, demobilization, hire charge, gunny bags & sand filling sack / gunny bags for loading, record readings & preparation of results in standard forms & other incidental charges as per standard practice and procedures incl submission of load test report, furnishing all graph and chart as per standard practice & direction of the Engineer-in-Charge. Allowable settlement shall not be more than .00028 mm per kg of the test load nor 20 mm.

d. **Pre-cast Pile.** Pre-cast driven pile with reinforced cement concrete (1:1.5:3) having minimum compressive strength 25 Mpa at 28 days or as shown in the drawing on standard cylinder with cement conforming to BDS 232 & ASTM standard mixed with best quality coarse sand (F.M. 2.5), 19 mm down well graded stone chips in mixture machine incl cost of breaking chips, screening through proper sieves, cleaning and washing, centering and shuttering with M.S sheet, M.S angle, F.I bar, nuts & bolts, preparation of bed, laying polythene, placing of reinforcement cage in position, casting, compacting by vibrators and tapered rods, curing for 28 days etc. incl cost of water, electricity & other charge, providing pile shoe as per design & drawing, test materials & concrete etc. all complete as per direction of the Engineer-in-Charge.

e. **Driving of Pre-cast Pile.** Driving the pile up to the design depth as per standard practice or specified method providing head cushion, all equipments including mobilization and hire charge of driving set.

27. **Different Type of Admixtures.** Supplying and mixing specified type chemical admixture from an authorized local agent or manufacturer, comply with the ASTM C-494 requirements, conforming the current compliance of the admixture to specification requirements like physical properties, uniformity & equivalents in composition etc., performance (water content, fresh concrete setting time and compressive strength) requirements, delivered in sealed water-tight containers having and conforming plainly marked the proprietary name of the admixture type under this specification, net weight & / or volume, manufacturing and expiry date, non aggressiveness to environment, aggregates and metals in concrete etc. and mixing the admixture in non pre-stressed cement concrete mixture in the field under the strict accordance with manufacturers recommendation and instruction, providing safety provisions in all respects etc. all complete as per instruction of Engineer-in-Charge.

Doses and specifications for different type admixtures of Baral Chemical Co. / Dr Fixit or equivalent are attached with this section.

Method of Measurements

28. **Tolerances.**

- a. Take lengths to nearest centimeter.
- b. Take widths to nearest centimeter.
- c. Take thickness (Least dimension) to nearest millimeter.

29. **Attached Works.** In reinforced concrete (Pilasters, buttresses, string-courses, beams girders etc.)

- a. Walls: Measure all projecting portions with the walls and pay at the same rate.
- b. Floors or Roofs: Measure all projecting portions (beams, haunches, etc.) separately and pay at the rate for beams, girders, columns, etc.

30. No deductions or additions shall be made on any account for:

- a. No deduction for volume of reinforcement, ends of dissimilar materials, i.e. joists, beams posts, girders, purlins, trusses, corbels, steps, etc., n. exc. 450 Sq. cm in section.
- b. Opening n.exc 0.20 sq. metre.
- c. Joints (Locking rebated, tongued and grooved etc.,)
- d. Linear labour (Small) and incidental labour.
- e. The portions shaded in the following sketches in the page-87 (Measuring throughout as a X b where such do not exceed 37.50-sq. cm in section. If they exceed 37.50 sq. cm each, the work will be measured net.
- f. Channels shall be measured as $(axb)-3/4 (c \times d)$. except where the shaded portion does not exceed 37.50 sq cm in section; **See fig 10 page-90.**
- g. Other sections shall be measured net.

31. **Staircases.**
- a. Measure spandrel steps net.
 - b. Measure half and quarter space landings as part of stair.
32. **Channel Formed in Poured Concrete.** When over 37.50 sq cm in section the curved waterway shall be deducted at $\frac{3}{4}$ x width x depth (maximum dimensions).

Clarification of Rates

33. The rates, inter alia include particularly:
- a. All matters specified which apply.
 - b. Aggregates of any grade.
 - c. Work in 15 cm (or less) layers.
 - d. Work in any position and of any thickness.
 - e. Linear and incidental labours produced by form work, cores, etc. except where a separate item exists.
 - f. Curing and protection.
 - g. Roughening surfaces of old concrete (where adjoining new) sweeping cleaning and watering.
 - h. Form work incl. using chatai under RCC roof slab.
34. Walls include attached work (pilaster, buttresses, strings, cornice, plinths etc.) also partition and other work not specifically mentioned.
35. Stairs include stairs of any type, straight, doglegs, winding, open or closed, and steps of square of spandrel section, any shape or plan, strings, carriages and landings less than $\frac{1}{4}$ space.
36. Additional cost for lifting above ground floor for major items are applicable as shown against the relevant items.

Specifications / Uses of Different Types Chemical Products of Baral Chemical Co. Ltd. / Dr Fixit or Equivalent to Prevent Salinity, Dampness of Different Structures / Members of New Buildings to Make Them Water Proof and Long Lasting

37. The uses of chemicals to prevent salinity, dampness of new buildings and make them water proof and long lasting are as follows :
- a. In the concrete of piling :
 - b. In the concrete of floor of new basement:
 - c. In the concrete of retaining walls of new basement:
 - d. In the concrete of underground water reservoirs:
 - e. In the concrete of over-head water reservoirs:
 - f. In the plastering mortar of underground and over-head water reservoirs:
 - g. In the concrete of underground footings and tie beam columns:
 - h. In the concrete of beams, columns, slabs etc. of superstructures:
 - j. In the concrete of top slabs:
 - k. In the fair face concrete:

- l. To make Curdy-dense cement grout for the joints of concretes:
- m. In the mortar of brick-walls cladding:
- n. To prevent the salinity, Desalt-S₀₁ applied on brick-walls before plastering:
- p. In the plastering mortar of walls to create strength & to remove salinity:
- q. Anti-salinity Sealer Desalt-S₀₁ applied on plaster before painting:
- r. To prevent the dampness and salinity of walls inside of kitchens and toilet walls of new buildings:
- s. In the mortar of Tiles-Cladding :
- t. To prevent the dampness and salinity of skirts level of newly constructed buildings:
- u. Mosaic works with Foam-Lub:
- v. In the cladding-mortar of tiles, marble, stones, etc. on floors:
- w. To prevent the stigmas of mosaic and marbles caused from coffee, tea etc. :
- x. In the cladding-mortar of fair face sand stone, ceramic, and fancy bricks:
- y. To prevent the salinity, tendency of water absorption, and the birth of algae on sand stone, ceramics, sand stone and ordinary as well as fine bricks:
- z. To prevent the salinity and dampness of ground floors of newly constructed building:
- aa. Water proofing & Heat reducing treatment at roof of new buildings:
- bb. To keep away termite & insects from the ground floors & external of newly constructed buildings:

38. **Foam-Lub used in The Concrete of Piling.**

a. **Merits / Functions.** Creating anti rust layer by peeling off the previous layer of rust on rods; Permanent prevention of rust using chloride, sulfur and carbonation process; Effective concreting against the intruding and extruding water in the holes of piling; Prevention of segregation or bleeding caused by excessive vibration to create compaction against pores and void; The achievement of high strength (up to 0.53) from the water & cement ratio; Achievement of higher ultimate strength at all events; The discharge of excessive water; The prevention of corrosion of concrete; Acting as the Lubricant, Plasticizer, and Water reducer.

b. **Method of Chemical Mixing.** Mix 125 ml. Foam-Lub (or as per table attached) with a full-bag-cement (50 kg). Mix up Foam-Lub with the concrete generated from the mixture of water, cleaned sand and cement. Usually, a bag of cement requires 20-22 liter water for optimum mixture.

39. **Foam-Lub used in The Concrete of Basement Floors.**

a. **Merits / Functions.** Highly Water proofing; Joint monolith bonding with the help of curdy-dense Foam-Lub grout applicable to casting of different duration; Concreting in flowing or still water; Fast achievement of resistance power of “Water and Cement Ratio (up to 0.53); Achievement of higher ultimate strength at all events; The discharge of excessive water; Concreting in the rain; Reducing and emitting *Heat of Hydration* ; Prevention of segregation and bleeding in excess water and in excess vibration for appropriate compaction to resist pores and void; Prevention of salinity and dampness; Creating anti rust layer by peeling off the previous layer of rust on rods; Permanent prevention of rust using chloride, sulphur and carbonation process; Saving concrete from the chloride and sulphur; Water reducer of concrete; The prevention of corrosion of concrete; Acting as the Lubricant, Plasticizer, water reducer of concrete; Having high workabilities; Acting as partial auto-curing and free flowing; Brings the fine brightness of concrete.

b. **The Amount of Foam-Lub in The Concrete of Basement Floors.**

300mm thickness 500 ml. Foam-Lub with one bag cement.	Thickness greater than 300mm 400 ml. Foam-Lub with one bag cement.
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c. **The Amount of Foam-Lub in The Concrete of Basement Floors (Incise of Water Intrusion).**

300mm thickness 1 Liter Foam-Lub with one bag cement.	Thickness greater than 300mm 800 ml. Foam-Lub with one bag cement.
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40. **Foam-Lub used in Concrete of Retaining Walls at New Basements.**

a. **Merits / Functions.** Highly water proofing; Joint monolith bonding with the help of curdy-dense Foam-Lub grout applicable to casting at different time; Working without Water stopper & Felt ; Concreting in flowing or still water; Fast achievement of resistance power of “Water and Cement Ration (upto 0.53); Achievement of high strength early; Achievement of higher ultimate strength at all events; The discharge of excess water; Concreting in the rain; Reducing and emitting *Heat of Hydration* ; Prevention of seggregation and bleeding in excess water and in excess vibration for appropriate compaction to resist pores and void; Prevention of salinity and dampness; Creating anti rust layer by peeling off the previous layer of rust on rods; Permanent prevention of rust using chloride, sulphur and carbonation process; Saving concrete from the chloride and sulphur; Water reducer of concrete; The prevention of corrosion of concrete; Acting as the Lubricant, Plasticizer, water reducer of concrete; Having high work abilities; Acting as partial auto-curing and free flowing; Brings the fine brightness of concrete.

b. **The Amount of Foam-Lub in The Concrete of Retaining Walls.**

300mm thickness 500 ml. Foam-Lub with a bag of cement.	Thickness greater than 300mm 400 ml. Foam-Lub with a bag of cement.
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c. **The Amount of Foam Lub in The Concrete of Retaining Walls (Incuse of Water Intrusion).**

300mm thickness 1 Liter Foam-Lub with a bag of cement.	Thickness greater than 300mm 800 ml. Foam-Lub with a bag of cement.
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41. **Foam-Lub used in The Concrete of New Underground Water Reservoirs.**

a. **Merits / Functions.** Highly Water proofing; Joint monolith bonding with the help of curdy-dense Foam Lub grout applicable to casting at different time; Working without Water stopper & Felt ; Concreting in flowing or still water; Fast achievement of resistance power of “Water and Cement Ratio (upto 0.53); Achievement of high strength early; Achievement of higher ultimate strength at all events; The discharge of excess water; Concreting in the rain; Reducing and emitting *Heat of Hydration* ; Prevention of segregation and bleeding in excess water and in excess vibration for appropriate compaction to resist pores and void; Prevention of salinity and dampness; Creating anti rust layer by peeling off the previous layer of rust on rods; Permanent prevention of rust using chloride, sulphur and carbonation process; Saving concrete from the chloride and sulphur; Water reducer of concrete; The prevention of corrosion of concrete; Acting as the Lubricant, Plasticizer, water reducer of concrete; Having high work abilities; Acting as partial auto-curing and free flowing; Brings the fine brightness of concrete.

N.B.: Foam-Lub guards concrete against the erosion caused by the chlorine of water.

b. **The Amount of Foam-Lub in The Concrete Of Underground Water Reservoir (Dry Concrete).**

Thickness up to 250mm 500 ml. Foam-Lub with one bag cement.	Thickness greater than 250mm at least 400 ml. Foam-Lub with one bag cement.
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c. **The amount of Foam-Lub in The Concrete of Underground Water Reservoir (Incuse of Water Intrusion).**

Thickness up to 250mm 1 Liter Foam-Lub with one bag cement.	Thickness greater 250mm at least 800 Foam-Lub with one bag cement.
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42. **Foam-Lub used in The Concrete of New Overhead Water Reservoirs.**

- a. **Merits / Functions.** Prevention of segregation and bleeding in excess water and in excess vibration for appropriate compaction to resist pores and void Complete Water proofing; Achievement of higher ultimate strength at all events; Joint monolith bonding with the help of curd-dense Foam Lub grout applicable to casting at different The discharge of excess water; Permanent prevention of rust using chloride, sulfur and carbonation process; Acting as partial auto-curing and free flowing; Brings the fine brightness of concrete.
- b. **Method of Chemical Mixing and Using.** Use 800ml. to 1 Liter Foam-Lub with a bag of cement to prepare the concrete of floors and walls.

N.B.: Foam-Lub guards concrete against the erosion caused by the chlorine of water.

43. **Foam-Lub used in The Plastering Mortar of Underground and Overhead Water Reservoirs.**

- a. **Merits / Functions.** Prevention of Hair Crack in high temperature; Achievement of early high strength; Better creeping; Partial auto curing; Water proofing; High work abilities; Water reducer; plasticizer, retarded; reducer of void and pores; Prevention against the harmful effect of acid rain; Prevention of harmful effect caused by chloride, sulphur and carbonation process; Bringing fine glazes; and other advantages.
- b. **Method of Chemical Mixing.** Use 250 ml. Foam-Lub with each bag of cement to prepare plastering mortar.

c. **Preparation and use of Curdy-Dense Foam-Lub Cement Grout for Neat Finishing.**

Foam-Lub + Cement + Water = 2 Liter + 1 bag or 50 kg + 35-38 Liter.

First mix Foam-Lub with water. Then use the mixture with Cement to prepare curdy-dense Foam-Lub cement grout. Apply the grout in neat finishing within 1 hour of preparation.

44. **Foam-Lub used in The Concrete of Underground Footing, Tie Beam, Column Etc.**

- a. **Merits / Functions.** Fast achievement of resistance power of “Water and Cement Ratio (upto 0.53); Achievement of high strength early; Achievement of higher ultimate strength at all events; The discharge of excess water; Concreting in the rain; Prevention of segregation and bleeding in excess water and in excess vibration for appropriate compaction to resist pores and void; Creating anti rust layer by peeling off the previous layer of rust on rods; Permanent prevention of rust using chloride, sulfur and carbonation process; Saving concrete from the chloride and sulphur; Acting as partial Auto-curing and free flowing.
- b. **Method of Chemical Mixing.** Use 200 ml. to 250 ml. Foam-Lub with each bag(50kg.) of cement to prepare concrete.

45. **Foam-Lub used in Concrete of Casting of Super Structure Beam, Column, Slab Etc:**

- a. **Merits / Functions.** Joint monolith bonding with the help of curd-dense Foam Lub grout applicable to casting at different time ;The discharge of excess water; Concreting in the rain; Prevention of salinity and dampness; Creating anti rust layer by peeling off the previous layer of rust on rods; Water reducer and water of concrete; Acting as the Lubricant, Plasticizer, water reducer of concrete; Brings the fine brightness of concrete.
- b. **The Amount of Chemical Mixing.** Use 125 ml. Foam-Lub with each bag(50kg.) of cement to prepare concrete.

46. **Foam-Lub used in The Concrete of Top Slab.**

- a. **Merits/Functions.** Prevention of water leakage and dampness; Fast achievement of resistance power of “Water and Cement Ratio (up to 0.53); Achievement of high strength at all events; The discharge of excess water; Concreting in the rain; Prevention of segregation and bleeding in excess water and in excess vibration for appropriate compaction to resist pores and void; Joint Monolith bonding with the help of Curd-dense Foam-Lub Grout applicable to casting at different time’Creating anti rust layer by peeling off the previous layer of rust on rods; Permanent prevention of rust using chloride, sulfur and carbonation process; Prevention of harmful effect of acid rain; Guard concrete against the harmful effect of chloride and sulphur; Act as Water reducer plasticiser, Retarder lubricant of concrete; High working abilities; Partial free flowing and Auto curing; Bringing fine fairness.
- b. **The Amount of Chemical Mixing.** Use 200 ml. to 250 ml. Foam-Lub with each bag of cement to prepare concrete.

N.B.: New top slab of concrete mixed with optimum Foam-Lub mixture doesn’t need any water proofing or lime tracing for at least 5 years.

47. **Foam-Lub used in The Fair Face Concrete.**

- a. **Merits / Functions.** Bringing fine fairness; Prevention of segregation and bleeding in excess water and in excess vibration for appropriate compaction to resist pores and void; Permanent prevention of rust using chloride, sulfur and carbonation process; Joint Monolith bonding with the help of Curd-dense Foam-Lub Grout applicable to casting at different time’; Prevention of harmful effect of acid rain; Act as Water reducer plasticiser; Achievement of early high strength; Achievement of higher ultimate strength at all events; Creating anti rust layer by peeling off the previous layer of rust on rods; Concreting in the rain; Concreting in flowing or still water; and other advantages.
- b. **Sequentially used Chemicals.**
 - (i) Curdy-Dense Foam-Lub Cement Grout For Joints:
 - (ii) Foam-Lub used in Shuttering
 - (iii) Foam-Lub used in the concrete.

- c. **The Method of Preparing Curdy-Dense Foam-Lub Cement Grout.** Mix 2 Liter Foam Lub + 35-38 Liter Water + 1 bag or 50 kg cement to prepare Curdy-Dense Foam-Lub cement grout.
- d. **Foam-Lub used in Shuttering.** Use Foam-Lub instead of shuttering oil. As a result it will bring the whiteness on the concrete surface.
- e. **Foam-Lub Mixed in the Concrete.** Mix 250 ml. Foam Lub in each bag cement to create concrete. In mixture machine pour necessary amount of water and Foam-Lub and water, then mix Chips, Sand and Cement to prepare concrete. Usually, 20-22 Liter water is required for each bag of cement.

48. **Foam-Lub used in Concrete of Swimming Pools.**

- a. **Merits/Functions.** Prevention of water leakage and dampness; Fast achievement of resistance power of “Water and Cement Ratio (up to 0.53); Achievement of high strength at all events; The discharge of excess water; Concreting in the rain; Prevention of segregation and bleeding in excess water and in excess vibration for appropriate compaction to resist pores and void; Joint Monolith bonding with the help of Curd-dense Foam-Lub Grout applicable to casting at different time’Creating anti rust layer by peeling off the previous layer of rust on rods; Permanent prevention of rust using chloride, sulfur and carbonation process; Prevention of harmful effect of acid rain; Guard concrete against the harmful effect of chloride and sulphur; Act as Water reducer plasticiser, Retarder lubricant and of concrete; High working abilities; Partial free flowing and auto curing; bringing fine fairness
- b. **The Amount of Chemical.** Mix 800ml. to 1 liter Foam-Lub with a bag of cement for preparing the concrete of floor and walls.

N.B.: Chlorine has no harmful effect on the concrete consists of Foam-Lub.

49. **To Prepare Curdy-Dense Foam-Lub Cement Grout for Various Joints of Concrete.**

- a. **Merits / Functions.** Joint monolith bonding with the help of curdy-dense Foam-Lub Cement grout applicable to casting at different time; highly Water proofing; Work without water bar or water stopper; Work without Felt; Create High creeping between two Clayey Building-materials; Prevention of segregation and bleeding in excess water and in excess vibration for appropriate compaction to resist pores and void; and other advantages.
- b. **The Amount of Chemical.** (Foam-Lub + Water) + Cement = (2 Liter + 35-38 Liter)+50 kg. Or 1 bag of cement.

N.B.: Use this Curdy-Dense foam-Lub Cement grout within 2 hours of preparation.

Advantages of using Curdy-Dense Foam-Lub Cement Grout on The Joints of Concrete.

- Joints don’t need any water bar. As a result, economy and permanence is achieved.
- Concrete from casting at different times compacts without any subtle breach; As a result there is no possibility of penetration of water.
- Bringing flexibility in casting Foam-Lub grout acts as an economical permanent bond building process.

c. **The Method of Preparing Concrete with Foam-Lub.**

(i) **Prepared Concrete by Mixer Machine.** Prepare concrete by mixing Chips, Sand, Cement and water in mixture machine. Before mixing materials firstly pour water & Foam-Lub in the mixer machine. Usually 20-22 liter water is used to prepare concrete of per bag cement.

(ii) **Manually Preparation.** Mix appropriate amount of Foam-Lub in the necessary amount of water in a bucket and then mix Chips, Sand & Cement to prepare concrete.

(iii) **Method of using Vibrator.** From the starting of casting, apply 3 times of vibration of 10 minutes after 10 minutes each. For this vibration the concrete will be highly compact, highly strong, well building and robust. Not to say that, high vibration makes the concrete strong.

50. **Foam Lub used in The Mortar of Brick Works of Wall.**

a. **Merits / Functions.** Better creeping; Early high strength; Highly Water proofing; Prevention of erosion on the mortar of brick work; Partial auto curing; and other advantages.

b. **The Amount of Chemical.** Mix 125 ml. Foam-Lub with each bag of cement(50kg.) to prepare cladding-mortar.

51. **Using Desalt-S₀₁ on Brick-Walls Before Plaster.**

a. **Merits / Functions.** Permanent prevention of salinity of bricks; tempering the bricks with resisting or erosion; Decreasing the penetration of water by blocking pores.

b. **The Amount of Chemical.** Desalt S₀₁ + Water + Catalyst = 1 Liter + 8 Liter + 25 ml. or 1 point/mark.

N.B.: Apply a coat of mixture with a jute brush. Use the mixture within 2 hours of preparation.

52. **Foam-Lub used in Mortar of Plastering on Walls.**

a. **Merits / Functions.** Achievement of high strength early; better creeping; Prevention of segregation and bleeding in excess water and in excess vibration for appropriate compaction to resist pores and void; Saving concrete from the chloride and sulfur; Having high work abilities; Acting as partial Auto-curing and free flowing; Brings the fine brightness of concrete; .Permanent prevention of salinity of bricks;; Decreasing the penetration of water by blocking pores.

(i) Using Foam-Lub in Plaster on Outside of Outer Walls, The Opposite Walls of Kitchen and Bathroom.

Use 250 ml. Foam-Lub with each bag of cement (50kg.) to prepare plastering mortar.

(ii) Using Foam Lub in Plaster on Inside of Outer Walls, and Other Walls.

Use 125 ml. Foam-Lub with each bag of cement(50kg.) to prepare plastering mortar.

53. **Anti-Salinity Sealer Desalt-S₀₁ Applied on Plaster Before Painting.**

a. **Merits / Functions.** Prevention and cure of salinity permanently acting as a sealer; To create plain surface to for applying putty; To create the strong bond of putty; Prevention of eroding of plaster; Prevention of birth of colony; Reducing the porosity; and other advantages of Desalt-S₀₁.

b. **The Amount of Chemical.** Desalt S₀₁ + Water + Catalyst = 1 Liter + 4 Liter + 25 ml. or 1 point/mark.

N.B.: Apply one coat of mixture with a jute brush. Use the mixture within 2 hours of preparation. Don't apply on wet plaster.

54. **Chemicals used in Damp Proof Treatment on Walls of Kitchen and Bathroom.**

a. **Merits / Functions.** Usually plaster and layer of colors of outside walls is damaged by water comes outside through the joints of tiles of inner bathroom walls and still water near the walls. Usually, it takes two years to start the penetration of water from inside walls. So it is important to use sequentially Desalt S₀₁ and Curdy-dense Foam-Lub cement grout for prevention damp and salinity. It is essential to plaster the outside wall with mortar of Foam-Lub.

b. **Site Preparation: Internal Walls of Kitchen, Bathroom.** Fill up the gaps or breach of mortar or brick work, keeping the pointing intact with the Foam-Lub mixed cement mortar. Never curing the wall, before and after the plaster.

c. **Chemicals to be used Sequentially.**

- (1) Desalt-S₀₁.
- (2) Curdy-Dense Foam-Lub Cement Grout (2 coats)

d. **Mixing and Amount.** Desalt S₀₁ + Water + Catalyst = 1 Liter + 8 Liter + 25 ml. or 1 point.

N.B.: Apply one coat of mixture with a jute brush. Use the mixture within 2 hours of preparation.

e. **Curdy-Dense Foam-Lub Cement Grout (2 Coats).** (Foam-Lub + Water) + Cement = (2 Liter + 35-38 Liter)+50 kg. Or a bag of cement.

(1) **1st Coat.** Apply the Curdy-Dense Foam Lub-Cement Grout on Desalt- S₀₁ wet walls. Use a jute brush to apply the Curdy-Dense Foam-Lub Cement Grout on wall.

(2) **2nd Coat.** Apply 2nd coat within 4 –6 hours after applying 1st coat or when the 1st coat is hard enough to be attached despite of the effect of 2nd coat. Applying 2nd coat on the drenched 1st coat is undesirable.

55. **Foam Lub used in The Mortar of Tiles and Marble Cladding.**

a. **Merits / Functions.** Better creeping; Prevention of dampness; Achievement of early high strength; Auto curing; Prevention of erosion; High work abilities; Removing pores and void; Water proofing; Prevention of erosion caused by chloride, sulfur, and carbonation; and other advantages including longevity.

b. **Chemicals to be used Sequentially.**

(1) Foam-Lub Cement Grout before Tiles, marble, etc. cladding

(2) Foam-Lub used in Mortar

c. **Mixture and Amount.** Foam-Lub Cement Grout Before Tiles, Marble, etc. Cladding. (Foam-Lub + Water) + Cement = (2 Liter + 35-38 Liter)+50 kg. Or a bag of cement are need to prepare Foam-Lub Cement Grout.

d. **Foam-Lub used in Mortar.** Mix 250 ml. Foam-Lub with each bag of cement(50kg.) to prepare cladding mortar. Mix up 250 ml. Foam Lub with necessary amount of water in a pot. After that with this Foam-Lub mixed water, prepare cladding mortar. Drench the wall with the Foam-Lub Cement grout before cladding the tiles, marble, etc. on it. If the wall is to be dry, it will be drenched with Foam-Lub Cement grout.

N.B.: Never drench the grout applied wall with water.

56. **Damp Proof Treatment at Skirt-Level.**

a. **Merits / Functions.** The water of wall and the water generated from casting tiles on skirt levels create huge dampness and salinity. To prevent this dampness and salinity it is necessary to use saline preventing Desalt-S₀₁; for generating Curdy-dense Foam Lub cement grout and plastering mortar Foam-Lub is essential.

b. **Necessary Chemicals.**

(1) Foam-Lub used in Pointing mortar at mortar Joints.

(2) Desalt- S₀₁

(3) Curdy-Dense Foam-Lub Cement grout (2 coats)

(4) Foam-Lub used in morar.

c. Use and Mixture of Chemical.

d. **Foam-Lub used in Pointing Mortar at Mortar Joints.** Generate pointing mortar by mixing 500 ml. Foam-Lub with per bag of cement (50 kg).

N.B.: Never drench the wall with water. Even don't clean the wall with water.

(1) **Desalt- S₀₁.** Desalt- S₀₁ + Water + Catalyst = 1 liter + 6 Liter + 25 ml. or 1 point. Apply a coat of mixture with a jute brush on wall. Use the mixture within 2 hours of preparation.

e. **Curdy-Dense Foam-Lub Cement Grout.**

(1) **Mixture and Amount.** Mix (Foam Lub + Water) + Cement = (2 liter + 35-38 liter) + a bag of cement or 50 kg cement to prepare Curdy-Dense Cement Grout. Apply the materials and generate dense grout.

(2) **1st Coat.** Apply the Curdy-Dense Foam Lub-Cement Grout on Desalt- S₀₁ wet walls. Use a jute brush to apply the Curdy-Dense Foam-Lub Cement Grout on wall.

(3) **2nd Coat.** Apply 2nd coat within 4 –6 hours after applying 1st coat or when the 1st coat is hard enough to be attached despite of the effect of 2nd coat. Applying 2nd coat on the drenched 1st coat is undesirable.

f. **Foam-Lub used in Mortar.** Mix 500 ml. Foam-Lub with each bag of cement (50kg.) to prepare mortar. Mix up 500ml. Foam-Lub, a bag cement and necessary amount of water to prepare cement mortar and plaster with the mortar. Drench the wall with the Foam-Lub Cement Grout before cladding and plastering.

57. **Foam Lub used in Mosaic Casting.**

a. **Merits/Functions.** Reducing hair cracking and bringing smoothness; Achievement of high strength early; Achievement of higher ultimate strength at all events; Resisting pores and void; Acting as the Lubricant, Plasticizer, water reducer of concrete; Having high work abilities; Brings the fine brightness of concrete.

b. **Site Preparation.** Level and clean the area to be used by mosaic.

c. **Chemicals to be used Sequentially.**

- (1) Curdy-Dense Foam-Lub Cement Grout.
- (2) Foam-Lub used in Mosaic-Concrete.
- (3) Foam-Lub used in Cement-Paste.

d. **Mixture and Amount.**

(1) **Curdy-Dense Foam-Lub Cement Grout.** Mix (Foam –Lub + Cement) + Cement + (2 Liter + 35-38 Liter) + 1 bag or 50 kg. of cement to prepare cement grout. Use the mixture with jute brush or broom. Then cast the mosaic after preparing mosaic concrete.

(2) **Foam-Lub used in Mosaic-Concrete.** Mix 250 ml. to 500 ml. Foam-Lub with each bag of cement (50kg.) to prepare mosaic-concrete. After preparing mosaic-concrete, mosaic will be cast. After mosaic casting, Cement Pest will be prepared with water, cement and Foam-Lub to be pest.

(3) **Foam-Lub used in Cement Paste.** Mix 2 litre Foam-Lub with per bag of Cement to prepare Foam-Lub Cement Paste.

N.B.: Use the Foam-Lub Cement-Pest within 2 hours of preparation.

58. **Foam Lub used in Cladding of Tiles, Marbles, Stones Etc. of Floors.**
- a. **Merits/Functions.** Better creeping; Achievement of high strength early; Having high work abilities; Acting as partial Auto-curing; appropriate compaction to resist pores and void; Permanent prevention of rust using chloride, sulfur and carbonation process; Saving concrete from the chloride and sulphur; Water proofing;
 - b. **Site Preparation.** Chip and clean the floor.
 - c. **Necessary Chemicals.**
 - (1) Curdy-Dense Foam-Lub Cement Grout.
 - (2) Foam-Lub used in Mortar.
 - (3) Foam-Lub used in Pointing Mortar.
 - d. **Mixture and Amount.** Mix (Foam –Lub + Cement) + Cement + (2 Liter + 35-38 Liter) + 1 bag or 50 Kg to prepare Curdy-Dense Foam-Lub cement grout. Use the mixture with jute brush or broom before tiles, marbles, stones cladding.
 - e. **Foam-Lub used in The Mortar of Tiles, Marbles, Stones, Etc Cladding.** Mix 125 ml. Foam-Lub with each bag of cement (50kg.) to prepare the mortar. Drench the floor with the Foam-Lub Cement grout before cladding the tiles, marble, stones, etc. on it. If the floor is to be dry, it will be drenched with Foam-Lub Cement grout. After cladding tiles, marbles, stones, etc., finally point with pointing mortar mixed with Foam-Lub.
 - f. **Foam-Lub used in Pointing Mortar.** Mix 2 Litre Foam-Lub with per bag of cement (50kg.) to prepare pointing mortar.
59. **Chemical used to Prevent Water Absorption, Hair Crack, and Stigma of Tea, Coffee, and Liquid of Curry Etc. on The Mosaic and Marble.**
- a. **Merits / Functions.** Prevention of absorption of water without layer; Filling hair crack; Prevention of stigma caused by tea, coffee or liquid of curry; Prevention of erosion; bringing longevity of the color of mosaic and marbles keeping the original beauty. Prevention of Water Absorption, Hair Crack, and Stigma of Tea, Coffee, and Liquid of Curry Etc. on The Mosaic.
 - b. **Site Preparation.** Cast mosaic after 7-10 days of cutting, polishing and finishing on dry surface. Clean mosaic with a dry cloth before casting.
 - c. **Necessary Chemicals.** Mosasol.

d. **The use of Mosasol.**

(1) **1st Coat.** Pour Mosasol in a pot. Then coat with a hair brush as 1st coat. Clean mosaic with a dry cloth before using Mosasol.

(2) **2nd Coat.** Use the same method in 2nd coat. Usually the surface will absorb less Mossasol in 2nd time than that of 1st coat. As a result the coverage of 2nd coat will be bigger than that of 1st coat. Polish the mosaic with polishing machine after 12 hours or a day of applying 2nd coat. Cleaning the surface of the stone of the polishing machine with a jute fiber is essential. Change the fiber after a few while and repeat the process again.

N.B.: Take proper caution to keep away Mosasol from the colour of brush. Otherwise the colour will create permanent points on the mosaic. As a precautionary manner, hack away the color on the handle of the brush.

e. **Prevention.** Prevention of Water Absorption, Hair Crack, and Stigma of Tea, Coffee, and Liquid of Curry Etc. on The Marble.

f. Site Preparation. Use Marbosol after 7-10 days of cutting, polishing and finishing on dry surface. Clean Marble with a dry cloth before applying marbosol.

g. **Necessary Chemicals.** Marbosol

h. **The use of Marbosol.**

(1) **1st Coat.** Pour Marbosol in a pot. Then coat with a hair brush as 1st coat. Clean marbles with a dry cloth before using Marbosol.

(2) **2nd Coat.** Use the same method in 2nd coat. Usually the surface will absorb less Marbosol in 2nd time than that of 1st coat. As a result the coverage of 2nd coat will be bigger than that of 1st coat. Polish the mosaic with polishing machine after 12 hours or a day of applying 2nd coat. Cleaning the surface of the stone of the polishing machine with a jute fiber is essential. Change the fiber after a few while and repeat the process again.

N.B.: Take proper caution to keep away Marbosol from the colour of brush. Otherwise the colour will create permanent points on the marble. As a precautionary manner, hack away the color on the handle of the brush.

60. **Foam-Lub used in The Mortar of Fair Face Brick, Sand Stone, Lime Stone and Ordinary Fine Bricks.**

a. **Merits/Functions.** Filling up the pores in joints of Joint Pointing Mortar; Better creeping; Permanent prevention of erosion of bricks using Anti-saline Desalt-S01; Joint Monolith bonding to resist the penetration of water with the help of Curdense Foam-Lub Grout applicable to casting at different time; Achievement of high strength early; Appropriate compaction to resist pores and void; Permanent prevention of rust using chloride, sulfur and carbonation process; Acting as partial Auto-curing and free flowing; Water proofing; Auto curing; Prevention of water penetration by reducing hair crank; Reducing of water penetration by reducing the on the mortar of ordinary brick-walls ; and other advantages of Foam-Lub.

- b. **Chemicals to be used Sequentially.**
- (1) Foam Lub used in pointing mortar at brick-walls.
 - (2) Desalt-S01.
 - (3) Curdy-Dense Foam Lub Cement-Grout.
 - (4) Faom Lub used in Mortar.
 - (5) Foam Lub used in pointing mortar at fair-face.
- c. **Site Preparation.** Clean the wall properly. Apply above chemicals sequentially when the wall is dry.
- d. **Foam-Lub used in Pointing Mortar at Brick Wall.** Use 500 ml. Foam Lub with per bag of cement to generate pointing-mortar. Then use the mortar to point.
- e. **The use of Desalt-S01.** Desalt-S01 + Water + Catalyst = 1 liter + 8 liter + 25 ml. or 1 point/mark. Apply one coat of mixture with a jute brush. Use the mixture within 2 hours of preparation.
- f. **Curdy-Dense Foam-Lub Cement Grout(2 coats).** Foam-Lub + Water + Cement = 2 Liter + 35-38 Liter + 1 bag or 50 kg. Cement.
- (1) **1st Coat.** Apply the Curdy-Dense Foam Lub-Cement Grout on Desalt- S₀₁ wet walls. Use a jute brush to apply the Curdy-Dense Foam-Lub Cement Grout on wall.
 - (2) **2nd Coat.** Apply 2nd coat within 4 –6 hours after applying 1st coat or when the 1st coat is hard enough to be attached despite of the effect of 2nd coat. Applying 2nd coat on the drenched 1st coat is undesirable.
- N.B.:** Use up the cement grout within the 2 hours of preparation. As a result, it is better to prepare the optimum amount of cement grout.
- g. **Foam-Lub used in Mortar.** Mix 250 ml. Foam-Lub with a bag of Cement (50kg.) to prepare cladding-mortar. Apply the Foam-Lub Cement Grout on the wall before casting ceramic, ordinary fine bricks etc. If the wall becomes dry, Foam-Lub Cement grout will be applied again.
- h. **Foam-Lub used in Pointing Mortar.** Mix 2 litre Foam-Lub with a bag of cement (50 kg.) to prepare pointing-mortar. Finally, point with the mortar.

61. **Chemicals used to Prevent Salinity, Water Absorption and Growth of Algae on Sand Stones, Ceramics and Ordinary Fine Bricks.**

- a. **Merits / Functions.** The annihilation of the source of white mark of Sesque-Carbonated, using the Desalt-S₀₁ at the beginning; Reducing the porosity and salinity using anti-saline Desalt-S₀₁, Keep the resplendence of materials by reducing the erosion of materials. Hydro Seal Ef-34 is a seme-transparent liquid that maintain the fine beauty of fair face, reduce the porosity, and prevents the growth of algae, moss etc.

b. **Chemicals to be used Sequentially.**

- (1) Foam-Lub used in pointing mortar
- (2) Desalt-S₀₁
- (3) Hydro Seal Ef-34 (with water)

c. **Method of Preparing and using Chemicals.** When the casting of sand stones, ceramics, and ordinary fine bricks is finished, generate the mixture of 2 liter Foam-Lub, 50 kg cement and appropriate amount of water to generate mortar. Use the mortar to fill up the joints of mortar with the mortar so that the water can't penetrate through the joints. Clean loose materials, if any, with brush and water. After 2 or 3 days of cleaning, apply Desalt-S₀₁ in a way that it can perpetuate through the wall.

d. **The use of Desalt-S01.** Desalt-S₀₁ + Water + Catalyst = 1 liter + 8 liter + 25 ml. or 1 point/mark. Apply one coat of mixture with a jute brush. Use the mixture within 2 hours of preparation. Clean the Desalt-S₀₁ applied surface after 1 day with water and brush. Let the surface dry, then after 6-7 days use 3 coats mixture Hydro-Seal, Ef-32 with water.

e. **The Mixing & using of Hydro-Seal-Ef-34.**

- (1) **1st Coat.** Hydro-Seal, Ef-34 + Water + T Catalyst = 1 Liter + 6 Liter + 25 ml. or 1 point/mark. Apply the mixture on Fair-face with a jute brush in a way that the mixture can be penetrated. Apply a 2nd coat after 1 day of 1st coat.
- (2) **2nd Coat.** Hydro-Seal, Ef-34 + Water + T Catalyst = 1 Liter + 5 Liter + 25 ml. or 1 point/mark. Apply the mixture with a jute brush in a way that the mixture can be penetrated. Apply a 3rd coat after 1 day of 2nd coat.
- (3) **3rd Coat.** Hydro-Seal, Ef-34 + Water + T Catalyst = 1 Liter + 5 Liter + 25 ml. or 1 point/mark. Apply the mixture with a jute brush in a way that the mixture can be penetrated.

62. **Chemicals used to Prevent Dampness and Salinity of Floors of New Buildings (Instead Of Bituminous Carpet).**

a. **Merits/Functions.** The permanent prevention of harmful effect of carbonation and prevention of salinity of C.C. surface using anti-saline Desalt-S₀₁; Reducing porosity; The water proofing effect of liquid of Hydro-seal, Ef-32 and Foam-Lub; Cast in-situ with the liquid. The liquid additionally consist of Desalt-S₀₁ enter the pores and void of bottom surface and fill up them and the overflow of liquid felt create a water proof plasticized layer on the surface. It creates a Cement Gum when comes close to cement. Felt create permanent bonds in the pores and voids and create a thick casting by creeping two monolith bonds. Moreover, it is proof against the harmful effect of salinity, sulphur, and insects. Finally, Felt is economic, and time saving, and easy to use.

b. **Site Preparation (The Ground Floor).** Compact the floor properly with sand. Then soling with bricks keeping 300 mm gap between each brick. Then cast C.C. From the top to the bottom of the brick including the gaps.

c. **Chemicals to be used Sequentially.**

(1) Desalt –S01.

(2) Hydro seal, Ef-32 and accessory materials i.e. Coal-tar, kerosene etc (2coats).

(3) Foam-Lub used in the concrete.

d. **The Sequential Mixture and use of Chemicals.** Desalt S₀₁ + Water + Catalyst = 1 Liter + 8 Liter + 25 ml. or 1 mark.

N.B.: Apply a coat of the mixture with a jute brush. Use the mixture within 2 hours of preparation. After applying Desalt-S₀₁, apply Hydroseal, Ef-32 with coal-tar.

e. **The Mixer & use of Hydro-Seal, Ef-32 with Coal-tar, Kerosene (2coats).**

(1) **1st coat.** (Hydro-seal, Ef-32 + Water + T. Cat. + R. Cat) in bucket + (Coal-Tar + Kerosine) in another bucket = (4 Liter + 4 Liter + 100 ml. or 1 mark + 50 ml. or 1 mark) + (4 Liter + 1 Liter). Apply a 2nd coat after 12 hours of 1st coat:

(2) **2nd Coat.** (4 Liter + 0 Liter + 100 ml. or 1 point + 50 ml. or 1 point) + (4 Liter + 1 Liter) Mix the elements properly and use the mixture with a jute brush. After applying 2nd coat, Cast at least 50mm C.C. (1:2:4) on it.

f. **Foam-Lub used in Concrete.** For C.C. mix 250 ml. Foam-Lub with 1 bag of cement to prepare concrete.

N.B.: Mix homogeneously the elements of each bucket together. Use the mixture of Catalyst and Hydro-seal, Ef-32 within the 30 minutes of preparation.

63. **Water Proofing & Heat Reducing Treatment Instead of Lime Tracing at Roof of New Buildings.**

a. Water Proofing & Heat Reducing Treatment with Hydro-Seal, Ef-32 Instead of Lime Tracing at Roof of New Buildings.

(1) **Merits/Functions.** The permanent prevention of harmful effect of carbonation and prevention of salinity of C.C. surface using anti-saline Desalt-S₀₁; The water proofing effect of liquid of Hydro-seal, Ef-32 and Foam-Lub; The liquid creates a highly creeping and monolith bonding in the C.C. on the surface above R.C.C. Foam-Lub used in C.C is a waterproof and temperature conductor. It guards against the harmful effect of sulphur, salinity and increase of hair crack. Instead of lime tracing, this method is economy, labour & time-saving.

- (2) **Site Preparation.** Chip & clean the top slab properly.
- (3) **Necessary Chemicals.**
- (a) Desalt –S01.
 - (b) Hydro seal, Ef-32.(with water)
 - (c) Hydro-seal, Ef-32 with Foam-Lub before patent-stone
 - (d) Foam-Lub used in Patent Stone
 - (e) Foam-Lub used in Neat Cement Finishing.
- (4) **The use of Desalt S01.** Desalt S₀₁ + Water + Catalyst = 1 Liter + 10 Liter + 25 ml. or 1 point/mark. Apply one coat of this mixture with a jute brush on the surface of roof. Apply the mixture Hydroseal,Ef-32 with water on dry surface of roof after applying Desalt-S01
- (5) **The use of Hydro-seal, Ef-32 with Water.** Hydro-Seal, Ef-32 + Water + T Catalyst + R Catalyst = 1 Liter + 7 Liter + 25 ml. or 1mark + 12.50 ml. Apply the mixture with a broom everywhere in the surface of top slab in way that the mixture can penetrate. Apply a 2nd coat after with Foam-Lub and cast patent stone after 1 day of 1st coat.
- (6) **The use of Hydro-seal, Ef-32 with Foam Lub.**
- (a) **1st coat.** (Hydro-seal, Ef-32 + Water + T . Cat. + R. Cat) in bucket + (Foam-Lub + Water) in another bucket = (4 Liter + 100 ml. or 1 point + 50 ml. or 1 point) + (4 Liter + 4 Liter). Apply this mixture with a jute brush or broom everywhere on the surface. After applying 12 hours of 1st coat, 2nd coat will be applied.
 - (b) **2nd Coat.** (4 Liter + 100 ml. or 1 point + 50 ml. or 1 point) + (4 Liter + 2 Liter)
- N.B.:** Mix homogeneously the elements of each bucket together. Use the mixture of Catalyst and Hydro-seal, Ef-32 within the 20 minutes of preparation. After applying 2nd coat Patent Stone will be cast within 12 hours.
- (7) **Foam-Lub used in Patent Stone Concrete.** Mix 500 ml. Foam-Lub with a bag of cement (50kg.)
- (8) **Size of Chips.** Pie chips or Pea Gravels or 6mm down brick aggregates.
- (9) **Thickness.** At least 75mm concrete (1:2:4), mix 500 ml. Foam Lub with per bag of cement.

(10) **The method of Mixing Concrete Mixed by Foam-Lub.** Prepare concrete by mixing Chips, Sand, Cement and water in mixture machine. Before mixing materials firstly pour water & Foam-Lub in the mixer machine. Usually 20-22 liter water is used to prepare concrete of per bag cement.

(11) **Manually Preparation.** Mix appropriate amount of Foam-Lub in the necessary amount of water in a bucket and then mix Chips, Sand & Cement to prepare concrete. Fix 22 Gauge Wire Mesh or Expanding Metal Net with 12mm to 6mm gap on the middle of patent stone. Fix net horizontally after completion of plaster of 6mm and fix the border of net with the strip of nails. Then plaster 38mm over the fixed net. The lower level of plaster will be long more than 300mm than of lower level so that the next net can be fasten by wear (at least 50mm over lap and every 150mm distance) and one bond be not aligned with another. Finally, apply net finishing with Curdy-Dense Foam Lub-cement grout.

(12) **Preparation and use of Curdy-Dense Foam Lub Cement Grout (For Neat Finishing).** Foam Lub + Water + Cement = 2 Liter + 35-38 Liter + 50 kg or 1 bag. Mix the elements properly. Use the mixture for net finishing on the day of casting. Start curing for 28 days after 24 hours of neat finishing.

b. **Water Proofing & Heat Reducing Treatment With Foam-Lub Instead of Lime Tracing at Roof of New Buildings.**

(1) **Merits/Functions.** Filling up the pores in joints of Joint Pointing Mortar; Better creeping; Permanent prevention of erosion of bricks using Anti-saline Desalt-S01; Joint monolith bonding to resist the penetration of water with the help of Curd-dense Foam-Lub grout applicable to casting at different time; Achievement of high strength early; Appropriate compaction to resist pores and void; Permanent prevention of rust using chloride, sulphur and carbonation process; Acting as partial Auto-curing and free flowing; Water proofing; auto curing; Prevention of water penetration by reducing hair crack; Reducing of water penetration by reducing the on the mortar of ordinary brick-walls ; and other advantages of Foam-Lub.

(2) **Site Preparation.** Chip & clean the top slab properly.

(3) **Necessary Chemicals.**

(a) Desalt –S01.

(b) Foam-Lub.(with water).

(c) Curdy-Dense Foam-Lub Cement Grout (Before Patent-stone)

(d) Foam-Lub used in Patent Stone.

(e) Foam-Lub used in neat Cement Finishing.

- (4) **The use of Desalt-S01.** Desalt-S01 + Water + Catalyst = 1 liter + 10liter + 25 ml. or 1 pint/mark. Apply one coat of mixture all over the surface of top slab with a broom. When the surface is dry then spread the mixture of water and Foam-Lub in a way enough for proper absorption of the liquid.
- (5) **Method of Preparing Mixture of Foam-Lub with Water.** Foam Lub + Water = 1 Liter+ 16 Liter. Apply one coat of mixture all over the surface of top slab with a broom.
- (6) **The mixer & use of Curdy-Dense Foam-Lub Cement Grout before Patent Stone.** Mix (Foam-Lub + water) + Cement = (2 lits. + 35-38 lits.) + a bag of cement (50kg) to prepare Curdy-Dense Foam-Lub Cement grout. Apply one coat of Curdy-Dense Foam-Lub Cement Grout after 1 day of applying Desalt-S01 before patent stone. When the surface is dry drench, it with Curdy-Dense Foam-Lub Cement Grout.
- (7) **Foam Lub used in Patent Stone Concrete.** Mix 500 ml. Foam Lube with a bag of cement(50kg.)
- (8) **Size of Chips.** Pie chips or Pea Gravels or 6mm down bricks aggregates.
- (9) **Thickness.** At least 75mm concrete (1:2:4), mix 500 ml. Foam Lub with a bag of cement (50kg.).
- (10) **Prepared Concrete by Mixer Machine.** Prepare concrete by mixing Chips, Sand, Cement and water in mixture machine. Before mixing materials firstly pour water & Foam-Lub in the mixer machine. Usually 20-22 liter water is used to prepare concrete per bag cement.
- (11) **Manually Preparation.** Mix appropriate amount of Foam-Lub in the necessary amount of water in a bucket and then mix Chips, Sand & Cement to prepare concrete. Fix 22 Gauge Wire Mesh or Expanding Metal Net with 12mm to 6mm gap on the middle of patent stone. Fix net horizontally after completion of plaster of 38mm and fix the border of net with the strip of nails. Then plaster 38mm over the fixed net. The lower level of plaster will be long more than 300mm than of lower level so that the next net can be fasten by wear (at least 50mm over lap and every 150mm distance) and one bond be not aligned with another. Finally, apply net finishing with Curdy-Dense Faom Lub-Cement Grout.
- (12) **Preparation and use of Curdy-Dense Foam Lub Cement Grout (For Neat Finishing).** Foam Lub + Water + Cement = 2 Liter + 35-38 Liter + 50 kg or 1 bag. Mix the elements properly. Use the mixture for net finishing on the day of casting. Start curing for 28 days after 24 hours of neat finishing.

64. **To Keep Away Termite & Insects From The Ground Floors & External Side of Newly Constructed Buildings.**

a. **Termite Controlling Treatment using Pesterthy (Termite Control Powder) with Hydro-Seal, Ef-32 Liquid Felt at Inside Ground Floor of New Building.** When Hydro seal, Ef-32 (as liquid Felt) is used for prevention of salinity and dampness, at that time Pesterthy (Termite Control Powder) to be used with Hydro seal, Ef-32.

(1) **Merits/Functions.** Permanent relief of ground floors from termite; Environment friendly treatment; Non- volatile and eternal existence in CC; Economic and easy-procedure to use.

(2) **Method of Mixing.** Mix 500 gm. Pesterthy (Termite Control Powder) with each 12 Liter Hydro Seal, Ef-32 properly and then this mixture is applied with coconut broom on whole floor properly.

b. **Mehtod of using only Pesterthy (Termite Controlling Powder).**

(1) **Merits / Functions.** Permanent relief of ground floors and the soil under the ground floors from Termite; Environment friendly treatment; Non volatile and eternal existence in CC; Economic and easy work-procedure to use.

(2) **The use of Pesterthy.** First fill the floors with sand and soil. Then spread Pesterthy (Termite Controlling Powder) equally on the surface of floor. Then cast CC and soling.

c. **Prevention of Termite Outside of New buildings.**

(1) **Merits/Functions.** The prevention of growth and penetration of termites up to 40 years; Non volatile and permanent existence in soil; Acting as Micro-nutrients of trees; Environment friendly chemicals; Economic and easy work-procedure to use.

(2) **Method of using Pesterthy (Termite Controlling Powder).** Dig canal in the soil outside and attached to the external wall and make a surrounding hole of 600mm wide and 600mm deep. Spread Pesterthy (Termite Controlling Powder) equally on the surface of the hole. Fill up half of the whole. Spread Pesterthy the half filled hole by the same way. Then fill up whole hole with soil. Spread Pesterthy again on the surface of filled up hole. Finally, cover the surface soil with brick soling, C.C. Tiles or layer of soil of 50mm thickness.

d. **Methods of using Pesto-Clea for Destroying and Preventing of Termite on New Wooden Furniture, Windows, and Doors.**

(1) **Merits/Functions.** Pestoclea (Termite Control Liquid) can efficiently and effectively destroy and prevent the attack of white ants, cockroaches, termite etc. It is non-volatile and permanently exists in soil, environment friendly chemicals; economic and easy-work procedure to use.

(2) **The Method of mixing and preparing Pesto-clea(Termite Controlling Liquid).** Mix Pesto-clea-A 150 ml. + Pesto-clea-B 150 ml. + 5 Liter water properly. Then it sprays on whole wooden materials with a spray machine or hair-brush. Pesto-clea must be used properly before polishing.

e. **Method of using Pesto-Con on Electric Conduit.** Pesto-con can efficiently and effectively destroy and prevent the attack of white ants, cockroaches, termite etc on the surface of electric conduit. It is non- volatile, environment friendly chemicals; economic and easy-work procedure to use. Spray Pesto-con (Tube) in electric conduit infected with insects with air-compressor.

The uses of Chemicals to Prevent Salinity, Dampness of Old Building and Make Them Water Proof and Long Lasting as Follows:

- (1) Leakage, Anti-salinity & damp-proof treatment at basement floor of old buildings:
- (2) Leakage, Anti-salinity & damp-proof treatment at basement wall of old buildings:
- (3) Leakage, Anti-salinity & damp-proof treatment at under-ground & over-head water reservoirs of old building:
- (4) Anti-salinity & damp-proof treatment at Ground-floor of old buildings:
- (5) (a) Anti-salinity & damp-proof treatment with Hydro-seal,Ef-32 (Specially approved Ground-floor & outside wall of the Bath & Kitchen Room):
(b) Anti-salinity & damp-proof treatment at inside and outside of old building (Except ground-floor):
- (6) Water proofing & Heat reducing treatment at roof instead of Lime-tracing of old building:
- (7) Ceiling treatment against penetration of water through roofs and erosion caused by salinity as well as the deformation of rods from the concrete:
- (8) To prevent the dampness, salinity, tendency of water absorption, birth of algae on sand stone, ceramic and fine bricks of old buildings as well as the tempering the colour:
- (9) To keep away termite & insects from the ground floors & external of old building:

The Techniques to Prevent Salinity, Dampness, Other Erosions, Tendency of Water Absorption of Old Buildings and to Increase The Strength and Longevity of Structures

65. Leakage, Anti-Salinity & Damp-Proof Treatment at Basement Floor Of Old Building.

- a. **Site Preparation.** Chip and clean the main concrete properly after removing the patent stone and plaster from the concrete:
- b. **The Chemicals to be used Sequentially.**
 - (1) Gray cementitious alloy.
 - (2) Desalt- S₁₀
 - (2) Hydro-seal, Ef-32 with Coal-tar & Kerosene
 - (3) Lub.
- c. **Sequential Methods of Mixture and Usage of Chemicals.** Group the identified leakage and removing loose concrete.
- d. **The Mixing & using of Gray Cementations Alloy.** Gray Cementitious Alloy + Water = 1 Kg + 350 ml. Rub the ointment of Gray Cementitious Alloy and water on the place bearing leakages. Use a foam to pressure the area of leakage to send the ointment everywhere.

N.B.: Use the ointment as soon as possible after preparation.

- e. **The Mixing & using of Desalt-S₀₁. Desalt –S₀₁ + Water + Catalyst = 1 Liter + 8 Liter + 25 m.l. or 1 mark. Apply the mixer with a jute brush or a broom. After 6-12 hours of applying the mixture, Hydro seal, Ef-32 with Coal-tar & Kerosene will be applied on dry surface.**
- f. **The mixing & using of Hydro-seal, Ef-32 with Coal-tar & Kerosene.**
 - (1) **1st Coat.** (Hydro seal, Ef-32 + Water + T. Cat. + R. Cat) in a bucket = (Coal-tar + Kerosene) in another bucket = (4 Liter + 4 Liter + 100 ml. =+ 50 ml.) + (4 Liter + 750 ml.) After mixing of above Chemicals properly, the mixer will be applied on whole floor as first coat. Apply 2nd coat within 3 to 12 hours from 1st coat.
 - (2) **2nd Coat.** (4 Liter + 0 Liter + 100 m.l. =+ 50 m.l.) + (4 Liter + 750 m.l.) Apply the mixer properly with a jute brush. After applying 2nd Coat cast 75mm (1:2:4) on it. Use 250 ml. Foam-Lub with a bag of cement to prepare concrete.

N.B: Prepare a homogeneous mixture of the mixtures of two buckets. Apply the mixture of Hydro-seal, Ef-32 and catalyst within the 20 minutes after preparation.

66. Leakage, Anti-Salinity & Damp-Proof Treatment at Basement Wall of Old Buildings.

- a. **Site Preparation.** After chipping and removing plaster, clean the concrete properly.
- b. **The Chemicals to be used Sequentially.**
- (1) Gray cementitious alloy.
 - (2) Desalt- S₁₀
 - (3) Curd-dense Foam-Lub Cement Grout (2 coats)
 - (4) Foam Lub used in Cement Grout before plaster.
 - (v) Foam Lub used in Plaster Mortar.
- c. **The Sequential Methods of Mixture and Usage of Chemicals.** Group the identified leakage and removing loose concrete.
- d. **The Mixing & using of Gray Cementitious Alloy.** Gray Cementitious Alloy + Water = 1 Kg + 350 ml. Rub the ointment of Gray Cementitious Alloy and water on the place bearing leakage. Use a foam to pressure the area of leakage to send the ointment everywhere.
- N.B.: Use the ointment as soon as possible after preparation.
- e. **Desalt- S₀₁.** Desalt- S₀₁ + Water + Catalyst = 1 Liter + 6 Liter + 25 ml or 1 mark. Apply the mixer properly with a jute brush. Apply the mixer within 2 hours of preparation. After that use Curdy-Dense Foam-Lub Cement Grout on Desalt S₀₁ wet wall.
- f. **Curdy-Dense Foam-Lub Grout (2 coats).** Method of generating Curdy-dense Grout of Foam-Lub: Mix Foam –Lub + Water + Cement = 2 Liter + 35-38 Liter + 1 bag or 50kg. of cement to prepare Curdy-Dense Foam-Lub Cement Grout properly.
- (1) **1st coat.** Apply the Curdy-Dense Foam-Lub Cement Grout with a brush on the Desalt- S₀₁ wet wall.
 - (2) **2nd Coat.** Apply 2nd coat within 4 –6 hours of applying 1st coat or when the 1st coat is hard enough to be attached despite of the effect of 2nd coat. Applying 2nd coat on the drenched 1st coat is undesirable.
- g. **Curdy-Dense Foam-Lub Cement Grout Before Plastering.** Foam –Lub + Water + Cement = 2 Liter + 35-38 Liter + 1 bag or 50kg cement. Apply the mixer properly with a broom . Plaster on Foam-Lub Cement Grout applied wall. If the grout dries, then apply the grout again and plaster then.
- h. **Foam-Lub used in Plastering-Mortar.** Mix 500 ml. Foam-Lub with per bag of cement to prepare plastering-mortar.

67. **Leakage, Anti-Salinity & Damp-Proof Treatment at Under-Ground & Over-Head Water Reservoirs of Old Building.**

- a. **Site Preparation.** Removing plaster inside and outside walls. Then chip and clean them.
- b. **The Chemicals to be used Sequentially.**
 - (1) Gray cementitious alloy.
 - (2) Desalt- S₁₀.
 - (3) Foam-Lub Cement (For Grout).
 - (4) Foam –Lub used in Plastering Mortar.
 - (5) Foam Lub used in Neat-cement Finishing.
- c. **The Sequential Methods of Mixture and Usage of Chemicals.** Group the identified leakage and removing loose concrete.
- d. **The Mixing & using of Gray Cementitious Alloy.** Gray Cementitious Alloy + Water = 1 Kg + 350 ml. Rub the ointment of Gray Cementitious Alloy and water on the place bearing leakage. Use a foam to pressure the area of leakage to send the ointment everywhere.
 N.B.: Use the ointment as soon as possible after preparation.
- e. **Desalt- S₀₁.** Desalt- S₀₁ + Water + Catalyst = 1 Liter + 6 Liter + 25 ml or 1 mark. Apply the mixer properly with a jute brush. Apply the mixer within 2 hours of preparation. After that use Curdy-Dense Foam-Lub Cement Grout on Desalt S₀₁ wet wall
- f. **Curdy-Dense Foam-Lub Grout (2 coats).** Method of generating Curdy-Dense Grout of Foam-Lub: Mix Foam –Lub + Water + Cement = 2 Liter + 35-38 Liter + 1 bag or 50kg. of cement to prepare Curdy-Dense Foam-Lub Cement Grout properly.
 - (1) **1st coat.** Apply the Curdy-Dense Foam-Lub Cement Grout with a brush on the Desalt- S₀₁ wet wall.
 - (2) **2nd Coat.** Apply 2nd coat within 4 –6 hours of applying 1st coat or when the 1st coat is hard enough to be attached despite of the effect of 2nd coat. Applying 2nd coat on the drenched 1st coat is undesirable.
- g. **Curdy-Dense Foam-Lub Cement Grout Before Plastering.** Foam –Lub + Water + Cement = 2 Liter + 35-38 Liter + 1 bag or 50kg cement. Apply the mixer properly with a broom . Plaster on Foam-Lub Cement Grout applied wall. If the grout dries, then apply the grout again and plaster then.
- h. **Foam-Lub used in Plastering-Mortar.** Mix 500 ml. Foam-Lub with per bag of cement to prepare plastering-mortar.

(j) **Curdy-Dense Foam-Lub Cement Grout (For Neat Finishing).** Foam Lub + Cement + Water = 2 Liter + 1 bag or 50 kag + 35-38 Liter. First mix Foam Lub with water. Then use the mixture with Cement and prepare grout. Apply the Curdy-Dense Foam-Lub Cement Grout on plaster-surface as neat finishing.

68. **Anti-Salinity & Damp-Proof Treatment at Ground-Floor of Old Building (Instead of Bituminous Carpeting).**

a. **Site Preparation.** Peel off the patent stone. Clean after chipping properly.

b. **Chemicals to be used Sequentially.**

(1) Desalt –S01.

(2) Hydro seal, Ef-32 and accessory materials i.e. Tar, kerosene etc (2coats).

(3) Foam-Lub used in the concrete.

c. **The Sequential Mixture and use of Chemicals.** Desalt S₀₁ + Water + Catalyst = 1 Liter + 8 Liter + 25 ml. or 1 mark.

N.B.: Apply a coat of the mixture with a jute brush. Use the mixture within 2 hours of preparation. After applying Desalt-S₀₁, apply Hydro-seal, Ef-32 with coal-tar.

(1) **1st coat.** (Hydro-seal, Ef-32 + Water + T . Cat. + R. Cat) in bucket + (Coal-Tar + Kerosene) in another bucket = (4 Liter + 4 Liter + 100 ml. or 1 mark + 50 ml. or 1 mark) + (4 Liter + 1 Liter) Apply a 2nd coat after 12 hours of 1st coat:

(2) **2nd Coat.** (4 Liter + 0 Liter + 100 ml. or 1 point + 50 ml. or 1 point) + (4 Liter + 1 Liter) Mix the elements properly and use the mixture with a jute brush. After applying 2nd coat, Cast at least 50mm (1:2:4) on it.

d. **Foam-Lub used in Concrete.** For C.C. mix 250 ml. Foam-Lub with 1 bag of cement to prepare concrete.

N.B.: Mix homogeneously the elements of each bucket together. Use the mixture of Catalyst and Hydro-seal, Ef-32 within the 30 minutes of preparation.

69. a. Anti-Salinity & Damp-Proof Treatment With Hydro-Seal,Ef-32 (Specially Approved in Very Important Structure and in The Bay Areas as well as Ground-Floor & Outside Wall of The Bath-Room & Kitchen Room).

(1) **Site Preparation: Internal and External Walls.** Hack out the plaster on the wall and create a 12mm deep pointing. In case of holes, breaches, or gaps on the brickworks, fill up those with Foam-Lub of 4%. Never drench the wall with water before and afterwards.

(2) **The Chemicals to be used Sequentially.**

- (a) Desalt- S₁₀
- (b) Hydro-seal,Ef-32 with Foam-Lub (as liquid felt)
- (c) Curdy-Dense Foam-Lub Cement Grout before plaster
- (d) Foam-Lub used in plastering mortar
- (e) Desalt-S₀₁ used as sealer

(3) **The use of Desalt-S₀₁.** Desalt- S₀₁ + Water + Catalyst = 1 Liter + 8 Liter + 25 ml or 1 mark. Apply a coat of Desalt-S₀₁ properly with a jute brush. Apply Hydro-seal, Ef-32 with Foam-Lub after 12 hours of applying Desalt-S₀₁.

(4) **Hydro-Seal, Ef-32 with Foam-Lub as liquid Felt (3 coats).**

(a) **1st Coat.** (Hydro-Seal, Ef-32 + T. Cat + R. Cat) in one bucket + (Foam-Lub + Water) in another bucket = (4 Liter + 100 ml. Or 1 mark + 50 ml or 1 mark) + (1 Liter + 4 Liter)

After 12 Hours of 1st Coat.

(b) **2nd Coat.** (Hydro-Seal, Ef-32 + T. Cat + R. Cat) in one bucket + (Foam-Lub + Water) in another bucket = (4 Liter + 100 ml. Or 1 mark + 50 ml or 1 mark) + (1 Liter + 2 Liter)

After 12 Hours of 2nd Coat.

(3) **3rd Coat.** (Hydro-Seal, Ef-32 + T. Cat + R. Cat) in one bucket + (Foam-Lub + Water) in another bucket = (4 Liter + 100 ml. Or 1 mark + 50 ml or 1 mark) + (1 Liter + 1 Liter)

N.B.: Use the mixture of catalysts, Hydro-seal , Ef-32 within 30 minutes. Powder dry cement and apply broom to fix cement on the treated wall within 2 hours. Then plaster with Foam-Lub. Apply Curdy-Dense Foam-Lub Grout before plastering. To prepare the grout mix 50 kg cement with , 2 liter Foam-Lub with 35-38 lits of water. In the mixture of plaster, use 250 ml. Foam – Lub with per bag of cement and necessary water.

(5) **Foam-Lub used in Plastering Mortar.** Mix 500 ml. Foam Lub with 1 bag or 50 kg cement and necessary amount of water. Use one coat of Desalt-S₀₁ as sealer before applying putty and painting.

(6) **Method of Mixture of Desalt-S₀₁ as Sealer.** Desalt-S₀₁ + Water + Catalyst = 1 Liter + 4 Liter + 25 m.l. or 1 mark. Apply the mixture properly with a jute brush. Apply the mixer within 2 hours of preparation. Don't apply Desalt-S₀₁ on wet plaster.

b. **Anti-Salinity & Damp-Proof Treatment at Inside and Outside Wall of Old Building (Except Ground-Floor).**

(1) **Site Preparation.** Hack out the plaster on the wall and create a 12mm deep pointing. In case of holes, breaches, or gaps on the brickworks, fill up those with Foam-Lub of 4%. Never drench the wall with water before and afterwards.

(2) **The Chemicals to be used Sequentially.**

- (a) Desalt- S₀₁
- (b) Curd dense Foam Lub Cement Grout (2nd Coat)
- (c) Foam-Lub used in Cement Grout before plaster.
- (d) Foam-Lub used in Plaster Mortar.
- (e) Desalt-S₀₁ as sealer.

(3) **The Sequential Method of Mixing and using Chemicals.** Desalt-S₀₁ + Water + Catalyst = 1 Liter + 8 Liter + 25 ml or 1 mark. Apply the mixture properly with a jute brush. Apply the Mixer within 2 hours. Apply Cement Grout on the wall wet with Desalt-S₀₁.

(4) **The use of Curdy-Dense Foam-Lub Cement Grout. Foam Lub + Cement + Water = 2 Liter + 1 bag or 50 kag + 35-38 Liter.**

- (a) **1st coat.** Apply 1st coat of Curdy-Dense Foam-Lub Cement Grout with a brush on the Desalt- S₀₁wet wall.
- (b) **2nd Coat.** Apply 2nd coat within 4 –12 hours of applying 1st coat or when the 1st coat is hard enough to be attached despite of the effect of 2nd coat. Applying 2nd coat on the drenched 1st coat is undesirable. After a day of Applying 2nd coats of Curdy-Dense Foam-Lub Cement Grout, plaster will be started.

(5) **Curdy-Dense Foam-Lub Cement Grout before Plastering.** Foam Lub + Cement + Water = 2 Liter + 1 bag or 50 kg. + 35-38 Liter. Apply the Mixer properly with broom . Plaster on Curdy-dense Foam-Lub Cement Grout wet wall. If the grout dries, then apply the grout again and plaster then.

(6) **Foam-Lub used in Plastering Mortar.** Use 250 ml. Foam Lub. Mix 500 ml. Foam Lub with 1 bag or 50 kg cement and necessary amount of water.

(7) **Method of Mixture of Desalt-S₀₁ as Sealer.** Desalt-S₀₁ + Water + Catalyst = 1 Liter + 4 Liter + 25 m.l. or 1 mark. Apply the mixture properly with a jute brush. Apply the mixer within 2 hours of preparation. Don't apply Desalt-S₀₁ on wet plaster.

70. **Water Proofing & Heat Reducing Treatment Instead of Lime Tracing at Roof of Old Buildings.**

a. **Water Proofing & Heat Reducing Treatment with Hydro-Seal, Ef-32 Instead of Lime Tracing at Roof of Old Buildings.**

(1) **Site Preparation.** Hack out the C.C. or patent stone, or lime tracing on the roof, if any. Then chip and clean the surface. Hack out the plaster up to 150mm to 300mm on parapet and chip and clean the surface. Then on the surface area of roof and parapet cast C.C. Strip of 50mm X 75mm. Then punch nail of 75mm up to 38mm after 150mm distance on the wet dressing of C.C. strip. Then clean the roof and apply the chemicals on the roof to prevent dampness and salinity by following methods:

(2) **Necessary Chemicals.**

- (a) Desalt –S₀₁.
- (b) Hydro seal, Ef-32.(with water)
- (c) Hydro-seal, Ef-32 with Foam-Lub before patent-stone
- (d) Foam-Lub used in Patent Stone
- (e) Foam-Lub used in Neat Cement Finishing.

(3) **The use of Desalt S₀₁.** Desalt S₀₁ + Water + Catalyst = 1 Liter + 10 Liter + 25 ml. or 1 point / mark. Apply one coat of this mixture with a jute brush on the surface of roof. Apply the mixture Hydroseal,Ef-32 with water on dry surface of roof after applying Desalt-S₀₁.

(4) **The use of Hydro-Seal, Ef-32 with Water.** Hydro-Seal, Ef-34 + Water + T Catalyst + R Catalyst = 1 Liter + 7 Liter + 25 ml. or 1mark + 12.50 ml. Apply the mixture with a broom everywhere in the surface of top slab in way that the mixture can penetrate. Apply a 2nd coat after with Foam-Lub and cast patent stone after 1 day of 1st coat.

(5) **The use of Hydro-seal, Ef-32 with Foam Lub.**

(a) **1st coat.** (Hydro-seal, Ef-32 + Water + T . Cat. + R. Cat) in bucket + (Foam-Lub + Water) in another bucket = (4 Liter + 100 ml. or 1 point + 50 ml. or 1 point) + (1 Liter + 4 Liter) Apply this mixture with a jute brush or broom everywhere on the surface. After applying 12 hours of 1st coat, 2nd coat will be applied.

(b) **2nd Coat.** (4 Liter + 100 ml. or 1 point + 50 ml. or 1 point) + (1 Liter + 2 Liter)

N.B.: Mix homogeneously the elements of each bucket together. Use the mixture of Catalyst and Hydro-seal, Ef-32 within the 20 minutes of preparation. After applying 2nd coat Patent Stone will be cast within 12 hours.

(6) **Foam-Lub used in Patent Stone Concrete.** Mix 500 ml. Foam-Lub with a bag of cement(50kg.)

(7) **Size of Chips.** Pie chips or Pea Gravels or 6mm down bricks aggregates.

(8) **Thickness.** At least 75mm concrete (1:2:4), mix 500 ml. Foam Lub with per bag of cement.

(9) The Method of Mixing Concrete Mixed by Foam-Lub.

(10) **Prepared Concrete by Mixer Machine.** Prepare concrete by mixing Chips, Sand, Cement and water in mixture machine. Before mixing materials firstly pour water & Foam-Lub in the mixer machine. Usually 20-22 liter water is used to prepare concrete of per bag cement.

(11) **Manually Preparation.** Mix appropriate amount of Foam-Lub in the necessary amount of water in a bucket and then mix Chips, Sand & Cement to prepare concrete. Fix 22 Gauge Wire Mesh or Expanded Metal Net with 12mm to 6mm gap on the middle of patent stone. Fix net horizontally after completion of plaster of 38mm and fix the border of net with the strip of nails. Then plaster 38mm over the fixed net. The lower level of plaster will be long more than 600mm than of lower level so that the next net can be fasten by wear (at least 50mm over lap and every 150mm distance) and one bond be not aligned with another. Finally, apply net finishing with Curdy-Dense Foam Lub-cement grout.

(12) **Preparation and use of Curdy-Dense Foam Lub Cement Grout (For Neat Finishing).** Foam Lub + Water + Cement = 2 Liter + 35-38 Liter + 50 kg or 1 bag. Mix the elements properly. Use the mixture for net finishing on the day of casting. Start curing for 28 days after 24 hours of neat finishing.

b. **Water Proofing & Heat Reducing Treatment with Foam-Lub Instead of Lime Tracing At Roof of New Buildings.**

(1) **Site Preparation.** Hack out the C.C. or patent stone, or lime tracing on the roof, if any. Then chip and clean the surface. Hack out the plaster up to 150mm to 300mm on parapet and roof. Cheap, clean & dry the surface. Then on the surface area of roof and parapet cast C.C. Strip of 50mm X 75mm. Then punch nail of 75mm up to 38mm after 150mm distance on the wet dressing of C.C. strip. Then clean the roof and apply the chemicals on the roof to prevent dampness and salinity by following methods:

- (2) **Necessary Chemicals.**
- (a) Desalt –S01.
 - (b) Foam-Lub.(with water).
 - (c) Curdy-Dense Foam-Lub Cement Grout (Before Patent-stone)
 - (d) Foam-Lub used in Patent Stone.
 - (e) Foam-Lub used in neat Cement Finishing.
- (3) **The use of Desalt-S01.** Desalt-S01 + Water + Catalyst = 1 liter + 10liter + 25 ml. or 1 point / mark. Apply one coat of mixture all over the surface of top slab with a broom. When the surface is dry then spread the mixture of water and Foam-Lub in a way enough for proper absorption of the liquid.
- (4) **Method of Preparing Mixture of Foam Lub with Water.** Foam Lub + Water = 1 Liter+ 16 Liter. Apply one coat of mixture all over the surface of top slab with a broom.
- (5) **The Mixer & use of Curdy-Dense Foam-Lub Cement Grout Before Patent Stone.** Mix (Foam-Lub + water) + Cement = (2 lits. + 35-38 lits.) + a bag of cement (50kg) to prepare Curdy-Dense Foam-Lub Cement grout. Apply one coat of Curdy-Dense Foam-Lub Cement Grout after 1 day of applying Desalt-S01 before patent stone. When the surface is dry drench, it with Curdy-Dense Foam-Lub Cement Grout.
- (6) **Foam Lub used in Patent Stone Concrete.** Mix 500 ml. Foam Lube with a bag of cement(50kg.)
- (7) **Size of Chips.** Pie chips or Pea Gravels or 6mm down bricks aggregates.
- (8) **Thickness.** At least 75mm concrete (1:2:4), mix 500 ml. Foam Lube with a bag of cement(50kg.).
- (9) **Prepared Concrete by Mixer Machine.** Prepare concrete by mixing Chips, Sand, Cement and water in mixture machine. Before mixing materials firstly pour water & Foam-Lub in the mixer machine. Usually 20-22 liter water is used to prepare concrete of per bag cement.
- (10) **Manually Preparation.** Mix appropriate amount of Foam-Lub in the necessary amount of water in a bucket and then mix Chips, Sand & Cement to prepare concrete. Fix 22 Gauge Wire Mesh or Expanding Metal Net with 12mm to 6mm gap on the middle of patent stone. Fix net horizontally after completion of plaster of 38mm and fix the border of net with the strip of nails. Then plaster 38mm over the fixed net. The lower level of plaster will be long more than 300mm than of lower level so that the next net can be fasten by wear (at least 50mm over lap and every 150mm distance) and one bond be not aligned with another. Finally, apply net finishing with Curdy-Dense Faom Lub-Cement Grout.

(11) **Preparation and use of Curdy-Dense Foam Lub Cement Grout (For Neat Finishing).** Foam Lub + Water + Cement = 2 Liter + 35-38 Liter + 50 kg or 1 bag. Mix the elements properly. Use the mixture for neat finishing on the day of casting. Start curing for 28 days after 24 hours of neat finishing.

71. **Ceiling Treatment Against Penetration of Water Through Roofs and Erosion Caused By Salinity as well as The Deformation of Rods From The Concrete.**

- a. **Site preparation.** Apply proper chipping and clean the main concrete after peeling off the patent stone and plaster from the concrete. Clean the rust of rods if necessary.
- b. **The Chemicals to be used Sequentially.**
- (1) Desalt- S₀₁
 - (2) High strength Highly Liquefied Construction Epoxy
 - (3) Curdy-Dense Foam–Lub Cement Grout
 - (4) Foam –Lub used in Plaster Mortar for ceiling
 - (5) Desalt- S₀₁ (used as sealer on the dry plaster of ceiling)
- c. **Desalt- S₁₀.** Desalt- S₀₁ + Water + Catalyst = 1 Liter + 8 Liter + 25 ml or 1 mark. Apply one coat of mixture properly with jute brush.

N.B: Use the mixture within 2 hours of preparation.

d. **Method of Preparation and use of High Strength Highly Liquefied Constructional Epoxy.** There will two types of liquid: A & B. Mix same amount of both liquid in a pot. As the mixture will be used within 15 minutes, it is better to mix optimum amount of both liquids.

N.B.: Don't keep the mouth of bottle open.

Use. Apply one coat of mixture on the rod with a hair made brush. Apply 2nd coat when the 1st coat is dry or after 12 hours.

e. **Curdy-Dense Foam-Lub Cement Grout before Plastering.** Foam-Lub + Water + Cement = 2 Liter + 35-38 Liter + 1 bag or 50 kg. Apply Curdy-Dense Foam-Lub Cement Grout on surface before plastering. If the surface dries, it will drench with Grout again.

N.B.: Use the mixture within 2 hours of preparation. Apply the 1st coat of grout properly with a jute brush. Drench the surface whenever it is dry before plastering.

f. **Foam-Lub used in Plastering-Mortar.** Apply 500 ml. of Foam-Lub with mixture of 1 bag of cement to prepare mortar for plastering. Use the sufficiently wet mortar. Apply curing for 7 days with normal mode. Apply one coat of Desalt- S₀₁ as sealer on dry plaster before putting and painting.

g. **Method of Mixture of Desalt-S₀₁ as Sealer.** Desalt-S₀₁ + Water + Catalyst = 1 Liter + 4 Liter + 25 m.l. or 1 mark. Apply the mixture properly with a jute brush. Apply the mixer within 2 hours of preparation. Don't apply Desalt-S₀₁ on wet plaster. Any other sealer is useless after using Desalt- S₀₁.

72. **Chemicals used to Prevent Salinity, Water Absorption and Growth of Algae on Sand Stones, Ceramics and Ordinary Fine Bricks of Old Building.**

a. **Chemicals to be used Sequentially.**

- (1) Foam-Lub used in pointing mortar
- (2) Desalt-S₀₁
- (3) Hydro Seal Ef-34 (with water)

b. Method of Preparing and using Chemicals.

c. **Foam-Lub used in Pointing Mortar as Site Preparation.** When the casting of sand stones, ceramics, and ordinary fine bricks is finished, generate the mixture of 2 liter Foam-Lub, a bag of (50kg) cement and appropriate amount of water to generate mortar. Use the mortar to fill up the joints of mortar with the mortar so that the water can't penetrate through the joints. Clean loose materials, if any, with brush and water. After 2 or 3 days of cleaning, apply Desalt-S₀₁ in a way that it can perpetuate through the wall.

d. **The use of Desalt-S₀₁.** Desalt-S₀₁ + Water + Catalyst = 1 liter + 8 liter + 25 ml. or 1 point/mark. Apply one coat of mixture with a jute brush. Use the mixture within 2 hours of preparation. Clean the Desalt-S₀₁ applied surface after 1 day with water and brush. Let the surface dry, then after 6-7 days use 3 coats mixture Hydro-Sea, Ef-32 with water.

e. **The Mixing & using of Hydro-Seal-Ef-34.**

- (1) **1st Coat.** Hydro-Seal, Ef-34 + Water + T Catalyst = 1 Liter + 6 Liter + 25 ml. or 1 point/mark. Apply the mixture on Fair-face with a jute brush in way that the mixture can be penetrated. Apply a 2nd coat after 1 day of 1st coat.
- (2) **2nd Coat.** Hydro-Seal, Ef-34 + Water + T Catalyst = 1 Liter + 5 Liter + 25 ml. or 1 point/mark. Apply the mixture with a jute brush in way that the mixture can be penetrated. Apply a 3rd coat after 1 day of 2nd coat.
- (3) **3rd Coat.** Hydro-Seal, Ef-34 + Water + T Catalyst = 1 Liter + 5 Liter + 25 ml. or 1 point/mark. Apply the mixture with a jute brush in way that the mixture can be penetrated.

73. **To Keep Away Termite & Insects From The Grand Floors & External Side of Old Building.**

- a. **Termite Controlling Treatment using Pesterthy (Termite Control Powder) with Hydro-Seal, Ef-32 Liquid Felt at Inside Ground Floor of Old Building.** When Hydro seal, Ef-32 (as liquid Felt) is used for prevention of salinity and dampness, at that time Pesterthy (Termite Control Powder) to be used with Hydro seal, Ef-32. Mix 500 gm. Pesterthy (Termite Control Powder) with each 12 Liter Hydro Seal, Ef-32 properly and then this mixture is applied with coconut broom on whole floor properly.
- b. **Prevention of Termite Outside of New Buildings.** Dig canal in the soil outside and attached to the external wall and make a surrounding hole of 600mm wide and 600mm deep. Spread Pesterthy (Termite Controlling Powder) equally on the surface of the hole. Fill up half of the whole. Spread Pesterthy the half filled hole by the same way. Then fill up whole hole with soil. Spread Pesterthy again on the surface of filled up hole. Finally, cover the surface soil with brick soling, C.C. Tiles or layer of soil of 50mm thickness.
- c. **Prevention of Insects of Inside Walls and Floors of Old Buildings.**
 - (1) **Use of Pestonal on Walls.** Prepare a mixture with 100 ml. Pestonal-A + 100 ml. Pestonal-B + 5 Liter water. Then spray the mixture with spray machine on the infested area. After 7 days, wash the wall with water or wet cloth.
 - (2) **Use of Pestonal on Floors.** Dug holes with drill machine of 12mm dia, on every 600mm on C.C. floor and nearby areas of the joint of walls and floors. Prepare a mixture with 100 ml. Pestonal-A + 100 ml. Pestonal-B + 10 Liter water Use a funnel to pour above mixture of 500ml. Then seal the holes with mortar. Though , hacking up floors is the best way of prevention of this kind of problem, this is an effective method of prevention of insects.
- d. **Methods of using Pesto-Clea for Destroying and Preventing of Termite on Old Wooden Furniture, Windows, and Doors.** The Method of Mixing and Preparing Pesto-Clea (Termite Controlling Liquid). Mix Pesto-clea-A 150 ml. + Pesto-clea-B 150 ml. + 5 Liter water properly. Then it sprays on whole wooden materials with a spray machine or hair-brush. Pesto-clea must be used properly before polishing.
- e. **Method of using Pesto-con on Electric Conduit.** Spray Pesto-con (Tube) in electric conduit infected with insects with air-compressor.

Table**74. Different Dosages of required chemical-products of BARAL Chemical Co. Ltd. / Dr Fixit or equivalent for treatments of different structures****a. Dosages in Concrete of Piling.**

Name of Chemical-Products	Ratio of concrete	Quantity
Foam-Lub	1:1½:3	125ml per bag of cement.
	1: 2: 4	150ml per bag of cement.

b. Dosages in Concrete of Basement (in dry Condition).

Name of Chemical-Products	Ratio of concrete	Quantity used per bag of cement
Foam-Lub	1:1½:3	400ml.
	1: 2: 4	500ml.

c. Dosages in Concrete of Basement (in Water-Leaking Condition).

Name of Chemical-Products	Ratio of concrete	Quantity used per bag of cement
Foam-Lub	1:1½:3	800ml.
	1: 2: 4	1Litre.

d. Dosages in Concrete of Retaining Wall (in dry Condition).

Name of Chemical-Products	Ratio of concrete	Quantity used per bag of cement
Foam-Lub	1:1½:3	400ml.
	1: 2: 4	500ml.

e. Dosages in concrete of Retaining Wall (in water-leaking condition).

Name of Chemical-Products	Ratio of concrete	Quantity used per bag of cement
Foam-Lub	1:1½:3	800ml.
	1: 2: 4	1Litre.

f. **Dosages in Concrete of Underground Water-Tank's Floor & Wall (In Dry Condition).**

Name of Chemical-Products	Ratio of concrete	Quantity used per bag of cement
Foam-Lub	1:1½:3	400ml.
	1: 2: 4	500ml.

g. **Dosages in Concrete of Underground Water-Tank's Floor & Wall (In Water-Leaking Condition).**

Name of Chemical-Products	Ratio of concrete	Quantity used per bag of cement
Foam-Lub	1:1½:3	800ml.
	1: 2: 4	1Litre.

h. **Dosages in Concrete of Overhead Water-Tank's Floor & Wall.**

Name of Chemical-Products	Ratio of concrete	Quantity used per bag of cement
Foam-Lub	1:1½:3	800ml.
	1: 2: 4	1Litre.

j. **Dosages in the Mortar of Plaster of Underground & Overhead Tanks.**

Name of Chemical-Products	Coverage	Quantity used per bag of cement
Foam-Lub	100sft	250ml.
	as per thickness	250ml.
Foam-Lub(used in curdy-dense grout for neat finishing)	800sft.	2 Litre

k. **Dosages in Concrete of Underground Footing, Tiebeam, Column Etc in Salinity Condition.**

Name of Chemical-Products	Ratio of concrete	Quantity used per bag of cement
Foam-Lub	1:1½:3	200ml.
	1: 2: 4	250ml.

l. **Dosages in Concrete of Underground Footing, Tiebeam, Column Etc at Normal Condition.**

Name of Chemical-Products	Ratio of concrete	Quantity used per bag of cement
Foam-Lub	1:1½:3	125ml.
	1: 2: 4	125ml.

m. **Dosages in Concrete of Super-Structure's Beam, Column, Slab etc.**

Name of Chemical-Products	Ratio of concrete	Quantity used per bag of cement
Foam-Lub	1:1½:3	125ml.
	1: 2: 4	125ml.

n. **Dosages in Concrete of Top-slab's Casting.**

Name of Chemical-Products	Ratio of concrete	Quantity used per bag of cement
Foam-Lub	1:1½:3	200ml.
	1: 2: 4	250ml.

p. **Dosages in Fair-face Concrete.**

Name of Chemical-Products	Ratio of concrete	Quantity
Foam-Lub	1:1½:3	125ml per bag of cement
	1: 2: 4	250ml per bag of cement

q. **Dosages in Concrete of Swimming-Pool.**

Name of Chemical-Products	Ratio of concrete	Quantity used per bag of cement
Foam-Lub	1:1½:3	800ml.
	1: 2: 4	1Litre.

r. **Curdy-Dense Grout at the Joints of Concrete.**

Name of Chemical-Products	Coverage (per bag of cement grout)	Quantity used in one bag of cement
Foam-Lub	20sqm.to 40sqm.	2Litres

s. **Dosages in Cement-Sand Mortar to Build-Brick Wall.**

Name of Chemical-Products	Quantity
Foam-Lub	125ml(per bag of cement)

t. **Anti Salinity Treatment at Brick-Wall.**

Name of Chemical-Products	Coverage	Quantity
Desalt-S01	40sqm.	1Litre

u. **Dosages in the Mortar of Plaster of Inside Brick-Wall Except That of Kitchen & Bathroom.**

Name of Chemical-Products	Coverage	Quantity
Foam-Lub	10sqm.	125ml
	Per bag of cement mortar	125ml.

v. **Dosages in the Mortar of Plaster of Outside Brick-Wall of Kitchen & Bathroom.**

Name of Chemical-Products	Coverage	Quantity
Foam-Lub	10sqm.	250ml
	Cement-mortar per bag of cement	250ml.

w. **Desalt-S01(Anti-doat to Salinity Come Sealer Before Painting).**

Name of Chemical-Products	Coverage	Quantity
Desalt-S01	45sqm.	1Litre

x. **Damp-Proof & Antisalinity Treatment of Inside Brick Wall of Kitchen & Bathroom.**

Name of Chemical-Products	Coverage	Quantity
Desalt-S01	40sqm.	1Litre
Foam-Lub (used in curdy-dense cement grout) 2coats	30sqm.	2 Litres

y. **Dosages in the Mortar of Tiles & Marble-Stone's Cladding on Wall.**

Name of Chemical-Products	Coverage	Quantity
Foam-Lub used in curdy-dense cement grout	80sqm.	2lits/bag of cement
Foam-Lub used in mortar	as per thickness	250ml./bag of cement-mortar

z. **Damp Proof Treatment at Skirting Level.**

Name of Chemical-Products	Coverage	Quantity
Desalt-S01	40sqm/lit.	1 litre
Foam-Lub(used in curdy-dense cement grout)	30sqm. (2coats)	2 lits./bag of cement
Foam-Lub(used in cement grout)	80sqm./2lits.	2 lits./bag of cement
Foam-Lub (used in mortar)	10sqm	500ml./bag of cement

aa. **Dosages in the Mosaic Casting.**

Name of Chemical-Products	Quantity
Foam-Lub	250ml.

bb. **Dosages in Mortar of Tiles & Marble Cladding at Floor.**

Name of Chemical-Products	Coverage	Quantity
Foam-Lub(used in curdy-dense cement grout)	80sqm./2lits.	2 lits./bag of cement
Foam-Lub(used in Mortar)	as per thickness	125ml./bag of cement

cc. **To Protect From any Water-Soaking, Hair-Crack Filling & to Protect From any Water-Based Staining at Mosaic.**

Name of Chemical-Products	Coverage (per litre)	Quantity
Mosasol	7sqm	1Litre

dd. **To Protect From any Water-Soaking, Hair-Crack Filling & to Protect From any Water-Based Staining at Marble.**

Name of Chemical-Products	Coverage (per litre)	Quantity
Marbosol	10sqm	1Litre

ee. **Fair-Face Brick, Sand-Stone, Lime-Stone Cladding on Wall.**

Name of Chemical-Products	Coverage	Quantity
Desalt-S01	40sqm	1 litre
Foam-Lub(used in curdy-dense cement grout)	30sqm(2coats)	2 lits./bag of cement
Foam-Lub(used in cement grout before cladding)	80sqm	2 lits./bag of cement
Foam-Lub (used in mortar)	5sqm	250ml./bag of cement
Foam-Lub (used in pointing mortar)	80sqm	2lits/bag of cement

ff. **Anti-Salinity, to Stop Water-Soaking, Anti-Algae and Colour Persisting Treatment on Fair-Face Or Weather-Exposed Surface of Sand-Stone, Ceramic & Common Brick-Walls.**

Name of Chemical-Products	Coverage (per litre)	Quantity
Desalt-S01	40sqm.	1Litre
Hydro-seal,Ef-34	25sqm.	1Litre

gg. **Anti-Salinity & Damp-Proof treatment at Ground-Floor of new Building (with Hydro-Seal,Ef-32 for Life-Long Durability).**

Name of Chemical-Products	Coverage (per litre)	Quantity
Desalt-S01	40sqm.	1Litre
Hydro-seal,Ef-32	5sqm.	1Litre
Cool-tar	50sqm.	1tin(10 lits)
Kerosin	20sqm.	1Litre
Foam-Lub (in patent stone)	3sqm. (1:2:4), 50mm thickness	250ml./bag of cement

hh. **Water & Heat Reducing Treatment with Hydro-Seal,Ef-32 at Roof.**

Name of Chemical-Products	Coverage	Quantity
Desalt-S01	40sqm	1 litre
Hydro-seal,Ef-32 (Raw)	10sqm.	1 litre
Hydro-seal,Ef-32	5sqm.	1 litre
Foam- Lub(to mix with Hydro-seal,Ef-32)	5sqm.	1 litre
Foam-Lub (for Patent-stone)	2.5sqm.(1:2:4), 75mm thikness	250ml./bag of cement
Foam-Lub (for neat-finishing)	60sqm.	2lits/bag of cement

jj. **Water & Heat Reducing Treatment with Foam-Lub at Roof.**

Name of Chemical-Products	Coverage	Quantity
Desalt-S ₀₁	40sqm	1 litre
Foam-Lub (Raw)	10sqm.	1 litre
Foam-Lub(used in cement grout)	40sqm.	2 lits./ bag of cement
Foam-Lub (for Patent-stone)	2.5sqm.(1:2:4), 75mm thickness	500ml/bag of cement
Foam-Lub (for neat-finishing)	60sqm.	2lits/bag cement

kk. **Termite Controlling Treatment with Hydro-Seal,Ef-32 Liquid-Felt at Inside Ground Floor of New Building.**

Name of Chemical-Products	Coverage	Quantity
Pesterthy (termite controlling powder)	90sqm/kg	1kg.

ll. **Termite Controlling Treatment Before Soiling or C.C. at Inside Ground Floor New Building.**

Name of Chemical-Products	Coverage	Quantity
Pesterthy (termite controlling powder)	30sqm/kg	1kg.

mm. **Termite Controlling Treatment Around New Building.**

Name of Chemical-Products	Coverage	Quantity
Pesterthy (termite controlling powder)	12mtr. or 40sqm.	1kg.

nn. **Termite Controlling Treatment on Wooden Furniture, Door, Window, Cup-Board etc.**

Name of Chemical-Products	Coverage	Quantity
Pesto-clea (termite controlling liquid)	100sqm/kg	1 kg.

pp. **Termite Controlling Treatment Electric Conduit.**

Name of Chemical-Products
Pestocon Tube (used in Electric conduit)

Gray Cementitious Alloy used for stopping running water-leakages:

Name of Chemical-Products	Coverage (per kg)	Quantity
Gray Cementitious Alloy	700 cubic c.m.	1 kg

TABLE

75. Different Dosages of required chemical-products in different treatments of Old Building

a. **Leakage, Anti-Salinity & Damp-Proof Treatment at Basement-Floor of Old Building (With Hydro-Seal,Ef-32 For Life-Long Durability).**

Name of Chemical-Products	Coverage (per litre)	Quantity
Gray Cementitious Alloy	700 cubic c.m.	1 kg
Desalt-S01	40sqm.	1Litre
Hydro-seal,Ef-32	5sqm.	1Litre
Cool-tar	50sqm.	1tin(10lits)
Kerosin	20sqm.	1Litre
Foam-Lub (in patent stone)	3sqm. (1:2:4), 50mm thickness	250ml./bag of cement

b. **Leakage, Anti-salinity & Damp-Proof Treatment at Basement-Wall of Old Building.**

Name of Chemical-Products	Coverage	Quantity
Gray Cementitious Alloy	700 cubic c.m.	1 kg
Desalt-S ₀₁	40sqm/lit.	1 litre
Foam-Lub(used in curdy-dense cement grout)	30sqm. (2coats)	2 lits./bag of cement
Foam-Lub(used in cement grout before plaster)	80sqm./2lits.	2 lits./bag of cement
Foam-Lub (used in Plaster mortar)	7sqm	500ml./bag of cement

c. **Leakage, Anti-Salinity & Damp-Proof Treatment at Under-Ground & Overhead Water-Tank of Old Building.**

Name of Chemical-Products	Coverage	Quantity
Gray Cementitious Alloy	700 cubic c.m.	1 kg
Desalt-S ₀₁	40sqm.	1 litre
Foam-Lub(used in curdy-dense cement grout)	30sqm. (2coats)	2 lits./bag of cement
Foam-Lub(used in cement grout before plaster)	80sqm.	2 lits./bag of cement
Foam-Lub (used in Plaster mortar)	7sqm	500ml./bag of cement
Foam-Lub (for neat finishing)	60sqm.	2 lits./bag of cement

d. **Anti-salinity & Damp-Proof Treatment at Ground-Floor of Old Building (with Hydro-seal, Ef-32 for Life-Long Durability).**

Name of Chemical-Products	Coverage (per litre)	Quantity
Desalt-S ₀₁	40sqm.	1Litre
Hydro-seal,Ef-32	5sqm.	1Litre
Cool-tar	50sqm.	1tin
Kerosin	20sqm.	1Litre
Foam-Lub (in patent stone)	3sqm. (1:2:4), 50mm thickness	250ml./bag of cement

e. **Anti-Salinity & Damp-Proof Treatment with Hydro-Seal, Ef-32(Specially Approved Ground Floor & Outside Wall of the Bath & Kitchen Room).**

Name of Chemical-Products	Coverage	Quantity
Desalt-S01	40sqm.	1Litre
Hydro-seal,Ef-32	3.5sqm.	1Litre
Foam-Lub (to mix with hydro seal Ef-32)	15sqm.	1Litre
Foam-Lub (to make curdy-dense cement grout)	80sqm	2Litre/bag of cement
Foam-Lub (used in the mortar of plaster)	10sqm.	250ml/bag of cement
Desalt-S01 (as sealer)	45sqm.	1Litre

f. **Anti-salinity & damp-proof treatment at inside and outside of old building(Except ground floor).**

Name of Chemical-Products	Coverage	Quantity
Desalt-S01	40sqm.	1 Litre
Foam-Lub curdy-dense cement grout (2 coat)	30sqm	2 Litre/bag of cement
Foam-Lub curdy-dense cement grout (before plaster)	80sqm.	2 Litre/bag of cement
Foam-Lub in mortar	10sqm.	250ml/bag of cement
Desalt-S01 (as sealer)	45sqm	1 Litre

g. **Water & Heat Proof Treatment with Hydro-Seal, Ef-32 at Roof.**

Name of Chemical-Products	Coverage	Quantity
Desalt-S01	40sqm	1 litre
Hydro-seal,Ef-32 (Raw)	10sqm.	1 litre
Hydro-seal,Ef-32	5sqm.	1 litre
Foam- Lub(to mix with Hydro-seal,Ef-32)	20sqm.	1 litre
Foam-Lub (for Patent-stone)	2sqm.(1:2:4), 75mm thikness	250ml./bag of cement
Foam-Lub (for neat-finishing)	60sqm.	2lits/bag of cement

h. **Water & Heat Proof Treatment with Foam-Lub at Roof.**

Name of Chemical-Products	Coverage	Quantity
Desalt-S01	40sqm	1 litre
Foam-Lub (Raw)	10sqm.	1 litre
Foam-Lub(used in cement grout)	40sqm.	2 lits./ bag of cement
Foam-Lub (for Patent-stone)	2sqm.(1:2:4), 75mm thickness	500ml./bag of cement
Foam-Lub (for neat-finishing)	60sqm.	2lits/bag cement

j. **Corrosive Ceiling Treatment of Old Building.**

Name of Chemical-Products	Coverage	Quantity
Desalt-S01	40sqm/lit.	1 litre
High Strength Highly Liquefied Constructional Epoxy(A & B)	as per condition (2coats)	as per requirement
Foam-Lub(used in curdy-dense cement grout)	60sqm.	2 lits./bag of cement
Foam-Lub (used in mortar)	7sqm	500ml./bag of cement

k. **Anti-Salinity, to Stop Water-Soaking, Anti-Algae and Colour Persisting Treatment on Face or Weather-Exposed Surface of Sand-Stone, Ceramic & Common Brick-Walls.**

Name of Chemical-Products	Coverage (per litre)	Quantity
Desalt-S01	40sqm.	1Litre
Hydro-seal,Ef-34	25sqm.	1Litre

l. **Termite Controlling Treatment in Hydro-Seal, Ef-32 Liquid-Felt at Nside Ground Floor of Old Building.**

Name of Chemical-Products	Coverage	Quantity
Pesterthy (termite controlling powder)	90sqm/kg	1kg.

m. **Termite Controlling Treatment Around the Old Building.**

Name of Chemical-Products	Coverage	Quantity
Pesterthy (termite controlling powder)	12 mtr. or 40sqm	1kg.

n. **Termite Controlling Treatment on Inside & Outside Wall of Old Building.**

Name of Chemical-Products	Coverage	Quantity
Pestonol (termite controlling liquid)	150sqm/kg	1kg.

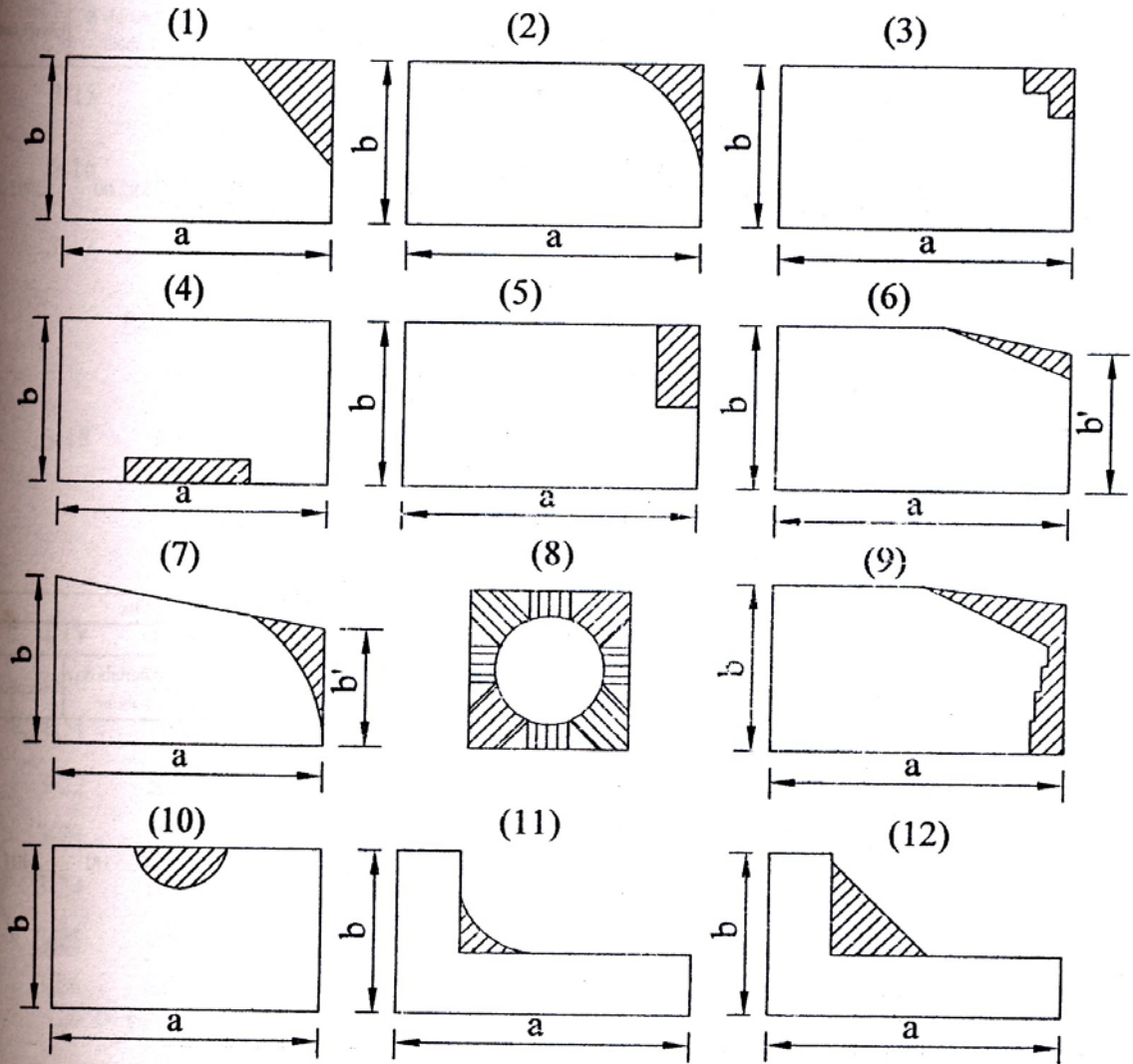
p. **Termite Controlling Treatment on Wooden Furniture, Cup-Board, Door, Window, False-Ceiling etc.**

Name of Chemical-Products	Coverage	Quantity
Pesto-clea (termite controlling liquid)	100sqm/kg	1kg.

q. **Termite Controlling Treatment Electric Conduit.**

Name of Chemical-Products
Pestocon Tube (used in Electric conduit)

CONCRETE



FOR NO 6&7 TAKE AVERAGE OF b & b'
FOR NO 11&12 TAKE NO ADDITIONS

SECTION-3
CONCRETE RATES

Item Description

FOUNDATION**Per Cubic metre**

Rate in Taka

3-1 Lime concrete 1:2.5:5 using bricks aggregate graded as specified 6,785.00

Concrete Mix					
1:2:4		1:3:6		1:4:8	
Materials & Labour	Except cement	Materials & Labour	Except cement	Materials & Labour	Except cement

3-2 Cement concrete using bricks aggregate graded as specified using 1/3 sylhet sand FM 2.5 & 2/3 local sand (F.M 1.5)

6000.00	3288.00	5046.00	3259.00	4598.00	3258.00
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CAST IN SITU**Per Cubic metre**

Concrete Mix			
1:2:4		1:3:6	
Materials & Labour	Except cement	Materials & Labour	Except cement

3-3 Cement concrete using bricks aggregate graded as specified in walls, sills, coping channels drains, steps, kerbs string course, corbels, pier caps, hinge stones, bed plate etc including form work (using 1/3rd sylhet & 2/3rd local sand) and fair faces to exposed surfaces (Ground floor)

6492.00	3793.00	5538.00	3751.00
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3-4 Add additional rate for each floor up to 5th 93.40 - 93.40 -

3-5 - Ditto - but for each floor from 6th upto 9th 124.50 - 124.50 -

3-6 - Ditto - but for 10th and above 145.00 - 145.00 -

3-7 Same as item no 3-3 but using crushed stone. 7702.00 4990.00 6733.00 4946.00

3-8 Add additional rate for each floor up to 5th 93.40 - 93.40 -

3-9 - Ditto - but for each floor from 6th upto 9th 124.50 - 124.50 -

3-10 - Ditto - but for 10th and above 145.00 - 145.00 -

SECTION-3
CONCRETE RATES

Item	Description	Solid Block		Hollow Blocks	
		Materials & Labour	Except cement	Materials & Labour	Except cement
<u>PRE CAST</u>					
Per Cubic metre					
3-11	Cement concrete (1:3:6) using bricks aggregate graded as specified in building block walls including setting and jointing in CM (1:6) Ground floor	5607.00	3693.00	4265.00	2829.00
3-12	Add additional rate for each floor up to 5th	93.40	-	93.40	-
3-13	- Ditto - but for each floor from 6th upto 9th	124.50	-	124.50	-
3-14	- Ditto - but for 10th and above	145.00	-	145.00	-
<u>REINFORCED</u>					
Rate in Taka					
Per Cubic metre					
				Materials & Labour	Except Cement
3-15	Reinforced cement concrete 1:2:4 using bricks aggregate graded as specified in foundation, solid floor etc including 1/3rd sylhet FM 2.5 & 2/3rd local sand of FM 1.50 (reinforcement measured separately)			6509.00	3797.00
3-16	- Ditto - but using crushed stone.			7719.00	5011.00
3-17	Reinforced cement concrete 1:2:4 using bricks aggregate graded as specified in roof slab, sunshade, shelves requiring shuttering, (Steel reinforcement measured separately) using sand 1/3rd sylhet FM 2.5 & 2/3 rd local of FM 1.50. Ground floor.			9227.00	6515.00
3-18	Add additional rate for each floor up to 5th			93.40	-
3-19	- Ditto - but for each floor from 6th upto 9th			124.50	-
3-20	- Ditto - but for 10th and above			145.00	-

RESTRICTED

SECTION-3
CONCRETE RATES

Item	Description	Rate in Taka	
		Materials & Labour	Except Cement
	<u>REINFORCED</u>		
	Per Cubic metre		
3-21	Same as item no 3-17 but using crushed stone.	10436.00	7724.00
3-22	Add additional rate for each floor up to 5th	93.40	-
3-23	- Ditto - but for each floor from 6th upto 9th	124.50	-
3-24	- Ditto - but for 10th and above	145.00	-
3-25	Reinforced cement concrete 1:2:4 using bricks aggregate graded as specified in columns, beams, stairs and landing, posts, struts, piers, lintels, walls and the like incl. form work (Steel reinforcement measured separately) using sand 1/3rd sylhet FM 2.5 & 2/3 rd local of FM 1.50. (Ground floor)	8941.00	6229.00
3-26	Add additional rate for each floor up to 5th	93.40	-
3-27	- Ditto - but for each floor from 6th upto 9th	124.50	-
3-28	- Ditto - but for 10th and above	145.00	-
3-29	Same as item no 3-25 but using crushed stone.	10150.00	7438.00
3-30	Add additional rate for each floor up to 5th	93.40	-
3-31	- Ditto - but for each floor from 6th upto 9th	124.50	-
3-32	- Ditto - but for 10th and above	145.00	-
3-33	Reinforced cement concrete 1:1.5:3 using bricks aggregate graded as specified in roof, slabs, sunshade, shelves etc requiring shuttering (Reinforcement measured separately) using sand 1/3rd sylhet FM 2.5 & 2/3rd local of FM 1.50. (Ground floor).	9959.00	6448.00
3-33A	Reinforced cement concrete 1:1.5:3 using bricks aggregate graded as specified special design cornice / corbel incl form work (Reinforcement measured separately) using grey cement, sand 1/3rd sylhet FM 2.5 & 2/3rd local of FM 1.50. (Ground floor).	9933.00	6425.00

RESTRICTED

SECTION-3
CONCRETE RATES

Item	Description	Rate in Taka	
		Materials & Labour	Except Cement
	<u>REINFORCED</u>		
	Per Cubic metre		
3-34	Add additional rate for each floor up to 5th	93.40	-
3-35	- Ditto - but for each floor from 6th upto 9th	124.50	-
3-36	- Ditto - but for 10th and above	145.00	-
3-37	Same as item no 3-37 but using crushed stone.	11237.00	7726.00
3-38	Add additional rate for each floor up to 5th	93.40	-
3-39	- Ditto - but for each floor from 6th upto 9th	124.50	-
3-40	- Ditto - but for 10th and above	145.00	-
3-41	Reinforced cement concrete 1:1.5:3 using bricks aggregate graded as specified as in columns, beams, stairs, posts, struts, piers, lintels and the like including form work (Reinforcement measured separately) using sand 1/3rd sylhet FM 2.5 & 2/3rd local of FM 1.50. (Ground floor)	9765.00	6254.00
3-42	Add additional rate for each floor up to 5th	93.40	-
3-43	- Ditto - but for each floor from 6th upto 9th	124.50	-
3-44	- Ditto - but for 10th and above	145.00	-
3-45	Same as item no 3-41 but using crushed stone.	10897.00	7386.00

SECTION-3
CONCRETE RATES

Item	Description	Rate in Taka	
		Materials & Labour	Except Cement
	<u>REINFORCED</u>		
	Per Cubic metre		
3-46	Reinforced cement concrete (RCC) 1:1.5:3 using 19mm down graded crushed stone with ordinary portland cement using 1/3rd Sylhet sand FM 2.50 & 2/3rd local sand FM 1.5 as in Rib Slab incl form work (excluding steel reinforcement work).	21953.00	18503.00
3-47	Reinforced cement concrete (RCC) 1:1.5:3 using 19mm down graded crushed stone with ordinary portland cement using 1/3rd Sylhet sand FM 2.50 & 2/3rd local sand FM 1.5 as in Rib Beam using incl form work (excluding steel reinforcement work).	30736.00	27286.00
3-48	Reinforced cement concrete (RCC) 1:1.5:3 fair face using 19mm down graded crushed stone with white & grey cement in proportion 60:40 using 1/3rd Sylhet sand FM 2.5 & 2/3rd local sand FM 1.5 as in column, girder and beam incl form work (excluding steel reinforcement work).	25939.00	24559.00
3-49	Reinforced (RCC) 1:1.5:3 fair face using 19mm down graded crushed stone with white & grey cement in proportion 60:40 using sylhet sand FM 2.50 & 2/3rd local sand FM 1.5 as in staircase, solid wall, box, duct etc. incl form work (excluding steel reinforcement work).	28431.00	27050.00
3-50	Add additional rate for each floor up to 5th	93.40	-
3-51	- Ditto - but for each floor from 6th upto 9th	124.50	-
3-52	- Ditto - but for 10th and above	145.00	-
3-53	Add to item 3-2 to 3-32 if pudlo or Foam lub of BCCL & other similar approved water proofing materials is added to the cement at the rate of 5% by weight for pudlo & Foam lub Qty as per doses chart shown in specefication section.	1,780.00	Foam lub as per Doses chart rate shall be calculated
3-54	Add to item 3-33 to 3-52 if pudlo or Foam lub of BCCL & other similar approved water proofing materials is added to the cement at the rate of 5% by weight for pudlo & Foam lub Qty as per doses chart shown in specefication section.	2,303.00	Foam lub as per Doses chart rate shall be calculated

SECTION-3
CONCRETE RATES

Item	Description	Rate in Taka	
		Materials & Labour	Except Cement
<u>EXPANSION JOINTS</u>			
	Per Square metre		
3-55	Form expansion joints 12.5 mm wide in reinforced concrete roof or floor slabs etc and fill in with molten PB-4	1,784.00	-
3-56	Copper Sheet 24 gauge in Expansion joints	5,535.00	-
3-57	Supply and fixing of 3mm thick Aluminium sheet for duct / expansion joints riveted with 38.10x38.10x4.76mm angle frame fixed to wall with rawl bolt etc complete all as spd.	4,388.00	-
	Per metre		
3-58	Supply & fixing of 32x25x3mm size aluminium angle for expansion joint setting with screw all as spd.	399.00	-
3-59	Supply, cutting and fitting of 115 mm Aluminium groove cover for expansion joint complete with screw as required.	486.00	-
<u>LIME TERRACING</u>			
	Per Cubic metre		
3-60	Lime Terracing (2:2:7) laid over roof slab as specified using well burnt bricks aggregate, un slaked lime and clean surkhi mixed together as specified, laying, spreading and finishing etc complete (Single storied bldg)	8,855.00	-
3-61	Add additional rate for each floor up to 5th	93.40	
3-62	- Ditto - but for each floor from 6th upto 9th	124.50	
3-63	- Ditto - but for 10th and above	145.00	

SECTION-3
CONCRETE RATES

Item	Description	Size	
<u>PCC PRE-CAST VENTILATOR</u>			
	Each	450x225 mm	450x300 mm
3-64	Supply & Fixing of PCC pre-cast ventilator in position made good with plaster etc complete.	154.00	85.00
	Per Cubic metre	Materials & Labour	Except Cement
3-65	Pre cast RCC (1:2:4) using brick agg. graded as in drain, slab, barbed wire post, soakage pit slab etc with 1/3rd of Sylhet sand FM 2.5 & 2/3rd of local sand FM 1.5 incl. Form work (reinforcement measured separately)	6257.00	3530.00
3-66	Reinforced Cement Concrete (1:1.5:3) using crushed stone Graded as specified as in foundation, solid floor etc incl. 1/3rd of Sylhet sand FM 2.5 & 2/3rd of local sand FM 1.50 (reinforcement measured separately)	8315.00	4805.00
3-67	Reinforced Cement Concrete (1:1.5:3) using Brick agg. Graded as specified as in foundation, solid floor etc incl. 1/3rd of Sylhet sand FM 2.5 & 2/3rd of local sand FM 1.50 (reinforcement measured separately)	7066.00	3555.00
3-68	Brick aggregate filling under foundation using 38 mm graded brick aggregate as spd.	3069.00	-
3-69	Brick aggregate filling under foundation using 19 mm down graded brick aggregate and sand (FM 1.5 and cement consolidation under foundation in proportion 12:8:1.	4238.00	-
3-70	Supply and filling brick aggregate (50 mm down graded) and sand (FM 1.50) consolidation under foundation in proportion 1: !	2802.00	-
	Each		
3-71	Reinforced cement concrete rail post fancy / decorative / Victorian type with standard height for stair verandah, parapet railing (25 mm to 75 mm average dia) including one 10 mm dia MS Bar embedded vertically at middle and finished as spd.	187.00	-

SECTION-3

CONCRETE RATES

Item	Description	Rate in Taka	
		Materials & Labour	Except Cement
	<u>PILLING & MISC.</u>		
	Per metre		
3-72	Drilling / boring including equipments, fuels, lubricant, bentonite and labour for cast in situ piling 400 mm dia upto 20 metre long.	463.00	-
3-73	Add additional rate for drilling / boring including equipments, fuels, lubricant, bentonite and labour for cast in situ piling 400 mm dia exceeding 20 metre but not exceeding 30 metre long.	19.40	-
3-74	Drilling / boring including equipments, fuels, lubricant, bentonite and labour for cast in situ piling 450 mm dia upto 20 metre long.	543.00	-
3-75	Add additional rate for drilling / boring including equipments, fuels, lubricant, bentonite and labour for cast in situ piling 450 mm dia exceeding 20 metre but not exceeding 30 metre long.	22.80	-
3-76	Drilling / boring including equipments, fuels, lubricant, bentonite and labour for cast in situ piling 500 mm dia upto 20 metre long.	600.00	-
3-77	Add additional rate for drilling / boring including equipments, fuels, lubricant, bentonite and labour for cast in situ piling 500 mm dia exceeding 20 metre but not exceeding 30 metre long.	25.30	-
3-78	Drilling / boring including equipments, fuels, lubricant, bentonite and labour for cast in situ piling 550 mm dia upto 20 metre long.	690.00	-
3-79	Add additional rate for drilling / boring including equipments, fuels, lubricant, bentonite and labour for cast in situ piling 550 mm dia exceeding 20 metre but not exceeding 30 metre long.	32.80	-
3-80	Drilling / boring including equipments, fuels, lubricant, bentonite and labour for cast in situ piling 600 mm dia upto 20 metre long.	737.00	-
3-81	Add additional rate for drilling / boring including equipments, fuels, lubricant, bentonite and labour for cast in situ piling 600 mm dia exceeding 20 metre but not exceeding 30 metre long.	34.80	-

SECTION-3

CONCRETE RATES

Item	Description	Rate in Taka	
		Materials & Labour	Except Cement
	<u>PILLING & MISC.</u>		
	Per Cubic metre		
3-82	Casting of cast in situ bored pile with reinforced cement concrete works (1: 1.5 : 3) with stone chips to give a minimum crushing strength of 20 Mpa using 100% sylhet sand FM 2.5 (Except reinforcement).	9293.00	5824.00
	Each		
3-83	Providing and making point welding	2.80	-
3-84	Providing and making joint welding of minimum 300 mm length.	119.00	-
3-85	Labour for breaking head of cast in situ bored pile / pre-cast driven pile including repairing of pile head, straightening and bending of pile bars.	2775.00	-
3-86	Conducting static load test (for design load 25 ton, test load 50 ton) for the cast in situ / pre cast pile providing required scaffolding, platform, manpower, equipment and necessary materials.	39579.00	-
3-87	Conducting static load test (for design load 75 ton, test load 150 ton) for the cast in situ / pre cast pile providing required scaffolding, platform, manpower, equipment and necessary materials.	94042.00	-
3-88	Conducting static load test (for design load 125 ton, test load 250 ton) for the cast in situ / pre cast pile providing required scaffolding, platform, manpower, equipment and necessary materials.	145184.00	-
3-89	Conducting static load test (for design load 175 ton, test load 350 ton) for the cast in situ / pre cast pile providing required scaffolding, platform, manpower, equipment and necessary materials.	195556.00	-
3-90	Conducting static load test (for design load 225 ton, test load 450 ton) for the cast in situ / pre cast pile providing required scaffolding, platform, manpower, equipment and necessary materials.	248744.00	-
3-90A	Integrity test of pile including all necessary equipments	1720.00	

SECTION-3

CONCRETE RATES

Item	Description	Rate in Taka	
3-91	Conducting static load test (for design load 275 ton, test load 550 ton) for the cast in situ / pre cast pile providing required scaffolding, platform, manpower, equipment and necessary materials.	299448.00	-
3-92	Add additional cost for intermediate loading of each additional ton	1023.00	-
		Rate in Taka	
		Materials & Labour	Except Cement
Per cu.m			
3-93	Pre-cast pile (Size 300 x 300mm) with reinforcement cement concrete (1:1.5:3) with stone chips and using 100% Sylhet sand FM-2.5 (Except reinforcement)	11492.00	8023.00
3-94	Pre-cast pile (Size 350 x 350 mm) with reinforcement cement concrete (1:1.5:3) with stone chips and using 100% Sylhet sand FM-2.5 (Except reinforcement).	10671.00	7202.00
Each			
3-95	Pile shoe made of 6 mm thick MS Plate connected with 16mm dia M.S bar.	1702.00	-
		Rate in Taka	
Per metre		Upto 6 metre	Exceeding 6 Metre upto 12 Metre
		Exceeding 12 Metre upto 15 Metre	Exceeding 15 Metre upto 18 Metre
3-96	Driving of (300 x 300mm) size pre-cast pile with drop / Auto diesel hammer type rig .	280.00	308.00
3-97	Driving of (350 x 350mm) size pre-cast pile with drop / Auto diesel hammer type rig .	367.00	404.00
			Rate in Taka
3-98	Supply and driving wooden ballah minimum dia 100mm to 150 mm in palisading.		661.00

SECTION-3

CONCRETE RATES

Item	Description	Rate in Taka	
Different type of Chemicals/Admixtures			
Per litre			
3-99	Supply and use of water reducing and retarding chemicals such as foam-lub of Baral Chemical Co. Ltd. / Dr Fixit Or equivalent as doses shown in the tables and manufacturers instructions.	511.00	
3-100	Supply and use of desalt-SOI (Anti-coat to salinity cum sealer before painting) of Baral Chemical Co. Ltd / Dr Fixit. Or equivalent as doses shown in the tables and manufacturers instructions.	594.00	
3-101	Supply and use of hydro seal Ef-32 for anti-salinity and damp proof treatment of Baral Chemical Co. Ltd. Or equivalent as doses shown in the tables and manufacturers instructions.	594.00	
3-102	Supply and use coal-tar for anti-salinity and damp proof treatment of Baral Chemical Co. Ltd./ Dr Fixit Or equivalent as doses shown in the tables and manufacturers instructions.	89.50	
3-103	Supply and use of Kerosene for anti-salinity and damp proof treatment as doses shown in the tables and instructions.	61.10	
Per kg			
3-104	Supply and use pesterthy (termite controlling powder) before filling or PCC floor of Baral Chemical Co. Ltd./ Dr Fixit Or equivalent as doses shown in the tables and manufacturers instructions.	2,399.00	
Rate in Taka			
Per Cubic metre		Materials & Labour	Except Cement
3-105	Reinforced cement concrete (1:2:4) using crushed stone graded as spd and sand (50% Local sand F.M 1.5 + 50% sylhet sand FM 2.5) as in pile (cast in situ) excluding boring but casting complete (Reinforcement measured separately)	8,639.00	5,954.00

SECTION-3
CONCRETE RATES

Item	Description	Rate in Taka	
		Sand FM 1.5	Sand FM 0.80
	Per Cubic metre		
3-106	Sand filling under foundation after screening but without washing including dressing, levelling, ramming etc. complete as spd.	727.00	618.00
	Per Metre	Width of Water stopper	
		150 mm	200 mm
		250 mm	
3-107	Supply and fixing of 6 mm thick PVC water stopper in construction joint for RCC water reservoir or in any position as spd.	332.00	474.00
	Per Cubic metre		
		Materials & Labour	Except Cement
3-108	Reinforced Cement Concrete (1:4:8) using bricks aggregate Graded as specified as in column, beam and the like including form work using local sand (reinforcement measured separately)	4427.00	3093.00

SECTION-4
BRICK WORK AND DPC
SPECIFICATION

General

1. **Bricks.**

a. A good first class brick should be sound, hard and well-brunt with uniform size, shape and colour, homogeneous in texture and free from flaws and cracks. Arises should be square, straight and sharply defined. A brick should give a metallic sound when struck with another brick. A first class dry brick should not absorb water more than 1/6th of its weight.

b. Fire bricks to be best quality country made fire bricks of same size as ordinary burnt bricks and to be of approved manufacture.

c. **Size of Bricks:**

(1) Burnt bricks shall be not less than 240mm X 120mm X 70mm.

2. **Cement.** The cement shall be ordinary, normal setting cement of any brand complying in all respects with BS No. 12. Cement, unless otherwise specified to be of any particular quality, shall mean this ordinary, normal setting cement.

3. Sand shall be from approved source and free from dust and salt.

4. **Brick work.** All burnt bricks to be thoroughly soaked in water before being laid in cement. Burnt bricks built in mud mortar will only be dipped in water before use. The joints of brickwork shall be not less than 6mm or more than 9 mm in thickness. All joints to be well flushed up at every course. The wall shall be carried up regularly, not leaving any part more than 1 metre lower than another, unless special circumstances render this impracticable.

RESTRICTED

Any walls left at different levels to be raked back, courses to be properly leveled, perpends, quoins, jambs, and other angles plumbed, as the work proceeds. All brickwork shall gauge four courses to 300mm in height including joints. In alteration work the brick work shall gauge with existing work unless otherwise directed; Internal walling and backings to be in even courses with external facings, but bricks may be thicker and joints thinner, provided the courses bond with the work. All brick work to be built in English bond, unless otherwise specified. No half bricks or bats being used except where necessary to complete the bond. External facings to be of sound hard bricks of good shape and uniform colour (unless mottled or multi-coloured bricks are required) with square and sharp arises selected from the stacks deposited on site. Joints of brickwork will be struck cleaned and the same mortar pressed while the brick work proceeds using additional mortar if required. Raking out joints will NOT be done. Pointing brick work will be a separate process including raking out joints and using different mortar from that of brick work mortar. Pointing will NOT be done in the same mortar. If ordered pudlo shall be added to the pointing materials. The joints on faces which are to be plastered or pointed in mortar different to the brick work mortar should be raked 9mm deep, while the mortar is green but not later than 24 hours after the work is done.

The pointing or striking out joints will normally be adopted as follows:

- a. Flush pointing will only be used on inside surfaces where ordered.
- b. Weather stuck joints/pointing will generally be adopted for external work where the walls are not plastered.
- c. Recessed joints/pointing will generally be adopted for pillars, fire places or other ornamental work/faces required both internally or externally where so ordered.
- d. Tuck-pointing will be done on surfaces when specially ordered by the Engineer-in-Charge.

All new work in cement mortar will be kept watered and damp for such period as directed n.exc. 14 days, and where it is to be built on to old work, the later will be kept watered for 2 days before hand.

5. **Brick work in Arches.** Bricks to be properly made or dressed (cut and rubbed) to template as specified and joints not to exceed 6mm in thickness. Where half brick rings are permitted, header bricks or "lacing courses" will be executed as directed by the Engineer-in-Charge. Centering to be approved and struck as directed by the Engineer-in-Charge.

6. **Mortar.** The proportions given are bulk, 0.071 cubic metre shall be taken as equal to 100 kg cement. The gauge boxes shall be of such dimensions that a complete bag of cement forms a unit part of cu.m when cement is re-bagged it will be done by weight so that a complete bag will weight 50 kg. Cement mortar to be composed of one part cement to the number of parts of sand specified. The ingredients of cement mortar shall be thoroughly mixed dry, sufficient water added through a rose to make the mixture workable and then thoroughly mixed wet.

7. **Honeycomb Brick Work.** Bricks to have a bearing of not less than 25mm in the case of half brick walls and 12mm in the case of one brick walls.

8. **Cavity Walls.** The thickness of skins to be as specified. The skins to have 60mm cavity in between, and to be tied together with cranked galvanized wrought iron wall ties 19mm X 9mm with ends split and fish tailed, spaced 1 Metre apart to every third course of brick work.

9. **Watering and Protection.** All brick works after pointing shall be kept wet for such period as directed n.exc. 14 days. Cover up and protect all brickwork from damage by frost or otherwise until the work is handed over.

Method of Measurements

10. **Thickness, Etc.** The following thickness shall be allowed when measuring:
 - a. Measure length and height to nearest mm.
 - b. Thickness of walls built in burnt bricks will be measured in multiple of 125mm i.e., 125, 250, 375, 500 and 625mm. and so on, without considering the increased width on account of the mortar in the joints. In case of cavity or similar walls built in brick on edge the thickness will be measured as 75mm or multiple of 75mm.

11. **Deductions.** No deduction shall be made in brickwork for opening n.exc. 0.35 Square Meter. No deduction shall be made for plates, strings, relieving arches, lintels, sills, etc., less than 150mm deep and fireplace flues.

12. **Arches.** Arches built in cut and rubbed bricks will be measured separately and the rate includes the use and waste of shuttering. The contents of arches will be deducted from brickwork. No deduction will be made for cambers of arches.

13. **Cavity Wall.** In cavity walls the width of the cavity will not be included in the thickness of the wall.

14. **Honeycomb Brick Work.** The pattern holes shall not be deducted.

15. **Cornices, etc.** Only the girth of the actual projection shall be measured for the "extra only" payment.

16. **Attached Work.** Measure pillars, pilaster, corbelling and similar projection as Brick work. No deductions or additions shall be made on any account for ends of dissimilar materials, i.e. joists, beams, posts, girders, rafters, purlins, trusses, corbels, steps, etc., n.exc. 450 Sq. cm.

Clarification of Rates

17. The rates, inter alia, include particularly:
- a. Rough relieving arches.
 - b. Beam filling (measured solid).
 - c. Rough and fair cutting.
 - d. Striking joints as work proceeds, or raking out joints if pointing is to be done in a mortar different to brickwork mortar.
 - e. Raking out joints for plaster and pointing in different mortar.
 - f. Forming cheeses, etc.
 - g. Levelling up and preparing walls for DPC.
 - h. Bedding wall plates in or on walls, bedding and pointing sash and door frames in mortar, bedding roof tiles and corrugated sheets in or on walls solidly in mortar and making good the same.
 - j. Building in or cutting and pinning in with mortar to ends of joists, beams, etc., and making good the same.
 - k. Holes (cut and form holes, for fixing pipes, etc.) and making good the same.
 - l. Construction and pargeting flues with weak mortar for flues, n.exc. 9000 sq. cm sectional area.
 - m. Building exposed faces fair.
 - n. Work in cavity walls.
 - p. Brick work to curve exceeding inner radius 6 metre.
 - q. Works in any position, in small or large quantities and in any thickness.
 - r. Supplying and fixing fire brick where required.
 - s. Connecting up new work and old (brickwork) in toothing to be measured with new work).
 - t. Cost of 1150 Bricks per 2.83 cum. or 406 bricks per cum. (except honey comb brickwork).
 - u. Re-facing with new bricks including headers and stretchers.

18. Rates for burnt brick work apply also to reinforced brickwork (reinforcement to be measured separately).
19. Pointing with different mortar when specified or ordered will be paid for extra.
20. Brick work in cut and rubbed arches includes centering and brick work in so fits.

SECTION-4

BRICK WORK AND DPC RATES

Item	Description	Rate in Taka																	
		Laid & jointed in Cement Mortar Mix																	
Per Cubic metre		1:3		1:4		1:6													
		Materials & Labour	Except Cement	Materials & Labour	Except Cement	Materials & Labour	Except Cement												
4-1	Burnt brick work straight or to curve with a radius of 6 metre and over.(Ground floor)	4817.00	3638.00	4509.00	3637.00	4227.00	3637.00												
4-2	Add for each additional floor up to 5th floor	93.40																	
4-3	Add for each additional floor from 6th to 9th	124.50																	
4-4	Add for each additional floor from 10th to above	145.00																	
4-5	Burnt brick work built to curve with a radius of less than 6 Metre in wall etc. (Ground floor)	5019.00	3695.00	4679.00	3693.00	4351.00	3692.00												
4-6	Add for each additional floor up to 5th floor	93.40																	
4-7	Add for each additional floor from 6th to 9th	124.50																	
4-8	Add for each additional floor from 10th to above	145.00																	
		<table border="1"> <thead> <tr> <th colspan="4">Cement Mortar Mix</th> </tr> <tr> <th colspan="2">1:3</th> <th colspan="2">1:4</th> </tr> <tr> <th>Materials & Labour</th> <th>Except Cement</th> <th>Materials & Labour</th> <th>Except Cement</th> </tr> </thead> </table>						Cement Mortar Mix				1:3		1:4		Materials & Labour	Except Cement	Materials & Labour	Except Cement
Cement Mortar Mix																			
1:3		1:4																	
Materials & Labour	Except Cement	Materials & Labour	Except Cement																
4-9	Brick work with Ceramic bricks having 10 holes (240x120x70 mm) Ground floor	8443.00	7264.00	8139.00	7262.00														
4-10	Add for each additional floor up to 5th floor	93.40																	
4-11	Add for each additional floor from 6th to 9th	124.50																	
4-12	Add for each additional floor from 10th to above	145.00																	

SECTION-4

BRICK WORK AND DPC RATES

Item	Description	Cement Mortar Mix			
		1:3		1:4	
		Materials & Labour	Except Cement	Materials & Labour	Except Cement
	<u>BURNT BRICK WORK</u>				
	Per Cubic metre				
4-13	Ceramic Bricks work having 3 holes size 240 X 162 X 113mm	5675.00	4495.00	5368.00	4490.00
4-14	Add for each additional floor up to 5th floor	93.40			
4-15	Add for each additional floor from 6th to 9th	124.50			
4-16	Add for each additional floor from 10th to above	145.00			
4-17	Cut and rubbed brick work in arches and vaults etc. (Ground floor)	4955.00	3776.00	4656.00	3774.00
4-18	Add for each additional floor up to 5th floor	93.40			
4-19	Add for each additional floor from 6th to 9th	124.50			
4-20	Add for each additional floor from 10th to above	145.00			
	<u>HONEY COMB BRICK WORK</u>				
	Per Cubic metre				
4-21	Brick work in honey comb walls. (Ground floor)	3281.00	2945.00	3204.00	2947.00
4-22	Add for each additional floor up to 5th floor	93.40			
4-23	Add for each additional floor from 6th to 9th	124.50			
4-24	Add for each additional floor from 10th to above	145.00			
	<u>HOLLOW CLAY BLOCK BRICK WORK</u>				
	Per Cubic metre				
4-25	Brick work with Hollow clay block set in CM (1:3) laid & jointed with CM (1:2) incl. Pointing.	5714.00	4536.00	-	-
4-26	Add for each additional floor up to 5th floor	93.40			
4-27	Add for each additional floor from 6th to 9th	124.50			
4-28	Add for each additional floor from 10th to above	145.00			

SECTION-4

BRICK WORK AND DPC RATES

Item	Description	Laid & Jointed in Cement Mortar Mix			
		1:3		1:4	
		Materials & Labour	Except Cement	Materials & Labour	Except Cement
<u>FACING BRICK WORK</u>					
Per Square metre					
4-29	100 mm wide facing brick work with machine made (Ceramic) brick including pointing (size-200x100x50) ground floor	1272.00	1134.00	1212.00	1123.00
4-30	100 mm wide facing brick work with machine made (Ceramic) brick including pointing (size-150x100x150) ground floor	1977.00	1850.00	-	-
4-31	Add for each additional floor up to 5th floor	16.60			
4-32	Add for each additional floor from 6th to 9th	22.80			
4-33	Add for each additional floor from 10th to above	27.00			
4-34	50 mm wide facing bricks work with machine made (Ceramic) brick including pointing (size-200x50x50) ground floor	2437.00	2377.00	2421.00	2377.00
4-35	Add for each additional floor up to 5th floor	16.60			
4-36	Add for each additional floor from 6th to 9th	22.80			
4-37	Add for each additional floor from 10th to above	27.00			
<u>POINTING WORK</u>					
Per Square metre					
4-38	Pointing struck flush or recessed to old or new brick work built in any mortar. Ground floor	118.90	110.70	117.00	110.70
4-39	Add for each additional floor up to 5th floor	7.50			
4-40	Add for each additional floor from 6th to 9th	10.40			
4-41	Add for each additional floor from 10th to above	14.50			
4-42	Tuck pointing to -ditto- (Ground floor)	118.90	111.00	117.00	111.00
4-43	Add for each additional floor up to 5th floor	7.50			
4-44	Add for each additional floor from 6th to 9th	10.40			
4-45	Add for each additional floor from 10th to above	14.50			
4-46	Raking out joints of old walls built in any mortar, including preparing surfaces for re-pointing. (Ground floor)				35.60
4-47	Add for each additional floor up to 5th floor				7.50
4-48	Add for each additional floor from 6th to 9th				10.40

RESTRICTED

SECTION-4

BRICK WORK AND DPC RATES

Item	Description	Rate in Taka																		
	<u>RAKING OUT WORK</u>																			
	Per Square metre																			
4-49	Add for each additional floor from 10th to above	14.50																		
	<u>DAMP PROOF COURSE</u>																			
	Per Square metre																			
4-50	Damp proof course of cm 1:3 mixed with pudlo or other similar approved materials 2.5% by weight, 19 mm thick.	186.00	99.00																	
4-50A	Damp proof course of cm 1:3 mixed with Foam lub of Baral Chemical Co. ltd (BCCL) @ of .70% by weight, 19 mm thick.	166.00	78.00																	
		<table border="1" style="width: 100%;"><tr><td colspan="2" style="text-align: center;">Materials & Labour</td></tr></table>		Materials & Labour																
Materials & Labour																				
4-51	Double layer polythene sheet under RCC work and floor as per specification. (Weight of sheet 1 kg per 6 sq.m single layer)	31.70																		
		<table border="1" style="width: 100%;"><tr><td colspan="2" style="text-align: center;">1:1.5:3</td></tr><tr><td style="text-align: center;">Materials & Labour</td><td style="text-align: center;">Except Cement</td></tr></table>		1:1.5:3		Materials & Labour	Except Cement													
1:1.5:3																				
Materials & Labour	Except Cement																			
4-52	38 mm thick PCC (1:1.5:3) using brick aggregate with one coat of hot bitumen applied @ 0.24 kg/sq.m as spd. (Ground floor)	315.00	181.00																	
4-53	Add for each additional floor up to 5th floor	16.60																		
4-54	Add for each additional floor from 6th to 9th	22.80																		
4-55	Add for each additional floor from 10th to above	27.00																		
		<table border="1" style="width: 100%;"><tr><td colspan="2" style="text-align: center;">Cement Mortar Mix</td></tr><tr><td style="text-align: center;">1:3</td><td style="text-align: center;">1:4</td></tr></table>		Cement Mortar Mix		1:3	1:4													
Cement Mortar Mix																				
1:3	1:4																			
4-56	Add item No. 4-38 to 4-45 if Pudlo or other similar approved water proofing materials is add to Cement 2.5% by weight	2.40	2.00																	
4-57	Add item No. 4-38 & 4-42 if Foam lub of Baral Chemical Co. ltd.(BCCL) or other similar approved water proofing materials is added to Cement .70% by weight	2.10	1.50																	
		Rate in Taka																		
	<u>FACING BRICK WORK</u>	<table border="1" style="width: 100%;"><tr><td colspan="5" style="text-align: center;">Materials & Labour</td></tr><tr><td colspan="5" style="text-align: center;">Colour</td></tr><tr><td style="text-align: center;">Klinker Red</td><td style="text-align: center;">Black Jet</td><td style="text-align: center;">Beige</td><td style="text-align: center;">Pearl white</td><td style="text-align: center;">Appricot</td></tr></table>				Materials & Labour					Colour					Klinker Red	Black Jet	Beige	Pearl white	Appricot
Materials & Labour																				
Colour																				
Klinker Red	Black Jet	Beige	Pearl white	Appricot																
	Per Square metre																			
4-58	Facing brick (Mirpur Ceramic made) work in wall laid and jointed in CM (1:2) incl. Pointing all as specified measured flat (wall claddings CT-5, size 200x62x25 mm) ground floor	0.00	2361.00	2453.00	2453.00	3046.00														
4-59	Add for each additional floor up to 5th floor	16.60																		
4-60	Add for each additional floor from 6th to 9th	22.80																		
4-61	Add for each additional floor from 10th to above	27.00																		

SECTION-4

BRICK WORK AND DPC RATES

Item	Description	Materials & Labour
	Per Square metre	
4-62	Facing brick (ATI Ceramic) work in wall laid and jointed in CM (1:2) incl. Pointing all as specified measured flat (wall claddings, (size 228.6x63.5x12 mm) any colour for ground floor	1781.00
4-63	Add for each additional floor up to 5th floor	16.60
4-64	Add for each additional floor from 6th to 9th	22.80
4-65	Add for each additional floor from 10th to above	27.00

FIRE BRICK WORK

Materials & Labour

Item	Description	Materials & Labour	
	Per Cubic metre	SK-34	SK-34
4-66	Fire brick work with fire clay as in wall or in any position as spd (Mirpur ceramic products/Equivalent Co.).	48388.00	33268.00

CERAMIC BRICK WORK

Item	Description	Cement Mortar Mix			
		1:3		1:4	
		Materials & Labour	Except Cement	Materials & Labour	Except Cement
4-67	Ceramic Bricks work having 3 holes size 240x162x100 mm.	6111.00	4932.00	5804.00	4927.00
4-68	Ceramic Bricks work having 3 holes 120x162x113 mm.	6575.00	5396.00	6268.00	5391.00
4-69	Ceramic Bricks having 3 holes re-inforcing 240x112x70 mm.	8250.00	7071.00	7943.00	7066.00

SECTION-5
WOOD WORKS
SPECIFICATIONS

General

1. **Glue Shall be.**
 - a. Of good make, prepared for skins or high grade bone glue.
 - b. Used in the proportion of 2 parts glue to 3 parts water.
 - c. Used as much possible on dry surfaces.

2. **Nails Shall be.** Cut brads, cut clasp, oval, square or round wire of approved manufacture and lengths as required.

3. **Screws Shall be.**
 - a. Of first class manufacture.
 - b. Of the gauges required.
 - c. Of flat or round head patterns as required.
 - d. Of strong bright steel.
 - e. Galvanized, etc. where ordered.

4. **Timber Shall be.**
 - a. Timber and Ballies shall be of good quality well and properly seasoned, at least three months air drying for carpenter's work, preferably under cover in all cases. To be of mature growth, uniform in texture, straight in fibre, free from sapwood, loose or dead knots, aggregating more than 7.5 cm in a batten 17.5 cm wide, open shakes, borer holes, rot, dote, decay and all other defects and blemishes. Sawn die, square and holding the full sizes specified whether wrought or unwrought. The timber shall be approved by Engineer-in-Charge before incorporation in the work.

b. **Classified as follows:**

(1) **All faces Sawn and angles square:**

- (a) When less than 7.5 cm wide and less than 5 cm thick i.e. under 37.5 sq. cm sectional area, as "fillet" or "battens".
- (b) When 7.5 cm wide or over and 5 cm thick or over as "scantlings" - no upper limit.
- (c) When less than 5 cm thick, except flooring, and the width is not less than 5 cm as "boarding".

(2) **Unswan but roughly squared.** All sections to be called "baulks".

(3) **Logs and Ballies.**

- (a) Round unsawn timber over 20cm mean diameter (without bark) shall be called "logs".
- (b) Round unsawn timber n.exc 20cm mean diameter (without bark) shall be called "ballies".
- (c) Specified as "Hardwoods" first class; "Softwoods" first and second class.

The following shall be the subdivision of the more common timbers:

Hardwood - 1st Class:

Chittagong Teak, Shishum & Sal.

Softwoods - 1st Class:

Jessore Teak

Champaful - Tit Chamble & Telshu

Chamble, Chittagong Silkarai, Kathal & Ctg Gamar.

Softwood - 2nd Class:

Garjan.

Jarul.

All other timbers shall be classified according to the comparable grading given in "Commercial Timbers of Bangladesh". In case of disagreement the case will be referred to next higher authority whose decision shall be final and work will not commence till the dispute is dissolved.

5. **Joints.** "Framed" means Mortise and tenon or dovetailed joints. All joints to fit truly and truly without wedging or filling, and framed joints to be coated with glue before being put together.

6. **Fixing etc.** In addition to the item detailed in definition 5(e) of the General rules, the term "fixed" shall include all taps, notching, halving, scraping, etc. Wrought, splayed, rounded, notched and pointed ends of timbers, scribing, circular cutting, and boring for bolts as well as wire hoop iron, coir, hemp or other approved ropes previously dipped in antitermite or preservative solutions, for Ballies. The term "Re-secure" provides for securing fittings, etc. which have become partially loosened, but, which can be secured with hold-fasts, plugs, etc., without taking down. The expression "taking up" or "taking down" includes clearing out nails, etc. The expression "taking down existing trusses and rehoisting and refixing the same" does not include taking trusses as under but does include tightening up wedges, cotters, bolts, etc. Any work done on the trusses in addition to the forging, shall be paid for separately under the relevant rates.

7. **Plugging to Walls.** Rawl plugs or Phill plugs will invariably be used. Wooden plugs (treated with preservative) may be used in lieu when permitted by Engineer-in-Charge and in that case plugs shall be put on the twist and fixed to show narrow face on the walls. Plugging to walls shall be at intervals n.exc. 0.9 metre.

8. **Boarding.** Shall be in widths n.exc. except where in detached pieces as shelves, etc. and in length not less than 1.8 Metre unless circumstances make it impracticable.

9. **Flooring:** Boarding in flooring, ceiling, etc. shall include cramping or wedging up, punching nails and "cleaning off" after fixing. All heading joints to be made on the centre of joist, bearers and no two heading joints to be adjacent. The boards to be nailed with steel cut brads (or oval wire brads) or fixed with screws, two to each board on every joints, of the following lengths:

For 25mm or 31mm flooring	63 mm long
For 38mm flooring	75 mm long
For 50mm flooring	100 mm long

Wrought timber means with surface plained.

Method of Measurements

10. **Timbering.**

- a. Measure the surface of excavation supported.
- b. Timbering to excavation will ONLY be carried out when specially ordered by the Engineer-in-Charge.
- c. Timbering, where ordered, includes use and waste up to 6 months and fixing and removal.

11. **Timbering Left in.** Measure the cubic contents of timber, planks, struts, etc., left in.

12. **Tolerance:**

- a. Lengths shall be measured to the nearest cm.
- b. Scantling, sawn or wrought, shall hold full dimension.
- c. Boarding shall hold the full thickness specified whether sawn or wrought.
- d. Widths of single boards shall be measured to the nearest cm.
- e. Widths of surfaces of 2 or more boards (width) shall be measured net surface area to the nearest cm.

13. **Framed and Unframed Timbers.** Shall be measured out to out. No extra measurement will be made for joints for lengthening of timbers.

14. **Ballies.** The mean diameter of ballies is the sum of the diameters at either end divided by two.

Clarification of Rates

15. **The rates, inter alia, include particularly:**

- a. Bevelled heading joints to boarding.
- b. Boring for bolts as required.
- c. Cleaning of wrought faces.
- d. Cramping and wedging.
- e. Fixing with hardwood or male bamboo pins, nails, spikes, hoop iron and wire in any position.
- f. Labour and material in halving, tabling, lapping, notching, framing, straight, splay, circular or birds mouth cutting, splayed and bevelled ends, and mitres, fair or returned ends as required.
- g. Punching and clenching nails.
- h. Treating plugs with wood preservative.
- j. Waste.
- k. Boarding in any widths.
- l. Work in all types of wood except where otherwise stated.
- m. All notching, firings or squaring to ballies necessary to obtain level bedding, bearing or fixings.
- n. Rebates and chamfers to door and window frames where required.
- p. Chamfering, trimming, edging, etc., to fillets.

16. **In Addition.** The rates for "add if framed" include for framing together with mortice and tenon or dovetailed joints, as in trimmer and trimming joints, roof trusses etc., and hoisting into position as may be necessary.

17. Circular framed work cut from the solid shall be measured net and paid for at twice the rates for straight.

SECTION-5

WOOD WORKS RATES

Item	Description	Rate in Taka
<u>TIMBERING TO EXCAVATION</u>		
Per Square metre		
5-1	Use and waste of timbering to excavation of any description including wells, struts, open or close pulling boards etc, may be provided and fixing and removal (payment to be made for the area supported)	276.00
<u>TIMBER WORK</u>		
Per Cubic metre		
5-2	Timbering to excavation when timber is permanently left in (Garjan)	51092.00
<u>SHORING ETC</u>		
Per Cubic metre		
5-3	Timber framing / boarding for shoring including erection and removal (using Garjan)	10487.00
<u>WOOD WORK</u>		
Per Cubic metre		
5-4	Timber in scantling fixed complete (Chamble)	112571.00
5-5	- Ditto - Gamar Ctg.	66314.00
5-6	- Ditto - Silkorai Ctg.	81733.00
5-7	- Ditto - Kathal	71059.00
5-8	- Ditto - Jarul	76989.00
5-9	- Ditto - Telshu	76989.00
5-10	- Ditto - Jessore Teak	142223.00
5-11	- Ditto - Garjan	56826.00
5-12	- Ditto - Tit Chamble	130362.00
5-13	- Ditto - Ctg. Teak	165945.00
5-14	- Ditto - Shishum / Mehgoni	81733.00

SECTION-5
WOOD WORKS RATES

Item	Description	Rate in Taka
<u>WOOD WORK</u>		
Per Cubic metre		
5-15	Timber in scantling fixed complete but framed using Chamble	114505.00
5-16	- Ditto -but using Gamar Ctg.	68248.00
5-17	- Ditto -but using Silkorai Ctg.	83667.00
5-18	- Ditto -but using Kathal	72992.00
5-19	- Ditto -but using Jarul	78923.00
5-20	- Ditto -but using Telshu	78923.00
5-21	- Ditto -but using Jessore Teak	144157.00
5-22	- Ditto -but using Garjan	58759.00
5-23	- Ditto -but using Tit Chamble	132296.00
5-24	- Ditto -but using Chittagong Teak	167878.00
5-25	- Ditto -but using Shishum / Mehgoni	83667.00
5-26	Timber in scantling fixed complete but wrought and framed Using Chamble	115134.00
5-27	- Ditto -but using Gamar Ctg.	68877.00
5-28	- Ditto -but using Silkorai Ctg.	84296.00
5-29	- Ditto -but using Kathal	73621.00
5-30	- Ditto -but using Jarul	79552.00
5-31	- Ditto -but using Telshu	79552.00
5-32	- Ditto -but using Jessore Teak	144786.00
5-33	- Ditto -but using Garjan	59388.00
5-34	- Ditto -but using Tit Chamble	132925.00
5-35	- Ditto -but using Chittagong Teak	168507.00
5-36	- Ditto -but using Shishum / Mehgoni	84296.00

SECTION-5

WOOD WORKS RATES

Item	Description	Rate in Taka	
		Clean Sawn	Wrought
	<u>FILLET</u>		
	Per Metre		
5-37	Fillet n.exc 12.00 Sq. cm sectional area and fixed with screws: using Chamble	116.00	121.00
5-38	- Ditto - Gamar Ctg.	68.40	73.70
5-39	- Ditto - Silkorai Ctg.	84.20	89.60
5-40	- Ditto - Kathal	73.20	78.60
5-41	- Ditto - Jarul	79.30	84.70
5-42	- Ditto - Tit Chamble	134.00	140.00
5-43	- Ditto - Garjan	57.70	63.10
5-44	- Ditto - Chittagong Teak	170.00	175.00
5-45	- Ditto - Jessore Teak	145.00	151.00
5-46	Fillet exc.12 sq.cm but n.exc. 25.00 sq. cm sectional area: using Chamble	226.00	234.00
5-47	- Ditto - Gamar Ctg.	132.00	140.00
5-48	- Ditto - Silkorai Ctg.	163.00	171.00
5-49	- Ditto - Kathal	142.00	150.00
5-50	- Ditto - Jarul	154.00	162.00
5-51	- Ditto - Tit Chamble	262.00	270.00
5-52	- Ditto - Garjan	113.00	121.00
5-53	- Ditto - Chittagong Teak	335.00	343.00
5-54	- Ditto - Jessore Teak	286.00	294.00

SECTION-5

WOOD WORKS RATES

Item	Description	Rate in Taka
<u>BOARDING</u>		
Per square metre		
5-55	Boarding rebated grooved and tongued or beaded or chamfered one or both sides and fixed complete with screws in any position and any widths required in walls, floors ceiling etc 12.50 mm thick wrought one side edges shot. (Chamble)	1421.00
5-56	- Ditto - Gamar Ctg.	843.00
5-57	- Ditto - Silkorai Ctg.	1036.00
5-58	- Ditto - Kathal	902.00
5-59	- Ditto - Jarul	976.00
5-60	- Ditto - Tit Chamble	1643.00
5-61	- Ditto - Garjan	724.00
5-62	- Ditto - Chittagong Teak	2088.00
5-63	- Ditto - Telshu	976.00
5-64	- Ditto - Jessore Teak	1792.00
5-65	- Ditto - Shishum / Mehgoni	1036.00

RESTRICTED

SECTION-5

WOOD WORKS RATES

Item	Description	Rate in Taka
<u>BOARDING</u>		
Per square metre		
5-66	Boarding rebated grooved and tongued or beaded or chamfered one or both sides and fixed complete with screws in any position and any widths required in walls, floors ceiling etc 12.50 mm thick wrought both side using Chamble	1431.00
5-67	- Ditto - Gamar Ctg.	853.00
5-68	- Ditto - Silkorai Ctg.	1045.00
5-69	- Ditto - Kathal	912.00
5-70	- Ditto - Jarul	986.00
5-71	- Ditto - Tit Chamble	1653.00
5-72	- Ditto - Garjan	734.00
5-73	- Ditto - Chittagong Teak	2098.00
5-74	- Ditto - Telshu	986.00
5-75	- Ditto - Jessore Teak	1802.00
5-76	- Ditto - Shishum / Mehgoni	1046.00

SECTION-5

WOOD WORKS RATES

Item	Description	Rate in Taka
<u>BOARDING</u>		
Per square metre		
5-77	Boarding rebated grooved and tongued or beaded or chamfered one or both sides and fixed complete with screws in any position and any widths required in walls, floors, ceiling etc but 19 mm thick wrought one side edges shot: using Chamble	2137.00
5-78	- Ditto - Gamar Ctg.	1258.00
5-79	- Ditto - Silkorai Ctg.	1552.00
5-80	- Ditto - Kathal	1349.00
5-81	- Ditto - Jarul	1461.00
5-82	- Ditto - Tit Chamble	2475.00
5-83	- Ditto - Garjan	1078.00
5-84	- Ditto - Chittagong Teak	3152.00
5-85	- Ditto - Telshu	1461.00
5-86	- Ditto - Jessore Teak	2701.00
5-87	- Ditto - Shishum / Mehgoni	1552.00

SECTION-5

WOOD WORKS RATES

Item	Description	Rate in Taka
<u>BOARDING</u>		
Per square metre		
5-88	Boarding rebated grooved and tongued or beaded or chamfered one or both sides and fixed complete with screws in any position and any widths required in walls, floors, ceiling etc but 25 mm thick wrought one side edges shot: using Chamble	2778.00
5-89	- Ditto - Gamar Ctg.	1621.00
5-90	- Ditto - Silkorai Ctg.	2007.00
5-91	- Ditto - Kathal	1740.00
5-92	- Ditto - Jarul	1888.00
5-93	- Ditto - Tit Chamble	3223.00
5-94	- Ditto - Garjan	1384.00
5-95	- Ditto - Chittagong Teak	4112.00
5-96	- Ditto - Telshu	1888.00
5-97	- Ditto - Jessore Teak	3519.00
5-98	- Ditto - Shishum / Mehgoni	2007.00

RESTRICTED

SECTION-5

WOOD WORKS RATES

Item	Description	Rate in Taka
<u>BOARDING</u>		
Per square metre		
5-99	Boarding rebated grooved and tongued or beaded or chamfered one or both sides and fixed complete with screws in any position and any widths required in walls, floors, ceiling etc but 19 mm thick wrought both side edges shot: using Chamble	2157.00
5-100	- Ditto - Gamar Ctg.	1277.00
5-101	- Ditto - Silkorai Ctg.	1570.00
5-102	- Ditto - Kathal	1367.00
5-103	- Ditto - Jarul	1480.00
5-104	- Ditto - Tit Chamble	2495.00
5-105	- Ditto - Garjan	1096.00
5-106	- Ditto - Chittagong Teak	3172.00
5-107	- Ditto - Telshu	1480.00
5-108	- Ditto - Jessore Teak	2721.00
5-109	- Ditto - Shishum / Mehgoni	1570.00

SECTION-5

WOOD WORKS RATES

Item	Description	Rate in Taka	
<u>BOARDING</u>			
Per square metre			
5-110	Boarding rebated grooved and tongued or beaded or chamfered both sides and fixed complete with screws in any position and any widths required in walls, floors, ceiling etc but 25 mm thick wrought both side edges shot: (Chamble)	2795.00	
5-111	- Ditto - Gamar Ctg.	1638.00	
5-112	- Ditto - Silkorai Ctg.	2024.00	
5-113	- Ditto - Kathal	1757.00	
5-114	- Ditto - Jarul	1905.00	
5-115	- Ditto - Tit Chamble	3239.00	
5-116	- Ditto - Garjan	1401.00	
5-117	- Ditto - Chittagong Teak	4129.00	
5-118	- Ditto - Telshu	1905.00	
5-119	- Ditto - Jessore Teak	3536.00	
5-120	- Ditto - Shishum / Mehgoni	2024.00	
<u>JOBING OLD ROOF TRUSSES</u>			
Each			
		Rate in Taka	
		Taking down old truss	Hoisting & Fixing old truss
5-121	Timber trusses up to 7.50 metre span	237.00	361.00
5-122	- Ditto -exceeding 7.50 metre but not exceeding 10.50 metre span	415.00	623.00
<u>TRELLIS WORKS</u>			
Per square metre		Rate in Taka	
5-123	38x10 mm wood of specified kind wrought trellis work, two way square of diagonal at 50 mm spaces and 75x25 mm fillet framing all round fixed complete. (Chamble)	1664.00	
5-124	- Ditto - Gamar Ctg.	952.00	
5-125	- Ditto - Silkorai. Ctg.	1190.00	
5-126	- Ditto - Garjan	711.00	

SECTION-5

WOOD WORKS RATES

Item	Description	Normal Size in mm		
		50x50	75x50	100x75
	<u>Moulding & Turned work</u>			
	Per Metre			
5-127	Mouldings and turned wood work for stair rails including and similar work with cost of timber. (Chamble)	319.00	695.00	1148.00
5-128	- Ditto - Gamar Ctg.	190.00	441.00	716.00
5-129	- Ditto - Silkorai Ctg.	233.00	526.00	860.00
5-130	- Ditto - Tit Chamble.	369.00	732.00	1335.00
5-131	- Ditto - Chittagong Teak	468.00	911.00	1674.00
5-132	- Ditto - Jessore Teak	402.00	792.00	1448.00
	<u>SMALL ARTICLES</u>			
				Rate in Taka
	Each			
5-133	Specified kind of wood small fittings, wrought, splayed, chamfered shaped rounded etc such as brackets, small shelves, latch, hinges, switch & bell push, blocks, door and window stops etc articles n.exc 250 cubic cm. (Chamble)			33.70
5-134	- Ditto - Gamar Ctg.			22.10
5-135	- Ditto - Silkorai. Ctg.			26.00
5-136	- Ditto - Kathal.			23.30
5-137	- Ditto - Garjan			19.80
5-138	- Ditto - Chittagong Teak			47.00
5-139	- Ditto - Shishum / Mehgoni			26.00
5-140	- Ditto - but exceeding 250 cu. centimetre but not exceeding 500 cu. cm (Chamble)			63.90
5-141	- Ditto - Gamar Ctg.			40.80
5-142	- Ditto - Silkorai Ctg			48.50
5-143	- Ditto - Kathal.			43.20
5-144	- Ditto - Garjan			36.00
5-145	- Ditto - Chittagong Teak			90.60
5-146	- Ditto - Shishum / Mehgoni			48.50

SECTION-5**WOOD WORKS RATES**

Item	Description	Rate in Taka		
		Mean Diameter in mm		
<u>BALLIES</u>				
Per Metre		Exc. 75 but n.exc 100mm	Exc. 100 but n.exc 150mm	
5-147	Ballies supplied and fixed with other member except pilling.	262.00	491.00	
5-148	- Ditto -but supplied and fixed independently except pilling	253.00	481.00	
Per Metre		Exc. 3.65m but n.exc 5.00m depth	Exc. 5.00m but n.exc 7.50m depth	
5-149	Ballies supplied & fixed exc 100mm dia but n. exc. 150mm dia as wooden pile up to the spd. depth including driving	572.00	598.00	
<u>WORKMANSHIP, PLUGGING ETC.</u>				
Including following items ::				
a) Apply to work with or across grain				
b) Apply to wood of any description				
c) Include meters, stops, chamfers, returns etc.				
Per Metre		Rate in Taka		
5-150	Labour only for beads, chamfers, splays, rebates, rounded angles, tongue, grooves rounded nosing, staff boards, flutes each exc 6.25 mm but n. exc 75 mm width or girth mouldings & turned works not exc 75 mm girth where not otherwise provided rate per 25 mm or part thereof.	8.30		
Per Metre		Rate in Taka		
		Silkorai	Garjan	Ctg. Teak
5-151	Plug wall for single boards etc not exceeding 200 mm wide with single row of plugs at distances n.exc 1.00 metre (any walls in any mortar or concrete walls) wood of specified kind.	12.60	10.90	17.70
5-152	Plug wall for boarding exc. 200 mm wide with double row of plugs at distances n.exc 1.00 metre (any walls in any mortar or concrete walls) wood of specified kind.	25.30	21.80	35.50
5-153	All as last item but detached work etc.	11.30	9.60	15.90
5-154	Extra for work in rifle racks i.e cutting & dishing for buttes, notching for stocks & cutting for ends of barrel.	Rate in Taka 81.70		

SECTION-5

WOOD WORKS RATES

Item	Description	Rate in Taka		
		Re-securing	Taking up or down & refixing	Taking up or down & remove to store
<u>JOBGING WORK</u>				
Per square metre				
5-155	Wire Gauze (Fly and Mosquito netting) with fillets and or framing (any kind of wood)	11.20	33.70	32.10
5-156	Shelves, including brackets fillets, etc & window boards with bearers etc (any kind of wood)	0.00	33.70	16.00
5-157	Skirting wood, any width including grounds if required (any kind of wood)	0.00	86.20	23.50
5-158	Boarding or flooring	0.00	103.80	-
5-159	- Ditto –but in patches in repairs to existing floors including cutting out joints etc.	0.00	146.00	-
Per Metre				
5-160	Casing (Box) to pipes any girth	10.80	21.50	2.00
5-161	Fillets, moulding quadrant skirting hand rails, peg rails etc.	4.70	11.90	6.80
Per Cubic Metre				
5-162	Timber in scantling in any position taking up or down and refixing (any timber).	Rate in Taka 1,006.00		
<u>BOARDING</u>				
Per Square Metre				
5-163	Boarding rebated grooved & tongued or beaded or chamfered one or both sides and fixed complete with screws in any position and any width required in walls, floors, ceiling etc 38mm thick wrought one side edges shot (Chamble)	4,157.00		
5-164	- Ditto - Gamar (Ctg.)	2,400.00		
5-165	- Ditto - Garjan	2,039.00		
5-166	- Ditto - Silkoari (Ctg.)	2,986.00		

SECTION-5

WOOD WORKS RATES

Item	Description	Rate in Taka
<u>BOARDING</u>		
Per Square Metre		
5-167	- Ditto - Jessore Teak	5,284.00
5-168	- Ditto - Tit Chamble	4,834.00
5-169	- Ditto - Chittagong Teak	6,186.00
5-170	- Ditto - Kathal	2,580.00
5-171	- Ditto - Jarul	2,805.00
5-172	- Ditto - Shishum / Mehgoni	2,986.00

PALASADING		Rate in Taka		
Per Square Metre		Materials & Labour	Fixing only	Add if fixed in repair
5-173	Bituminous drum sheet fixed with palasadings as spd (Framing to be paid separately).	503.00	64.60	16.20

SECTION-6
DOORS AND WINDOWS
SPECIFICATIONS

General

1. **Screws Shall be**

- a. Of first class manufacture.
- b. Of the gauge required.
- c. of flat or round head patterns as required.
- d. Of strong bright steel
- e. Galvanized, etc. where ordered.

2. **Timber.** For specification and classification of timber, see "WOOD WORK" section.

3. **Joints.** The joints in framed and halved joinery to be pinned with hardwood pins and put together with Glue. Framed means mortise and tenon or dovetailed joints.

4. **Frames or Chowkats.** Door and window chowkats, transoms, and mullions shall be rebated, or the dimension shown below or as per drawing of the contract and will have no horns:

Opening under 1 Sq.m	=	7.5cm x 7.5 cm
Opening 1 Sq.m and over but n.exc 2.5 Sq.m	=	7.5cm x 10cm
Opening exc. 2.5 Sq.m	=	6.25cm x 12.5 cm

Size of chowkat may vary as per drawing.

5. **Sashes.** The terms "Sashes" includes casements, single or double, fixed, sliding or hung, and fanlights and clerestorey windows, centre, top or bottom hung, or fixed. Sashes shall be wrought, framed, square, chamfered, or moulded, with or without bars and rebated for glass, or wire gauze. Styles and rails to be 7.5 cm wide. When fixed it will be with screws.

6. **Glass.** Shall be clear glass ordinary glazing quality 3mm thick. The glass shall be fixed with oil putty well bedded, back puttied and sprigged where necessary, or with hard wood beads as directed.
7. **Wire Gauze.** Shall be of iron tinned (fly wire 4 x 4 mesh x 22 or 24 gauge, mosquito wire 7 x 7 meshes x 28 gauge) fixed in a rebate and secured with wooden fillets braded in.
8. **Doors.**
 - a. **Ledged and Batten Doors.** The thickness of battened doors will be the thickness of the battens, which shall be of equal width n.exc. 15cm Ledges to be 6mm thicker than the battens. Doors n.exc. 1.5 Metre high will have two ledges not less than 11.25cm width; doors exc. 1.5 metre high will have three ledges. The battens will have rebated side joints. Ledges to be chamfered or splayed if required. Doors to be fitted with 3 pintol hinges of specified size or using butt hinges as per requirement.
 - b. **Ledges and Braced Batten Doors.** To be all as last described with the addition of braces 11.25 cm width 6mm thicker than the battens, and birds-mouthed between the ledges. The braces to be chamfered or splayed if required. Doors to be fitted with 3 pintol hinges of specified size or using butt hinges as per requirement.
 - c. **Framed and Braced Doors.** To be framed with mortise and tenon joints put together with Glue and pinned, and to be framed with styles, top and bottom rails of the thickness of the doors, with the middle rail of less thickness. Battens to be of even width, not more than 10cm wide and to be tongued and grooved, including tonguing into styles, and tongued (cross grain) into top and bottom rails. The battens middle rail and braces to be 1.9cm thick for 3.75cm doors and 2.5cm thick for 5cm doors. The styles and top rail to be 12.5cm wide, the middle rail to be 20cm wide and the bottom rail to be 17.5cm wide, all stop chamfered on the inner edges. The braces to be 11.25cm wide, birds-mouthed and fixed as for ledged and braced doors. Doors to be fitted with 3 pintol hinges of specified size or using butt hinges as per requirement.

- d. **Panelled Door.** To be wrought, square framed and flats or chamfered or moulded one or both sides. Bottom rails to be 15cm wide and other rails and styles 10cm wide. Panels to be not less than 15mm thick.
- e. **Framed Panelled Partitions and Dados.** To be all as (d) above. The through styles to be not more than 1 metre apart.
- f. **Half Glazed Doors.** To have styles and rails to Panelled portion as specified for Panelled doors, and top rail to be as for sashes.
- g. **Matting Doors and Windows.**
- (1) **Matting.** To be of split bamboo or flat leaf as specified in roofs and shall be laid single or double, as ordered on frames or boarding as described below.
- (2) **Frames.** For doors, wrought frames 7.5cm x 3.75cm with centre ledge and two braces and for windows a similar frame without ledges and braces. Cover fillets size 7.5cm x 1.9cm to be centrally clenched nailed at 15cm intervals to all frame members. Where the height of a window exceeds 1 metre one brace shall be provided and where the height exceeds 1.5 metre it shall be considered as a door.
- (3) **Boarding.** If so ordered, provide styles and rails of double wrought boarding 7.5cm wide, each board of the same thickness (1.25cm, 1.9 cm or 2.5cm as ordered), provide one ledge for heights above 1.5 metre. On one side the vertical boards shall "run through" to the top and bottom of the door or window and on the other side of the horizontal boards shall "run through" to each side, the butt joints being thus staggered at corners. Each such joint shall be clenched nailed in three places and the two boards shall be centrally clenched nailed at 15cm intervals. Each panel shall have two braces each of double split bamboo or wrought laths (1.9cm x 1.6cm minimum) nailed at 15cm intervals.

- h. **Flush Doors.** Flush door shutters will be 3.60cm thick solid made of Partex density 400 (38 gram/cm) both sides veneered. Chowkats will be paid extra under the schedule items. Shutters and veneering to be machine pressed.
- j. Plastic door shall be 25mm and 32mm thick both side flush made by well Reputed Co. The door shall be including chowkats and mongery (handle and tower bolt to be fixed with nut bolts), clamp etc. all complete.
9. **Hinges.** Doors exc. 1.5 metre high shall be fixed with 4 Nos. butt hinges to each leaf.
10. **Holdfasts.** Doors, windows and CSW frames shall be fixed with 22.5cm long hold fasts made of flat iron 2.5cm x 3mm thick with forked ends tarred and sanded "with 2 screws 6.25 long" 2 to every CSW, 4 to every windows and 6 to every door frames respectively.
11. **Treatment For Elimination On Termites From Doors & Windows.**
- a. Wooden doors and windows frames will be treated by applying anti-termite pesticide through holes drilled along the line joining the wall and the frames. Holes will be power drilled at 90cm (appx) intervals. A typical door (2.15m x 1.05m) needs a total seven holes. However, if the sides of the frame exceeds 15cm additional holes may be required. Dursban 20 EC or equivalent diluted with kerosene at ratio of 1:9 it will be injected in to the holes. The objective is to soak the spaces between the wall and frame and eliminate the termites. In case of doors in ground floor, holes at the floor level will be drilled through the concrete slab allowing the diffusion of pesticide solution within the floor bed. 1.5 Litres of Dursban 20 EC or equivalent spray solution will be injected in to each hole. Five Litres will be injected to the holes made at floor level.
- b. Wooden doors and windows frames will be treated by applying anti-termite pesticide through holes drilled along the line joining the wall and the frames. Holes will be power drilled at 30cm (approx) intervals. A typical door (2.15m x 1.05m) needs a total 21 holes. Pesto-clea A & B of Baral chemical Company Ltd.(BCCL diluted with water at ratio of 1:16 it will be injected in to the holes. The objective is to soak the spaces between the wall and frame and eliminate the termites. In case of doors in ground floor, holes at the floor level will be drilled through the concrete slab allowing the diffusion of pesticide solution within the floor bed. 0.5 Litres of Pesto-clea A & B spray solution will be injected in to each hole.

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12. **Iron / Brass Mongery.** Shall be provided to doors and windows as shown below except where otherwise described :

Description	Unit	Doors		Opening windows		
		Double Leaf	Single Leaf	Double Leaf	Single Leaf	Clere story pivot hung
10cm steel / brass butt hinges	Nos	08	04	04	02	-
6.25cm wrought iron / brass pivots & sockets	Sets	-	-	-	-	02
20 cm wrought iron / brass tower or barrel bolts	Nos	01	01	-	-	-
15 cm wrought iron / brass tower or barrel bolts	Nos	02	01	01	01	-
10 cm-ditto	Nos	-	-	02	01	-
Door and window stops, teak or shishum with one 7.5 cm steel / brass butt hinges.	Nos	02	01	02	01	-
15 cm Iron / brass bow handle	Nos	02	02	01	01	-
White cotton sash cord 9mm girth 4 metre long with wrought iron / brass eyes	No	-	-	-	-	01
10 cm wrought iron / brass belaying cleat	No	-	-	-	-	01
12.5 cm x 5 cm x 7.5 cm softwood chocks	Nos.	02	01	02	01	-

13. **Preservative.** Backs of door and window frames or chowkats shall be treated with one coat of Tar, before fixing.

14. **Fixing etc.** In addition to the items detailed in definitions under General Rules, the term "Fixed" shall include all laps, notching, halving, scarifying, etc., and boring for bolts. The term "Re-secure" provides for securing fittings etc., which have become partially loosened, but which can be secured with hold-fasts, plugs, etc., without taking down and shall include cost of any subsidiary materials required for re-securing. The expression "taking up" or "taking down" include clearing out nails, etc. The expression "in other openings" include cutting to size and fittings in old openings.

15. **Aluminium Doors/Windows.** All as per AAMA standard aluminum door/windows frame, rails, styles etc shall be of BTA/KAI/Fu-Wang or any other brand approved by E-in-C time to time.

a. **Swing Door Frame.** Section and size of frames shall be 90-95mm x 45mm box/hollow type aluminium metal. Thickness of the frame shall not be less than 1.5mm single leaf door shall not be more than an opening of 1000mm and similarly double leaf door opening shall not be more than 1800mm.

b. **Aluminium Swing Glazed Door Shutter.** Swing door shutter shall be provided with top and bottom rails and two Nos. vertical styles. Both rails and styles shall be of hollow/box types aluminium section 65mm x 50mm with minimum skin thickness 1.5mm. 5mm thick distortion free best quality clear glass shall be fitted with rails and styles providing all necessary fittings and gasket of approved quality. Each of the swing shutter shall have 2 Nos. tower bolts, 2 Nos. aluminium plate handles and floor liner 100mm wide, 4mm thick.

c. **Frame For Sliding Window/Door.** Section/size of frame shall be 90-95mm wide 1.5mm thick aluminum metal having channel in vertical & top along with guide rail in bottom for sliding the shutter.

d. **Aluminium Glazed Shutter for Sliding Window/ Doors.** Single leaf sliding door shall be provided for opening upto 1100mm and single leaf sliding window shall be provided for opening upto 700mm. Nos. of shutters/leaf to be decided by the Engineer-authority during preparation of drawing for opening larger than mentioned above. Each shutter shall be comprised of two vertical styles and two horizontal top and bottom rail. Section/size of style & rail shall be 50mm x 25mm hollow/box type aluminium metal. Shutter will run over guide rail attached with frame having all required arrangement. Each shutter shall be provided with locking device, sliding system & all the required fittings will be approved by GE/PE. 5mm thick distortion free best quality clear glass shall be fitted with rails & styles providing all necessary fittings and requirement.

e. **Aluminium Gauzed Shutter For Sliding Window.** Sliding gauzed window of single leaf shall be provided for opening upto 700mm. Nos. of shutter to be decided by the Engineer authority during preparation of drawing for opening more than 700mm. Each shutter shall be comprised with two vertical styles and two horizontal top and bottom rail. Size of style/rail shall be 38mm x 12mm hollow/box type aluminium section. Shutter will run over guide rail attached with frame having all required system. Best quality aluminium wire net mosquito proof of required mesh to be provided.

f. **Aluminium Fixed Glazed Door/ Window.** 5mm thick distortion free best quality clear glass shall be fixed with main frames providing all necessary fittings and required for fixed door/window, width of glass pane shall 600mm. Middle sash if required may be provided with section 50mm hollow/box type aluminium metal. Section and size of main frame shall be 90-95mm x 45mm box/hollow type aluminium metal, skin thickness of which shall be 1.5mm.

Identification

16. Supplying, fitting & fixing aluminium sliding doors/windows with 75mm frames manufactured from standard extruded medium bronze/silver colour aluminium sections with all necessary standard accessories alongwith 5mm thick distortion free foreign made tinted/clear glass complete as per drawing & direction.

17. Supplying, fitting & fixing aluminium fixed composite sliding doors/windows with 75mm frames manufactured from standard extruded medium bronze/silver colour aluminium sections with all necessary standard accessories alongwith 5 mm thick distortion free foreign made tinted/clear glass complete as per drawing and direction.

18. Supplying, fitting & fixing aluminium fixed windows with 75 mm frames manufactured from standard extruded medium bronze/silver colour aluminium sections with all necessary standard accessories alongwith 5mm thick distortion free foreign made tinted/clear glass complete as per drawing and direction.

19. Supplying, fitting & fixing aluminium sliding doors/windows with 90-95 mm frames manufactured from standard extruded medium bronze/silver colour aluminium sections with all necessary standard accessories alongwith 5mm thick distortion free foreign made tinted/clear glass complete as per drawing and direction.

20. Supplying, fitting & fixing aluminium fixed composite sliding doors/windows with 90-95 mm frames manufactured from standard extruded medium bronze/silver colour aluminium sections with all necessary standard accessories alongwith 5 mm thick distortion free foreign made tinted/clear glass complete as per drawing and direction.

21. Supplying, fitting and fixing aluminium fixed doors/windows with 90-95 mm frames manufactured from standard extruded medium bronze/silver colour aluminium sections with all necessary standard accessories alongwith 5 mm thick distortion free foreign made tinted/clear glass complete as per drawing & direction.

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22. Supplying, fitting & fixing horizontally sliding insect proof shutters manufactured from standard extruded bronze/silver colour aluminium sections with all standard accessories and fiber glass aluminium insect screens all complete as per drawing & direction.
23. Supplying, fitting & fixing aluminium both way swing doors with 90-95 mm frames manufactured from standard extruded medium bronze/silver colour aluminium sections with all necessary standard accessories alongwith 5 mm thick distortion free foreign made tinted/clear glass complete all as per drawing & direction.
24. Supplying, fitting & fixing aluminium fixed composite both way swing doors with 100 mm frames manufactured from standard extruded medium bronze/silver colour aluminium sections with all necessary standard accessories alongwith 5 mm thick distortion free foreign made tinted/clear glass complete as per drawing & direction.
25. Supplying, fitting & fixing aluminium swing doors with 75 mm frames manufactured from standard extruded medium bronze/colour aluminium sections with all necessary standard accessories alongwith exposed one way door closer and 5 mm thick distortion free foreign made tinted/clear glass complete as per drawing & direction.
26. Supplying, fitting & fixing aluminium fixed composite swing doors with 75 mm frames manufactured from standard extruded medium bronze/silver colour aluminium section with all necessary standard accessories alongwith exposed one way door closer and 5 mm thick distortion free foreign made tinted/clear glass complete as per drawing & direction.
27. Supplying, fitting & fixing aluminium fixed louver windows manufactured from standard extruded medium bronze/silver colour aluminium sections with all necessary standard accessories all complete as per drawing & direction.
28. Supplying, fitting & fixing of exposed grid 600mm x 600mm Paneled false ceiling with 12 mm thick textured nylex surface imported gypsum board of approved colour and texture suspended on standard extruded bronze/silver colour aluminium 38mm x 25mm main tee 25mm x 25mm cross tee & 25mm x 25mm angle along the side walls all around as per approved plan hang by 2-ply 14 gauze GI wire etc. complete.

29. Supplying, fitting & fixing in position from standard extruded medium bronze/silver colour aluminium stair railing as per drawing, design & specification including all standard accessories etc.

30. Supplying, fitting & fixing of aluminium partition wall with vertical and horizontal aluminium frames both sides covered with 12 mm thick fire resistant Gypsum board calded with vinyl wall fabrics. The whole partitions shall be fixed with metal stand frames insides spaced at 600mm-c/c upto 2.44 mm height etc complete as per direction.

31. Supplying, fitting & fixing aluminium casement windows manufactured from standard extruded medium bronze/silver colour aluminium sections with all necessary standard accessories alongwith 5 mm thick distortion free foreign made tinted/clear glass complete as per drawing & direction.

32. Supplying, fitting & fixing aluminium fixed windows with 90-95 mm/75 frames manufactured from standard extruded medium bronze/silver colour aluminium sections with all necessary standard accessories alongwith 5 mm thick distortion free foreign made tinted/clear glass complete as per drawing & direction.

Method of Measurements

33. **Tolerances.** Thickness will be dead as shown in each item. No tolerance plus or minus will be admissible.

34. **Clench Nailing.** No extra allowance shall be made where clench nailing is specified (e.g., in ledged and battened door) but screws are used.

35. **Door and Windows Shutters.** Chowkats shall be measured in volume (i.e. in cubic metre) door leaf shall be measured net (i.e. in square metre) except Chowkat, Circular and curved portions shall be measured as square and paid for at twice the ordinary rates, segment only to be measured.

36. **Mitred Pieces.** Each piece shall be measured over all
37. **Meeting Styles.** No extra width or lap shall be measured for rebated or splayed meeting styles.
38. **Open Battened Doors, Gates, etc.** With spaces 3.20 cm wide between battens shall have a 10% deduction made from the overall area.
39. **Door Partly Panelled and Partly Sashed.** The glazed portion shall be measured separately as a sash. The dividing line shall be the middle of the rail below the glazing. Frames/Chowkats to be measured net in volume.

Clarification of Rates

40. The rates, inter alia, include particularly.
- a. Work in all class of wood as defined except where otherwise stated.
 - b. Fitting and fixing or hanging as indicated.
 - c. Nails screws, wedging and keys as required.
 - d. Hardwood or bamboo pins for framed joints.
 - e. Boring for bolts.
 - f. Arises or chamfers 6mm wide as required.
 - g. Miter, stops, fair or returned ends, etc.
 - h. All cutting and waste.
 - j. Fixing gauze with wooden beads and glass with oil putty sprigs or beads and breads; or hardwood beads as directed.
 - k. Frames or chowkats to doors and windows with holdfast.
 - l. Iron / brass mongery to doors and windows as listed in Specification to be paid extra as per relevant item.
41. The rates for sashes also includes.
- a. Glass or wire gauze (fly or mosquito wire) on steel or wood.
 - b. Fixing with screws or nails, or preparing for hanging with hinges, pivots, etc.
42. Wood preservatives except as specified in para 13 of the specifications and painting will be paid extra.

SECTION-6

DOORS AND WINDOWS RATES

Item	Description	Rate in Taka
	<u>CHOWKATS</u>	
	Per cu.m	
6-1	Chowkat for windows glazed or gauzed including holdfast fixed in position as specified (Chamble)	138896.00
6-2	- Ditto - but (Silkorai ctg)	104974.00
6-3	- Ditto - but (Jarul)	99756.00
6-4	- Ditto - but (Kathal)	93232.00
6-5	- Ditto - but (Telsu)	99756.00
6-6	- Ditto - but (Jessore Teak)	171513.00
6-7	- Ditto - but (Garjan)	77576.00
6-8	- Ditto - but (Tit Chamble)	158466.00
6-9	- Ditto - but (Chittagong Teak)	197607.00
6-10	- Ditto - but (Shishum / Mehgoni)	104974.00
6-11	Chowkat for CSWs glazed or gauzed including holdfast and fixed in position as specified (Chamble)	146093.00
6-12	- Ditto - but (Silkorai ctg)	112171.00
6-13	- Ditto - but (Jarul)	106953.00
6-14	- Ditto - but (Kathal)	100429.00
6-15	- Ditto - but (Telsu)	106953.00
6-16	- Ditto - but (Jessore Teak)	178710.00
6-17	- Ditto - but (Garjan)	84773.00
6-18	- Ditto - but (Tit Chamble)	165663.00
6-19	- Ditto - but (Chittagong Teak)	204804.00
6-20	- Ditto - but (Shishum / Mehgoni)	112171.00

SECTION-6

DOORS AND WINDOWS RATES

Item	Description	<u>Rate in Taka</u>	
<u>CHOWKATS</u>			
Per cu.m			
6-21	Chowkat for doors gates including holdfast and fixed in position as specified (Chamble)	140599.00	
6-22	- Ditto - but (Silkorai ctg)	106733.00	
6-23	- Ditto - but (Jarul)	101523.00	
6-24	- Ditto - but (Kathal)	95010.00	
6-25	- Ditto - but (Gamar ctg)	89800.00	
6-26	- Ditto - but (Telsu)	101523.00	
6-27	- Ditto - but (Jessore Teak)	173163.00	
6-28	- Ditto - but (Garjan)	79380.00	
6-29	- Ditto - but (Tit Chamble)	160137.00	
6-30	- Ditto - but (Chittagong Teak)	199072.00	
6-31	- Ditto - but (Shishum / Mehgoni)	106733.00	
		Rate in Taka	
<u>WINDOWS SHUTTERS</u>		Thickness in millimetre	
Per sq.m		32.00	38.00
6-32	Wrought sashes, glazed shutter with moulded or chamfered bars, panels filled in with glass fixed as specified including hanging complete except mongeries which will be paid separately (Chamble)	3339.00	3702.00
6-33	- Ditto - but (Gamar ctg)	2479.00	2685.00
6-34	- Ditto - but (Silkorai ctg)	2766.00	3024.00
6-35	- Ditto - but (Jarul)	2678.00	2919.00
6-36	- Ditto - but (Kathal)	2567.00	2789.00
6-37	- Ditto - but gauzed shutter (Chamble)	3176.00	3571.00

SECTION-6

DOORS AND WINDOWS RATES

Item	Description	Rate in Taka	
		Thickness in millimetre	
		32.00	38.00
	<u>WINDOWS SHUTTERS</u>		
	<u>Per sq.m</u>		
6-38	- Ditto - but (Gamar ctg)	2366.00	2590.00
6-39	- Ditto - but (Silkorai ctg)	2636.00	2917.00
6-40	- Ditto - but (Jarul)	2553.00	2816.00
6-41	- Ditto - but (Kathal)	2449.00	2691.00
6-42	- Ditto - but glazed shutter (Ctg. Teak)	4332.00	4925.00
6-43	- Ditto - but gauzed shutter (Ctg. Teak)	4110.00	4702.00
6-44	- Ditto - but glazed shutter (Jessore Teak)	3891.00	4396.00
6-45	- Ditto - but gauzed shutter (Jessore Teak)	3626.00	4172.00
6-46	- Ditto - but glazed shutter (Tit Chamble)	3596.00	4094.00
6-47	- Ditto - but gauzed shutter (Tit Chamble)	3425.00	3923.00
6-48	- Ditto - but glazed shutter (Shishum / Mehgoni)	2720.00	3024.00
6-49	- Ditto - but gauzed shutter (Shishum / Mehgoni)	2598.00	2902.00
	<u>DOOR SHUTTERS</u>		
	<u>Per sq. m</u>		
6-50	Wrought sashes, glazed shutter with moulded or chamfered bars, panels filled in with glass fixed as specified including hanging complete except mongeries which will be paid separately (Chamble)	3285.00	3728.00
6-51	- Ditto - but (Gamar ctg)	2492.00	2743.00
6-52	- Ditto - but (Silkorai ctg)	2756.00	3071.00
6-53	- Ditto - but (Jarul)	2675.00	2970.00
6-54	- Ditto - but (Kathal)	2573.00	2844.00

SECTION-6

DOORS AND WINDOWS RATES

Item	Description	Rate in Taka	
		Thickness in millimetre	
	<u>DOOR SHUTTERS</u>	32.00	38.00
	<u>Per sq. m</u>		
6-55	- Ditto - but gauzed shutter (Chamble)	2939.00	3272.00
6-56	- Ditto - but (Gamar ctg)	2195.00	2383.00
6-57	- Ditto - but (Silkorai ctg)	2443.00	2679.00
6-58	- Ditto - but (Jarul)	2366.00	2588.00
6-59	- Ditto - but (Kathal)	2271.00	2474.00
6-60	- Ditto - but glazed shutter (Ctg. Teak)	4199.00	4865.00
6-61	- Ditto - but gauzed shutter (Ctg. Teak)	3799.00	4298.00
6-62	- Ditto - but glazed shutter (Jessore Teak)	3793.00	4360.00
6-63	- Ditto - but gauzed shutter (Jessore Teak)	3417.00	3842.00
6-64	- Ditto - but glazed shutter (Tit Chamble)	3590.00	4107.00
6-65	- Ditto - but gauzed shutter (Tit Chamble)	3226.00	3614.00
6-66	- Ditto - but glazed shutter (Shishum / Mehgoni)	2756.00	3071.00
6-67	- Ditto - but gauzed shutter (Shishum / Mehgoni)	2443.00	2679.00
		Rate in Taka	
	<u>CSW SHUTTERS</u>	Thickness in millimetre	
	<u>Per sq.m</u>	32.00	38.00
6-68	Glazed shutter for CSWs all as above but including hanging complete but excluding mongeries which will be paid separately (Chamble)	3835.00	4312.00
6-69	- Ditto - but (Gamar ctg)	2946.00	3217.00
6-70	- Ditto - but (Silkorai ctg)	3242.00	3582.00

SECTION-6

DOORS AND WINDOWS RATES

Item	Description	Rate in Taka	
		Thickness in millimetre	
	<u>CSW SHUTTERS</u>		
	Per sq.m	32.00	38.00
6-71	- Ditto - but (Jarul)	3151.00	3469.00
6-72	- Ditto - but (Kathal)	3037.00	3329.00
6-73	- Ditto - but gauzed shutter (Chamble)	3497.00	3975.00
6-74	- Ditto - but (Gamar ctg)	2609.00	2879.00
6-75	- Ditto - but (Silkorai ctg)	2905.00	3244.00
6-76	- Ditto - but (Jarul)	2814.00	3132.00
6-77	- Ditto - but (Kathal)	2700.00	2992.00
6-78	- Ditto - but glazed shutter (Ctg. Teak)	4860.00	5576.00
6-79	- Ditto - but gauzed shutter (Ctg. Teak)	4523.00	5239.00
6-80	- Ditto - but glazed shutter (Jessore Teak)	4404.00	5014.00
6-81	- Ditto - but gauzed shutter (Jessore Teak)	4067.00	4677.00
6-82	- Ditto - but glazed shutter (Tit Chamble)	4176.00	4734.00
6-83	- Ditto - but gauzed shutter (Tit Chamble)	3839.00	4396.00
6-84	- Ditto - but glazed shutter (Shishum / Mehgoni)	3241.00	3581.00
6-85	- Ditto - but gauzed shutter (Shishum / Mehgoni)	2905.00	3244.00

SECTION-6

DOORS AND WINDOWS RATES

Item	Description	Rate in Taka	
		Thickness in millimetre	
		32.00	38.00
	<u>WINDOWS SHUTTER</u>		
	Per sq.m		
6-86	Fixed Venetian shutter for Window with 10 CM wide rails and styles including hanging complete but except mongeries which will be paid separately (Chamble)	5002.00	5523.00
6-87	- Ditto - but (Gamar ctg)	3556.00	3852.00
6-88	- Ditto - but (Silkorai ctg)	4038.00	4409.00
6-89	- Ditto - but (Jarul)	3890.00	4237.00
6-90	- Ditto - but (Kathal)	3705.00	4023.00
6-91	- Ditto - but (Jessore Teak)	5928.00	6594.00
6-92	- Ditto - but (Ctg. Teak)	6670.00	7452.00
6-93	- Ditto - but (Tit Chamble)	5558.00	6166.00
	<u>DOOR SHUTTERS</u>		
	Per sq.m		
6-94	Framed and Panelled door shutter including hanging but excluding mongeries which will be paid separately (Chamble)	4494.00	5014.00
6-95	- Ditto - but (Gamar ctg)	3083.00	3378.00
6-96	- Ditto - but (Silkorai ctg)	3553.00	3924.00
6-97	- Ditto - but (Jarul)	3409.00	3756.00
6-98	- Ditto - but (Kathal)	3228.00	3546.00
6-99	- Ditto - but (Jessore Teak)	5398.00	6063.00
6-100	- Ditto - but (Ctg. Teak)	6121.00	6902.00
6-101	- Ditto - but (Tit Chamble)	5036.00	5644.00

SECTION-6

DOORS AND WINDOWS RATES

Item	Description	Rate in Taka	
		Thickness in millimetre	
	<u>DOOR SHUTTERS</u>		
	Per sq.m	32 mm	38 mm
6-102	Framed and Panelled partition and dados made of (Chamble)	4271.00	4558.00
6-103	- Ditto - but (Gamar ctg)	2679.00	2842.00
6-104	- Ditto - but (Silkorai ctg)	3209.00	3414.00
6-105	- Ditto - but (Jarul)	3046.00	3238.00
6-106	- Ditto - but (Kathal)	2842.00	3018.00
6-107	- Ditto - but (Jessore Teak)	5292.00	5659.00
6-108	- Ditto - but (Ctg. Teak)	6108.00	6539.00
6-109	- Ditto - but (Tit Chamble)	4883.00	5219.00
		Thickness in millimetre	
	Per sq.m	19 mm	25 mm
6-110	Ledged and battened door shutter with rebated joints including hanging complete but except mongeries which will be paid separately (Chamble)	3342.00	4008.00
6-111	- Ditto - but (Gamar ctg)	2199.00	2572.00
6-112	- Ditto - but (Silkorai ctg)	2580.00	3049.00
6-113	- Ditto - but (Jarul)	2462.00	2902.00
6-114	- Ditto - but (Kathal)	2316.00	2719.00
6-115	- Ditto - but (Jessore Teak)	4074.00	4923.00
6-116	- Ditto - but (Ctg. Teak)	4660.00	5656.00
6-117	- Ditto - but (Garjan)	1964.00	2286.00
6-118	- Ditto - but (Tit Chamble)	3781.00	4557.00

SECTION-6

DOORS AND WINDOWS RATES

Item	Description	Rate in Taka	
		Thickness in millimetre	
	<u>DOOR SHUTTERS</u>		
	Per sq.m	19 mm	25 mm
6-119	Ledged, battened and braced door shutter with rebated side joints including hanging complete but except mongeries which will be paid separately (Chamble)	3806.00	4865.00
6-120	- Ditto - but (Gamar ctg)	2464.00	3061.00
6-121	- Ditto - but (Silkorai ctg)	2911.00	3661.00
6-122	- Ditto - but (Jarul)	2773.00	3477.00
6-123	- Ditto - but (Kathal)	2601.00	3246.00
6-124	- Ditto - but (Jessore Teak)	4667.00	6019.00
6-125	- Ditto - but (Ctg. Teak)	5356.00	6942.00
6-126	- Ditto - but (Tit Chamble)	4323.00	5557.00
	<u>DOOR SHUTTERS</u>		
	Per sq.m	38.00	50.00
6-127	Framed and braced door filled with tongued grooved and beaded (or chamfered both side) battens including hanging complete but except mongeries which will be paid separately (Chamble)	4699.00	6070.00
6-128	- Ditto - but (Gamar ctg)	3120.00	3894.00
6-129	- Ditto - but (Silkorai ctg)	3646.00	4618.00
6-130	- Ditto - but (Jarul)	3484.00	4396.00
6-131	- Ditto - but (Kathal)	3282.00	4117.00
6-132	- Ditto - but (Jessore Teak)	5704.00	7454.00
6-133	- Ditto - but (Ctg. Teak)	6514.00	8567.00
6-134	- Ditto - but (Tit Chamble)	5299.00	6897.00

SECTION-6

DOORS AND WINDOWS RATES

Item	Description	Rate in Taka		
		Star Particles	BFIDC	
<u>FLUSH DOOR</u>				
Per sq.m				
6-135	Supply and fixing of Flush door 36 mm thick both side veneered commercial (Garjan) excluding mongeries	2355.00	2355.00	
6-136	- Ditto – but Chapalish	2679.00	-	
6-137	- Ditto – but Tit Chamble / Champa	2679.00	2679.00	
6-138	- Ditto – but Burma Teak	3828.00	-	
		Rate in Taka		
<u>SOLID DOOR</u>				
Per sq.m				
		Thickness in millimetre		
		32.00	38.00	
6-139	Solid door shutter including hanging but excluding mongeries (Chamble)	5934.00	6733.00	
6-140	- Ditto - but (Gamar ctg)	4078.00	4531.00	
6-141	- Ditto - but (Silkorai ctg)	4697.00	5265.00	
6-142	- Ditto - but (Jarul)	4507.00	5039.00	
6-143	- Ditto - but (Kathal)	4269.00	4757.00	
6-144	- Ditto - but (Ctg. Teak)	8076.00	9274.00	
6-145	- Ditto - but (Jessore Teak)	7124.00	8145.00	
6-146	- Ditto - but (Tit Chamble)	6648.00	7580.00	
6-147	- Ditto - but (Shishum / Mehgoni)	4697.00	5265.00	
		Rate in Taka		
6-148	38 mm thick solid door shutter made of ctg. teak designed with raised batten including hanging but excluding mongeries		7724.00	
6-149	Supply and fixing of wooden louver shutter 30 mm thick for cat door made of Ctg. Teak wood all as per drawing.		10408.00	
6-149A	Supply and fixing of 38 mm and 25 mm thick composite panel and framed door shutter made with ctg Teak wood with raised design batten as spd except mongeries		8812.00	
		Thickness in millimetre		
		3.00	6.00	12.00
6-150	Ply wood fixed to timber framing (Timber to be paid separately)	377.00	566.00	954.00
6-151	- Ditto - fixing only	117.50	117.50	118.90
6-152	- Ditto - but add if fixed in repair	147.00	147.00	149.00

SECTION-6

DOORS AND WINDOWS RATES

Item	Description CUP BOARD / CABINET	Rate in Taka
Per sq.m		
6-153	Supply and fixing of Cup board 625 mm depth any colour made of both side melamine coated / laminated board 19mm thick including 2xdrawer, shelf, 3mm thick plastic board liner, steel channel for drawer, steel lama hinges, steel handle, steel lock, etc. complete (OTOBI / NAVANA / PARTEX BRAND) as spd.	5182.00
6-153A	Supply and fixing of Cabinet Bed room, 625 mm depth any colour made of both side melamine coated / laminated board 19mm thick, 25mm top and bottom, including 2xdrawer, lock, handle, hinges, tower bolt, roller, shelf, 3mm thick MDF board back, steel channel for drawer, etc. complete (OTOBI / NAVANA / PARTEX BRAND) as spd.	5426.00
6-154	Supply and fixing of Cup board / Cabinet Dress, 625 mm depth any colour made of both side melamine coated / laminated board 19mm thick including 2xdrawer, shelf, 3mm thick plastic board liner, steel channel for drawer, steel lama hinges, steel handle, steel lock, mirror (size 600x1200mm) etc. complete (OTOBI / NAVANA / PARTEX BRAND) as spd.	6064.00
6-155	Supply and fixing of Cabinet Kitchen, 375 mm depth any colour made of both side melamine coated / laminated board 19mm thick including 2xdrawer, shelf, 3mm thick plastic board liner, steel channel for drawer, steel lama hinges, steel handle, steel lock, etc. complete (OTOBI / NAVANA / PARTEX BRAND) as spd.	6327.00
6-156	Supply and fixing of Cup board / Cabinet JCO's / OR's type, 500 mm depth any colour made of both side melamine coated / laminated board 19mm thick including 2xdrawer, shelf, 3mm thick plastic board liner, steel channel for drawer, steel lama hinges, steel handle, steel lock, etc. complete (OTOBI / NAVANA / PARTEX BRAND) as spd.	4505.00

SECTION-6

DOORS AND WINDOWS RATES

Item	Description	Rate in Taka				
		Doors		Windows		CSWs
		Double leaf	Single leaf	Double leaf	Single leaf	
<u>MONGERIES FOR DOORS, WINDOWS & CSWS</u>						
Each						
6-157	Iron mongeries for doors, windows and CSWs as spd	302.00	179.00	209.00	124.00	979.00
6-158	Brass mongeries for doors, windows and CSWs as specified.	1251.00	739.00	782.00	465.00	980.00
<u>WIRE GAUZE</u>						
Per sq.m						
6-159	Iron tinned fly proof 4x4 mesh per CM , 24 gauze complete with screw (Timber to be paid under relevant item)			289.00	135.00	22.50
6-160	- Ditto - but using 7x7 mesh per cm - Ditto -			295.00	135.00	22.50
6-161	Iron tinned mosquito proof 7x7 mesh per CM 28 gauze complete with screw (timber to be paid under relevant item)			307.00	135.00	22.50
6-161A	Iron tinned mosquito proof 7x7 mesh per CM 32 gauze complete with screw (timber to be paid under relevant item)			301.00	135.00	22.50
6-162	Plastic wire gauze mosquito proof 7x7 mesh / CM complete with screw (Timber to be paid under relevant item)			267.00	136.70	22.80
		Rate in Taka				
<u>JOBING WORK</u>						
Each						
		Resecuring without taking down	Taking down & refixing			Removing to or from store
			Same Opening	Other Opening	Taking down only	
6-163	Window chowkats including board if any	45.70	148.00	196.00	59.30	40.30
6-164	Window chowkats including sashes	54.10	197.00	297.00	59.30	39.60

SECTION-6

DOORS AND WINDOWS RATES

Item	Description	Rate in Taka				Removing to or from store
		Resecuring without taking down	Taking down & refixing		Taking down only	
JOBGING WORK			Same Opening	Other Opening		
Each						
6-165	Casement windows fan lights etc (sashes only)	21.50	43.70	81.50	27.40	29.70
6-166	Door chowkat wooden / steel door complete (n. exc 2.6 sq.m each) including architraves if any.	43.70	148.00	197.00	59.30	29.70
6-167	Door chowkat wooden / steel door complete (exc 2.6 sq.m each) including architraves if any.	58.20	197.00	297.00	59.30	33.90
6-168	Door gate leaves only (single or folding) of any pattern or thickness not exc 2.60 sq.m each.	27.10	43.70	81.50	22.90	29.70
6-169	Partitions framing cupboard fronts wall paneling & similar wood work including door exc 2.60 sq.m each	40.30	127.70	169.00	73.40	51.10
Rate in Taka						
Per sq.m						
6-170	Door or gates of any description cramped up, rewedged with new wedged in glue (or white lead repined if in ext. works) not exceeding 2.60 sq.m each incl. taking down & rehangng and taking off and refixing hinges (any description) & removing to & from workshop.					4.00
6-171	- Ditto - but exc 2.60 sq.m - ditto -					5.30

SECTION-6

DOORS AND WINDOWS RATES

Item	Description	Rate in Taka									
<u>JOBGING WORK</u>											
Per sq.m											
6-172	- Ditto - but not exceeding 2.60 sq.m. and including in addition taking as under for the renewal of defective parts also preparing to receive the same.			73.40							
6-173	- Ditto - but exc 2.60 sq.m supper and -ditto-			98.90							
6-173A	Supply and fixing of steel louver made of 14 BG plain sheet including cutting, welding and red oxide priming coat paint complete as spd.			19389.00							
		<table border="1"> <thead> <tr> <th colspan="2">Taking down & refixing</th> <th rowspan="2">Taking down only</th> <th rowspan="2">Remove to or from store</th> </tr> <tr> <th>Same opening</th> <th>Other opening</th> </tr> </thead> </table>				Taking down & refixing		Taking down only	Remove to or from store	Same opening	Other opening
Taking down & refixing		Taking down only	Remove to or from store								
Same opening	Other opening										
	Each										
6-174	Steel glazed window / CSW complete	297.00	445.00	74.10	30.80						
6-175	Steel gauzed window/ CSW complete	148.00	197.00	59.30	29.70						
6-176	Steel window grill	148.00	197.00	59.30	29.70						
Per Metre											
6-177	Supply & fixing 19mm dia brass tube curtain poles, fixed with suitable soft wood brackets but without curtain rings.			1088.00							
<u>STEEL GLAZED WINDOW</u>											
Per sq.m											
6-178	Steel window/CSW glazed with 3 mm glass outer and inner frame "Z" bars 19x19x3mm size and "T" section 19x19x3mm for horizontal & vertical division as per drawing including fabrication welding all fitting holdfast embedded in PCC blocks & painting with anticorrosive priming coat, fixed complete in position (area n.exc 1.50 sq.m each)			3097.00							
6-179	- Ditto - but exc 1.5 sq.m -ditto-			2832.00							

SECTION-6

DOORS AND WINDOWS RATES

Item	Description	Rate in Taka		
		Supply & fixing		
<u>STEEL GAUZED WINDOW</u>		7x7 mesh / cm 32 gauze	7x7 mesh / cm 28 gauze	4x4 mesh / cm 24 gauze
Per sq.m				
6-180	Steel gauzed windows/CSW panels filled with wire net outer and inner frame with "Z" bars 19x19x3 mm size and "T" section 19x19x3 mm for horizontal and vertical division as per drawing incl fabrication welding all fitting holdfast embedded in PCC block & painting with anticorrosive priming coat, fixed complete in position (area n.exc 1.50 sq.m each)	2919.00	2925.00	2907.00
6-181	- Ditto - but exc 1.5 sq.m -ditto-	2635.00	2641.00	2623.00
6-182	Steel fixed windows/CSW panels filled with wire net, outer and vertical division with "Z" bars 19x19x3 mm size horizontal division with 19x3 mm FI bar gauzed wire net fixed to frame with 12x3mm FI cover fillets as per drawing incl fabrication welding holdfast embedded in PCC blocks and painting with anticorrosive priming coat, fixed complete in position (area n.exc 1.50 sq.m each)	1879.00	1885.00	1868.00
6-183	- Ditto - but exc 1.5 sq.m -ditto-	1393.00	1399.00	1381.00
Per sq.m				Rate in Taka
6-184	Steel window half glazed with 3mm sheet glass fixed with putty & half panelled with 20 BG M S sheet outer & inner frames with "Z" bars 19x19x3mm size "T" section 19x19x3mm for horizontal & vertical division as per drawing incl. fabrication welding all fittings holdfast embedded in PCC blocks & painting with anticorrosive priming coat fixed complete in position (area exc 1.50 sq.m each)			2874.00
6-185	- Ditto - but n. exc 1.5 sq.m			3259.00

SECTION-6

DOORS AND WINDOWS RATES

Item	Description	Rate in Taka								
STEEL GAUZED WINDOW										
	Per sq.m									
6-186	Steel pivoted glazed window, outer frame & vertical uprights made of "Z" bars 19x19x3mm size & shutter made of angle iron 19x19x3mm size, horizontal division made of 19x19x3mm "T" section and filled with 3 mm thick sheet of glass fixed with putty all as per drawing incl. fabrication welding all fittings (GI eye hook fastener handle) holdfast embedded in PCC blocks & painting with anticorrosive priming coat fixed complete in position	3348.00								
		<table border="1"> <thead> <tr> <th colspan="3">Supply & fixing</th> </tr> <tr> <th>7x7 mesh / cm 32 gauze</th> <th>7x7 mesh / cm 28 gauze</th> <th>4x4 mesh / cm 24 gauze</th> </tr> </thead> </table>			Supply & fixing			7x7 mesh / cm 32 gauze	7x7 mesh / cm 28 gauze	4x4 mesh / cm 24 gauze
Supply & fixing										
7x7 mesh / cm 32 gauze	7x7 mesh / cm 28 gauze	4x4 mesh / cm 24 gauze								
	Per sq.m									
6-187	Wire gauge fixed netting in verandah having outer frame with 19x19x3mm angle & vertical division with 19mmx3mm MS FI bar wire gauge fixed to frame with 19mm x3mm FI cover fillets screwed all as per drawing incl. fabrication welding all fixing holdfast embedded in PCC blocks & painting with anticorrosive priming coat fixed complete in position.	957.00	963.00	946.00						
	Per sq.m	Rate in Taka								
6-188	Supply and fixing of aluminium wire mosquito proof net for Verandah grill or any other place fixed with iron angle outer frame 19x19x3mm and cover fillets division with 19x3mm MS flat bar incl welding, granding, screw, holdfast joint bolt, nut & bolts, painting with red oxide paint etc complete as spd.	3766.00								
		<table border="1"> <thead> <tr> <th colspan="2">Supply & fixing</th> </tr> <tr> <th>Fixed</th> <th>Venetian</th> </tr> </thead> </table>			Supply & fixing		Fixed	Venetian		
Supply & fixing										
Fixed	Venetian									
6-189	Steel glazed window for stair case made of 25x25x3mm angle iron outer frame, internal panels made of 19x19x3mm angle iron, fixed panels/venetian panels filled with 3mm thick sheet of glass fixed with putty all as per drawing including fabrication welding holdfast embedded in PCC blocks & painting with anticorrosive priming coat fixed complete in position	2374.00	3556.00							
		Rate in Taka								
6-190	Steel grill for railing of stair with 12x12 mm ² solid bar 38.1 x 4.76 mm FI bar including welding and fixed complete in position	1772.00								

SECTION-6

DOORS AND WINDOWS RATES

Item	Description	Rate in Taka
	<u>GRILL</u>	
	Per sq.m	
6-191	Steel window design grill made of 19x5mm FI bar as per specification including welding holdfast etc, embedded in PCC blocks & painting with anticorrosive priming coat fixed complete in position (any design as approved.)	1141.00
6-192	Steel window design grill made of 25x5mm FI bar as per specification including welding holdfast etc, embedded in PCC blocks & painting with anticorrosive priming coat fixed complete in position (any design as approved.)	1468.00
6-193	Steel window design grill made of 19x3mm FI bar as per design & specification including welding all fitting holdfast etc, embedded in PCC blocks & painting with anticorrosive priming coat fixed complete in position (any size in approved.)	916.00
6-194	Steel window design grill made of 19x6mm FI bar outer frame & 19x5mm FI bar inner members as per design & specification incl. welding all fitting holdfast embedded in PCC blocks & painting with anticorrosive priming coat fixed complete in position (any design as approved.)	1189.00
6-195	Steel window design grill made of 25x3mm FI bar as per specification incl. welding holdfast embedded in PCC blocks & painting with anticorrosive priming coat (any design as approved.)	1076.00
6-195-A	Design steel window grill made with 18 BG 25x25 mm and 19x19 mm MS square box, 12x12 mm MS solide square bar, 19x5 mm FI bar including cutting, welding, grinding and one coat anticorrivise paint complete as required size and specification.	7344.00
6-195-B	Design steel window grill made with 18 BG 25x25 mm MS square box and 12x12 mm MS solide square bar, 19x5 mm FI bar including cutting, welding, grinding and one coat anticorrivise paint complete as required size and specification.	6990.00
6-195-C	Design steel window grill made with 18 BG 19x19 mm MS square box, 12x12 mm MS solide square bar, 19x5 mm FI bar including cutting, welding, grinding and one coat anticorrivise paint complete as required size and specification area exc 1.50 sq.m.	5899.00
6-195-D	Design steel window grill made with 18 BG 19x19 mm MS square box, 12x12 mm MS solide square bar including cutting, welding, grinding and one coat anticorrivise paint complete as required size and specification area not exc 1.5 sq.m.	7316.00

SECTION-6

DOORS AND WINDOWS RATES

Item	Description	Rate in Taka	
<u>STEEL DOOR</u>			
Per sq.m			
6-196	Steel door panelled with 18 BG MS sheet outer & inner frame with 'Z' bar 19x19x3mm size & 'T' section 19x19x3mm for Horizontal & vertical division as per drawing incl. fabrication welding all fittings holdfast embedded in PCC blocks & one coat of anticorrosive paint fixed complete in position.	2633.00	
6-197	Steel door panelled with 18 BG MS sheet outer & inner frame with 'Z' bar 38x38x6mm MS angle & 'T' section 25x25x3mm for Horizontal & vertical division as per drawing incl. fabrication welding all fittings holdfast embedded in PCC blocks & one coat of anticorrosive paint fixed complete in position.	3368.00	
6-198	Steel door half glazed with 3mm sheet glass fixed with putty, half panelled with 18 BG MS sheet outer & inner frame with 'Z' bar 19x19x3mm size & 'T' section 19x19x3mm for Horizontal & vertical division as per drawing incl. fabrication welding hold fast etc embedded in PCC blocks & painting with anticorrosive priming coat fixed complete in position.	2509.00	
<u>PLASTIC DOOR</u>			
		Rate in Taka	
Per sq.m		25 mm thick	32 mm thick
6-199	Supply and fixing of framed and paneled (8 mm thick) plastic door shutter including hanging with chowkat and S S mongeries.	5892.00	6841.00
6-200	Supply and fixing of Hollow plastic door shutter including hanging with chowkat and SS mongeries.	-	2808.00
Per sq.m			
6-200A	Supply and fixing of 10mm thick plastic sheet for cat door shutter making with necessaries fittings complete as spd.	Rate in Taka	
		1018.00	
6-201	Supply and fixing of 6 mm thick plastic Cat door shutter complete all as spd.	1159.00	
<u>COLLAPSIBLE GATE</u>			
Per sq.m			
6-202	Collapsible gate made of standard MS channel & 19mx5mm thick FI bar riveted with best quality rivet with top & bottom runner 50x50x6mm MS 'T' fixed in brick work PCC / RCC etc with suitable legs anchorage incl. stop, handle & locking arrangement with two coats of paint fixed in position & complete in all respect.	Rate in Taka	
		3232.00	

SECTION-6

DOORS AND WINDOWS RATES

Item	Description	
6-203	Rolling shutter made of 24 BG galvanized plain sheet with 3mm thick MS plate guard rail made of shape on either ends 10cm wide fixed in PCC blocks with suitable holdfast etc & roller made of standard quality spring to be provided not more than 60 cm apart including locking arrangement & covering of roller box with 24 BG galvanized plain sheet one coat of anticorrosive paint to MS works fixed in position & complete in all respect.	2672.00

ALUMINIUM FALSE CEILING

Rate in Taka

Per sq.m

Materials & Labour	Fixing Only	Add if fixed in repair
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6-204	Blank	See section-13
6-205	Blank	

Rate in Taka

TERMITE TREATMENT TO DOORS & WINDOWS

Each

(Ground floor)

6-206	Dursban 20 EC or equivalent to doors to eliminate termites (1st floor & above)	699.00
6-207	Dursban 20 EC or equivalent to doors to eliminate termites	639.00
6-208	Dursban 20 EC or equivalent to windows to eliminate termites	624.00

SECTION-6

DOORS AND WINDOWS RATES

Item	Description	Type of lipped panel		
		Burma Teak	Champa	Chapalish
	<u>LIPPED PANEL FLUSH DOORS</u>			
	Per sq.m			
6-209	Lipped panel flush doors 36 mm thick both side lipped panel as specification supplied & fixed completes but excl to mongaries (star Particles).	3829.00	2679.00	2679.00
	<u>FLUSH DOORS</u>			
	Per sq.m			
		Type of vinyl laminated other side veneering		
		Burma Teak	Champa	Chapalish
6-210	Flush doors as bath room doors 36 mm thick solid timber around 19mm thick centre board one side vinyl laminated & other side veneered as specified supplied & fixed completes but exc of mongeries (star Particles) (For 2.08mx0.76m to 2.08mx1.06m).	3829.00	2679.00	2679.00
6-211	- Ditto - but 2.08mx0.06m to 2.08mx0.68m	130.00	130.00	130.00
		Rate in Taka		
6-212	Flush doors as bath room doors 36 mm thick solid timber around 19mm thick centre board both side vinyl laminated as specified supplied & fixed complete but excl of mongeries (Star Particles) (For 2.08mx0.76m to 2.08mx1.06m)			114.00
6-213	- Ditto - but 2.08m x 0.06m to 2.08m x 0.68m			130.00
		Rate in Taka		
	<u>JOBING WORK</u>	Taking down & refixing		
	Each	Same opening	Other opening	Taking down only
				Removing to or from store
6-214	Steel gauzed door complete	148.00	297.00	74.10
				29.70

SECTION-6

DOORS AND WINDOWS RATES

Item	Description			
		Materials & Labour	Fixing Only	Add if fixed in Repair
	<u>JOBGING WORK</u>			
6-215	5 mm thick and 450x1350 mm size looking mirror fixed with clip/screw etc in any position as spd.	1299.00	65.20	16.30
	Per cu.m		Rate in Taka	
6-216	Steel cupboard all inner MS sheet 22 BG and outer sheet (covering all sides) 20 BG incl. Spray painting and complete with all necessary fittings all as spd.			15932.00
	Per sq.m		Supply and Fixing	
		7x7 mesh / cm 32 gauze	7x7 mesh / cm 28 gauze	4x4 mesh/cm 24 gauze
6-217	Steel gauzed door panels filled with wire net outer and inner frame with "Z" bar 19x19x3 mm size horizontal & vertical including fabrication, welding, drilling, hold fast Embedded in pcc block and painting with anticorrosive priming coat fixed complete in position.	1794.00	1800.00	1788.00
	Per cu.m		Rate in Taka	
6-218	Chowkat for windows glazed or gauzed incl. Hold fast fixed in position as spd (Garjan)			76498.00
6-219	Chowkat for door gates incl. Hold fast fixed in position all as spd (Garjan)			69815.00
6-220	Chowkat for CSWs glazed or gauzed incl. Hold fast and fixed in position all as spd (Garjan)			74314.00
	Per sq.m			
6-221	Steel glazed sliding windows with 5 mm glass, outer frame 25x25x3 mm angle and 19x19x3 mm angle for shutter frame, horizontal and vertical division all as spd incl. Fabrication, welding with all fittings hold fast embedded in PCC blocks (1:2:4) and painting with anticorrosive priming coat, fixed complete in position (area exc. 1.50 sq.m each)			5277.00

SECTION-6

DOORS AND WINDOWS RATES

Item	Description	Rate in Taka				
		Resecuring without taking down	Same opening	Other opening	Taking down only	Removing to or from store
<u>JOBGING WORK</u>						
	Each					
6-222	Window shutter only	32.60	58.70	179.00	25.00	23.70
	Per sq.m					
					Materials & Labour	
					5 mm thick	3 mm thick
6-223	Lead sheet as in wall plate, door or in any other position all as spd.				9192.00	6796.00
	Per sq.m					
					Rate in Taka	
6-224	Steel cupboard outer frame & shutter made with 18 BG sheet & shelf made with 20 BG sheet incl fabrication, welding with all fittings and one coat of anticorrosive paint fixed in position complete					2380.00
6-225	Steel glazed sliding windows with 5 mm glass, outer frame 25x25x3 mm angle and 19x19x3 mm angle for shutter frame, horizontal and vertical division all as spd incl. Fabrication, welding with all fittings hold fast embedded in PCC (1:2:4) blocks and painting with anticorrosive priming coat, fixed complete in position (area n exc. 1.50 sq.m each)					5343.00
					Supply and Fixing	
					Venetain	Fixed
6-226	Steel glazed window for stair case made of 19x19x3 mm angle iron outer frame internal panels made of 19x19x3 mm angle iron, fixed panels/Venetian panels filled with 3 mm thick sheet of glass fixed with putty incl. Fabrication, welding hold fast embedded in PCC blocks and painting with anticorrosive priming coat, fixed complete in position.				3287.00	1583.00

SECTION-6

DOORS AND WINDOWS RATES

Item	Description	Rate in Taka		
		Materials & Labour	Fixing only	Add if fixed in repair
	<u>ALUMINIUM DOOR & WINDOWS</u>			
	Per sq.m			
6-227	Supply and fixing of aluminium fixed window / partition as per AAMA standard specification having 1.5 mm thick, 90-95 mm wide, outer bottom top side section, all aluminium member will be anodized natural colour with a coat not less than 15 microne in thickness and density of 4 mg / cm ² including all accessories, keeping provision of 5 mm thick glass / spandrel (Glass / spandrel to be paid under relevant item) and sealant as spd.	2745.00	453.00	113.30
6-228	- Ditto - but anodized Bronze colour as spd.	2797.00	453.00	113.30
6-229	Supply and fixing of aluminium fixed window / partition as per AAMA standard specification having 1.5 mm thick, 75 mm wide, outer bottom top side section, all aluminium member will be anodized natural colour with a coat not less than 15 microne in thickness and density of 4 mg / cm ² including all accessories, keeping provision of 5 mm thick glass / spandrel (Glass / spandrel to be paid under relevant item) and sealant as spd.	2260.00	453.00	113.30
6-230	- Ditto - but anodized Bronze colour as spd.	2298.00	453.00	113.30
6-231	Supply and fixing of aluminium sweing door as per AAMA standard specification all aluminium member will be anodized natural colour with a coat not less than 15 microne in thickness and density of 4 mg / cm ² including all accessories like handle, hydraulic door closer, pivot etc. keeping provision for fixing 5 mm thick glass / aluminium spandrel as spd.	6772.00	950.00	238.00
6-232	- Ditto - but anodized Bronze colour as spd	6891.00	950.00	238.00

SECTION-6

DOORS AND WINDOWS RATES

Item	Description	Rate in Taka		
		Materials & Labour	Fixing only	Add if fixed in repair
	<u>ALUMINIUM DOOR & WINDOWS</u>			
	Per sq.m			
6-233	Supply and fixing of aluminium sliding door/window as per AAMA standard specification having 1.5 mm thick, 90-95 mm wide, outer bottom top side, 1.5 mm thick shutter top bottom lock inter lock section all aluminium member will be anodized natural colour with a coat not less than 15 microne in thickness and density of 4 mg / cm ² including all accessories like lock (Japan), rular, handle, stopper etc. keeping provision of 5 mm thick glass / spandrel (Glass / spandrel to be paid under relevant item) and sealant as spd .	2874.00	536.00	107.20
6-234	- Ditto - but anodized Bronze colour as spd.	3087.00	536.00	107.20
6-235	Supply and fixing of aluminium sliding door / window as per AAMA standard specification having 1.5 mm thick, 75 mm wide, outer bottom top side, 1.5 mm thick shutter top bottom lock inter lock section all aluminium member will be anodized natural colour with a coat not less than 15 microne in thickness and density of 4 mg / cm ² including all accessories like lock (Japan), rular, handle, stopper etc. keeping provision of 5 mm thick glass / spandrel (Glass / spandrel to be paid under relevant item) and sealant as spd.	2735.00	536.00	107.20
6-236	- Ditto - but anodized Bronze colour as spd	2930.00	536.00	107.20

SECTION-6

DOORS AND WINDOWS RATES

Item	Description	Rate in Taka		
		Materials & Labour	Fixing only	Add if fixed in repair
	<u>ALUMINIUM DOOR & WINDOWS</u>			
	Per sq.m			
6-237	Supply and fixing of aluminium sliding door / window as per AAMA standard specification having 1.5 mm thick, 90-95 mm wide, outer bottom top side, 1.5 mm thick shutter top bottom lock inter lock section all aluminium member will be anodized natural colour with a coat not less than 15 microne in thickness and density of 4 mg / cm ² including all accessories like lock (Japan), rular, handle, stopper etc. keeping provision of 5 mm thick glass / spandrel (Glass / spandrel to be paid under relevant item) and sealant as spd	3893.00	714.00	143.00
6-238	- Ditto - but anodized Bronze colour as spd	4119.00	714.00	143.00
6-239	Supply and fixing of aluminium sliding door / window as per AAMA standard specification having 1.5 mm thick, 75 mm wide, outer bottom top side, 1.5 mm thick shutter top bottom lock inter lock section all aluminium member will be anodized natural colour with a coat not less than 15 microne in thickness and density of 4 mg / cm ² including all accessories like lock (Japan), rular, handle, stopper etc. keeping provision of 5 mm thick glass / spandrel (Glass / spandrel to be paid under relevant item) and sealant as spd	3732.00	714.00	143.00
6-240	- Ditto - but anodized Bronze colour as spd	3940.00	714.00	143.00

SECTION-6

DOORS AND WINDOWS RATES

Item	Description	Rate in Taka		
		Materials & Labour	Fixing only	Add if fixed in repair
<u>ALUMINIUM DOOR & WINDOWS</u>				
	Per sq.m			
6-241	Supply and fixing of aluminium sliding shutter net as per AAMA standard specification having 1.5 mm thick, section all aluminium member will be anodized natural colour with a coat not less than 15 microne in thickness and density of 4 mg / cm ² including all accessories like rular, handle, stopper etc fixed with mosquito proof fibre net 7x7 mesh per cm as spd.	1560.00	387.00	77.40
6-242	- Ditto - but anodized Bronze colour as spd	1587.00	387.00	77.40
6-243	Supply and fixing of standrad aluminium spandrel fixed to aluminium frame with all accessories as required for natural colour.	1776.00	147.00	29.40
6-244	- Ditto - but anodized Bronze colour as spd	1776.00	147.00	29.40
6-245	supply and fixing of standard aluminium fixed and louver window as per AAMA specification silver colour including net shutter and all other accessories as spd.	8123.00	502.00	100.40
6-246	Venetian blind 25 mm wide with all accessories such as cotton newar, sash cord, wheel etc complete (Foreign made)	3254.00	362.00	60.40
6-247	Vertical blind 75-125 mm wide with all accessories such as cotton newar, sash cord, wheel etc complete	3111.00	362.00	60.40
6-248	Supply and fixing of Vertical Blind with 125 mm wide synthetic fibre cloth with Roller & Rail as spd.	3467.00	297.00	49.60

SECTION-7
MONGERY
SPECIFICATIONS

General

1. **Mongery.** All articles of mongery to be sound. Strong well finished according to the weights specified.
2. **Samples** of mongeries for each contract shall be submitted by the Contractor to the GE/Engineer-in-charge for approval before ordering.
3. The weight of articles of mongeries made from iron or brass shall be within 10% of the weights given in the following table.

Weight for size other than those given in the following table shall be pro-rata to the sizes:

WEIGHT PER TEN NOS., ARTICLES IN KG
(Including weights of necessary screws, etc.)

Size in Cm										
	10 Cm		15 Cm		20 Cm		30 Cm		45 Cm	
	Iron	Brass	Iron	Brass	Iron	Brass	Iron	Brass	Iron	Brass
Bolts Tower	.075	1.30	1.10	1.55	2.15	2.25	2.90	4.00	-	-
Bolts All drop (Plate thickness as 16th 18 gauge)	-	-	-	-	4.25	8.00	8.00	12.00	13.5	17.00

Size in Cm									
	5 Cm		7.5 Cm		10 Cm		12.5 Cm		
	Iron	Brass	Iron	Brass	Iron	Brass	Iron	Brass	
Hinges Butt	0.34	0.40	0.80	0.86	1.45	1.50	2.20	2.40	
Hinges Parliament	-	-	2.50	-	-	-	5.70	-	

Rate in Taka

	Size in Cm			
	25	30	45	60
Hinges strap, cross garnet, etc. iron	3.20	4.10	8.25	-
Hinges, hook and ride (heavy) iron	-	12.00	17.50	-

RESTRICTED

	Iron	Brass
Thumb lathes 20cm x 44cm	2.00	-
-Ditto- 25cmx 6cm	3.25	-
Cleats belying 10 cm	0.45	0.50
Catches spring 5 cm	0.50	1.00
Fasteners Cocksure	2.00	2.20
Fasteners and stays (Casement) 30 cm	2.80	3.20
Fasteners and stays (Casement) 37.5 cm	3.50	4.00
Pivot and sockets 5.6 cm (per 10 set)	0.80	0.85
Stays Quadrant for fanlights 25 cm	2.20	2.30
Handles, Bow 15 cm	0.60	1.20
Handles, Bow 17.5 cm	0.70	1.30
Handles, Drawer pull 10 cm	0.40	0.70
Hooks, Hat and Coat 17.5 cm	1.40	1.50
Hooks , Wardrobe 5.6 cm single	0.50	0.60

	2.5 cm	3.75 cm
Hooks, Screw (Dresser or cup) iron	0.02	0.10
Hooks, Screw (Dresser or cup) Brass	0.02	0.12

	10 cm		15 cm	
	Iron	Brass	Iron	Brass
Hooks and eyes cabin or casement	0.60	0.65	0.70	0.80
Hooks screw pattern (Wire)	0.30	.035	0.68	0.70
	Iron		Brass	
Knobs, cupboard 3.12 cm	-		0.15	
Hasp and staples (Wire) 15 cm	0.70		-	
Hasp and staples (Flat bar) 5 cm	2.80		3.40	

Method of Measurements

4. **General.** The under mentioned articles of mongery shall be measured as indicated in the table below:

Name of Article	How measured
Bolts	(a) The length of plates in flush and French casement bolts
	(b) The length of shoots in the case of level, tower of all other drop bolts.
Hasps and staples Hinges	The overall length of the hasp (a) The length of the joint of butt and back flaps hinges (b) Overall of parliament hinges when open. (c) The length of strap, cross garnet and hook and ride hinges, from the joint or knuckle to the point.
Latches	The overall length of the plate for mounted Suffolk latches or the handle for un-mounted Suffolk latches.
Locks	The length or width (whichever is greater)

Clarification of Rates

5. **The rates, inter alia, include particularly:**

- a. Fixing to softwood or hardwood.
- b. Brass articles are to be fixed with brass screws. Black Japaned articles are to be fixed with black Japaned screws. Screws are to be round or flat headed as required
- c. Keys to differ if required and 2 keys to each lock, and stamping as required.
- d. Plugs and plugging to walls, building into walls of floors and making good.
- f. Black Japaned finish to all wrought iron, cast and malleable cast articles (except hinges).
- g. Varnishing and lacquering of exposed surfaces of brass fittings.
- h. Easing, oiling leaving all iron mongery in good working condition.

RESTRICTED

6. If the brass mongeries is ordered to be finished "Copper bronze", 10% will be added to the "except fixing" rates.
7. Fixing only rates include the supply of screws.
8. The rates for "fixed in repairs" include taking off the old articles and removing to store; also for plugging up old key holes, spindle holes, screw holes, etc., where necessary.
9. The rates for taking off and refixing also include adjustment, plugging up key holes, etc., as required.

SECTION-7

MONGERY RATES

Item	Description	Rate in Taka			
		Length in Centimetre			
<u>TOWER BOLTS</u>		10.00	15.00	20.00	
	Each				
7-1	Supply & fixing of wrought iron tower bolt with bright sheet & fixed with sockets or let into any materials	41.30	45.30	47.30	
7-2	-Ditto-but fixing only	16.30	16.30	16.30	
7-3	-Ditto-but add fixed in repair	4.10	4.10	4.10	
7-4	Supply & fixing brass tower bolts with bright sheets & fixed with sockets brass screws or let into any materials	107.70	146.40	181.00	
7-5	-Ditto-but fixing only	16.30	16.30	16.30	
7-6	-Ditto-but add if fixed in repair	4.10	4.10	4.10	
	<u>BOLT (All drop)</u>	Length in Centimetre			
	Each	25.00	30.00	45.00	
7-7	Wrought iron sliding & locking with staple 15 mm diameter	163.00	187.00	329.00	
7-8	-Ditto-but fixing only	32.60	32.60	32.60	
7-9	-Ditto-but add if fixed in repair	8.20	8.20	8.20	
7-10	Brass sliding & locking bolt with staple 15 mm diameter	329.00	365.00	-	
7-11	-Ditto-but fixing only	32.60	32.60	-	
7-12	-Ditto-but add if fixed in repair	8.20	8.20	-	
	<u>HINGES</u>	Length in Centimetre			
	Each	5.00	7.50	10.00	
7-13	Steel butt supply and fixing	22.60	25.60	35.10	
7-14	-Ditto-but fixing only	13.00	13.00	13.00	
7-15	-Ditto-but add if fixed in repair	3.30	3.30	3.30	
		Length in Centimetre			
		5.00	7.50	10.00	12.50
7-16	Brass but supply and if fixing with brass screws	80.60	97.10	120.90	158.00
7-17	-Ditto-but fixing only	13.00	13.00	13.00	13.00
7-18	-Ditto-but add if fixed in repair	3.30	3.30	3.30	3.30

SECTION-7

MONGERY RATES

Item	Description	Rate in Taka			
		Length in Centimetre			
	<u>HOOKS AND EYES</u>				
	Each	25.00	30.00	45.00	60.00
7-19	Hooks & eyes wrought iron (pintle) with riveted hooks on plates (on hooks prepared for leading) heavy pattern welded hand made	114.50	144.00	215.00	286.00
7-20	-Ditto-but fixing only	19.60	19.60	19.60	19.60
7-21	-Ditto-but add if fixed in repair	4.90	4.90	4.90	4.90
	<u>SPRING HINGES</u>				
	Per set	10.00	12.50	15.00	
7-22	Double action brass spring hinges fixed with brass screws.	876.00	1350.00	1943.00	
7-23	-Ditto-but fixing only	45.70	45.70	45.70	
7-24	-Ditto-but add if fixed in repair	11.40	11.40	11.40	
7-25	Single action brass spring hinges fixed with brass screws.	757.00	1054.00	1469.00	
7-26	-Ditto-but fixing only	45.70	45.70	45.70	
7-27	-Ditto-but add if fixed in repair	11.40	11.40	11.40	
7-28	Double action steel spring hinges fixed with steel screws.	496.00	639.00	817.00	
7-29	-Ditto-but fixing only	45.70	45.70	45.70	
7-30	-Ditto-but add if fixed in repair	11.40	11.40	11.40	
7-31	Single action steel hinge	401.00	520.00	-	
7-32	-Ditto-but fixing only	45.70	45.70	-	
7-33	-Ditto-but add if fixed in repair	11.40	11.40	0.00	
	<u>HYDRAULIC DOOR CLOSER</u>				
	Each	Materials & Labour	Fixing only	Add if fixed in repair	
7-34	Hydraulic Door closer (Japan)	2291.00	147.00	36.80	

SECTION-7

MONGERY RATES

Item	Description	Rate in Taka		
		Materials & Labour	Fixing only	Add if fixed in repair
DOOR STOPPER				
	Each			
7-35	Foot press stopper (Japan / china made)	208.00	18.30	4.60
7-35A	Plastic block local made	72.20	24.80	6.20
<u>LOCK</u>				
	Each			
		Supplied & fixed	Fixing only	Add if fixed in repair
7-36	Yale lock (china made)	1290.00	104.40	26.10
7-37	Yale lock (Local made)	638.00	104.40	26.10
7-38	Yale lock (England made)	3425.00	104.40	26.10
7-39	Rim lock with round knob (Japan Made)	1231.00	104.40	26.10
7-40	Rim lock with round knob (local)	638.00	104.40	26.10
<u>LOCKS (ORDINARY CUP BOARD)</u>				
	Each			
7-41	5 cm long cup board lock with round brass wards incl. female portion (iron body) approved quality	91.00	47.00	11.70
7-42	7.5 cm long cup board lock with round brass wards incl. female portion (iron body) approved quality	154.00	47.00	11.70
7-43	5 cm long cup board lock with round brass wards incl. female portion (Brass body) approved quality	343.00	47.00	11.70
7-44	7.5 cm long cup board lock with round brass wards incl. female portion (Brass body) approved quality	581.00	47.00	11.70
<u>LOCKS (DESK, DRAWER, FLUSH CUP BOARD)</u>				
	Each			
		Supplied & fixed	Fixing only	Add if fixed in repair
7-45	Iron 6.25 cm long	87.00	39.10	9.80
7-46	Iron 7.5 cm long	146.00	39.10	9.80
7-47	Brass 6.25 cm long	466.00	39.10	9.80
7-48	Brass 7.5 cm long	573.00	39.10	9.80

SECTION-7

MONGERY RATES

Item	Description	Rate in Taka				
		Supplied & fixed diameter in cm			Fixing only	Add if fixed in repair
		3.75	5.00	6.25		
<u>LOCKS FURNITURE</u>						
	Each					
7-49	Cast brass knobs with solid necks, cast brass cover rose & catchments wrought iron spindle wilkes naces or equal & approved pattern	206.00	224.00	254.00	16.30	4.10
<u>CLEATS BELAYING</u>						
	Each	Supplied & fixed diameter in cm		Fixing only	Add if fixed in repair	
		Wrought	Brass			
7-50	10 cm for cords etc fixed on & incl. circular wooden disc with hook wrought iron	48.60	65.90	7.80	2.00	
<u>EYES SCREWS</u>						
	Each					
7-51	0.87 cm to 1.25 cm internal dia for cords	4.40	10.40	2.00	0.50	
<u>CATCHES SPRING</u>						
	Each					
7-52	5 cm with projecting ring & with staples or striking plates (for fan light hung at bottom opening in wards or hung at top opening out wards)	-	30.20	6.50	1.60	
7-53	-Ditto-but 6.25 cm	-	36.20	6.50	1.60	
<u>PIVOTS AND SOCKETS (OR SASH CENTRE)</u>						
	Each					
7-54	5.72 cm plates as for swing sashes iron	73.00	21.60	13.70	3.40	
<u>CASEMENT STAYS</u>						
	Each	Supplied & fixed diameter in cm			Fixing only	Add if fixed in repair
		17.5	25.00	30.00		
7-55	Casement stays quadrant for fan light iron	51.90	57.80	69.70	16.30	4.10
7-56	-Ditto-but brass	123.10	146.80	164.60	16.30	4.10

SECTION-7

MONGERY RATES

Item	Description	Rate in Taka		
		Materials & Labour	Fixing only	Add if fixed in repair
<u>CLEATS HINGE</u>				
	Each			
7-57	Cleats hard wood not exc. 250 cu.cm wrought & Splayed to doors & windows incl. 7.50 cm pressed steel butt hinge & fixing with screws.	81.70	9.80	2.40
7-58	-Ditto-but 7.50 cm brass hinge	153.10	9.80	2.40
<u>HANDLES</u>				
	Each			
7-59	Bow 15 cm over all wrought iron	26.80	9.80	2.40
7-60	-Ditto-but brass	67.40	9.80	2.40
7-61	Bow 25 cm over all brass 'Canted' for swing doors.	97.10	9.80	2.40
7-62	Drawers handles (drop handle & 2 screw on plates) 7.50 cm grip brass	93.40	14.40	3.60
7-63	Flush pattern handle with dished plates, 7.50 cm grip brass	133.00	14.40	3.60
7-64	15 cm iron handle for steel windows	42.70	13.00	3.30
7-65	15 cm brass handle for steel windows	82.20	13.00	3.30
7-66	Adjustable stay/stopper for steel window made of FI bar (19mmx3mm)	32.80	13.00	3.30
7-67	Adjustable stay stopper for steel window made of brass	111.90	13.00	3.30
<u>HOOKS</u>				
	Each			
7-68	Hat & coat hooks strong make 17.00 cm or over brass.	88.80	13.00	3.30
<u>HOOKS AND EYES</u>				
	Each			
7-69	15.00 cm long cabin or casement with eyes complete screw type made of galvanized iron.	21.30	9.80	2.40
7-70	20.00 cm long cabin or casement with eyes complete screw type iron.	24.60	9.80	2.40
7-71	15.00 cm long cabin or casement with eyes complete screw type made of brass.	59.20	9.80	2.40
7-72	20.00 cm long cabin or casement with eyes complete screw type made of brass	70.60	9.80	2.40

SECTION-7

MONGERY RATES

Item	Description	Rate in Taka		
		Materials & Labour	Fixing only	Add if fixed in repair
	<u>KNOBS</u>			
	Each			
7-73	3.15 cm cup board knob (iron) plain with screwed end	17.70	9.80	2.40
7-74	3.15 cm cup board knob (brass) with nut screwed and rose	207.00	9.80	2.40
	<u>HASPS & STAPLES</u>			
	Each			
7-75	Stout steel wire loop hinged to plate with staple on plate (holes for bolts & screws) china length over all 15 cm one bolt to hinge plate in addition to screws.	43.40	7.80	2.00
7-76	Ditto-but of flat bar wrought iron with hinged joint china 10 cm to 15 cm	37.50	7.80	2.00
	<u>SPRING FOR DOORS</u>			
	Each			
7-77	15 cm ordinary rat tail (box pattern) extra strong china steel including friction plate.	250.00	42.40	10.60
7-78	15 cm patent helical spring made of brass including friction plate.	576.00	42.40	10.60
7-79	15 cm patent helical spring made of Aluminium including friction plate.	244.00	42.40	10.60
	<u>POLES CURTAINS ETC.</u>			
	Per Metre			
7-80	Poles (1 st class soft wood) turned stained & polished n. exc 2.54 cm dia .	68.00	29.40	7.30
	Each			
7-81	Ends(1 st class soft wood) for curtain poles turned (incl double ended steel screws) stained & varnished	16.80	4.60	1.10
7-81-A	Supply and fixing of 50 mm dia brass ring for hanging curtain as spd.	41.30	3.20	0.80

RESTRICTED

SECTION-7

MONGERY RATES

Item	Description	Rate in Taka		
		Materials & Labour	Fixing only	Add if fixed in repair
<u>CURTAINS RAIL & PIPE ETC.</u>				
	Per metre			
7-82	Aluminium curtain rail incl. ring approved foreign made	80.90	9.80	2.40
7-83	Aluminium curtain rail incl. ring approved local made	77.80	9.80	2.40
7-84	Aluminium tube / pipe 19 mm dia for curtain including End clamp and fittings as required.	187.00	15.40	3.90
7-85	Aluminium tube / pipe 25 mm dia for curtain including End clamp and fittings as required.	286.00	19.30	4.80
7-86	Aluminium tube / pipe 25 mm dia foreign made any colour for curtain including End clamp and fittings as required.	256.00	19.30	4.80
7-87	Sash cords for CS window best white country cotton 1.87 cm girth.	11.70	2.80	0.70
7-88	-Ditto-but Nylon	12.90	2.80	0.70
	Each			
7-88A	Supply and fixing of Tarssal stand foreign made for curtain including fittings complete as spd.	351.00	32.60	8.20
<u>ALUMINIUM ACCESSORIES</u>				
	Each			
7-89	Sliding lock key part-reliance Japan Made	415.00	106.70	26.70
7-90	Sliding show part Japan Made	320.00	106.70	26.70
	Per metre			
7-91	Netting rubber round Japan Made	11.90	4.70	1.20
7-92	Netting rubber flat Japan Made	34.40	4.70	1.20
	Each			
7-93	Netting angle metal Japan Made	112.70	23.70	5.90
7-94	Netting wheel Japan Made	67.60	14.20	3.60

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SECTION-7

MONGERY RATES

Item	Description	Rate in Taka		
		Materials & Labour	Fixing only	Add if fixed in repair
	<u>ALUMINIUM ACCESSORIES</u>			
	Per metre			
7-95	Fixed rubber gasket (single) Japan Made	11.90	3.60	0.90
7-96	-Ditto-but double -ditto-	13.00	3.60	0.90
7-97	Single Mohair Japan Made	11.90	3.60	0.90
7-98	Sliding rubber gasket Japan Made	17.60	4.70	1.20
	Each			
7-99	Wheel (Get on) Japan Made	136.00	47.40	11.90
	Per metre			
7-100	Double Mohair Japan Made	20.20	2.40	0.60
	Each			
7-101	Sliding lock Reliance Japan Made	373.60	106.70	26.70
7-102	Wheel (Matex) Japan Made	94.90	35.60	8.90
7-103	38mm counter sunk screw Japan Made	3.70	2.40	0.60
7-104	-Ditto-but 25mm -ditto-	3.80	2.40	0.60
7-105	Flush bolt Japan Made	623.00	237.00	59.30
7-106	Rivet Pin Japan Made	3.20	2.40	0.60
7-107	Diamond door closer Japan Made	3959.00	400.00	100.10
7-108	Alpha door lock Japan Made	1394.00	267.00	66.70

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SECTION-7
MONGERY RATES

Item	Description	Rate in Taka												
		Materials & Labour	Fixing only	Add if fixed in repair										
	MISCELLANEOUS													
	Each													
7-109	Supply & fixing EYE VIEWER as in wooden door	83.00	29.60	7.40										
7-110	Supply & fixing chromium plated security chain as in door shutter	326.00	29.60	7.40										
7-111	250 mm long fancy type bow handle (foreign made) fixed with screw complete	1256.00	65.20	16.30										
7-112	Spring for rolling shutter incl. Fixing in position as spd (Best quality)	652.00	356.00	89.00										
7-113	19 mm wide and 1400 mm long brass hinges fixed with brass screw in any position as spd.	755.00	65.20	16.30										
7-114	375 mm long brass tower bolt (heavy type) with bright sheet fixed with brass screw in any position as spd	444.00	65.20	16.30										
		<table border="1" style="width: 100%;"> <thead> <tr> <th colspan="2">Materials & Labour</th> <th rowspan="2">Fixing only</th> <th rowspan="2">Add if fixed in repair</th> </tr> <tr> <th>130 mm long</th> <th>100 mm long</th> </tr> </thead> <tbody> <tr> <td>207.00</td> <td>148.00</td> <td>16.30</td> <td>4.10</td> </tr> </tbody> </table>		Materials & Labour		Fixing only	Add if fixed in repair	130 mm long	100 mm long	207.00	148.00	16.30	4.10	
Materials & Labour		Fixing only	Add if fixed in repair											
130 mm long	100 mm long													
207.00	148.00	16.30	4.10											
7-115	Fancy type brass bow handle fixed with screw in any position as spd.													
	Per Metre	<table border="1" style="width: 100%;"> <thead> <tr> <th colspan="2">Materials & Labour</th> <th rowspan="2">Fixing only</th> <th rowspan="2">Add if fixed in repair</th> </tr> <tr> <th>25 mm dia</th> <th>19 mm dia</th> </tr> </thead> <tbody> <tr> <td>913.00</td> <td>676.00</td> <td>128.60</td> <td>32.20</td> </tr> </tbody> </table>		Materials & Labour		Fixing only	Add if fixed in repair	25 mm dia	19 mm dia	913.00	676.00	128.60	32.20	
Materials & Labour		Fixing only	Add if fixed in repair											
25 mm dia	19 mm dia													
913.00	676.00	128.60	32.20											
7-116	Brass pipe 1.5 mm wall thick as in stair/verandah railing or in any position assembling by welding (Welding to be paid separately) as spd.													
	Each	Materials & Labour	Fixing only	Add if fixed in repair										
7-117	Concealed lock with one side handle for steel cupboard / almirah	483.00	163.00	40.80										
	Each	<table border="1" style="width: 100%;"> <thead> <tr> <th colspan="2">Length in Centimetre</th> </tr> <tr> <th>5.00</th> <th>7.50</th> </tr> </thead> <tbody> <tr> <td>25.50</td> <td>32.40</td> </tr> </tbody> </table>			Length in Centimetre		5.00	7.50	25.50	32.40				
Length in Centimetre														
5.00	7.50													
25.50	32.40													
7-118	Supply and fixing of wrought iron tower bolt with bright sheet fixed complete		25.50	32.40										
7-119	-Ditto- but fixing only.		14.40	14.40										
7-120	-Ditto- but add if fixed in repair		3.50	3.60										
7-121	Supply and fixing of brass tower bolt with bright sheet fixed complete		78.60	93.40										
7-122	-Ditto- but fixing only		14.40	14.40										
7-123	-Ditto- but add if fixed in repair		3.60	3.60										

SECTION-8

STEEL AND IRON WORKS
SPECIFICATIONS

General

1. Bolts and Nuts shall be.
 - a. Wrought iron or steel with worth standard pattern.
 - b. Forged with heads in one piece.
 - c. Threaded for required lengths.
 - d. With full, true, deep threads.

2. Cast Iron castings shall be clean, sound, and free from air holes. Cast iron pipes shall be obtained from an approved manufacturer.

3. Galvanizing shall be a through even coat of zinc free from stains, bare spots or defects, at the rate of 0.60 kg of zinc per Sq.m of materials measured on both sides.

4. Plain steel sheeting shall be of the quality specified for Corrugated Steel Sheeting.

5. Rivets shall be:
 - a. of mild steel, truly shaped and of hammer tight fit.
 - b. Provided with cheese, countersunk round etc. heads as required.

6. Steel and iron including cast iron:
 - a. Steel shall.
 - (1) Comply with BDS 1313:1991.
 - (2) be obtained from approved source.
 - (3) be of tested quality where required without extra charge.

 - b. Mild steel of Wrought Iron shall be comply with the relevant BDS Grade 400 i.e 60000 psi/413.68 N/mm² manufacture company shall be BSRM, BASUNDHARA STEEL MILLS, RAHIM STEEL MILLS, BAIZID STEEL INDUSTRIES LTD & KABIR STEEL RE-ROLLING MILLS LTD.

 - c. All bars are to be tested in materials testing Laboratory in AHQ, EinC's Br.

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7. Wire netting shall be of galvanized iron in any width required from 30cm to 180cm fixed with galvanized wire staples etc. complete. For lathing it shall be 6mm mesh, 20 SWG.

8. Wrought Iron of Mild Steel: All forging shall be neatly and soundly made to the dimensions given.

Bolt and rivet holes may be punched unless ordered to be drilled.

9. XPM Shall be 9mm mesh.(short way)x22G. and weight 2.30kg per square metre.

10. **Generally.** Drilling punching, forging, screwing, riveting, bolting etc, shall be done in sound and workmanlike manner.

11. **Painting.** Steelwork which will be exposed shall be thoroughly cleaned and receive one coat of linseed oil or oxide of iron paint at works before bolting or riveting. Additional painting to be as specified.

Steel work in contact with brick work or masonry to be grouted over with cement.

Steelwork to be buried in concrete work shall be scraped free from oil, scale of loose rust with a stiff wire brush before it is placed in position and except in the case of reinforcement bars, shall be given one coat of cement wash.

12. **Reinforcement.** All reinforcing rods shall be bent cold and tied with No.22 SWG wire to keep correct position in centering. Welded splices and other mechanical connections are allowed, except as provided in the Code, all welding shall conform to “Structural Welding Code-Reinforcing Steel” (AWS D 1.4). Unless otherwise shown in the drawing, Lap length shall be provided as per table below :-

Dia meter of the bar in mm	Compression		Tension	
	40 Grade	60 Grade	40 Grade	60 Grade
10	300	350	375	500
12	375	420	450	600
16	450	560	600	800
20	700	750	900	1000
22	850	900	1000	1100
25	1000	1100	1200	1400

13. **Standard Hooks.** Unless other wise shown in the drawing, the term “standard hook” shall mean one of the following :

- a. 180° bend plus an extension of at least 4 bar diameters, but not less than 60 mm at the free end of the bar.
- b. 90° bend plus and extension of at least 12 bar diameters at the free end of the bar.
- c. **For stirrup and tie anchorage.**
 - (1) For 16 mm \emptyset bar and smaller, a 90° bend plus an extension of at least 6 bar diameters at the free end of the bar (As for example for 10 mm \emptyset stirrups additional length of $2 \times 6 \times 10 = 120$ mm length to be added for hook with original length).
 - (2) For 20 mm and 25 mm \emptyset bar a 90° bend plus an extension of at least 12 bar diameters at the free end of the bar.
 - (3) For 25 mm \emptyset bar and smaller a 135° bend plus an extension of at least 6 bar diameters at the free end of the bar.
 - (4) For closed ties and continuously wound ties a 135° bend plus an extension of at least 6 bar diameters but not less than 75 mm.

14. The weight of mild steel round bars will be calculated at rates specified below, with a tolerance of upto 5 percent both ways.

15. If the variation due to rolling margin of steel exceeds the percentage shown in the table of conversion weight of steel shall accurately be fixed by CsMES prior to issue of steel to contractor. Excess consumption due to over weight shall be balanced proportionately by increasing the spacing of reinforcement bars shown on drawings.

16. **The Values for the Nominal Cross-Sectional Area and Mass shall be as Under.**

CROSS- SECTIONAL AREA AND MASS (PLAIN & DEFORMED BAR)

Nominal size mm	Cross sectional area mm ²	Mass (wt) in Kg per metre run
4	12.6	0.099
5	19.6	0.154
6	28.3	0.222
7	38.5	0.302
8	50.3	0.395
10	78.5	0.616
12	113.0	0.888
16	201.0	1.579
20	314.0	2.466
22	380.0	2.98
25	491.0	3.854
28	616.0	4.83
32	804.0	6.313
40	1257.0	9.864

The mass of individual bars as given shall be subject to the tolerances as under:

17. **Tolerance on Mass.** Tolerance on Mass is as follows :

Nominal Size (mm)	Tolerance of mass per meter run (%)
upto 7	± 8.0
8 to 12	± 6.0
over 12	± 4.5

18. **Tolerance on Diameters.** Permissible tolerance on dia for plain bars and deformed bars will be same. If the plain bars are used for other than concrete reinforcement the out of round that is the difference between minimum diameter at same section shall not exceed 2.5% for 12 mm and less sizes nor 1.8% for sizes larger than 12mm.

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19.	<u>Tor Steel</u>	<u>Area in Sq. cm</u>	<u>Weight per kg/meter</u>
	08mm	0.50	0.395
	10mm	0.78	0.617
	12mm	1.13	0.888
	16mm	2.01	1.578
	18mm	2.55	2.000
	20mm	3.14	2.466
	22mm	3.80	2.980
	25mm	4.91	3.854
	28mm	6.16	4.830
	32mm	8.40	6.313

Method of Measurments

20. **Tolerances.** Linear work shall be measured to the nearest cm.

- Superficial work:
- a. Length as above
 - b. Width to the nearest cm.

21. **Steel bar Reinforcement.** Shall be measured gross. Lap shall be measured and hooks girthed and the weight added to the total weight.

Patent reinforcement (expanded metal) shall be measured net with no allowance for laps.

22. **Generally.** All work (except steel reinforcement) shall be measured net and flat (not girthed) as fixed.

23. Corrugated and plain Sheets shall be measured net and no allowance made for laps or welts. Sheets cut to shape shall be measured overall the least dimension out of which the sheets can be cut.

24 **Bolts shall be measured as follows:**

- a. Underside of head to end of shank for ordinary bolts.
- b. Overall for double ended, lewis bolts, etc.

25. Sheets, Iron pipes etc, Sheet iron eaves gutters and pipes shall be measured net length x fixed girth.

Clarification of Rates

26. **The rates, inter alia include particularly:**

- a. Reducing to size, shape, figure, etc., including rolls, welts, seams and all straight cutting and waste.
- b. All holes, screws, bolts, nuts, washers, rivets, connections, packing pieces, wedges require (weights to be added to main article) and grouting as necessary.
- c. True and square ends and neatly cut and fitted notches.
- d. All necessary templates, patterns, mould, etc.
- e. Jointing, etc. for pipe work.
- f. Scraping reinforcement as specified and all bends, cranks, hook, spirals, loops and tying wire, supporting and maintaining in position.
- g. Painting all Iron and steelwork (except wrought iron articles, which will be dipped in hot tar if required and the items mentioned below) with one coat of paint before fixing and one coat of paint after fixing. All steel and iron in contact with brickwork or concrete will be given a coat of cement slurry.
- h. Mortises, holes, plugs, etc., in concrete brick or stone and making.
- j. Hoisting, erection etc., complete as required.
- k. Fixing/Erection only will also include 2 coats of paint as specified above.

Exception: Sheet steel work, sheet iron pipes reinforcement and galvanized work.

SECTION-8

STEEL AND IRON WORKS RATES

Item	Description	Rate in Taka		
		Materials & Labour	Fabrication & erecting only	Fixing in repairs
	<u>STRUCTURAL STEEL WORK</u>			
	Per Kilogram			
8-1	Joist, channel, angle or the sections fixed independently without connecting plates etc cut to ordinary lengths	78.70	11.10	2.50
8-2	Purlins, hips & the like main & cross beams or girders with angle cleats or their connecting plates cut to dead length where required	76.00	8.40	2.20
8-3	Built up girders ordinary & compound stanchions with or without heads base & connection & plates for wheel runs platforms gate/door covering incl. holes screws bolts nuts & rivets etc.	83.70	16.10	3.50
8-4	Built up girders ordinary & compound stanchions with or without heads base & connection & plates for wheel runs platforms gate/door covering with Gas/Electric welding etc (Welding to be paid separately)	79.60	12.00	3.10
8-5	Roof trusses framed structure walls partition & heavy brackets incl. distance pieces, purlins cleats etc & all connections with rivets.	92.90	24.60	3.10
8-6	Roof trusses framed structure walls partition & heavy brackets incl. distance pieces, purlins cleats etc & all connections with welding (welding will be paid separately).	84.90	17.30	3.10
8-7	Framed stair-case, framed doors & gates prepared for attachment of covering incl. hooks hinges sliding or hanging door, fitting fastenings (excl. locks) & hanging & fixed complete covering to be paid extra as 'supplied & fixed'	106.70	38.40	3.50
8-8	Framed stair-case, framed doors & gates prepared for attachment of covering incl. hooks, hinges sliding or hanging door, fitting fastenings (excl. locks)& hanging & fixed complete covering to be paid extra as 'supplied & fixed (welding to be paid separately)	94.80	27.20	3.10

SECTION-8

STEEL AND IRON WORKS RATES

Item	Description	Rate in Taka		
		Materials & Labour	Fabrication & erecting only	Fixing in repairs
	General Steel works			
	Per Kilogram			
8-9	Hold-fasts guard bars, straps for wooden trusses, holding down bolts with washers ladders, railing brackets, pipe support, tie rods & blusters chimney bars, chains rings shackles hinges & type gratings for gullies etc incl. bolts nuts washers rivets threading forging, letting into stone or brick work etc. complete with rivets.	112.00	52.70	13.20
8-10	Hold-fasts guard bars, straps for wooden trusses, holding down bolts with washers, ladders, railing brackets, pipe support, tie rods & blusters, chimney bars, chains rings shackles hinges & type gratings for gullies etc with Gas/Electric welding complete (Welding to be paid separately)	93.10	33.80	8.40
8-11	Wind ties including punching and fixing in any position complete	68.00	8.70	2.20
8-12	Guard bars grills, railing, ladders, brackets, framed etc cut to dead lengths reduced to size shapes, figure etc incl. punching, drilling holes if necessary & fixing assembling by welding or without the use of bolts nuts rivets washers etc & erection/ fixing in position incl. making good the disturbed surfaces (welding to be paid separately)	76.00	8.40	2.20
			Supplied & Fixed	
			Under 1 Kg	Exc. 1 Kg & under 3 Kg.
8-13	Small articles hammered from the anvil, heated if necessary reduced to any size of figure required incl. drilling, punching, riveting & roughly filed if necessary. Articles which can not be measured but can only be weighted		153.00	127.90
8-14	Fabrication & Fixing only		83.80	58.90
8-15	Fixing only in repair		21.00	14.70
	Per metre		Gas	Electric
8-16	Gas or Electric welding of MS or wrought iron		118.60	77.10

SECTION-8

STEEL AND IRON WORKS RATES

Item	Description	Rate in Taka		
		Supplied & fixed length in CM		
<u>SCREW BOLTS</u>		N. exc. 7.5 cm	Exc 7.5 cm n.exc. 15 cm	Exc 15cm & n.exc 30cm
Each				
8-17	Bolts n.exc 9mm dia with hexagon square cap of cheesed heads screwed one or both ends or one end enlarged or jagged or lewised, each with one washer and one hexagon or square nut.	14.70	26.50	36.50
8-18	-Ditto- fixing only	5.20	5.20	10.40
8-19	-Ditto- fixed in repair	1.30	1.30	2.60
8-20	Bolts exec 9mm but n. exec 19mm dia with hexagon square cap or cheese heads screwed one or both ends or both end or one end enlarged or jagged or lewised, each with one washer and one hexagon or square nut.	19.10	41.30	48.80
8-21	-Ditto- fixing only for length n.exe 7.5 cm	7.80	11.70	15.60
8-22	-Ditto- add if fixed in repair	1.90	2.90	3.90
8-23	Bolts exec 18mm but n. exec 25mm dia with hexagon square cap or cheesed head screwed one or both ends or one end enlarged or jagged or lewised, each with one washer and one hexagon or square nut	25.60	44.90	57.10
8-24	-Ditto- fixing only	7.80	11.70	15.60
8-25	-Ditto- fixed in repair	1.90	2.90	3.90
<u>CAST IRON WORKS</u>		Supplied & fixed each article		
Per Kilogram		Not exc 6 kg	Exc 6 Kg	
8-26	Cast iron work un machined in brackets gully tops, grating, frames, fire doors & frames, air grating, dampers & frames stop cock boxes & the like.	118.80	90.30	
8-27	-Ditto-but machined turned as in pulley etc	176.00	118.80	

SECTION-8

STEEL AND IRON WORKS RATES

Item	Description	Rate in Taka	
		Supplied & Fixed	Except bars
<u>STEEL REINFORCEMENT</u>			
	Per kg		
8-28	Bars round square or flat including binding & placing reinforcement in position BDS Grade 275,(40,000 PSI/145.038 N/mm ² (1 Mpa=145.038 PSI)	61.50	6.90
8-29	- Ditto - but BDS grade 350 (50,763.3) = 350 Nmm ²)	68.60	6.90
8-30	-Ditto-but using deformed bars, ditto yield strength BDS grade 275, (40,000 PSI/145.038 N/mm ² (1 Mpa=145.038 PSI)	60.30	6.90
8-31	-Ditto-but using Tor-steel bars BDS grade 400 (60000 PSI/413.68 Nmm ²)	80.50	6.90
8-32	-Ditto-but using deformed bars, yield strength BDS grade 400 (60000 PSI/413.68 Nmm ²)	72.20	6.90
	Each		
8-33	Supply Fan hook of 1.60 cm (16mm) dia MS rod fabrication & fixing in position in all floors over all 0.90 meter long	119.00	41.10
		Supplied & Fixed weight Per Square metre of fabric	
	Per Square metre	Not exc. 2.50 Kg	Exc. 2.50 Kg n. exc 4.50 Kg
8-34	Expanded metal, BRC fabric welmesh etc in reinforcement or in other position or lathing for plaster to shape & size is required incl. binding with 14 SWG wire nails staples etc & placing in position measured net.	302.00	525.00
			55.00
<u>PLAIN SHEETING</u>			
	Per Square metre	Supplied & Fixed gauge	
		26 BG	24 BG
8-35	Galvanized sheeting in walls, floor, ceiling etc.	500.00	625.00
		22 BG	56.20
8-36	Galvanized sheeting in hearths troughs, protection sheet behind stoves, covering to frame & door incl. edges sleeve pieces curbs to hearths over wooden cores edges of mangers etc	553.00	677.00
		885.00	113.90

SECTION-8

STEEL AND IRON WORKS RATES

Item	Description	Rate in Taka						
		Size of hoop iron supplied & fixed						
	<u>HOOP IRON</u>							
	Per metre	2.5cmx18G @ 0.52 kg/M	3.12cmx16G @ 0.89 kg/M	3.75cmx16G @ 1.05 kg/M				
8-37	Hoop iron in any position not elsewhere listed incl. nails punching bending laps etc as required.	23.80	35.30	41.00				
	<u>WIRE AND FENCING ETC</u>							
	Per metre							
		RCC Pillar	Wooden post	RCC Pillar	Wooden post	Add if fixed in repair		
8-38	Barbed wire Galvanized 14 SWG 2 strands 4 point barb at 75 mm apart fixed with staples nails etc & connect up ends complete.	11.60	12.00	1.90	2.20	1.50		
	<u>WIRE AND FENCING ETC</u>							
	Per metre							
		Supplied & fixed SW gauge					Fixing only	Add if fixed in repair
		16.00	14.00	12.00	10.00	8.00		
8-39	Galvanized plain wire fixed in any position	2.70	3.70	5.70	8.20	12.30	0.90	0.80
	<u>WOVEN WIRE WORK ETC</u>							
	Per Square metre							
8-40	Wire netting iron galvanized 50 mm mesh 16 SWG & fixed with tinned tacks GI staples etc as required.	145.00	14.70	4.40				
8-41	-Ditto-but 37 mm mesh 16 SWG and Ditto.	159.00	17.10	4.40				
8-42	-Ditto-but 25 mm mesh 16 SWG and Ditto.	182.00	21.50	4.40				
8-43	-Ditto-but 19 mm mesh 16 SWG and Ditto.	188.00	21.50	4.40				
8-44	-Ditto-but 12.5 mm mesh 22 SWG and Ditto.	116.40	21.50	4.40				

SECTION-8

STEEL AND IRON WORKS RATES

Item	Description	Rate in Taka		
<u>JOBGING WORK</u>				
	Per Kilogram			
8-45	Hoisting of steel truss/girder etc in any position		3.90	
	Per Metre			
8-46	150 mm dia MS pipe as air breather (Shaped as required) for water reservoir, over head tank, etc.)	3193.00	82.40	20.60
8-47	Brass angle as in nosing of stair incl. Hold fast, making groove and fixed in position all as spd. Size 38x38x6 mm or 40x40x6 mm	1927.00	208.00	34.60
8-48	- Ditto – but size 50x38x6 mm	2431.00	208.00	34.60
8-49	- Ditto – but size 50x25x6 mm	2194.00	208.00	34.60
8-50	Supply and Fixing of 38x38x5mm size angle stair iron nosing with 75mm long 38x5mm F.I bar clamp @ 300 c/c and 25x38x3mm M.S plate including welding and fixed in position all complete as spd.	441.00	213.00	35.60
8-51	Supply and Fixing of Nosing iron angle 38 x 38 x 3mm of stair including holdfast, making groove and fixed in position all as reqd.	349.00	213.00	35.60
8-52	Supply and fixing of 38 x 38 x 3mm size stainless steel angle nosing of stair (Foreign made) all complete as required.	955.00	255.00	42.50

SECTION-8

STEEL AND IRON WORKS RATES

Item	Description	Rate in Taka			
		Supplied & fixed	Fixing only	Add if fixed in repair	
<u>WOVEN WIRE WORK</u>					
<u>ETC.</u>					
Per sq.m					
8-53	Wire netting iron galvanized 50 mm mesh 14 SWG and fixed with tinned tacks, GI staples etc. complete.	174.00	19.90	4.40	
8-54	Wire netting iron galvanized 38 mm mesh 14 SWG and fixed with tinned tacks, GI staples etc. complete.	216.00	20.40	4.40	
8-55	Wire netting iron galvanized 25 mm mesh 14 SWG and fixed with tinned tacks, GI staples etc. complete.	236.00	22.30	4.40	
8-56	Wire netting iron galvanized 19 mm mesh 14 SWG and fixed with tinned tacks, GI staples etc. complete.	254.00	22.30	4.40	
<u>PLAIN SHEETING</u>					
Per sq.m					
		Supplied & fixed		Fixing only	Add if fixed in repair
		20 BG	18 BG		
8-57	Galvanized sheeting in walls, floor, ceiling etc.	982.00	1225.00	63.00	15.80
		Materials & Labour		Fixing only	Add if fixed in repair
8-58	Brass plate / sheet 3 mm thick fixed in wooden / wall surface or any description incl. Brass screw, rawl plug etc.	2084.00	1017.00	254.00	
Per Meter					
8-59	GI pipe other than National tubes ltd. brand fixed in any position such as structural work, rain & waste water line, railing, post, heavy brackets etc incl. Distance pieces and all connection with or without welding (welding to be paid separately if required) 12.50 mm dia.	229.00	65.20	16.30	
8-60	-Ditto- but 18.70 mm dia.	279.00	65.20	16.30	
8-61	-Ditto- but 25.00 mm dia.	338.00	65.20	16.30	
8-62	-Ditto- but 38.00 mm dia.	550.00	65.20	16.30	
8-63	-Ditto- but 50.00 mm dia.	673.00	71.20	17.80	

SECTION-8
STEEL AND IRON WORKS RATES

Item	Description	Rate in Taka		
		Materials & Labour	Fixing only	Add if fixed in repair
<u>STAIR HAND RAILS</u>				
Per Metre				
8-64	S/F of stainless steel pipe for stair hand rails 50mm dia 2 mm thick including necessary welding / other accessories as required.	1257.00	237.00	-
8-65	Supply and fixing of stainless steel stair hand rails 38mm dia 1.5mm thick including necessary welding/other accessories as required.	1069.00	237.00	-
8-66	- Ditto - but 25 mm dia 1.5 mm thick	765.00	190.00	-
Per sq.m				
8-67	Supply and Fixing of 25mm dia 2mm thick stainless steel pipe railing 19mm dia 2mm thick vertical post and middle pipe including cutting, shaping, welding, polishing as required.	2211.00	411.00	267.00
8-68	Supply and Fixing of Stainless steel pipe Stair Railing made 2 mm thick of 50mm dia at top Hand Rail, 38mm dia x 2mm thick vertical post and 25 mm dia x 2mm thick middle pipe all as per drawing including welding, polishing etc. complete all as spd.	4341.00	496.00	123.90
8-69	Supply, fitting , fixing of stainless steel pipe Railing 38mm dia x 1.5 mm thick vertical post & 19mm dia x 2 mm thick Horizontal middle pipe and 50mm dia x 2 mm thick Hand rail including cutting, SS welding, bending, grinding etc. all complete as required.	4526.00	519.00	129.70
8-70	Supply and fixing of aluminium box railing complete with all fittings any colour as spd.	934.00	268.00	46.50
Each				
8-71	Supply and Fixing of 25mm dia stainless steel Ball / Bottom anchor plate / Top cap / U-cap etc all complete.	127.00	34.00	8.50
8-72	- Ditto - but 38 mm	155.00	34.00	8.50
8-73	- Ditto - but 50 mm	237.00	48.00	11.90

RESTRICTED

SECTION – 9

ROOF COVERINGS FELT AND BUILDING

PAPERS, ETC

SPECIFICATIONS

General

1. **Building Paper.** Waterproof building or insulating paper shall be of approved manufacture, stout and strong and thoroughly impregnated with waterproof composition.

2. **Corrugated Steel Sheeting.**

a. The sheets to be made of tough mild steel well annealed, even in temper and thickness, free from holes, cracks, blisters and other defects.

b. The sheets to be perfectly rectangular, the corrugations paralleled with the sides and regular in curve, pitch and depth, and the weight of any ten sheets to be within 7-1/2% margin of the weights given in © below.

c. The weight and thickness of steel before galvanizing shall be as shown below:

(1) 26 BG to be 0.46 mm thick and to weight 3.80 kg. Per Sqm of girthed surface.

(2) 24 BG to be 0.62 mm thick and to weight 4.92 kg. Per Sqm of girthed surface.

(3) 22 BG to be 0.793 mm thick and to weight 6.19 kg. Per Sqm of girthed surface.

(4) 20 BG to be 0.995 mm thick and to weight 7.66 kg. Per Sqm of girthed surface.

The allowance for increase in weight by galvanizing shall be 0.60 kg. Per Sq. m. of girth surface, which weight includes both sides.

d. Galvanized steel sheets to be thoroughly and evenly coated with Zinc, and to be free from stains, bare spots and other defects.

e. When not galvanized, all sheets are to be coated immediately after manufacture with one coat of oil-paint applied by dipping or brushing over the whole of the surface of each sheet.

f. Unless otherwise specifically ordered the corrugations are to be of standard pattern 75mm pitch and 19mm deep.

RESTRICTED

The widths shall be as under:

- (1) 8/3 Corrugations 66cm measured straight and 76cm measured along the girth.
 - (2) 10/3 Corrugations 81cm-measured straight and 91.5 cm measured along the girth.
- g. The diagonal distances between opposite corners of any sheet shall not differ by more than 19mm.
3. **Felt.** Shall be of approved local or imported manufacture, one, two or three ply, as specified.
 4. **Plain Steel Sheeting.** Shall be of the quality specified for corrugated steel sheeting.
 5. **Tiles (Bricks).** Tiles shall be sound, well burnt, of good colour, free from warp or twist and give a clear ring when struck, and of the best quality obtainable in the locality. The size shall be as specified.
 6. **Tiles (Cement).** These shall be pre-cast from the specified mix. The size shall be as specified.
 7. **Corrugated Sheeting.** Sheets shall be fixed with galvanized screws or bolts, fiber and galvanized curve or limpet washers at n.exc. 30 cm centers in the case of 8/3 corrugation sheets and at n. exc. 38cm centers in the case of 10/3 corrugation sheets on every bearer.
 8. **Asbestos Cement Roofing.** Shall be of approved pattern or manufacture laid in accordance with the manufacturer's instructions.
 9. **Mud Roofing.** Mud shall be stiff mortar.
 - a. **Laying.** Apply to thickness ordered, and finish to levels, falls, dishings, etc. as required with 3mm leeping as specified in plastering. Slope of Mud Roofs Minimum 1 in 30, maximum 1 in 20.
 - b. **Flat Tiles.** Flat tiles shall be 30 cm x 15cm and of the required thickness, square at angles and of uniform shape and will ring clear and true, and be approved before incorporation in the work. They shall be bedded if required jointed and pointed on either lower or upper face in the appropriate mortar.

10. **Felt Work and Building Papers.**

a. **Felts.**

(1) **Laps.** Side laps shall be 5cm and end laps 15cm.

(2) **Fixing.** The side laps shall be nailed with 3.12cm clout nails at 15cm centers. Two raw shall be used at end laps at 7.5cm centers and intermediate between the end laps nail at 22.5cm centers, in rows 75cm apart. Stuck joints shall be formed at the side and end laps be a suitable bitumastic adhesive in addition to nails, if required.

b. Building paper shall be laid with laps and fixed as specified for Felt.

Method of Measurements (Corrugated and Plain Steel Sheeting)

11. **Measurements.** The net superficial area of sheeting as fixed is to be measured on the flat (not girthed to corrugations) without any extra allowance for laps or welts.

12. **Cutting.** Sheets cut to shape (as in stepped flashing) shall be measured overall the least dimensions out of which the sheets can be cut.

13. **Openings.** No deductions shall be made for openings of any shape n.exc. 0.35 . each.

Clarification of Rates

14. The rates, inter alia, include particularly labour in reducing to size, shape, figure, etc. and all straight, raking and circular cutting, and materials in rolls, welts, seams, etc.

RESTRICTED

**APPROXIMATE NUMBER OF GALVANIZED
CORRUGATED SHEETS PER TON (ENGLISH)**

Thickness	Corrugation	Length in feet Length in metre					
		5	6	7	8	9	10
		1.53	1.83	2.14	2.44	2.75	3.05
16BG	<u>8/3"</u>	70	58	50	44	39	35
	8/75mm						
	<u>10/3"</u>	59	49	42	37	33	29
	10/75mm						
18 BG	<u>8/3"</u>	89	74	64	56	49	44
	8/75mm						
	<u>10/3"</u>	74	62	53	46	41	37
	10/75mm						
20 BG	<u>8/3"</u>	114	95	81	71	63	57
	8/75mm						
	<u>10/3"</u>	95	79	68	59	53	47
	10/75mm						
22 BG	<u>8/3"</u>	139	116	99	87	77	69
	8/75mm						
	<u>10/3"</u>	116	97	83	73	65	58
	10/75mm						
24 BG	<u>8/3"</u>	168	140	120	105	93	84
	8/75mm						
	<u>10/3"</u>	140	117	100	88	78	70
	10/75mm						
26 BG	<u>8/3"</u>	223	186	159	139	124	111
	8/75mm						
	<u>10/3"</u>	186	155	133	166	103	93
	10/75mm						

RESTRICTED

For calculation of number of sheets per ton the above table shall be used. For sheets which vary from standard weight shall be calculated on the basis of actual numbers received in the consignment, converting those into the Gauge for which, rates of finished job is available in the MES Schedule of Rates, payment for the finished job shall be made accordingly. For example, 24 BG 10/3 Corr. 2.14 metre long sheet should be 100 Nos./Ton as per standard weight. If more Nos. of sheets are issued per ton, additional recovery for those sheets shall be made and if less nos. of sheets are issued, credit shall also be given and payment shall be made as per Gauge of the sheets.

Method of Measurements (Asbestos Cement Sheeting)

15. **Measurement.** All measurements shall be net flat as fixed, not girthed.
16. **Cutting and Waste.** No allowance shall be made for cutting and waste.
17. **Opening.** No deductions or additions shall be made for opening of any shape n.exc.
0.35

Clarification of Rates

18. The rates, inter alia, include particularly:
 - a. Fixing complete according to maker's instructions with all necessary screws, bolts and washers in any position.
 - b. All cutting and waste
 - c. Jointing to gutters and pipes.
 - d. Laying complete
 - e. Fillets against walls.

SECTION-9

ROOF COVERING FELT AND BUILDINGPAPERS ETC.- RATES

Item	Description	Rate in Taka	
		Supplied & fixed gauge 26 BG	Except Sheet
	<u>SHEET ROOFS</u>		
	Per square metre		
9-1	Corrugated steel sheeting fixed to timber framing or purlin with one & a half corrugation side laps & 15cm end laps fixed with screws fibre & galvanized curved or limpet washers at centre not exc 38 cm	856.00	66.80
9-2	- Ditto - but without end laps	826.00	66.80
9-3	- Ditto - fixed to timber/steel framing or purlin with one & a half corrugation side lap 15 cm end lap fixed with 9.60 mm dia 'J' bolts at centre not exceeding 38 cm	929.00	141.00
9-4	- Ditto - but without end laps	900.00	141.00
	<u>SHEET ROOFS</u>		
	Per metre		Except Sheet
9-5	Extra for riveting or bolting side laps any gauge at 23 cm centres.		19.90
9-6	Extra for riveting or bolting end laps each corrugation		55.00
		Rate in Taka	
	Per square metre	Supplied & fixed gauge 26 BG	Except Sheet
9-7	Plain steel sheeting in ridges, hips, valleys & straight & stepped flashing roof plates & sleeve pieces etc.	549.00	110.30
		Rate in Taka	
	Per square metre	Supplied & fixed gauge	Except Sheet
		20 BG	18 BG
9-8	Galvanized Plain steel sheeting in gutters etc. with round edges, any pattern fixed with flat iron straps, spaced n.exc 1 metre apart incl. angles, outlets, stop ends etc (straps if any to be paid separately)	1082.00	1325.00
			Sheet
			Sheet fixed with
		Screws	Hook / 'J' bolts
9-9	Dismantling corrugated sheets for repair & refixing the same with 'J' bolts/screws.	91.30	133.70

SECTION-9

**ROOF COVERING FELT AND BUILDING
PAPERS ETC.- RATES**

Item	Description	Rate in Taka			
		Materials & Labour	Except sheet ridges	Add if fixed in repair	
COLOUR SHEET ROOFS					
Per square metre					
9-10	Corrugated colour sheet 26 BG of any approved make & fixed with screws, hook bolts 'J' bolts nuts, GI limpet washers & fibre washers as required in any position with proper side and end lap.	561.00	86.50	19.90	
9-11	-Ditto-but without end laps.	457.00	91.90	19.90	
9-12	Asbestos cement two pieces ridging separated or close fitting of any approved make.	1114.00	103.40	53.60	
Rate in Taka					
<u>FELT WORK</u>					
Per square metre					
9-13	Felt bituminous in flashing & concrete/brick work joint, joints wedged & tucked in, side & end joints struck with approved bituminous adhesive.		1 Ply	2 Ply	
			535.00	671.00	
BITUMEN COATING					
Per square metre					
Rate in Taka					
9-14	One coat of bitumen applied hot on roof at the rate of 7 kg per 10 sq.m & blinding with sand 1.00 FM at the rate of 0.122 cubic meter per 10 sq.m (incl. clearing of surfaces)		70.70		
9-15	Two coat of bitumen applied hot on roof at the rate of 11 kg per 10 sq.m & blinding with sand 1.00 FM at the rate of 0.122 cubic meter per 10 sq.m (incl. clearing of surfaces)		108.60		
Rate in Taka					
<u>TRANSPARENT SHEET ROOFS</u>					
Per square metre					
9-16	Corrugated transparent fibre sheet 1.50 to 2.00 mm thick fixed with timber or steel framing with one and half corrugation side laps and 15 cm end laps fixed with screw, 'J' hook, fibre and galvanized curved or limpet washers at centres not exc 38 cm	1045.00	1055.00	Tin screw	J' hook
			96.60	106.50	

SECTION-10
BAMBOO AND MATTING WORK
SPECIFICATIONS

General

1. **Bamboo.** Bamboo shall be of mature growth, free from splits weevil rot, bore holes or other defects. Bamboo's of 20cm girth and over shall be semi-solid (fiber content not less than 75 percent of cross sectional area).

2. **Matting.** Matting shall be of the best quality available and to be of the type detailed below. The samples and the weight per Sq. metre will be approved by Engineer-in-Charge. All edges to be properly bound.

Type	Details
Bamboo	Split bamboo (durma, etc.) woven as closely as possible.

3. **Bamboo works.**

<u>Use</u>	<u>Requirements</u>
Framing for roof, walls Partitions, trellis, jarfi etc.	Whole, unsplit bamboo 20cm girth. Split bamboos 25 mm x 6mm minimum
Single bamboos, detached as in rafters, purlins posts caves, ties etc.	Whole, unsplit bamboos, girth to be 20 cm to 30 cm as ordered.

4. **Fixing.** String for fixing bamboos shall be stout, good quality Coir or other equal and approved. All intersections of bamboos, whole or split, shall be securely tied or wired. Whole or split bamboos along side each other shall be securely tied together by string or wire at intervals n.exc. 1 metre. All bamboos shall be securely tied, wired or nailed to the supports as ordered. Joints shall be formed by laps of at least 0.80 metre tied spirally with double string.

5. **Matting.** Lay matting with side and end laps of at least 15cm and securely tie it to the supports at intervals not less than 30 cm. For door or window covering etc use fillets of split bamboos or laths at the edges and laps and as ledges and diagonal braces as directed, all such fillets being securely tied wired or nailed to the frames as ordered. If so ordered, properly bind all cut edges to prevent fraying.

6. **Girth.** The girth of bamboos is the sum of the girths at the each end divided by two.

Clarification Of Rates

7. The rates, inter alia, include particularly:
- a. **Fixing.** Fixing complete with all necessary string, wire, nails, spikes, dowels and all other fixing materials except screw bolts and nut, and steel or iron strips.
 - b. **Framing etc.** These rates will be combined as required to cover any type of bamboo framing trellis, jafri, etc., pro-rata rates shall be paid for spacing other than those given. The same rates apply whether the whole or split bamboos are laid straight on diagonally and include end bamboos.
 - c. **Doors, Windows etc.** These rates include framing to form doors windows etc., and other fittings shall be paid extra.
 - d. **Single bamboos.** These rates are for whole bamboos laid detached in rafters, purlins, bressumers, posts, wind ties at eaves, etc. and include fixing to the supports as ordered.

FLOORS AND WALL TILING
SPECIFICATIONS

General

1. **Cement.** The cement shall be ordinary, normal setting cement of approved brand complying in all respect with BS No. 12. Cement, unless otherwise specified to be of any particular quality shall mean this ordinary, normal setting cement.

2. **Floor Finishes.** The surface of concrete floors shall be finished fair. The floors shall be laid in alternate bays with wrought wood parting slips (expansion joints) which shall be left in if required, pre-cast floor slabs shall have fair edges.

3. **Mosaic Finish (Situ).**
 - a. **Grey Mosaic.**
 - (1) **Grey Mosaic (6mm Thick).** The thickness of mosaic finish shall be 6mm (finished). It shall be consists of one part of cement (grey and white cement in proportion of 1:1) and one part of 3mm size marble chips (imported). The marble chips shall be of black and white colour in the proportion (1:6) or only white marble chips. The mosaic shall be laid within 24 hours after lying the base. Surface of the mosaic shall be rubbed with Carborandum block after 3 days of laying, beginning with the coarser grade. After first cutting, cement grouting of the same mixture of cement shall be applied on mosaic surface. The surface shall again be rubbed with Carborandum block after two days. The process shall be repeated till smooth and even surface free from any pinhole etc. is obtained. The thickness as specified shall be FINISHED, for which 3mm extra thickness to be laid to get SPECIFIED thickness after rubbing wastage. Finally, oxalic acid shall be applied with Linseed oil and rubbed well, till a glossy finish is obtained.

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In walls, dados, skirting and the like, the mosaic finish shall be given a base of 12mm thick cement mortar (1:3). The same shall be hacked cross-hatched so as to provide strong bond between the base and the mosaic finish.

(2) **Grey Mosaic (9mm thick).** All as specified in a (1) except the size of chips which shall be of 6mm size.

b. **White Mosaic.**

(1) **White Mosaic (6mm thick).** All as specified in “a” (1) but using white cement instead of grey cement.

(2) **White Mosaic (9mm thick).** All as specified in a (1) and (2) but using white cement instead of grey cement.

c. **Silver Grey.**

(1) **Silver Grey (6mm thick).** All as specified in “a” but using mixer of grey cement, white cement in the proportion of (1:1).

(2) **Silver Grey (9mm thick).** All as specified in “a”, “b”, “c”.

4. **Mosaic Tiles.**

a. The tiles shall be manufactured at site and will be hydraulically compressed at 140 kg. Per sq. cm. Normal size of tiles shall be 20cm x 20cm x 1.90cm.

b. The base of tiles shall be of cement mortar (1:2) 13mm thick for 6mm thick mosaic and 10mm thick for 9mm thick mosaic. The mosaic top of the tiles shall be laid as specified in mosaic finish (situ) and finished accordingly.

- c. **Laying/jointing.** 2.50cm thick lime surki 1:3 padding shall be provided under the tiles. Tiles shall be fixed on the padding by spreading a thin even layer of cement slurry and the tiles shall be worked into the mortar with a wooden mallet to ensure correct slope/level and adhesion. All joints shall be as close as possible and parallel to walls and right angles to each other. After laying of tiles in a particular area the surface shall be washed down at the end of the days works and any unevenness removed. No traffic shall be allowed on tiles laid for five days. After 24 hours the tiles shall be grouted with cement mixture as in the matrix of the tiles ensuring filling of all joints. The top surface of the joints shall be lightly sprinkled with water to ensure adequate curing of the joints. After a minimum of 7 days the floor shall be rubbed with Carborandum stone. The floor shall then be washed down and grouted with cement as in the matrix of tiles ensuring filling of joints and cavities, which may appear. The process shall be continued till smooth and even surface is obtained. After drying the surface shall be rubbed with a mixture of oxalic acid and linseed oil to obtain glossy finish.
5. a. If colour chips is used the proportion of white and coloured mosaic chips shall be (1:3) colored means RED, GREEN, PINK, YELLOW, and NOT BLACK.
- b. Glazed Tiles shall be used following companies i) RAK ii) MIR iii) FU-WANG iv) MADHUMATY v) ATI CERAMICKS vi) BISF vii) China Bangla
6. a. **Glazed Wall Tiles.** The glazed tiles and fittings, e.g. angles internal and external, coves, copping, corners, bends, etc., for the same shall be approved by the GE/Engineer-in-charge before incorporation. Glazed tiles shall be laid/fixe d in cement mortar (1:2) screed of specified thickness. Old surface shall be well watered and the screeding left slightly rough (by being cross hatched). Tiles first well soaked in water, are bedded in cement mortar (1:2) the mortar being, “buttered” on the back of the tiles to give a bed of 6mm, after which the tiles is pressed and tapped home. The joints between the tiles shall be grouted with white or tinted cement according to the colour of tiles.
- b. **Glazed Floor Tiles.** The glazed tiles and fittings, e.g. angles internal and external, coves, copping, corners, bends, etc., for the same shall be approved by the GE/Engineer-in-charge before incorporation. Glazed tiles shall be laid/fixe d in cement mortar (1:4) screed of specified thickness. Old surface shall be well watered and the screeding left slightly rough (by being cross hatched). Tiles first well soaked in water, are bedded in cement mortar (1:4) the mortar being, “buttered” on the back of the tiles to give a bed of 19mm, after which the tiles is pressed and tapped home. The joints between the tiles shall be grouted with white or tinted cement according to the colour of tiles.

7. **Stonolithic Wearing Surfaces.** To be composed of 2-part cement and 3 parts aggregate. The aggregate is to be of approved hard shingle. No sand will be used. The stonolithic wearing surface must be floated on to the under layer of ordinary concrete immediately the latter has been laid and before it has commenced to set a sufficient quantity of stonolithic being mixed at the same time as the mixing of the concrete for the under layer. Particular care is to be taken to remove any dust and to use minimum amount of water for mixing. The surface shall be well rubbed with carborandum block, 3 days after laying. No polishing will be done. The slump on a 10cm-20cm cone 30 cm high must not exceed 3.8cm in any case.

8. **Channel Formed in Concrete Floors.** When over 40 sq. cm. in section the curved water way shall be deducted as $\frac{3}{4}$ x width x depth (maximum dimension).

9. No deduction shall be made for glass strips from mosaic work.

Method of Measurements

10. **Thicknesses etc.** The following thickness shall be allowed when measuring:

For single layer floors with or without bed joint :

- a. For ordinary burnt bricks on edge allow 12.50cm.
- b. For ordinary burnt bricks laid flat allow 7.5cm.

Clarification of Rates

11. **The rate, inter alia, include particularly:**

- a. The base/rendering of skirting and dados.
- b. Lime-surki padding of mosaic tiles.
- c. Carborandum blocks/cutting machine.
- d. Hire charges of tile making machine.

SECTION-11

FLOORS AND WALL TILING RATES

Item	Description	Rate in Taka				
		Laid & jointed with sand	Laid jointed & pointed in Cement Mortar			
<u>FLOORS</u>			Materials & Labour	Except Cement	Materials & Labour	Except Cement
Per Square metre			1:4		1:6	
11-1	Burnt brick laid flat in floors, channels etc.	245.00	286.00	264.00	283.00	264.00
11-2	-Ditto-but laid on edge	417.00	466.00	437.00	463.00	436.00

DPC UNDER FLOOR

Rate in Taka

Per Square metre		Materials & Labour
11-3	19mm thick (consolidated) bitumen premix carpeting as DPC under floor using shingle 0.012 cu.m & sand 0.012 cu.m with 1.34 kg hot bitumen for shingle and 0.77 kg hot bitumen for sand & 0.73 kg bitumen for tack coat, as specified for 1 sq.m (using shingles)	324.00

Rate in Taka

Item	Description	Concrete Mix							
		Materials & Labour	Except Cement	Materials & Labour	Except Cement	Materials & Labour	Except Cement	Materials & Labour	Except Cement
Per Square metre		1:6:12		1:4:8		1:3:6		1:2:4	
11-4	Cement concrete 150 mm thick laid under floor & plinth protection	592.00	454.00	652.00	448.00	712.00	444.00	862.00	449.00
11-5	Cement concrete 100 mm thick laid under floor & plinth protection	407.00	315.00	446.00	309.00	491.00	309.00	585.00	310.00
11-6	Cement concrete 75mm thick laid under floor & plinth protection	313.00	243.00	342.00	231.00	376.00	240.00	450.00	243.00

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FLOORS AND WALL TILING RATES

Item	Description	Concrete Mix			
		Materials & Labour	Except Cement	Materials & Labour	Except Cement
	<u>FLOORS</u>				
	Per Square metre	1:3:6		1:2:4	
11-7	Cement concrete floor 38mm thick using coarse aggregate as specified	202.00	133.80	237.00	107.60
11-8	Cement concrete floor 29mm thick using coarse aggregate 12mm graded as specified	154.00	103.20	181.00	103.30
11-9	Cement concrete floor 25mm thick using coarse aggregate 12 mm graded as specified	133.00	88.00	157.00	88.00
	<u>CEMENT FINISH</u>				
	Per Square metre			Rate in Taka	
				Materials & Labour	Except Cement
11-10	Neat cement finishing to floor slab/plinth protection & the like, finished smooth with trowel or as directed.			60.30	36.10
	<u>SAND CUSHION</u>				
	Per Cubic metre			Rate in Taka	
11-11	Sand cushion as under floor using sand 0.80 F.M		647.00		
	<u>HARD WEARING SURFACES</u>				
	Per Square metre			Rate in Taka	
				Materials & Labour	Except Cement
11-12	Stonolithic (1:1.5) 12 mm thick spread over ordinary concrete floors etc incl. rubbing with carborandum blocks as specified			370.00	277.00
11-13	Stonolithic layer 12 mm thick (1:1.5) spread over concrete stairs incl. rubbing as specified			398.00	305.00
11-14	Stonolithic (1:1.5) as in dados, skirting 12 mm thick incl. casings, mitres, returned ends & tucking in top edge or fair upper edges where walls are plastered incl. 6mm thick cm (1:3) base.			439.00	309.00

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SECTION-11

FLOORS AND WALL TILING RATES

Item	Description	Rate in Taka			
		In floor		In dados skirting	
	<u>MOSAIC WORK (SITU)</u>				
	Per Square metre				
11-15	6mm thick finished silver grey mosaic (1:1) i.e one part of cement (grey & white in proportion 1:1) & one part of 3 mm size marble chips (imported) black & white in proportion (1:6) or only 3mm size white marble chips incl. cutting & polishing with Pumice stone/Carborandum stone & finishing with oxalic acid.	729.00	692.00	807.00	734.00
11-16	-Ditto-but using grey cement only	645.00	572.00	717.00	607.00
		Rate in Taka			
		In floor	In dados skirting		
		Materials & Labour	Materials & Labour	Except grey cement	
11-17	-Ditto-but using white cement only	812.00	884.00	848.00	
		In floor		In dados skirting	
		Materials & Labour	Except grey cement	Materials & Labour	Except grey cement
11-18	6mm thick finished silver grey mosaic (1:1) i.e one part of cement (grey & white in proportion 1:1) & one part of 3 mm size marble chips (imported) multi coloured & white in proportion (1:3) incl. cutting & polishing with Pumice stone/Carborandum stone & finishing with oxalic acid.	728.00	691.00	799.00	726.00
11-19	-Ditto- but using grey cement only	644.00	571.00	716.00	606.00
		In floor	In dados skirting		
		Materials & Labour	Materials & Labour	Except grey cement	
11-20	-Ditto-but using white cement only	811.00	883.00	846.00	

SECTION-11

FLOORS AND WALL TILING RATES

Item	Description	In floor		In dados skirting	
		Materials & Labour	Except grey cement	Materials & Labour	Except grey cement
	<u>MOSAIC WORK (SITU)</u>				
	Per Square metre				
11-21	9mm thick finished silver grey mosaic (1:1) i.e one part of cement (grey & white in proportion 1:1) & one part of 6 mm size marble chips (imported) black & white in proportion (1:6) incl. or only 6 mm size white marble chips incl. polishing with Pumice stone / Carborandum stone & finishing with oxalic acid.	832.00	784.00	904.00	818.00
11-22	-Ditto-but using grey cement only	719.00	618.00	791.00	655.00
11-23	-Ditto-but using white cement only	946.00	1006.00	969.00	
	Per Square metre				
11-24	9mm thick finished silver grey situ mosaic (1:1) i.e one part of cement (grey & white in proportion 1:1) & one part of 6 mm size marble chips (imported) multi coloured & white in proportion (1:3) incl. cutting & polishing with Pumice stone/ Carborandum stone & finishing with oxalic acid.	831.00	781.00	903.00	817.00
11-25	-Ditto-using grey cement only	718.00	619.00	790.00	654.00
11-26	-Ditto-but using white cement only	944.00	1016.00	979.00	

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FLOORS AND WALL TILING RATES

Item	Description	Rate in Taka			
		In floor		In dados skirting	
		Materials & Labour	Except grey cement	Materials & Labour	Except grey cement
	<u>MOSAIC WORK (SITU)</u>				
	Per Square metre				
11-27	Silver grey mosaic tiles 200mm x 200mm x 19mm flooring with 6mm thick finished mosaic top (1:1)incl one part of cement (grey & white in proportion (1:1) & one part of 3 mm size marble chips (imported) black & white in proportion(1:6) or only 3mm size white marble chips machine pressed on cement mortar base (1:4) incl. preparing base , setting tiles in cement slurry & lime mortar (lime unslaked & surki) (1:3) incl. cutting & polishing with Pumice stone/Carborandum stone & finishing with oxalic acid.	1279.00	1159.00	0.00	0.00
11-28	-Ditto-but using grey cement only	1213.00	1057.00	0.00	0.00
11-29	-Ditto-but using white cement only	1380.00	1297.00	0.00	0.00
11-30	Silver grey mosaic tiles 200mm x 200mm x 19mm flooring with 6mm thick finished mosaic top (1:1)incl one part of cement (grey & white in proportion (1:1) & & one part of 3 mm size marble chips (imported) multi coloured & white in proportion (1:3) incl. preparing base setting tiles in cement slurry & lime un slaked & surki (1:3) incl. cutting & polishing with Pumice stone/Carborandum stone & finishing with oxalic acid.	1296.00	1176.00	0.00	0.00
11-31	-Ditto-but using grey cement only	1206.00	1050.00	0.00	0.00
11-32	-Ditto-but using white cement only	1373.00	1290.00	0.00	0.00

SECTION-11

FLOORS AND WALL TILING RATES

Item	Description	Rate in Taka			
		In floor		In dados skirting	
		Materials & Labour	Except grey cement	Materials & Labour	Except grey cement
<u>MOSAIC WORK (SITU)</u>					
Per Square metre					
11-33	Silver grey mosaic tiles (200mm x 200mm x 19mm) flooring with 9mm thick finished mosaic top (1:1)incl one part of cement (grey & white in proportion (1:1) & one part of 6 mm size marble chips (imported) black & white in proportion(1:6) or only 6mm size white marble chips machine pressed on cement mortar base (1:2) incl. preparing base , setting tiles in cement slurry & lime mortar (lime unslaked & surki) (1:3) incl. cutting & polishing with Pumice stone/Carborandum stone & finishing with oxalic acid.	1400.00	1267.00	0.00	0.00
11-34	-Ditto-but using grey cement only	1282.00	1099.00	0.00	0.00
11-35	-Ditto-but using white cement only	1514.00	1431.00	0.00	0.00
<u>TILE WORK</u>					
Per Square metre					
Rate in Taka					
		Plain		Design	
11-36	White glazed tiles in walls (Fu-wang / China-Bangla) plain / design size 200x300 mm incl. angle coves, coping, corner, bends etc set on cement mortar base (1:2) & joint grouted with white cement complete as specified (measured flat)	971.00		985.00	
		Luxury luster colour		Luxury Roto colour	
11-37	White glazed tiles in walls (Fu-wang / China-Bangla) luxury luster / roto colour size 200x300 mm incl. angle coves, coping, corner, bends etc set on cement mortar base (1:2) & joint grouted with white cement complete as specified (measured flat)	1014.00		985.00	
		SIZE			
		200x300 mm		250x330 mm	
11-38	Ceramic glazed tiles in walls (RAK) incl. angle coves, coping, corner, bends etc set on cement mortar base (1:2) & joint grouted with white cement complete as specified (measured flat)	973.00		1079.00	

SECTION-11

FLOORS AND WALL TILING RATES

Item	Description	Size	
		250x400 mm	200x300 mm
11-39	Ceramic glazed tiles in walls (MIR/Madhupati) colour / printed incl. angle coves, coping, corner, bends etc set on cement mortar base (1:2) & joint grouted with white cement complete as specified (measured flat)	1102.00	1028.00
Rate in Taka			
<u>TILE WORK</u>		Brand Fu-wang and size of tiles	
	Per Square metre	Special design 200x300 mm	Luxury 310x450 mm
		Luxury polished 310x450 mm	Luxury special 250x360 mm
11-40	Ceramic glazed tiles in wall (Fu-wang/China-Bangla) design/special design/luxury / luxury special as spd incl. angles, coves, coping, corner bends etc set on cement mortar base (1:2) & joint grouted with coloured cement complete all as specified (measured flat)	1014.00	1101.00
		1101.00	1042.00
RAK			
11-41	Glazed tiles design over colour base in wall incl. angles, coves, coping, corner bends etc set on cement mortar base (1:2) & joint grouted with coloured cement complete all as specified (measured flat)	Red body 305x510 mm	Matt 250x400 mm
		White body squaring 300x600 mm	White body squaring 305x510 mm
		1180.00	1123.00
		1461.00	1389.00
Rate in Taka			
11-42	Ceramic glazed tiles wall Fu-wang Exterior 65x200 mm set on cement base (1:2) & joint grouted with white cement complete all as specified incl angles, coves, coping, corner, bend etc (measured flat).		819.00
<u>GLASS STRIPS</u>			
Per metre			
11-43	Glass strip 5mm thick provided & embedded in Mosaic / Terrazzo floors (19mm in depth)		41.50
11-44	-Ditto-but 3 mm thick		30.10
<u>POINTING</u>			
Per Square metre			
		Laid on Edge	
		Materials & Labour	Except Cement
		Laid Flat	
		Materials & Labour	Except Cement
11-45	Pointing flush to old or new brick floors built in cm (1:3)	39.00	29.80
		27.40	20.60

SECTION-11

FLOORS AND WALL TILING RATES

Item	Description				
<u>FLOORS PAVING</u>					
	Per Square metre		Materials & Labour	Except Cement	
11-46	Ceramic solid brick laid flat in floor / walkway paving etc laid, jointed and pointing in cement 1:4 (200x100x50 mm size)	927.00		859.00	
11-47	-Ditto-but laid on edge	1747.00		1645.00	
	Per Square metre		Coloured / printed size 310x310 mm	Special design size 310x310 mm	
11-48	Printed / designed / coloured floor tiles (Fu-wang / China-Bangla) or equivalent) in floor set on 19mm cement mortar base (1:4) and joint grouted with coloured cement complete all as spd (Measured flat)	851.00		869.00	
			Matt size 316x316 mm	Matt size 400x400 mm	
11-49	Ceramic glazed tiles floor (RAK or equivalent) in floor set on 19mm cement mortar base (1:4) and joint grouted with white / coloured cement complete (measured flat) of approved quality and design.	866.00		846.00	
			Materials & Labour	Fixing only	Add if fixed in repair
11-49 A	Linoleum sheet as in floor or in any other position fixed with glue (Foreign made) as spd.	468.00	65.20	16.30	
			Materials & labour	Except Cement	
11-50	75 mm thick brick bonded concrete (1:2:4) using brick aggregate as in floor, car-parking or in any other position as spd.	425.00		361.00	
			Foreign china	Foreign other than china	
11-51	Coloured glazed tiles (Foreign made) in walls incl angles, coves, coping, corner, bends etc set on 19mm cement mortar base (1:4) and joint grouted with coloured cement complete (Measured flat)	1127.00		1200.00	
				Rate in Tk	
11-52	Coloured tiles (foreign made non-slide any size) in floor incl angle, coves, coping, corner, bends etc set on cement mortar base (1:4) and joint grouted with coloured cement complete (measured flat)			1841.00	
11-52A	Supply and fixing of Granite 12 mm thick foreign made as in floor / wall including angle, cover, coping, corner, bends etc set on cement mortar base (1:4) and joint grouted with colour cement complete as spd.			7977.00	

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FLOORS AND WALL TILING RATES

Item	Description	Rate in Taka			
		19 mm thick stone		12 mm thick stone	
	<u>MARBLE SLAB</u>				
	Per Square metre	Materials & Labour	Except Grey cement	Materials & Labour	Except Grey cement
11-53	Marble stone as in floor on cement mortar (1:4) and joint grouted with white cement complete (Foreign made)	5304.00	5221.00	4331.00	4248.00
	<u>FLOORS PAVING</u>				
	Per Square metre	Klinker Red	Black Jet	Beige	Apricot
11-54	Hexagonal ceramic Tiles (Mirpur ceramic made / equivalent) laid in floor / walk way paving etc. set on cement mortar base (1:4) and joint grouted with cement complete all as spd. measured flat (Clay paves, CT-10, size 230/150/80/25 mm, Hexagon)	2136.00	2459.00	2459.00	2862.00
11-55	Hexagonal ceramic Tiles (Mirpur ceramic made / equivalent) laid in floor / walk way paving etc. set on cement mortar base (1:4) and joint grouted with cement complete all as spd. measured flat (Clay paves, CT-12, size 300/90/210/25 mm, Hexagon)	1806.00	1991.00	2084.00	2145.00
	<u>DIFFERENT TYPES TILES</u>				
	Per Square metre			300x300 mm	special 300x300 mm
11-56	Supply & fixing of ceramic glazed tiles floor (MIR) set on cement mortar base (1:4) and joint grouted with white cement as in floor.			871.00	943.00
				316x316 mm	400x400 mm
11-57	Supply & fixing coloured glazed tiles floor (Madhumati) set on cement mortar base (1:4) and joint grouted with coloured cement as spd.			854.00	910.00

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FLOORS AND WALL TILING RATES

Item	Description	Rate in Taka	
		code GP, 7GP, 173GP, 173UP	other codes
11-58	Supply & fixing ceramic glazed coloured tiles floor (RAK) set on cement mortar base (1:4) and joint grouted with coloured cement as spd size 400x400 mm.	1209.00	1648.00
		310x310 mm	420x420 mm
11-59	Supply & fixing ceramic glazed coloured tiles floor (Fu-wang luxury) set on cement mortar base (1:4) and joint grouted with coloured cement as spd size.	864.00	979.00
		Special 300x300 mm	400x400 mm
11-59A	Supply & fixing ceramic glazed coloured tiles floor (MIR) set on cement mortar base (1:4) and joint grouted with coloured cement as spd size.	921.00	1152.00
<u>DIFFERENT TYPES TILES</u>		<u>Rate in Taka</u>	
	<u>Per Square metre</u>	305x305 mm	400x400 mm
11-60	Supply & fixing ceramic glazed homogeneous mettalic / coloured tiles floor (RAK) set on cement mortar base (1:4) and joint grouted with coloured cement as spd.	1174.00	1235.00
		304x304 mm	400x400 mm
11-60A	Supply & fixing ceramic glazed homogeneous any colour tiles floor (ATI) set on cement mortar base (1:4) and joint grouted with coloured cement as spd.	1052.00	1113.00
11-60B	Supply & fixing ceramic glazed homogeneous mono colour tiles floor (ATI) set on cement mortar base (1:4) and joint grouted with coloured cement as spd any size		1259.00

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11-61	Supply & fixing ceramic glazed homogeneous mirror polish tiles floor (RAK) set on cement mortar base (1:4) and joint grouted with coloured cement as spd size 595x595 mm.	1638.00
<u>DIFFERENT TYPES TILES</u>		Rate in Taka
Per Square metre		
11-62	Supply & fixing ceramic glazed homogeneous tiles floor G-4400 GL (MIR) set on cement mortar base (1:4) and joint grouted with coloured cement as spd size 400x400 mm.	1598.00
11-63	Supply & fixing ceramic glazed homogeneous mirror polish tiles floor (MIR) set on cement mortar base (1:4) and joint grouted with coloured cement as spd size 400x400 mm.	1368.00
11-64	Supply & fixing ceramic glazed homogeneous mirror polish tiles floor (RAK) set on cement mortar base (1:4) and joint grouted with coloured cement as spd size GP 400x400 mm.	1648.00
<u>DIFFERENT TYPES TILES</u>		Rate in Taka
Per Square metre		
11-65	Supply & fixing ceramic glazed homogeneous mirror polish tiles floor (MIR) set on cement mortar base (1:4) and joint grouted with coloured cement as spd code G-4400GL size 400x400 mm.	1502.00
11-65A	Supply & fixing ceramic glazed homogeneous mirror polish tiles floor (Foreign made) set on cement mortar base (1:4) and joint grouted with coloured cement as spd size 400x400 mm.	3046.00
11-66	Supply & fixing ceramic glazed tiles floor (Fu-wang/China-Bangla/Mir) set on cement mortar base (1:4) and joint grouted with coloured cement as spd code size 310x310 mm.	1131.00
11-67	Supply & fixing of homogeneous parquet sheet floor tiles (like wood) alder type using double layer polythene and silicon gum including cutting, pasting in position as spd.	8560.00
11-68	Supply & fixing ceramic glazed tiles stair (Fu-wang/China-Bangla) set on cement mortar base (1:4) and joint grouted with coloured cement as spd code size 260x300 mm.	1101.00

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11-69	Supply & fixing ceramic glazed tiles stair bull nose (RAK) set on cement mortar base (1:4) and joint grouted with coloured cement as spd code size 305x305 mm.	1137.00
11-70	Supply & fixing ceramic glazed tiles stair group (RAK) set on cement mortar base (1:4) and joint grouted with coloured cement as spd code size 305x305 mm.	1198.00
11-71	Supply & fixing special design concord tiles 38 mm thick set on cement mortar base (1:4) and joint grouted with coloured cement as spd.	1564.00

ADDITIONAL COST FOR LIFTING

Rate in Taka

Per Square metre

11-72	Additional cost per floor for Cement concrete floor laying (any thickness) from 1st floor to 5th floor.	16.60
11-73	Additional cost per floor for Cement concrete floor laying (any thickness) from 6th floor to 9th floor.	20.80
11-74	Additional cost per floor for Cement concrete floor laying (any thickness) from 10th floor and above.	27.00
11-75	Additional cost per floor for Mosaic / Tiles / Marble laying (any thickness) from 1st floor to 5th floor.	6.20
11-76	Additional cost per floor for Mosaic / Tiles / Marble laying (any thickness) from 6th floor to 9th floor.	10.40
11-77	Additional cost per floor for Mosaic / Tiles / Marble laying (any thickness) from 10th floor and above.	16.60

SECTION-12
PLASTERING SPECIFICATION

General

1. **Cement.** The cement shall be ordinary, normal setting cement of approved brand, complying in all respects with BS No. 12. Cement, unless otherwise specified to be of any particular quality, shall mean this ordinary normal setting cement.

2. **Lime.** Shall be
 - a. rendered hydraulic, if required, by the additions of under burnt ground surki.
 - b. pure of fat for plaster or lime whiting.
 - c. properly burnt in kilns, kept dry until slaked, ground screened through 3mm mesh screen and slaked at site.
 - d. deemed to weight 960 kg per Cu.m before slaking for purposes of estimating the proportion specified for use.

3. **Sand.** Shall be from approved source and free from dirt and salt.

4. **Surki** Shall be
 - a. Hard well burnt, insoluble in water used in lieu of sand.

 - b. Under burnt and soluble in water when used for imparting hydraulicity to lime mixtures and ground to pass a 1.5mm mesh sieve and used in the proportion of:
1 lime: 0.50 surki: 1.50 sand for 1:2 mix.
1 lime: 1 surki: 2 sand for 1:3 mix and so on.
under burnt surki shall not be used for plastering.

5.
 - a. Cement plaster shall be composed of cement and washed sand, mixed in the proportions specified. The plaster shall be applied in one or two coats work, as may be ordered. The surface should be racked cleaned and brushed before plastering.

 - b. **Dubbing Out.** All irregularities in walls shall be dubbed out with mortar of the same specification and consistency as the plaster coat.

Method of Measurements

6. **Measurements.** All work shall be measured net and flat (not girthed)
7. **Openings.** No deductions or additions shall be made for openings not exc. 0.35 Sq.m
8. **Ends.** No deductions shall be made for ends (joist, beams, steps posts etc.)
9. **Thickness.** Thickness of plaster specified is the thickness when dry and exclusive of any key or dubbing out sand is from face or lathing or walls.

Clarification of Rates

10. **The rates, inter alia, include particularly.**
 - a. Fair and even surfaces where exposed, finished with steel trowel, wood hand float.
 - b. Work on ceiling, walls or other positions and in patches.
 - c. Work of any widths, including coving.
 - d. Straight or curved work.
 - e. Small labour (chamfers, rounds, coves) n.exe. 7.50 cm wide or girth and end labour such as stops, meters, returns, etc.
 - f. Dubbing out of irregular surfaces.
 - g. Blocking out pieces to beam, etc. as required.
 - h. All labour in rounding off internal and external angles in plaster.
 - j. Rates apply to skirting also.

SECTION-12

PLASTERING RATES

Item	Description	Rate in Taka					
		Cement Mortar					
<u>CEMENT PLASTER</u>		1:3		1:4		1:6	
Per Square metre		Materials & Labour	Except Cement	Materials & Labour	Except Cement	Materials & Labour	Except Cement
12-1	12mm thick cement plaster finished as specified (Ground floor)	120.60	47.60	106.50	48.20	90.10	48.80
12-2	19mm thick cement plaster finished as specified	175.00	70.60	154.00	71.10	131.00	72.30
		Rate in Taka					
		Mortar Mix					
		1:3		1:4			
		Materials & Labour	Except Cement	Materials & Labour	Except Cement		
12-3	Add to item 12-1 for pudlo or other similar approved materials mixed with cement at the rate of 2.5% by weight of cement as specified.			23.80	0.00	19.10	0.00
12-3 (A)	Add to item 12-1 for Foam lub of Boral Chemical Co. ltd (BCCL) or other similar approved materials mixed with cement at the rate of 0.70% by weight of cement as specified.			18.60	0.00	14.70	0.00
12-4	Add to item 12-2 for pudlo or other similar approved materials mixed with cement at the rate of 2.5% by weight of cement as specified.			34.30	0.00	27.00	0.00
12-4 (A)	Add to item 12-2 for Foom lub of Baral Chemical Co. ltd (BCCL) or other similar approved materials mixed with cement at the rate of 0.70% by weight of cement as specified.			26.40	0.00	20.90	0.00
		Rate in Taka					
		Mortar Mix					
		1:4					
		Materials & Labour	Except Cement				
12-5	6mm thick cement plaster (1:4) on RCC faces as specified (Ground floor)					98.90	65.80
12-6	6mm thick cement plaster (1:4) on top of wall as specified					72.80	43.50
12-7	Add to item 12-1 & 12-2 for neat cement finishing where applicable.					50.60	38.60

SECTION-12**PLASTERING RATES**

Item	Description	Rate in Taka	
		Lime Mortar	Cement Mortar
<u>SCRAPING PLASTER</u>			
Per Square metre			
12-8	Hacking lime or cement plaster on walls, lathing & raking out joints when required or raking lime or cement jointing to walls, roofs or floor of any description or hacking concrete to form key or dismantling lathing with or without plaster.	11.90	19.00
12-9	Scraping mud Plaster of any thickness.	Rate in Taka 3.60	
<u>FILLETING</u>			
Per metre			
		Rate in Taka	
		Width of fillets in mm	
		Exc. 37.5 N.exc 75.0	Exc. 75.0 N. exc 150.0
12-10	Filleting upon 50mm deep in any position in cement mortar (1:3)	44.40	58.10
12-11	- Ditto - but except cement	36.90	42.50
12-12	25 mm deep and 50 mm wide grooved cement plaster with CM (1:3)	Rate in Taka 92.50	
12-13	- Ditto - but except cement	89.10	
<u>LETTERING</u>			
Each			
12-14	Forming 'V' grooves 12.5mm wide & 18.7 mm deep in new plaster as form letters or figures up to 100mm height as specified.	Rate in Taka 35.20	
<u>ADDITIONAL LIFT FOR CEMENT PLASTER</u>			
Per Square metre			
		Rate in Taka	
12-15	Add to item 12-1 for each additional floor from 1st upto 5th floor	7.40	
12-16	Add to item 12-1 for each additional floor from 6th to 9th floor	9.20	
12-17	Add to item 12-1 for each additional floor from 10th to above	11.10	
12-18	Add to item 12-5 for each additional floor from 1st upto 5th floor	6.00	
12-19	Add to item 12-5 for each additional floor from 6th upto 9th floor	9.00	
12-20	Add to item 12-5 for each additional floor from 10th to above	12.00	

SECTION-13
CEILING AND WALL BOARD ETC
SPECIFICATIONS

General

1. **Clothcotton.** Shall be double warp cloth, of approved quality.
2. **Hessian Cloth.** Shall be of two qualities known as No. 1 and No. 2 It shall be tightly woven with yarn of uniform thickness. Quality No. 1 shall weigh approximately 300 grams per sqm. and quality No.2 shall weigh approximately 230 grams per Sq.m.
3. **Partex Board/Hard Board.** Partex board shall be of thickness not less than 12 mm fixed as directed by Engineer-in-charge. Screws are fixed not more than 30cm apart. The sheets shall be fixed but jointed, a joint stopped and sheets drilled for and fixed with, including nails at 15cm rows not exc. I metre apart or fixed according to maker's instruction. Hard board shall be not less than 3mm thick and fixed as above.
4. **Veneered Partex Board.** Veneered Partex board shall not be less than 12mm thick. The grains will be long way free knots and will be approved manufacture to protect it from damage etc.
5. **Cloth Surfaces.** The cloth shall be damped, stretched and nailed with 2.5cm end and side laps and fixed as specified in para 3 above.
6. **Treatment for Elimination of Termite From Wooden Panel False Ceiling Wooden Partition Cup Board Cabinet etc.**
 - a. Wooden panels, false ceiling partition wall, cup board, cabinet similar other wooden and termite susceptible items will be treated with dursban 20 EC (chlorpyrifos diluted with water concentration 1.0% A.I) the diluted pesticide will be applied to the surfaces using brush on and/or injection methods. Depending on the surface concerned about 1 liter of diluted pesticide will be applied. The brush on application may have to be done in two or more and dry cycles.

b. Wooden panels, false ceiling partition wall, cup board, cabinet similar other wooden and termite susceptible items will be treated with Pesto-clea A & B of Baral Chemical Company Ltd. (BCCL). diluted with water. The diluted pesticide will be applied to the surfaces using brush on and/or injection methods. Depending on the surface concerned. The brush on application may have to be done in two or more and dry cycles. Chemical will be mixed at the company instruction.

Method of Measurement

7. **Measurements.** All work shall be measured net as fixed with no allowances for cutting and waste, laps means turnings, etc.

Clarification of Rates

8. **The rates inter alia include particularly.**

- a. Fixing complete with screws as specified in any position.
- b. All cutting and waste
- c. Cutting holes for pipes etc.

SECTION-13

CEILING AND WALL BOARD ETC RATES

Item	Description	Rate in Taka		
		Supplied & Fixed	Except Sheets	Add if fixed in repair/removal
<u>HARD BOARD & PARTEX BOARD PARTITION & CEILING ETC</u>				
Per Square metre				
13-1	Hard board sheet 3mm thick in ceiling & partitions fixed to frame with screws (Timber to be paid separately under relevant item)	310.00	148.00	37.00
13-2	Partex board 12mm thick of 400 density in ceiling & partitions fixed to frame with screws (Timber to be paid separately under relevant item)	577.00	148.00	37.00
13-3	-Ditto-but 12 mm thick of 500 density with - ditto -	714.00	148.00	37.00
13-4	-Ditto-but 19 mm thick of 400 density with - ditto -	739.00	148.00	37.00
13-5	Partex board 19 mm thick of 500 density with - ditto -	833.00	148.00	37.00
13-6	Partex board 26 mm thick of 500 density with - ditto -	926.00	148.00	37.00
<u>PARTEX VINYL BOARD IN PARTITION & CEILING ETC.</u>				
Per Square metre				
13-7	Partex vinyl board as in partition, ceiling 12 mm thick one side laminated 500 kg / cu.m density fixed to frame with screws (Timber to be paid under relevant item) Garjan	1169.00	148.00	37.00
13-8	-Ditto-but 19mm thick-ditto.	1306.00	148.00	37.00
13-9	-Ditto-but 8mm thick & 600 kg / cu.m density - ditto.	1366.00	148.00	37.00
13-10	Partex vinyl board as in partition, ceiling 12mm thick both side laminated 500 kg / cu.m density fixed to frame with screws (Timber to be paid under relevant item)	1213.00	148.00	37.00
13-11	-Ditto-but 19mm thick	2178.00	148.00	37.00
13-12	-Ditto-but 8mm thick (Teak) & 600 kg / cu.m density -ditto.	239.00	148.00	37.00

SECTION-13

CEILING AND WALL BOARD ETC RATES

Item	Description	Rate in Taka		
		Supplied & Fixed	Except Sheets	Add if fixed in repair/removal
	<u>VENEERED PARTEX BOARD IN PARTITION & CEILING</u>			
	Per Square metre			
13-13	Veneered board as in partition, ceiling 12mm thick of Chapalish 500 kg / cu.m density fixed to frame with screws (Timber to be paid under relevant item)	1431.00	148.00	37.00
13-14	-Ditto-but 19mm thick –ditto-	1611.00	148.00	37.00
13-15	-Ditto- but 26mm thick chapalish with ditto.	2215.00	148.00	37.00
13-16	-Ditto- but 12 mm thick Garjan veneered with – ditto-	1169.00	148.00	37.00
13-17	-Ditto- but 19 mm thick Garjan veneered with – ditto-	1306.00	148.00	37.00
13-18	-Ditto- but 12 mm thick Teak veneered with –ditto-	1997.00	148.00	37.00
13-19	-Ditto- but 19 mm thick Teak veneered with –ditto-	2178.00	148.00	37.00

TERMITE ELIMINATION TREATMENT

	Per Square metre	Rate in Taka
13-20	Treatment for elimination of termite from wooden panel, false ceiling, wooden partition, cupboard, cabinet etc.	211.00

GYPSUM BOARD

	Per Square metre	Rate in Taka		
		Supplied & Fixed	Except Gypsum Board, Nylex cover & Aluminum framing	Add if fixed in repair
13-21	Gypsum board 10mm thick in false ceiling with supplying & fixing of Aluminum framing such as 32 x 25 mm size Tee, 25 x 25 mm size cross Tee & 25 x 25 mm size angle hanging with 14 BG GI wire, Rawl plug, screw etc incl. Nylex cover pasting in one side of gypsum board. (Natural Colour)	2674.00	88.60	22.20
13-22	Gypsum board 10mm thick in false ceiling with supplying & fixing of Aluminum framing such as 32 x 25 mm size Tee, 25 x 25mm size cross Tee & 25 x 25mm size angle hanging with 14 BG GI wire, Rawl plug, screw etc complete (Natural Colour)	2221.00	71.60	17.90

SECTION-13

CEILING AND WALL BOARD ETC RATES

Item	Description	Rate in Taka		
		Supplied & Fixed	Except Aluminum Tee & Angle	Add if fixed in repair
<u>ALUMINUM FRAMING ONLY FOR GYPSUM BOARD / ANY FALSE CEILING</u>				
	Per Square metre			
13-23	Aluminum framing such as 32 x 25 mm size Tee, 25 x 25mm size cross Tee & 25 x 25 mm size angle hanging with 14 BG GI wire, Rawl plug, screw etc as in false ceiling (Natural Colour)	1552.00	1224.00	306.10
		Materials & Labour		
		5 mm thick	3 mm thick	Fixing Only Add if fixed in repair
13-24	Plastic wood as in ceiling fixed to aluminum framing of 32 x 25 mm size Tee, 25 x 25 mm size cross T and 25 x 25 mm size angle hanging with 14 BG GI wire, rawl plug, screw etc. complete. (Framing to be paid under relevant item).	473.00	479.00	60.40 15.10
	Per Square metre	Materials & Labour		
13-25	Hollow plastic board 10 mm thick as in ceiling fixed to aluminum framing of 32 x 25 mm size Tee, 25 x 25 mm size cross T and 25 x 25 mm size angle hanging with 14 BG GI wire, rawl plug, screw etc. complete. (Framing to be paid under relevant item).	1002.00	60.40	15.10
		Rate in Taka		
		Materials & Labour		
		10 mm thick	5 mm thick	Fixing Only Add if fixed in repair
13-26	Plastic wood as in Partition wall fixed to Timber frame with screw, wire nails etc. complete. (Timber to be paid under relevant item).	960.00	767.00	326.00 81.50
		Materials & Labour		
		5 mm thick	3 mm thick	Fixing Only Add if fixed in repair
13-27	Plastic wood as in Ceiling fixed to wooden frame with screw & gum as spd. (Framing to be paid under relevant item).	533.00	540.00	111.00 27.80

SECTION-14

WHITE/ COLOUR WASHING AND DISTEMPERING

SPECIFICATIONS

General

1. **Distempers.** Distemper will be water bound (Liquid) obtained from any of the following manufacturers and approved by the GE/Engineer-In-Charge.
 - a. Berger Robbialac
 - b. Elite / Aqua
 - c. Imperial
 - d. Navana.
2. **Lime.** The lime for white/colour washing shall be ordinary fat lime of good quality.
3. **Whiting Paris.** Shall be of an approved quality.
4. **Cement Slurry.** Shall be of a creamy consistency.
5. **Preparatory Work.** For white washing colour washing, distempering etc. Shall consist of brushing with stiff broom to remove all loose scales and removing nails, screws plugs etc. as required and stopping holes n. exc. 25sq.cm.
6. **Whitening.** Give any number of coats required to produce a well-covered smooth bodied opaque surface.
7. **White Washing.** The lime is to be slaked at site with an excess of water to the consistency of a cream and allowed to remain under water for 2 days. The mixture shall then be strained through coarse cloth and gum water (in the proportion of 100 grams gum to 16 liter of water) added as directed. The white wash shall be applied with proper fiber brushes.
8. **Colour Washing.** Shall be prepared as for white washing and the colour added after the white wash has been strained. The colouring matter is to be boiled in water and gum water added to it and then strained into the white wash.
9. **Distemper.** Shall be applied strictly in accordance with manufacture's instructions on the tins etc.

10. **Snowcem Wash.** Shall be of foreign made or equivalent and be applied strictly as per Maker's instruction.
11. **Cleaning.** Protect all surfaces liable to splashing and clean all splashes of neighbouring work and leave the whole of the premises clean.
12. **Use of Sealer for Distemper & Snowcem Wash.** The first coat of distemper and snowcem wash on new or old surface should be carried out according to the following procedure. The plastered surface shall be covered with Acrylic water base sealer made of reputed approved company and then distemper or snowcem shall be applied strictly accordance with manufacturers instruction on the container or approved by the Engineer-in-Charge.

Method of Measurements

13. **Measurement.** All surfaces measured flat (not girthed) whether plain or corrugated.
14. **No Addition.** Shall be made for attachments to surfaces as casings, pipes, timbers etc. which are distempered, or lime washed and no deduction shall be made for such attachments if not distempered or lime washed etc.
15. **Opening.** No deduction or addition shall be made for opening n. exc. 0.35 Sq.m Opening shall not be deducted when the jambs are distempered or lime washed and no addition will be made for the jambs. No deduction shall be made for ends of joists, beams, timbers etc.
16. **Payment.** Where the record Measurement Book for white washing colour washing distempering etc. duly checked by MES authorities exist for old building, payment will be made on the quantities recorded therein.
17. **Sanction for Additional Coats.** Prior written approval of Engineer-in-Charge will be required for the following.
 - a. More than one coat on old surfaces.
 - b. 4th coat white or colour wash on new surfaces.
 - c. 3rd coat distemper/plastic emulsion paint / weather coat on new surfaces.

SECTION-14**WHITE / COLOUR WASHING & DISTEMPERING RATES**

Item	Description	Rate in Taka	
		One coat	2nd & subsequent incl 1st coat on old surface
<u>CEMENT WASH</u>			
Per Square metre			
14-1	Cement slurry wash per coat	14.80	0.00
<u>LIME WASHING</u>			
Per Square metre			
14-2	White wash	10.40	8.60
14-3	Colour wash	10.30	10.30
14-4	Distempering with water bound distemper incl acrylic sealer in priming / 1st coat (Berger Robbialac liquid)	32.30	24.20
14-5	- Ditto - but Elite / Aqua	31.90	24.00
14-6	- Ditto - but Imperial / Navana	31.30	23.60
14-7	Snowcem wash on walls incl acrylic sealer in priming / 1st coat (Berger Robbialac)	40.90	27.80
14-8	Snowcem wash on walls incl acrylic sealer in priming / 1st coat (Thailand)	40.30	27.40
14-9	Snowcem wash on walls incl acrylic sealer in priming / 1st coat (England)	41.90	28.60
<u>SCRAPING</u>			
Per Square metre			
		Rate in Taka	
14-10	Removing white / colour wash & distemper etc from plastered/unplastered surface.		14.40
14-11	Removing of snowcem wash, plastic paint & weather coat etc from plastered/unplastered surface.		18.70

SECTION-15
GLAZING, PAINTING AND LETTERING
SPECIFICATIONS

General

1. **Glazing.**

a. Generally all glass to be the best of its respective kind, free from specks, bubbles and other defects.

b. Putty shall be made as follows. Take 1 kg finely powdered whiting 60 grams white lead (dry) 360 grams raw linseed oil, 30 grams litharge, mix well together and beat with a wooden mallet until thoroughly incorporated. if the putty becomes hard it can be restored by heating it and working it up while hot. For glazing in metal sashes, 5 percent red lead to be added.

2. **Sheet Glass.** Where not otherwise specified to be fixed in oil putty (red lead putty for steel sashes) well bedded and back puttied and glass well sprigged where necessary. All broken or damaged glass will be hacked out and replaced and the whole of the glazing left perfect on completion. Rebates, whether in new or old work to be painted one coat before glazing, or moistened with raw linseed oil if joinery is to be oiled. Each pane of glass to be in one whole piece, pieces of panes of glass will not be allowed.

3. **Painting Generally.** Paint, oil turpentine, dries, varnish, polish, etc., used by the contractor will be obtained from any of the following manufacturers and approved by GE/Engineer-in-charge:

- a. Berger (Robbialac)
- b. Elite / Aqua
- c. Imperial
- d. Navana

Painting as far as possible, to be carried out in dry weather.

RESTRICTED

Paint to be applied with proper paint brushes of good quality, carefully maintained throughout the work so to be always pliable and free from the loose bristle and well worked over the surface. Where more than one coat is specified, each coat is to be of a different shade and to be passed by the Engineer-in-charge before the next coat is started. The faces of all new priming and under coat to be properly rubbed down with pumice stone or sandpaper and well dusted. If old paint is unsound it shall be entirely removed by burning off or using suitable paint remover. Burning off or stripping of paint will not be done unless specifically ordered in writing by the Engineer-in-charge

4. **Painting New Wood Surfaces or Old Surfaces from Where Paint has been Burnt or Removed.** Painting shall be done in the following order.

- a. **Knotting.** Knots and resinous portions shall be coated with two thin coats of "patent" knotting well brushed in.
- b. **Stopping up.** All crevices, crack or holes shall be thoroughly cleaned out and filled up with thick coat of white lead paint and or putty.
- c. **Touching up.** All the knots crevices, cracks and hole treated as above (not the whole surface to be painted) shall be touched up with an even coat of primer.
- d. **Priming Coat or Under Coat.** The entire surface will then be painted with pink primer manufactured by any of the manufacturer specified below for paints for first coat or pink obtained by a mixture of white and red lead paint.
- e. **First Coat.** Apply thick coat of paint of the required shades obtained from any of the following manufacturers as approved by Engineer in Charge.
 - (1) Elite / Aqua
 - (2) Berger (Robbialac)
 - (3) Imperial
 - (4) Navana
- f. **Second and Subsequent Coat.** Apply a thin coat of paint as specified for first coat.

5. **Painting Old Wood Surfaces.** Painting on old surface shall be done in the following order:

- a. **Washing Down.** Surfaces are to be well rubbed down with pumice or soapstone to remove all blisters, scales of old paint, etc. and greasy spots rubbed and removed with turpentine. The surface to be then well washed with soap and water.
- b. **Filling Cracks.** All holes and cracks shall be filled up with putty to an even and smooth surface.
- c. **Touching up in Patches.** All patches rendered naked by "Washing down" shall be touched up with primer to the tint of the required paint.
- d. **First Coat.** Apply thick coat of paint obtained from any of the manufactures specified for new surface.
- e. **Second and Subsequent Coats.** Apply a thin coat of paint obtained from any of the manufacturers specified for new surfaces.

6. **Painting New Surfaces or Old Surfaces from Where Paint has been Burnt or Removed (Steel And Iron).**

- a. All mill scale, rust scale, etc, to be removed by means of heavy steel scrapers of steel wire brush and well dusted.
- b. **Priming Coats.** To be oxide of iron paint or red lead or obtained from manufacturers specified for FIRST Coat of paint on new wood surface.
- c. **Second and Subsequent Coats.** To be oxide of iron or lead base paint as ordered or paints obtained from manufacturers specified for FIRST Coat on new wood surface.

7. **Painting on Old Surfaces (Steel And Iron).**
 - a. If the existing paint is not ordered to be removed, remove all blisters, scales of old paint, rust, etc and dusts the surface.
 - b. Surfaces, which become naked by the above process, will be treated with priming coat.
 - c. When thoroughly dry, one or two coats shall be applied as ordered.
8. **Wood Preservative.** Shall be of approved manufacture, Creosote shall comply with BS No. 144.
9. **Tarring.** Tar shall be heated near boiling point and 1 kg of unslaked lime added to each 5 kg of tar. The mixture shall be thinned with 1 part of kerosene to 4 parts of tar by volume and applied hot.
10. **Crude Oil & Creosote.** These shall be applied as thickly as practicable in one coat so as to cover completely all surfaces to be treated. The materials shall be worked in with a brush.
11. **Oiling Wood Work shall be done as Follows.** A mixture of 450 grams beeswax, 0.12 litre of turpentine and 1.30 litre boiled linseed oil is to be used for oiling 75 metre. Super of work. The oil and wax are to be mixed by heating slowly till the wax has melted. The turpentine is to be then added boiled linseed oil not raw linseed oil, is to be used to facilitate drying.
12. **Painting on Plastered Surfaces & use of Sealer for Painting on Plastered Surfaces.**
 - a. The first coat of Acrylic weather coat paint and plastic emulsion paint on new or old surface should be carried out according to the following procedure. The plastered surface shall be covered with a Acrylic water base sealer made of reputed approved company and a paste made of the under mentioned in gradients for 01 sq.m and shall be rubbed with sand paper after being dried. After rubbing Acrylic weather coat paint or plastic emulsion paint shall be applied with roller/ brush.

Ingredients required for making paste for 1 square metre.

(i)	Chalk powder	0.49 kg
(ii)	Zinc oxide	0.20 kg
(iii)	Linseed oil	0.15 litre
(iv)	Thinner	0.25 litre
(v)	Synthetic enamel paint	0.20 litre

b. The second and subsequent coat of plastic emulsion paint: shall be applied with the help of roller/brush after drying first coat.

13. **Weather Coat Painting on Plastered Surfaces.** The weather coat paint on new surface should be carried out according to the following procedure:

a. The plastered surface should be prepared by sand paper and dust should be removed.

(1) First Coat : Apply water base acrylic sealer @ 0.08 litre per sq.m and after 24 hours, the first weather coat should be apply @ 0.08 litre per sq.m.

(2) Second and subsequent coat : 24 hours after the first coat, the second weather coat should be applied @ 0.06 litre per sq.m.

Note : When weather coat painting on old surface, the previous paintings, white/colour wash must be removed/cleaned, then surface to be considered as a new surface and the above procedure should be applied.

Method of Measurements (Glazing)

14. **Tolerance.**

a. Take dimensions to nearest cm.

b. Measure irregular panes as the smallest circumscribing rectangle.

Clarification of Rates

15. **The rates, inter alia, include particularly:**
- a. Glazing with sprigs and oil putty well bedded and back puttied or beads and screws as required in wood or metal sashes, skylights, etc.
 - b. All cutting and waste.
 - c. Fixing in any position.

Method of Measurements (Oiling, Painting etc)

16. **Generally.** Oiling will be paid per cubic metre as per quantity of timber measured.
17. **Attachments.** No extra shall be paid for oiling or painting attachments (block, wood handles, etc.) in a similar manner to the main work.
18. **Measurements.** Method, boarding with cover fillets, corrugated sheeting, etc, shall be measured net and flat (Not girthed). Boarding with faces and edges exposed shall be measured over the faces only.
19. **Doors, Windows.** shall be measured on both sides, portion of doors slashed or with panels left out shall not be measured separately from doors with panels, and no deductions shall be made for glass or panels left out.
20. **Trellis Work, Iron Guard Bars, Iron Bar Gates, Grating and Railing, etc.** Shall be measured on one side only but shall be coated on all exposed faces.
- a. **Oiling or Tarring.** Second coat will only be paid if specially ordered by GE/Engineer-in-charge.

Clarification of Rates

21. The rates, inter alia, include particularly:

- a. Cleaning and preparing all surfaces for the application of wood preservatives, tar, paint etc.
- b. Work on surfaces of any materials in any position.
- c. The rates apply to paint of any base and /or colour or tint.
- d. The use of cradles, etc, where required particularly for convenience of inspection, etc, by the GE/Engineer-in-charge.
- e. Rate for priming coat, which is for new work will include knotting, stopping and under coat on crevices, cracks or holes.
- f. Rates for washing down, which is for old work, will include rubbing, filling cracks with putty and under coat on naked patches.

- g. The rates in Iron and Steel work section (with the exception of sheets steel work, sheet iron pipes, reinforcement and galvanized work) include for painting with one coat of paint before fixing and one coat of paint after fixing.

SECTION-15**GLAZING, PAINTING AND LETTERING RATES**

Item	Description	Rate in Taka			
		Thickness			
		3 mm	5 mm		
<u>GLAZING</u>					
Per sq.m					
15-1	Sheet glass (local) fixed to timber or steel sashes with putty as specified	669.00	956.00		
15-2	- Ditto - but frosted - ditto -	832.00	1443.00		
15-3	Sheet glass (local) fixed to timber or steel sashes with hard wood beads & nails as specified	870.00	1162.00		
15-4	-Ditto-but frosted (India) - ditto -	889.00	1672.00		
		Rate in Taka			
15-5	Sheet glass 6mm thick tinted / frosted foreign made fixed to aluminium frame with all accessories all as required.	1701.00			
<u>HACKING OUT</u>					
		Rate in Taka			
Per sq.m					
15-6	Hacking out old broken glass from sashes remove any serviceable portion to store disposed off rubbish as specified	93.40			
<u>OILING</u>					
		Rate in Taka			
Per cu.m		Crude Oil		Creosote Oil	
		One coat	Two coat	One coat	Two coat
15-7	Timber in scantling	303.00	472.00	315.00	460.00
		Per sq.m			
15-8	Planks, boarding doors windows trellies work etc.	6.40	10.70	6.90	12.10
		Per Metre			
15-9	Fillets framing & similar work exceeding 150 mm girth	2.90	9.20	7.60	9.80
15-10	Ballies n.exc. 140 mm mean dia	7.20	13.80	4.30	7.90
15-11	- Ditto - but exc. 140 mm not exceeding 200 mm mean dia	4.90	9.40	3.90	10.10

SECTION-15**GLAZING, PAINTING AND LETTERING RATES**

Item	Description	Rate in Taka		
		One coat	Two coat	
<u>TARRING</u>				
	Per sq.m			
15-12	Tarring on any plain surface	25.70	45.90	
<u>PAINTING WOOD WORK</u>				
	Per sq.m			
15-13	Painting timber work ceiling & timber boarding etc of any description with synthetic enamel paint. (Berger Robbialac)	42.80	35.00	32.50
15-14	- Ditto - (Elite / Aqua)	42.80	34.60	32.10
15-15	- Ditto - (Imperial / Navana)	42.80	34.60	32.10
15-16	Painting glazed & gauzed windows & fanlight with synthetic enamel paint. (Berger Robbialac)	30.50	22.50	22.20
15-17	- Ditto - (Elite / Aqua)	30.50	22.30	22.10
15-18	- Ditto - (Imperial / Navana)	30.50	22.30	22.10
15-19	Painting to door of any type & description with synthetic enamel paint. (Berger Robbialac)	40.30	37.90	35.00
15-20	- Ditto - (Elite / Aqua)	40.30	37.40	34.60
15-21	- Ditto - (Imperial / Navana)	40.30	37.40	34.60

SECTION-15

GLAZING, PAINTING AND LETTERING RATES

Item	Description	Rate in Taka		
		Primer on new work	First coat new or old work	Second & subsequent coat new or old work
<u>PAINTING WOOD WORK</u>				
Per Metre				
15-22	Painting to fillets, framing, skirting & similar works n-exc. 150 mm girth with synthetic enameled paint. (Berger Robbialac)	5.00	5.30	4.40
15-23	- Ditto - (Elite / Aqua)	5.00	5.20	4.30
15-24	- Ditto - (Imperial / Navana)	5.00	5.20	4.30
Each				
15-25	Painting detached article n-exc. 0.1 Sq. M each with synthetic enamel paint. (Berger Robbialac)	3.20	3.70	3.20
15-26	- Ditto - (Elite / Aqua)	3.20	3.70	3.20
15-27	- Ditto - (Imperial / Navana)	3.20	3.70	3.20
<u>PAINTING STEEL & IRON WORK</u>				
Per sq.m				
15-28	Painting Red oxide to old surface of any description except item below.	0.00	32.80	31.00
15-29	Painting Red oxide to iron guard bras, iron bars, gratings railing & similar open work new or old.	0.00	27.40	26.90

SECTION-15

GLAZING, PAINTING AND LETTERING RATES

Item	Description	Rate in Taka		
		Primer on new work	First coat new or old work	Second & subsequent coat new or old work
PAINTING STEEL & IRON WORK				
	Per sq.m			
15-30	Painting to steel doors with synthetic enamel paint. (Berger Robbialac)	0.00	35.00	32.80
15-31	- Ditto - (Elite / Aqua)	0.00	34.60	32.40
15-32	- Ditto - (Imperial / Navana)	0.00	34.60	32.40
15-33	Painting to steel glazed or gauzed window and fanlight with synthetic enamel paint. (Berger Robbialac)	0.00	24.60	24.10
15-34	- Ditto - (Elite / Aqua)	0.00	24.40	23.90
15-35	- Ditto - (Imperial / Navana)	0.00	24.40	23.90
15-36	Painting to steel grill with synthetic enamel paint. (Berger Robbialac)	0.00	24.60	24.10
15-37	- Ditto - (Elite / Aqua)	0.00	24.40	23.90
15-38	- Ditto - (Imperial / Navana)	0.00	24.40	23.90
15-38A	Painting to 50 mm mesh wire neting with synthetic enamel paint. (Berger Robbialac)	0.00	23.60	22.30
	Per Metre			
15-39	Painting Red oxide to pipes / gutters & similar works exc. 150 mm but n-exc. 314 mm girth old or new surface.		15.40	13.30

SECTION-15

GLAZING, PAINTING AND LETTERING RATES

Item	Description	Rate in Taka	
		First coat	2nd & subsequent coat
PAINTING STEEL & IRON WORK			
	Per Metre		
15-40	Painting Red oxide to pipes/gutters & similar works exc. 150mm girth on old work.	7.60	6.20
	Each		
15-41	Painting Red oxide to detached articles n-exc. 0.1 sq.m each old work.	3.50	3.50
	Per sq.m		
15-42	Aluminum painting to steel doors & windows (Berger Robbialac)	23.20	22.20
15-43	- Ditto - (Elite / Aqua)	23.00	22.10
15-44	- Ditto - (Imperial / Navana)	23.00	22.00
15-45	Aluminum painting to steel grills (Berger Robbialac)	22.20	21.20
15-46	- Ditto - (Elite / Aqua / Imperial / Navana)	22.10	21.10
15-47	Aluminum painting to corrugated sheet in roof & partition etc. (Berger Robbialac)	46.00	31.10
15-48	- Ditto - (Elite / Aqua / Imperial / Navana)	45.40	30.80
	Per Metre		
15-49	Aluminum painting to pipes gutters etc n-exc. 150 mm girth	10.70	9.40
	Each		
15-50	Aluminum paint to detached articles n-exc. 0.1 sq.m each new or old work.	7.40	7.00

SECTION-15

GLAZING, PAINTING AND LETTERING RATES

Item	Description	Rate in Taka	
		First coat for new surface	2nd & subsequent on new surface and any coat on old surface
<u>PAINTING ON PLASTERED WALL</u>			
Per sq.m			
15-51	Plastic emulsion paint with acrylic sealer in priming / 1st coat on plastered walls incl all detached attachment (Berger Robbialac)	213.00	58.60
15-52	- Ditto - (Elite / Aqua)	213.00	58.50
15-53	- Ditto - (Imperial / Navana)	214.00	60.40
15-54	Painting on plastered walls with syn. enamel paint incl. all detached attachment (after removing of paint old surface may be treated as new surface) Berger Robbialac	172.00	50.10
15-55	- Ditto - (Elite / Aqua)	172.00	49.80
15-56	- Ditto - (Imperial / Navana)	172.00	49.80
Per Metre			
15-57	Ditto to pipes picture rails dados etc n. exc. 150 mm girth (Berger Robbialac)	7.80	7.20
15-58	- Ditto - (Elite / Aqua)	7.70	7.10
15-59	- Ditto - (Imperial / Navana)	7.70	7.10
<u>PAINTING WITH BLACK JAPAN OR ORDINARY VARNISH ONE COAT</u>		Rate in Taka	
Per sq.m			
15-60	Surface of any description	24.20	
Per Metre			
15-61	Linear work n-exc. 150 mm girth	7.20	
Each			
15-62	Small detached articles such as locks, latches shoot doors & frames, casement fasteners etc.	9.20	

SECTION-15**GLAZING, PAINTING AND LETTERING RATES**

Item	Description	Rate in Taka
<u>BURNING OLD PAINTS</u>		
	Per sq.m	
15-63	Burning of paints (or removing by chemical where burning is not allowed)	29.40
15-64	Washing down old wood work	10.80
<u>WRITING LETTERS</u>		
	Each	
15-65	Writing letters or figures incl. stops, brackets, sashes etc.	3.90
	Per sq.m	
15-66	Wax polishing to wooden joinery	106.70
15-67	spirit polishing to new wood surface complete rate	286.00
15-68	Ditto but sashes glazed or gauzed complete rate	208.00
15-69	Road marking paint on any surface complete/finished as directed. (Berger Robbialac)	156.00
15-70	- Ditto - (Elite / Aqua)	150.00
15-71	- Ditto - (Imperial / Navana)	0.00
15-72	Spirit polishing to old wooden surface complete rate	185.00
15-73	Spirit polishing to old wooden sashes glazed or gauzed complete	135.00

SECTION-15

GLAZING, PAINTING AND LETTERING RATES

Item	Description	Primer on new work	First coat new or old work	Second & subsequent coat new or old work
<u>PAINTING HARD OR SOFT BOARD</u>				
Per sq.m				
15-74	Painting to hard or soft board & Partex board etc of any description with synthetic enamel paint. (Berger Robbialac)	54.80	49.60	36.40
15-75	- Ditto - (Elite / Aqua)	54.80	48.80	35.90
15-76	- Ditto - (Imperial / Navana)	54.80	48.80	35.90
Per Metre				
15-77	Painting with synthetic enamel paint to pipes gutters & similar work n-exc. 150 mm girth new or old surface as spd. (Berger Robbialac)	0.00	11.40	9.60
15-78	- Ditto - (Elite / Aqua)	0.00	11.30	9.60
15-79	- Ditto - (Imperial / Navana)	0.00	11.30	9.60
15-80	Painting with synthetic enamel paint to pipes gutters & similar work exc. 150 mm but n. exc. 314mm girth new or old surface. (Berger Robbialac)	0.00	13.30	10.80
15-81	- Ditto - (Elite / Aqua)	0.00	13.20	10.70
15-82	- Ditto - (Imperial / Navana)	0.00	13.20	10.70
Per Sq. M				
15-83	Mansion Polish on ceramic brick work new or old surface as spd.	Rate in Taka 56.90		
<u>GLAZING</u>				
Per sq.m				
		Thickness		
		3 mm	5 mm	
15-84	Sheet glass foreign made distortion free fixed to aluminum frame with foreign origin accessories as per direction.	0.00	1024.00	
15-85	- Ditto - but tinted glass -ditto-	0.00	1095.00	
15-86	- Ditto -but foreign made original frosted glass -ditto-	0.00	1408.00	

SECTION-15

GLAZING, PAINTING AND LETTERING RATES

Item	Description	Thickness	
		3 mm	6 mm
	Per sq.m		
15-87	Decorative / designed / figured Tinted glass foreign made fixed to aluminum frame with foreign origin accessories as per direction.	0.00	1865.00

MISC PAINTING

	Description	Primer on new surface	Final coat on new or old surface
		Rate in Taka	
	Per sq.m		
15-88	Spray painting with synthetic enamel paint to steel surface all as spd. (Berger Robbialac)	123.20	202.90
15-89	- Ditto - (Elite / Aqua)	123.20	182.00
15-90	- Ditto - (Imperial / Navana)	123.20	182.00
15-91	Prepare surface and apply bone tile paint (textured paint) on plastered or brick surface complete.		551.00
15-92	Apply 2xcoats of silicon water repellent paint (Berger) at fair face new or old surface all complete as spd.		94.30
	Per sq.m	First coat on new surface	Second & Subsequent coat on new or old surface
15-93	Red oxide painting to brick/plastered surface complete	41.10	31.20

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SECTION-15

GLAZING, PAINTING AND LETTERING RATES

Item	Description		
15-94	Painting on Tennis court surface with non-skid tennis court paint incl. Cleaning the surface all as spd. (Berger Robbialac / Elite / Aqua)	193.00	44.70
15-95	Acrylic weather coat paint with acrylic sealer in priming / 1st coat on plastered walls / surface including all detached attachment (Berger Robbialac)	87.20	54.40
15-96	- Ditto - but (Elite / Aqua / Navana	85.60	53.40

SECTION-16
SANITARY FITTINGS
SPECIFICATIONS

General

1. **Workmanship and Materials.** The materials shall be of the best description, and the workmanship and labour required in preparing and fitting shall be executed in neat and workmanlike manner.

2. **Hard Brass.** Hard brass shall be a composition of copper and zinc with or without lead of tin, not less than 62 percent by weight of the composition being copper and having tensile strength of not less than 2000 kg per Sq. Cm of sectional area.

3. **Gunmetal.** The gunmetal shall be an alloy containing not less than 88 percent by weight of copper and not less than 8 percent by weight of tin and the balance of 4 percent made up of zinc, lead or spelter as may be decided by the contractor and having a tensile strength of not less than 2100 kg per Sq. Cm of sectional area.

4. **Joints Generally.** These should be made with special care, particularly joints between different materials. No joint to be embedded in a wall if avoidable.

5. **Cement Caulked Joints.** The spigots to be packed and caulked with 12mm depth of tarred yam. Pipes to be truly fitted concentric to be solidly bedded, packed or caulked with wooden caulking tool shaped to fit the annular ring and jointed in cement mortar (1.1) and finished with a bold collar of cement mortar on the outside of each joint. The bore of the pipes to be carefully wiped clean as work proceeds.

6. **Runlead Caulked Joints.** The spigots and sockets are to be cleaned, truly fitted and concentrically aligned. The joint to be packed and caulked for half the depth of the socket with picked gasket and then filled with molten lead caulked and trimmed.

7. **Lead Wool Caulked Joint.** To be as for run lead but using lead wool in lieu of molten lead.

8. **Redlead Caulked Joint.** The pipes to be clean, fitted, aligned, concentric and the joint packed and caulked with packed gasket intimately mixed with red lead putty. The joint to be neatly finished with a bold collar of similar materials.

9. **Rubber Cone Joint Cover.** Rubber cones to be 10 to 15 cm long with end diameters as required, edges beaded . Rubber to be 6mm thick. The cone to be bound on with copper wire.

10. **Ragjoint Cover.** To consist of clean linen 5cm wide, thickly coated with thick red paint and bandaged (six laps) round the joint. To be secured with copper wire and finished with 3 coats of red lead paint.

11. **Joints to Similar Materials**

- a. Lead to lead-wiped lead joint.
- b. Stoneware (or porcelain) to stoneware-caulked cement joint.
- c. Iron to iron.
 - (i) Run lead caulked joints.
 - (ii) Lead wool caulked joint.

12. **Joints To Dissimilar Materials.**

a. Lead to stone ware, etc use a 15 cm long by 5 mm thick brass ferrule plain one end flanged the other. Plain end to be wiped to the lead and flanged end, caulked with stoneware, by any one of the following:

- (1) Cement caulked into stoneware socket or
- (2) Red lead caulked into stoneware socket AND
- (3) finish (1) or (2) with rag cover.

b. **Stoneware To Lead.** Use a spigot and socket piece 15cm long of 5 mm brass.

- (1) Cement caulk the stoneware spigot into the brass socket OR (2) Red lead with stoneware spigot into brass socket AND (3) Cover (1) or (2) with a rag cover.

The brass spigot to be wiped to the lead pipe.

- c. **Lead to Iron.** Use a 5mm thick brass ferrule 15cm long with one flagged end. Wipe the plain end to the lead and (1) Run lead caulk the flanged end of the brass ferrule into the cast iron socket, OR (2) caulk with lead wool.
- d. **Irona to Lead.** use a brass spigot and socket piece of 5mm brass 15cm long.
- (1) Run lead caulk the iron spigot into the brass socket Or (2) lead wool caulk the iron spigot into the brass socket. The spigot end of the brass to be wiped to lead.
- e. **STONEWARE ETCTO IRON:**
- (1) Cement caulked the stoneware spigot into a special large socket of the iron pipe OR (2) All as (1) but red lead caulk AND (3) Use a rag cover where directed in addition.
- f. **Iron to Stoneware.**
- (1) Cement caulk the iron spigot into the stoneware socket OR (2) All as (1) but red lead caulk AND (3) cover with rag where directed.
13. **All Sanitary Fittings.** Unless specially ordered to the contrary will be supplied by the Contractor.
14. **All Pipe and Fitting.** Joints will be tested under a water pressure head of 0.60m to 1.80m or by smoke as directed in the presence of the Engineer-in Charge. Defects will be notified immediately and pipes and fitting retested until passed by the Engineer-in-Charge.
15. **The Whole of the Work.** Is to be tested at the contractor's expense at such time and in such manner, as the Engineer-in charge shall direct, and to his satisfaction.

Clarification of Rates

16. **The rates, inter alia, include particularly:**

a. **Fixing Only Rates.**

b. The rates of "fixing only" water closets and urinals complete include for pedestal pattern pan with combined basins "P" or "S" traps or Asiatic pattern with loose trap. and basin or stall urinals. the rates include for securing to floors wall in CM 1.3 and bedding traps of Asian W.C in cement concrete 1:2:4 also for securing seats, flushing systems and their brackets to walls, fixing and jointing flush pipes including joints to fittings fixing stoppers if anti-syphonge pipes are not required.

c. The rates of "fixing only" for Slipper Baths, etc. include placing the bath in position and securing to floor, if required, fixing overflow and waste grating and trap, stopper and chain.

d. The rates of "Fixing only" Sinks, ablution basin in ranges, etc. include for properly securing to brackets of bedding in cement to dwarf piers, and fixing waste or overflow gratings and trap, stopper and chain. These rates also include for "Fixing only" a porcelain stopper in lieu of a pillar cock. if only one pillar cock required and supplied.

2. The rates for "Add if fixed in Repairs" include carriage to MES store or for safe custody until required to reuse, and making good on completion.

3. All "fixing only" rates include all jointing and fixing material, i.e. lead, lead wool, red lead, cement mortar, screws, nails and other subsidiary articles required for the proper fixing of the fittings, but do not include for red joints to iron or soldered joint to lead service waste or overflow pipes, where required.

SECTION-16

SANITARY FITTINGS RATES

Item	Description	Rate in Taka				
		Supplied & Fixed			Fixing only	Add if fixed in repair
		White	Coloured	Special Coloured		
<u>SANITARY FITTINGS</u>						
Each						
16-1	Supplying & fixing in position European type glazed porcelain water closet with 'P' or 'S' trap, plastic seat cover with all necessary fittings BISF products standard quality (code no-104/104-A)	3110.00	3549.00	4047.00	489.00	122.30
16-2	- Ditto – but RAK product (Model Karla)		3630.00		489.00	122.30
16-3	- Ditto – but (Model Orient)		3932.00		489.00	122.30
16-4	- Ditto – but (Model Washington)		6166.00		489.00	122.30
16-5	- Ditto – but (Model Venice)		9031.00		489.00	122.30
16-6	Cistern flushing porcelain with lid without fittings for water closet apparatus European type (BISF products standard quality) code no-401	2155.00	2601.00	3054.00	326.00	81.50
16-7	- Ditto – but with fittings RAK product (Model Karla)		2128.00		326.00	81.50
16-8	- Ditto – but (Model Orient)		2641.00		326.00	81.50
16-9	- Ditto – but (Model Washington)		2885.00		326.00	81.50
16-10	- Ditto – but (Model Venice)		3179.00		326.00	81.50
16-11	European type glazed porcelain Combi closet with 'P' or 'S' trap, plastic seat cover with all necessary fittings BISF products standard quality (code no-114/414, 114A/414)	1379.00	10488.00	11680.00	489.00	122.00
Each						
16-11A	European type glazed porcelain Combi closet with 'P' or 'S' trap, plastic seat cover with all necessary fittings RAK products standard quality (Karla)		10393.00		489.00	122.00
16-11B	European type glazed porcelain Combi closet with 'P' or 'S' trap, plastic seat cover with all necessary fittings RAK products standard quality (Orient)		11579.00		489.00	122.00

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SECTION-16

SANITARY FITTINGS RATES

Item	Description	Supplied & Fixed	Fixing only	Add if fixed in repair		
	Each					
16-12	Full set of spare parts of low down cistern (Combi closet) incl. all necessary fitting of approved quality	1937.00	39.10	9.80		
16-13	Supply & fixing of low down cistern fittings incl. ball cock with all fitting standard quality	810.00	39.10	9.80		
16-14	Supply, fittings, fixing of Asiatic type glazed porcelain water closet incl. CI trap seated on concrete floors making good of disturbed surfaces BISF product standard quality (Code No. 313)	1698.00	584.00	146.00		
16-15	- Ditto – but RAK product	2331.00	583.00	146.00		
		Rate in Taka				
	Each					
16-16	Supply & fixing oriental pan orrissa type glazed porcelain water closet incl. CI trap –ditto-BISF product standard quality (Code No. 317)	2594.00	583.00	146.00		
16-17	Supply fitting & fixing of CI flushing cistern 13.60 ltr (3 gallon) capacity incl. CI brackets, 31mm dia PVC flush pipe, 12.50 mm dia plastic connection with nipple, 12.50 mm dia ball cock & pulling chain etc complete.	2976.00	354.00	88.40		
16-18	- Ditto - but Plastic low down cistern (Local made)	1393.00	337.00	84.30		
16-19	Supplying, fitting & fixing in position porcelain foot rest (white) seated on concrete floors & make good the disturbed surface (BISF product standard quality Code No. 305)	336.00	58.40	14.60		
		Rate in Taka				
	Each					
		Size mm	Supplied & Fixed	Fixing only	Add if fixed in repair	
			White	Coloured		
16-20	Supplying, fitting, fixing of glazed porcelain wash hand basin (WHB) fixing in position with heavy type CI bracket , 31 mm dia PVC waste pipe, 12.50mm dia plastic connection with nipple 12.50mm dia CP pillar cock, 31 mm dia CP basin, waste with coupling, chain & plug incl. making holes, wooden blocks, rawl plug, screws & making good the disturbed surface. (White Model-204, Coloured Model-204)	580x445	2814.00	2899.00	352.00	88.00
16-21	Supplying, fitting, fixing of glazed porcelain wash hand basin (WHB) fixing in position with heavy type CI bracket , 31 mm dia PVC waste pipe, 12.50mm dia plastic connection with nipple 12.50mm dia CP pillar cock, 31 mm dia CP basin, waste with coupling, chain & plug incl. making holes, wooden blocks, rawl plug, screws & making good the disturbed surface. (White Model-211, Coloured Model-211)	570x420	2550.00	2774.00	361.00	90.30

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SECTION-16

SANITARY FITTINGS RATES

Item	Description	Rate in Taka		
		Supplied & Fixed	Fixing only	Add if fixed in repair
16-22	- Ditto - but RAK product (Model Karla)	3119.00	361.00	90.30
16-23	- Ditto - but (Model Orient)	3412.00	361.00	90.30
16-24	- Ditto - but (Model Washington)	3667.00	361.00	90.30
16-25	- Ditto - but (Model Venice)	5248.00	361.00	90.30
16-26	- Ditto - but (Model Windsor)	4572.00	361.00	90.30
16-27	Supply and fixing coloured glazed porcelain wash hand Basin (Cabinet type) RAK size 590 x 475mm fixing in position on RCC slab, 12.50mm dia plastic connection pipe with nipple, 12.50mm dia pillar cock. 31mm dia CP. Basin waste with coupling & making good the disturb surface all as spd.	3911.00	414.00	103.40
16-27A	- Ditto - but corner type RAK product.	3052.00	393.00	98.20

	Each	Description	Rate in Taka			
			Supplied & Fixed		Fixing only	Add if fixed in repair
			White	Coloured		
16-28		Supplying, fitting, fixing of glazed porcelain pedestal for wash hand basin (WHB) (BISF product standard quality (Code No.-701A)	827.00	866.00	32.60	8.20

Item	Description	Rate in Taka		
		Supplied & Fixed	Fixing only	Add if fixed in repair
16-29	- Ditto - but RAK product (Model Karla)	1246.00	32.60	8.20
16-30	- Ditto - but (Model Orient)	1304.00	32.60	8.20
16-31	- Ditto - but (Model Washington)	1560.00	32.60	8.20
16-32	- Ditto - but (Model Venice)	2163.00	32.60	8.20
16-33	- Ditto - but (Model Windsor)	1886.00	32.60	8.20
16-34	Supplying & fixing in position 12.50 mm dia chromium plated pillar cock standard quality.	669.00	43.10	10.80

Item	Each	Description	Supplied & Fixed			Fixing only	Add if fixed in repair
			WHB & Sink etc	Low Down cistern	High cistern		
16-35		Supplying, fitting & fixing in position 31 mm dia PVC pipe standard quality.	80.80	80.80	170.00	21.50	5.40
16-36		Supply and fixing of 38 mm dia sink & WHB waste pipe.	100.60	80.80	116.00	21.50	5.40

SECTION-16

SANITARY FITTINGS RATES

Item	Description	Supplied & Fixed	Fixing only	Add if fixed in repair			
	Each						
16-37	Supplying, fitting, fixing in position 12.50 mm dia plastic connection with nipple standard quality.	122.00	20.40	5.10			
16-38	Supplying, fitting, fixing in position CP chain with rubber plug for WHB, Sink etc	65.20	8.30	2.10			
16-39	Supplying, fitting, fixing in position 31 mm dia CP basin waste with coupling.	198.00	20.40	5.10			
		Rate in Taka					
	Each	Supplied & Fixed					
		Cistern flushing	WHB	Sink	Fixing only	Add if fixed in repair	
16-40	Supplying, fitting, fixing in position CI brackets heavy type standard quality	213.00	213.00	213.00	82.60	20.70	
					Supplied & Fixed	Fixing only	Add if fixed in repair
16-41	Supplying, fitting, fixing in position porcelain stand urinal (BISF product standard quality size 490 x 385mm) incl 31 mm dia PVC waste pipe, 12.50mm dia plastic connection with nipple (without flushing cistern) (Code No. 603)				1555.00	335.00	83.70
16-42	Supplying, fitting, fixing in position glazed porcelain flat squatting type urinal with all necessary fittings BISF product standard quality size 610x 375mm (without flushing cistern) Model No. 602				1209.00	183.00	45.70
	Each	Size mm	Supplied & Fixed	Fixing only	Add if fixed in repair		
16-43	Supplying, fitting, fixing in position porcelain kitchen sink with heavy type CI brackets 31mm dia CP chain, plug, water pipe & 12.50 mm dia CP bib cock 200mm long incl. making holes, wooden blocks, rawl plug, screws & making good the disturbed surface, (BISF product standard quality) Model No. 502	515x430 x275 mm	2713.00	341.00	85.20		
16-44	Supplying, fitting, fixing in position porcelain kitchen sink with heavy type CI brackets 31mm dia CP chain, plug, water pipe & 12.50 mm dia CP bib cock 200mm long incl. making holes, wooden blocks screws & making good the disturbed surface, (BISF product standard quality) Model No. 502	625x490 x224 mm	2868.00	339.00	84.90		

SECTION-16

SANITARY FITTINGS RATES

Item	Description	Supplied & Fixed			
		Supplied & Fixed	Fixing only	Add if fixed in repair	
16-45	Supplying, fitting, fixing in position toilet paper holder approved size and standard quality fixed complete with wooden block, rawl plug & screws etc.	180.00	37.40	9.30	
16-46	- Ditto - but RAK product	481.00	37.40	9.30	
16-47	Supplying, fitting, fixing in position CP soap dish approved size and standard quality fixed complete with wooden block / rawl plug screws etc.	141.00	24.80	6.20	
16-48	- Ditto - but RAK product	293.00	24.80	6.20	
16-48A	- Ditto - but melamine	206.00	24.80	6.20	
		Supplied & Fixed		Fixing only	Add if fixed in repair
		19 mm dia	25mm dia		
16-49	Each Supplying, fitting, fixing in position CP Towel Rail 600 mm long standard quality fixed complete with wooden block, rawl plug & screws etc.	284.00	341.00	37.10	9.30
16-50	- Ditto - but RAK product	476.00		37.10	9.30
16-50A	- Ditto - but 19mm dia tube 175 mm dia Circular type	452.00	-	37.10	9.30
		Materials and labour		Fixing only	Add if fixed in repair
16-51	Supply and fixing of 12 mm CP Towel Rail Triangular Type standard quality fixed complete with wooden block, rawl plug & screws etc.	588.00		78.00	19.50
		Supplied & Fixed		Fixing only	Add if fixed in repair
		350x450mm	450x600mm		
16-52	Each Supplying, fitting, fixing in position bath mirror approved quality fixed complete with rawl plug, rubber washer, screws/ clip & hard board backing etc.	336.00	446.00	51.60	12.90
		Supplied & Fixed		Fixing only	Add if fixed in repair
16-53	Supplying, fitting, fixing in position plastic seat cover with all fittings standard quality for WC European type	911.00		21.50	5.40
		Supplied & Fixed		Fixing only	Add if fixed in repair
		White	Coloured		
16-54	Each Supplying & fixing in position porcelain lid of cistern , BISF product standard quality (size 552x254mm) Model No. 401A.	548.00	678.00	13.80	3.50
		Supplied & Fixed		Fixing only	Add if fixed in repair
		CI Grating	CP Grating		
16-55	Supply and fixing of 10 cm dia grating heavy type standard quality	101.70	125.00	16.30	4.10

SECTION-16

SANITARY FITTINGS RATES

Item	Description					
		Supplied & Fixed	Fixing only	Add if fixed in repair		
	Each					
16-56	Supply and fixing of 100 mm box type PVC grating any colour fixed in position and made good the disturbed area all as per direction of Engineer in charge.	384.00	65.20	16.30		
16-57	Supply and fixing of 10 cm dia CI floor trap heavy type standard quality	576.00	40.80	10.20		
16-58	Glass shelf 5mm thick (125mm x 600 mm) with best quality CP railing & brackets fixed with rawl plug / wooden block screws etc.	271.00	20.40	5.10		
16-58A	Supply and fixing of Glass for shelf only 5mm thick (125mm x 600 mm)	92.00	20.40	5.10		
	Each	Supplied & Fixed		Fixing only	Add if fixed in repair	
		Single draining board	Double draining board			
16-59	Stainless steel kitchen sink with single / double draining board (Foreign made) with heavy type CI brackets, 31mm dia CP waste with brass coupling waste pipe & 12.50mm dia CP bib cock 200 mm long incl. making holes, wooden blocks, rawl plug, screw & making good the disturbed surface.	4157.00	7120.00	326.00	81.50	
				Supplied & Fixed	Fixing only	Add if fixed in repair
16-60	Supply & fixing in position CP bottle trap standard quality.			612.00	43.00	10.80

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SECTION-17

WATER SUPPLY AND PLUMBING

SPECIFICATIONS

General

1. All water mains and connections will be fully tested to 1.50 times working pressure and left drop dry before hunching and or trenches are filled in and put into commission.
2. In case sluice valves, water hydrants, etc. are supplied by the dept. responsibility for supply of rubber flanged rings and nut bolts are also responsibility of the departments, but lead and gasket will be provided by the working contractors and the whole fixed complete as ordered.
3. **GI Tubing (Water quality).** Water quality (medium) G I tubing to be screwed and socketed in accordance with the latest edition of B.S. 1387 of 1957. These are the specified brand : 1) National tubes Ltd. (NTL) 2) Other than NTL a. Bashundhara (Diamond), b. Union (Diamond), c. Asia or any other brands including foreign made approved by EinC's branch time to time. All tubing will be galvanized and screwed connections to be taper threaded and put together with red lead cement or havock and spun yarn or thread tape or any other approved suitable consumables. Pipes and joints are to be capable of withstanding 50 kg/sq. cm. hydraulic pressure. The whole of the pipes and fittings to be fully tested and left drop dry on completion and put to commission. The tenderer while quoting rates shall include work below and above ground either concealed or exposed as specified or ordered.

The outside diameter and wall thickness of GI. Tubing shall be as follows:

Ser. No.	Size/Bore of pipes	Maximum outside diameter	Wall thickness
1.	12.50mm	21.0mm	2.35mm
2.	18.70mm	26.4mm	2.35mm
3.	25.0mm	33.2mm	2.65mm
4.	37.5mm	47.8mm	2.90mm
5.	50.00mm	59.6mm	2.90mm
6.	75.00mm	87.9mm	3.25mm
7.	100.00mm	113.0mm	3.65mm NTL
	100.00mm	113.0mm	4-4.20mm other
8.	150.00mm	167.7 mm	4.85 mm
9.	200.00 mm	219.2 mm	4.78 mm

4. **MS Tubing (Steam Quality).** Steam tubing is to be capable of withstanding 40 kg/sq. cm hydraulic pressure. All connections to be made by welded joint. The whole of the pipes and fittings are to be fully tested and left drop dry on completion and put to commission. The tenderer while quoting rates shall include work below and above ground either concealed or exposed as specified or ordered.

5. **PVC / uPVC Tubing (Water quality).** Water quality PVC tubing to be connected in accordance with the latest engineering practice by approved suitable consumables. Pipes and joints are to be capable to withstand 9.19 kg/cm² hydraulic pressure for 75mm dia 15.30 kg/cm² hydraulic pressure for 100 and 150 mm dia tube. Tubing will be **Lira / Aziz / BRB / National Polymer / Zakaria Polymer / RFL / Adcon Polymer** or any other brands as approved from the time to time. The whole of the pipes and fittings to be fully tested and left drop dry on completion and put to commission. The tenderer while quoting rates shall include work below and above ground either concealed or exposed as specified or ordered.

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The outside diameter and wall thickness of PVC and uPVC. tubing shall be as follows:

Ser. No.	Size / Bore of pipes	Maximum outside diameter	Wall thickness	
			PVC	uPVC
1.	13 mm	17.3 mm	Gde E (2.2mm)	-
2.	16 mm	21.5 mm	T/S (2.5mm)	Gde E (3.2mm)
3.	20 mm	26.9 mm	T/S (3.5mm)	Gde E (3.5mm)
4.	25 mm	33.7 mm	T/S (4mm)	Gde E (4mm)
5.	30 mm	42.4 mm	T/S (4.5mm)	4.5 mm
6.	40 mm	48.4 mm	T/S (4.5mm)	4.5 mm
7.	50 mm	60.5 mm	4.5 mm	4.5 mm
8.	75 mm	89.1 mm	6 mm	6 mm
9.	100 mm	114.5 mm	7.5 mm	8 mm
10.	150 mm	168.5 mm	10.5 mm	12 mm
11.	200 mm	219.4 mm	14.0 mm	14 mm
12.	250 mm	275.0 mm	10 mm	18 mm
13.	300 mm	330 mm	-	12 mm

6. **Fittings for Water Supply.** All bib cocks, stop cocks, etc. are to conform to the specifications of approved manufacturers i.e. **Raja Metal, Nazma, Sharif, Gloria, MECO, S** or any other brand approved by E in C's branch from time to time as ordered by the Engineer-in-Charge. Washer for ball valves, stop cocks, bib cocks etc. shall of leather, best quality rubber or any other approved materials, but for hot water cocks special type vulcanized fiber washer shall be provided.

7. **Flexible Pipe Connection.** Plastic pipe connection, even and concentric bore as specified by the Engineer-in-Charge shall be provided.

8. **Soldered Joints.** For hot water pipes all joints shall be soldered and solder is to be composed of two parts of lead and one part of tin. Fine solder for tufted joints to be composed of one and half parts of tin and one part of lead. All joints to lead pipes, unions, ferrules etc. to be wiped soldered joints, unless specially ordered to be tufted.
9. **Water Meter.** Water meter up to 50 mm diameter will be completed with union joints to suit iron or lead pipes as necessary. Those exceeding 50 mm diameter will be completed with flange ends, rubber flanged rings, bolts and nuts and spigot socket connecting pieces, the whole to be fixed complete.
10. **Plumbers Brass Work.**
- a. The whole of the plumbers brass, copper, gun metal fitting works shall be of best quality and have approved manufacturer, as decided by the Engineer-in-charge. Fixture shall be fixed completely with necessary / subsidiary materials / consumables.
 - b. Bib/stop cocks either brass or gun metal as ordered are to be of working pressure up to 15 kg/cm².and confirm to B.S. 1010 or equivalent Bangladesh standard. All types washer shall be inter-changeable, confirm to B.S./Bangladesh standard dimensions, Shanks to be screwed. Cocks shall have stuffing boxes, loose valves and strong crutch handles lettered "HOT or COLD" for use with sanitary fittings. Valves to be faced with specially prepared leather for cold water and with good quality vulcanized fiber for hot water.
 - c. Pillar cocks as described but fitted with suitable handles lettered "HOT or COLD" have long screwed shanks with fly nuts.
 - d. Ball valves shall be of strong brass croyden or other approved pattern with copper or plastic ball having screwed sockets. The valves to be faced with vulcanized rubber.
 - e. Ferrules, unions, etc. shall be of heavy brass of approved quality, but when connected to lead pipes shall have tinned ends.
 - f. Gun metal may be used in place of brass at no extra price of ordered by the Engineer-in-Charge.

11. **Hot Water Boilers and Cylinders/Tanks.** All types of water tanks/boiler/heater will be hoisted to any height and fixed with all necessary circulating pipes, safety valves connections, flue pipes and hand hole covers including any necessary drilling and tapping. Fixing of boilers will also include any necessary brick work etc. required. Provisions and fixing of cantilevers or supports will be made unless otherwise specified.

Method of Measurement

12. **All pipe works generally shall be measured:**
- a. Net over all length of pipes and fittings as fixed except where otherwise indicated.
 - b. Fittings of unequal bores shall be classified according to the larger bore.

Clarification of Rates

13. **The rates, inter alia, include particularly:**
- a. Fixing complete in long or short lengths including running joints in the length.
 - b. Fixing of water tubing:
 - (1) Fixing to walls complete with clips, wall hooks and wooden plugs either surface or concealed.
 - (2) Making good surfaces disturbed.
 - (3) Forming all necessary holes and making good.
 - (4) The supply and fixing of all bedding, jointing and pointing materials and reinforcement as required.
 - c. Cut in new water mains.

- d. For plumbing generally:
 - (1) Jointing and fixing with and including supporting materials specified or necessary. Rates excepts pipes include for plugging walls where required, making good, provision and fixing of wall hooks, hold-fasts, clips etc.
 - (2) Turning water on or off as necessary.
 - (3) Taps, valves and other plumbers brass work with suitable washer complete.
 - (4) Jointing as specified or required.
 - (5) Taking off and re-fixing for inspections, measuring etc.

- 14. The contractor shall provide lead, gasket and necessary consumables as required.

SECTION-17

WATER SUPPLY AND PLUMBING

Item	Description	Rate in Taka			
		Materials and Labour	Fixing only	Add if fixed in r/r	Add if for wash and clean
	Trench excavation embankments	Rate is to be taken from item of work of section 1 (Earth work)			
<u>WATER TUBING (GI)</u>					
Per Metre					
<u>INTERNAL WORK (inside of house or room either concealed or surface)</u>					
17-1	Tubes "Water quality" (GI) with equal socket and laid complete in wall / floor groove or fixed to walls / ceiling / floors etc including clamps and plugs as required 12.50 mm dia. Brand National Tubes Ltd	258.00	80.90	40.40	15.00
17-2	- Ditto - but (Other than NTL brand)	251.00	80.90	40.40	15.00
17-3	- Ditto - but 18.70 mm dia (National Tubes Ltd)	348.00	89.00	44.50	15.00
17-4	- Ditto - but (Other than NTL brand)	309.00	89.00	44.50	15.00
17-5	- Ditto - but 25.00 mm dia (National Tubes Ltd)	464.00	98.80	49.40	19.70
17-6	- Ditto - but (Other than NTL brand)	379.00	98.80	49.40	19.70
<u>EXTERNAL WORK (outside of house or room / ground either concealed or surface)</u>					
17-7	Tubes "Water quality" (GI) with equal socket and laid complete in trenches (exclusive of excavation) or fixed to walls ceiling and floors etc including clamps and plugs as required 12.50 mm dia. (National Tubes Ltd)	236.00	59.30	29.70	15.00
17-8	- Ditto - but (Other than NTL brand)	229.00	59.30	29.70	15.00
17-9	- Ditto - but 18.70 mm dia (National Tubes Ltd)	334.00	74.10	37.10	15.00
17-10	- Ditto - but (Other than NTL brand)	294.00	74.10	37.10	15.00

SECTION-17

WATER SUPPLY AND PLUMBING

Item	Description	Rate in Taka			
		Materials and Labour	Fixing only	Add if fixed in r/r	Add if for wash and clean
	<u>EXTERNAL WORK</u> (outside of house or room / ground either concealed or surface)				
	Per Metre				
17-11	- Ditto - but 25.00 mm dia (National Tubes Ltd)	454.00	89.00	44.50	19.70
17-12	- Ditto - but (Other than NTL brand)	369.00	89.00	44.50	19.70
17-13	-Ditto-but 37.50 mm dia (National Tubes Ltd)	660.00	98.80	49.40	24.10
17-14	- Ditto - but (Other than NTL brand)	589.00	98.80	49.40	24.10
17-15	- Ditto- but 50.00 mm dia (National Tubes Ltd)	773.00	112.70	56.30	26.80
17-16	- Ditto - but (Other than NTL brand)	725.00	112.70	56.30	26.80
17-17	- Ditto - but 75.00 mm dia (National Tubes Ltd)	1207.00	125.20	62.60	36.10
17-18	- Ditto - but (Other than NTL brand)	1203.00	125.20	62.60	36.10
17-19	- Ditto - but 100.00 mm dia (National Tubes Ltd)	1927.00	141.00	70.40	39.70
17-20	- Ditto - but (Other than NTL brand) thickness 4 -4.20mm diamond	1713.00	141.00	70.40	39.70
17-21	- Ditto - but 150.00 mm dia (National Tubes Ltd)	0.00	152.00	75.80	52.20
17-22	- Ditto - but (Other than NTL brand)	3010.00	152.00	75.80	52.20
17-23	- Ditto - but 200.00 mm dia (National Tubes Ltd)	0.00	160.00	80.10	61.50
17-24	- Ditto - but (Other than NTL brand)	3975.00	160.00	80.10	61.50

SECTION-17

WATER SUPPLY AND PLUMBING

Item	Description	Rate in Taka				
		Materials and Labour	Fixing only	Add if fixed in r/r	Add if for wash and clean	
	<u>TUBES "STEAM QUALITY"</u>					
	Per Metre					
17-25	Tubes "Steam quality" with socket, weldless as IRS specification No. 3-31 and laid complete in trenches (exclusive of excavation) or fixed to walls ceiling and floors etc including clamps and plugs as required 12.50 mm dia.	211.00	98.80	49.40	0.00	
17-26	-Ditto-but 18.70 mm dia	267.00	98.80	49.40	0.00	
17-27	-Ditto-but 25.00 mm dia	335.00	98.80	49.40	0.00	
17-28	-Ditto-but 37.50 mm dia	549.00	162.00	80.90	0.00	
17-29	-Ditto-but 50.00 mm dia	650.00	162.00	80.90	0.00	
17-30	-Ditto-but 75.00 mm dia	984.00	178.00	89.00	0.00	
	<u>PVC / uPVC TUBES</u>					
	Per Metre					
		Materials and Labour (wall thickness of tubes will be the same as given in sec-29)				
		PVC	uPVC	Fixing only	Add if fixed in r/r	Add if for wash and clean
17-31	PVC / uPVC Tubing with all fittings (i.e. socket, bends elbows, tees, etc.) and laid in trenches or fixed to walls, ceiling, etc either surface or concealed including all consumables but exclusive trenches excavation 13 mm dia.	49.30	-	14.80	7.40	-
17-32	- Ditto – but 16.00 mm dia	57.20	57.20	17.80	8.90	-
17-33	- Ditto – but 20.00 mm dia	69.60	75.50	17.80	8.90	-
17-34	- Ditto – but 25.00 mm dia	83.80	98.00	19.80	9.90	-
17-35	- Ditto – but 30 mm dia.	111.10	126.50	19.80	9.90	-

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SECTION-17

WATER SUPPLY AND PLUMBING

Item	Description	Materials and Labour (wall thickness of tubes will be the same as given in sec-29)		Fixing only	Add if fixed in r/r	Add if for wash and clean	
		PVC	uPVC				
	<u>PVC / uPVC TUBES</u>						
	Per Metre						
17-36	- Ditto - but 40.00 mm dia	144.00	166.00	22.20	11.10	-	
17-37	- Ditto- but 50.00 mm dia	184.00	206.00	22.20	11.10	-	
17-38	- Ditto - but 75.00 mm dia	384.00	443.00	29.70	14.80	-	
17-39	- Ditto - but 100.00 mm dia	600.00	684.00	45.10	22.50	-	
17-40	- Ditto - but 150.00 mm dia	1315.00	1,480.00	68.20	34.10	-	
17-41	- Ditto - but 200.00 mm dia	1872.00	2,114.00	75.80	37.90	-	
	<u>PVC Coil Pipe</u>	25 mm	20 mm	-	-	-	
17-41 A	- Ditto - but Coil pipe approved brand	81.80	68.80	27.30	13.60	-	
	<u>SOCKET (GI)</u>	Rate in Taka					
	Each				Materials and Labour	Fixing only	Add if fixed in r/r
17-42	Socket GI 12.50mm				30.20	14.80	7.40
17-43	- Ditto - but 18.70 mm				32.60	14.80	7.40
17-44	- Ditto - but 25.00mm				48.20	19.80	9.90
17-45	- Ditto - but 37.50 mm				102.50	25.40	12.70
17-46	- Ditto - but 50.00mm				121.50	25.40	12.70
17-47	- Ditto - but 75.00mm				311.00	29.70	14.80
17-48	- Ditto - but 100.000mm				520.00	74.10	37.10
17-49	- Ditto - but 150.00mm				648.00	74.10	37.10
17-50	- Ditto - but 200.00mm				786.00	74.10	37.10

SECTION-17

WATER SUPPLY AND PLUMBING

Item	Description	Rate in Taka		
		Materials and Labour	Fixing only	Add if fixed in r/r
	<u>TEE EQUAL (GI)</u>			
	Each			
17-51	Tee equal 12.50 mm	33.80	14.80	7.40
17-52	- Ditto - but 18.70mm	76.50	14.80	7.40
17-53	- Ditto - but 25.00mm	115.80	19.80	9.90
17-54	- Ditto - but 37.50mm	127.40	25.40	12.70
17-55	- Ditto - but 50.00mm	172.50	25.40	12.70
17-56	- Ditto - but 75.00mm	540.00	29.70	14.80
17-57	- Ditto - but 100.00mm	775.00	74.10	37.10
17-58	- Ditto - but 150.00mm	2995.00	445.00	222.00
17-59	- Ditto - but 200.00mm	3,410.00	445.00	222.00
	<u>SOCKET REDUCING (GI)</u>			
	Each			
17-60	Socket reducing (GI) 18.70 mm x down to 12.50 mm	37.40	14.80	7.40
17-61	- Ditto - but 25.00 mm x down to 12.50 mm	50.40	14.80	7.40
17-62	- Ditto - but 37.50 mm x down to 12.50 mm	83.80	19.80	9.90
17-63	- Ditto - but 50.00 mm x down to 12.50 mm	127.00	25.40	12.70
17-64	- Ditto - but 75.00 mm x down to 12.50 mm	326.00	29.70	14.80
17-65	- Ditto - but 100.00 mm x down to 12.50 mm	738.00	74.10	37.10
17-66	- Ditto - but 150.00 mm x down to 12.50 mm	897.00	74.10	37.10

SECTION-17

WATER SUPPLY AND PLUMBING

Item	Description	Rate in Taka		
		Materials and Labour	Fixing only	Add if fixed in r/r
	<u>TEE REDUCING (GI)</u>			
	<u>Each</u>			
17-67	Tee reducing 18.70 mm x down to 12.50 mm	59.90	14.80	7.40
17-68	- Ditto - but 25.00 mm x down to 12.50 mm	78.90	14.80	7.40
17-69	- Ditto - but 37.50 mm x down to 12.50 mm	153.80	19.80	9.90
17-70	- Ditto - but 50.00 mm x down to 12.50 mm	178.00	25.40	12.70
17-71	- Ditto - but 75.00 mm x down to 12.50 mm	540.00	29.70	14.80
17-72	- Ditto - but 100.00 mm x down to 12.50 mm	999.00	178.00	89.00
17-73	- Ditto - but 150.00 mm x down to 12.50 mm	3102.00	297.00	148.00
	<u>ELBOW (GI)</u>			
	<u>Each</u>			
17-74	Elbow (GI) 12.50 mm	33.00	14.80	7.40
17-75	- Ditto - but 18.70 mm	40.90	14.80	7.40
17-76	- Ditto - but 25.00 mm	64.80	19.80	9.90
17-77	- Ditto - but 37.50 mm	108.00	25.40	12.70
17-78	- Ditto - but 50.00 mm	140.00	25.40	12.70
17-79	- Ditto - but 75.00 mm	610.00	74.10	37.10
17-80	- Ditto - but 100.00 mm	879.00	178.00	89.00
17-81	- Ditto - but 150.00 mm	2549.00	445.00	222.00

SECTION-17

WATER SUPPLY AND PLUMBING

Item	Description <u>BEND (MS / GI)</u>	Rate in Taka		
		Materials and Labour	Fixing only	Add if fixed in r/r
	Each			
17-82	Bend (GI) 12.50 mm	46.80	14.80	7.40
17-83	- Ditto - but 18.70 mm	59.90	14.80	7.40
17-84	- Ditto - but 25.00 mm	115.80	19.80	9.90
17-85	- Ditto - but 37.50 mm	191.00	25.40	12.70
17-86	- Ditto - but 50.00 mm	305.00	25.40	12.70
17-87	- Ditto - but 75.00 mm	1158.00	74.10	37.10
17-88	- Ditto - but 100.00 mm	2409.00	178.00	89.00
17-89	- Ditto - but 150.00 mm	5800.00	445.00	222.00
17-90	- Ditto - but 200.00 mm	6,138.00	445.00	222.00
17-87 A	Both end flanged type MS Bend 75 mm dia	1,134.00	178.00	89.00
17-88 A	Both end flanged type MS Bend 100 mm dia	2,134.00	222.00	111.00
17-89 A	Both end flanged type MS Bend 150 mm dia	4,759.00	297.00	148.00
	<u>ELBOW REDUCING(GI)</u>			
	Each			
17-91	Elbow reducing (GI) 18.70 mm x down to 12.50 mm size	50.40	14.80	7.40
17-92	- Ditto - but 25.00 mm x down to 12.50 mm	73.10	19.80	9.90
17-93	- Ditto - but 37.50 mm x down to 12.50 mm	108.00	25.40	12.70
17-94	- Ditto - but 50.00 mm x down to 12.50 mm	133.00	25.40	12.70
17-95	- Ditto - but 75.00 mm x down to 12.50 mm	613.00	74.10	37.10
17-96	- Ditto - but 100.00 mm x down to 12.50 mm	800.00	74.10	37.10
17-97	- Ditto - but 150.00 mm x down to 12.50 mm	2,556.00	445.00	222.00
17-98	- Ditto - but 200.00 mm x down to 12.50 mm	2,817.00	445.00	222.00

SECTION-17

WATER SUPPLY AND PLUMBING

Item	Description	Materials and Labour	Fixing only	Add if fixed in r/r
	<u>CHECK NUT (GI)</u>			
	Each			
17-99	Check nut (GI) 12.50 mm	26.70	8.90	4.40
17-100	Check nut (GI) 18.70 mm	35.60	11.90	5.90
17-101	Check nut (GI) 25.00 mm	48.00	14.80	7.40
17-102	Check nut (GI) 37.50 mm	70.80	19.80	9.90
17-103	Check nut (GI) 50.00 mm	82.30	25.40	12.70
17-104	Check nut (GI) 75.00 mm	221.00	29.70	14.80
17-105	Check nut (GI) 100.00 mm	353.00	35.60	17.80
17-106	Check nut (GI) 150.00 mm	518.00	59.30	29.70
17-107	Check nut (GI) 200.00 mm	652.00	59.30	29.70
	<u>UNION SOCKET / JOINT (GI)</u>			
	Each			
17-108	Union socket (GI) 12.50 mm	72.00	14.80	7.40
17-109	Union socket (GI) 18.70 mm	91.90	14.80	7.40
17-110	Union socket (GI) 25.00 mm	109.00	19.80	9.90
17-111	Union socket (GI) 37.50 mm	191.00	25.40	12.70
17-112	Union socket (GI) 50.00 mm	256.00	25.40	12.70
17-113	Union socket (GI) 75.00 mm	737.00	35.60	17.80
17-114	Union socket (GI) 100.00 mm	1193.00	44.50	22.20

SECTION-17

WATER SUPPLY AND PLUMBING

Item	Description	Rate in Taka		
		Materials and Labour	Fixing only	Add if fixed in r/r
	<u>NIPPLE (GI/MS)</u>			
	Each			
17-115	Nipple (GI/MS) 12.50 mm	27.90	14.80	7.40
17-116	Nipple (GI/MS) 18.70 mm	33.80	14.80	7.40
17-117	Nipple (GI/MS) 25.00 mm	40.90	14.80	7.40
17-118	Nipple (GI/MS) 37.50 mm	76.40	25.40	12.70
17-119	Nipple (GI/MS) 50.00 mm	121.00	25.40	12.70
17-120	Nipple (GI/MS) 75.00 mm	311.00	29.70	14.80
17-121	Nipple (GI/MS) 100.00 mm	604.00	29.70	14.80
	<u>PLUG (GI/MS)</u>			
	Each			
17-122	Plug (GI/MS) 12.50 mm	19.60	8.90	4.40
17-123	Plug (GI/MS) 18.70 mm	24.30	8.90	4.40
17-124	Plug (GI/MS) 25.00 mm	30.80	11.90	5.90
17-125	Plug (GI/MS) 37.50 mm	52.80	14.80	7.40
17-126	Plug (GI/MS) 50.00 mm	71.80	14.80	7.40

SECTION-17

WATER SUPPLY AND PLUMBING

Item	Description	Rate in Taka		
		Materials and Labour	Fixing only	Add if fixed in r/r
	<u>CAP (GI)</u>			
	Each			
17-127	Cap (GI) 37.50 mm	100.20	14.80	7.40
17-128	Cap (GI) 50.00 mm	107.30	14.80	7.40
17-129	Cap (GI) 75.00 mm	200.00	22.20	11.10
17-130	Cap (GI) 100.00 mm	259.00	29.70	14.80
17-131	Cap (GI) 150.00 mm	362.00	44.50	22.20
17-132	Cap (GI) 200.00 mm	543.00	44.50	22.20
	<u>SLUICE VALVE (water quality)</u>			
	Each			
17-133	Sluice valve water quality high pressure with iron wheel head complete with nuts, with flanges bolts and gasket 50 mm dia.	3781.00	222.00	111.20
17-134	-Ditto-but 75.00 mm dia	5672.00	222.00	111.20
17-135	-Ditto-but 100.00 mm dia	8000.00	297.00	148.00
17-136	-Ditto-but 150.00 mm dia	9809.00	445.00	222.00
17-137	-Ditto-but 200.00 mm dia	14067.00	563.00	282.00
17-134A	Butterfly valve water quality high pressure with handle complete incl nuts bolts, flanges and gasket, 75.00 mm dia	4145.00	225.00	113.00
17-135A	-Ditto-but 100.00 mm dia	5159.00	282.00	141.00
17-136A	-Ditto-but 150.00 mm dia	6560.00	376.00	188.00
17-137A	-Ditto-but 200.00 mm dia	9362.00	563.00	282.00

SLUICE VALVE PIT (RCC/Bricks)

All type valve pits as required as per design and specification

Rate is to be taken from various section of civil works as per requirement

SECTION-17

WATER SUPPLY AND PLUMBING

Item	Description	Rate in Taka		
		Materials and Labour	Fixing only	Add if fixed in r/r
	<u>NON-RETURN VALVE (water quality)</u>			
	Each			
17-138	Non return valve water quality high pressure both way complete with nut and bolts including gasket for 50.00 mm diameter.	3,090.00	222.00	111.20
17-139	-Ditto-but 75.00 mm dia	4,566.00	297.00	148.00
17-140	-Ditto-but 100.00 mm dia	5,990.00	297.00	148.00
17-141	-Ditto-but 150.00 mm dia	10,645.00	445.00	222.00
17-142	-Ditto-but 200.00 mm dia	14,203.00	563.00	282.00
	<u>DRESSER JOINT(CI)</u>			
	Each			
17-143	Dresser joint with bolts gasket etc complete 75.00 mm dia	535.00	89.00	44.50
17-144	-Ditto-but 100.00 mm dia	684.00	111.20	55.60
17-145	-Ditto-but 150.00 mm dia	976.00	148.00	74.10
17-146	-Ditto-but 200.00 mm dia	1,156.00	148.00	74.10
	<u>CHECK VALVE</u>			
	Each			
17-147	Check valve made of brass/gun metal water quality 25.00 mm dia	574.00	89.00	44.50
17-148	-Ditto-but 37.50 mm dia	829.00	89.00	44.50
17-149	-Ditto-but 50.00 mm dia	1,237.00	89.00	44.50
17-150	-Ditto-but 75.00 mm dia	2,983.00	178.00	89.00
17-151	-Ditto-but 100.00 mm dia	4,003.00	178.00	89.00

SECTION-17

WATER SUPPLY AND PLUMBING

Item	Description	Rate in Taka		
		Materials and Labour	Fixing only	Add if fixed in r/r
	<u>SHOWER BATH</u>			
	Each			
17-152	Shower bath CP complete best and approved quality for 12.50 mm dia pipe line	438.00	29.70	14.80
17-153	-Ditto-but 18.70 mm dia	468.00	29.70	14.80
17-154	-Ditto-but moving type 12.50 mm dia	695.00	29.70	14.80
17-155	-Ditto-but telephone type shower rose 12.50 mm dia	836.00	59.30	29.70
	<u>LEAD / PLASTIC CONNECTION</u>			
	Each			
17-156	Lead (plastic pipe) connection with brass union on both end 12.50 mm	124.00	22.20	11.10
17-157	- Ditto - but 18.70 mm	137.00	22.20	11.10
	<u>BIB COCKS - Brass bright</u>			
	Each			
17-158	Bib / push cock plug round way low pressure with galvanized iron, brass lever handle and shouldered lever handle and tail screwed for iron pipe and fixed size 12.50 mm.	255.00	26.10	13.00
17-159	- Ditto - but 18.70 mm	269.00	26.10	13.00

SECTION-17

WATER SUPPLY AND PLUMBING

Item	Description	Rate in Taka		
		Materials and Labour	Fixing only	Add if fixed in r/r
	<u>BIB COCKS - CP</u>			
	Each			
17-160	Bib cock chromium plated low pressure polished body special type approved quality size 12.50 mm, 100 mm long.	638.00	26.10	13.00
17-161	- Ditto - but 18.70 mm	728.00	26.10	13.00
17-162	Double knob mixture cock 12.50 mm for use in sink and fixed.	2583.00	32.60	16.30
17-163	- Ditto - but 18.70 mm	1602.00	32.60	16.30
17-164	Bib / push cock chromium plated high pressure polished body special type approved quality size 12.50 mm, 150 mm long.	823.00	32.60	16.30
17-165	- Ditto - but size 18.70 mm	965.00	32.60	16.30
17-166	- Ditto - but size 12.50 mm, 200 mm long.	874.00	32.60	16.30
17-167	- Ditto - but size 18.70 mm	962.00	32.60	16.30
17-168	Bib cock plastic (PVC) best and approved quality size 12.50 mm	54.00	16.30	8.20
17-169	- Ditto - but size 18.70 mm	66.10	18.60	9.30
	<u>STOP COCKS</u>			
	Each			
17-170	Stop cock brass bright high pressure screwed for iron pipe or for brass ferrule and fixed size 12.50mm	243.00	26.10	13.00
17-171	- Ditto - but size 18.70 mm	269.00	26.10	13.00
17-172	- Ditto - but size 25.00 mm	311.00	32.60	16.30
17-173	- Ditto - but chromium plated (concealed) 12.50 mm	944.00	32.60	16.30
17-174	- Ditto - but size 18.70 mm	1,091.00	32.60	16.30
17-175	- Ditto - but surface type 12.50 mm	658.00	32.60	16.30
17-176	- Ditto - but surface type 18.70 mm	680.00	32.60	16.30

SECTION-17

WATER SUPPLY AND PLUMBING

Item	Description	Rate in Taka			
		Materials and Labour	Fixing only	Add if fixed in r/r	
	<u>PILLAR COCKS</u>				
	Each				
17-177	Pillar cock special type screwed down high pressure lettered "HOT or COLD" complete with long crewed shanks, fly nuts etc as required approved quality size 12.50 mm single knob	659.00	32.60	16.30	
17-178	- Ditto - but double knob, mixer cock	1391.00	32.60	16.30	
	<u>VALVE PEET / GATE</u>				
	Each				
17-179	Valves peet (Gate) pattern strong gun metal high pressure "Full way " valves with iron wheel head screwed both ends for iron pipe and fixed complete size 12.50 mm	269.00	32.60	16.30	
17-180	- Ditto - but 18.70 mm	326.00	32.60	16.30	
17-181	- Ditto - but 25.00 mm	470.00	43.00	21.70	
17-182	- Ditto - but 37.50 mm	728.00	65.20	32.60	
17-183	- Ditto - but 50.00 mm	1,085.00	65.20	32.60	
17-184	- Ditto - but 75.00 mm	3,397.00	81.50	40.80	
17-185	- Ditto - but 100.00 mm	4,119.00	130.50	65.20	
	<u>PRESSURE REDUCING VALVE</u>				
	Each				
		Materials and Labour		Fixing only	Add if fixed in r/r
		Light Model RINOX2 working pressure 220 PSI	Heavy Model RINOX working pressure 360 PSI		
17-185A	Supply and fixing of pressure reducing valve (brand Itap , Italy) 37.5 mm dia	9098.00	9,710.00	148.00	74.10
17-185B	- Ditto - but 25 mm	4487.00	5,138.00	127.10	63.50
17-185C	- Ditto - but 20 mm	2335.00	4,531.00	111.20	55.60
17-185D	- Ditto - but 12.50 mm	1995.00	3,759.00	89.00	44.50

SECTION-17

WATER SUPPLY AND PLUMBING

Item	Description	Rate in Taka			
		Materials and Labour	Fixing only	Add if fixed in r/r	
	<u>VALVE FLOAT</u>				
	Each				
17-186	Float valves brass or gun metal as approved by the Engineer-in-Charge complete with all accessories as required with copper (crydon) ball size 12.50 mm	354.00	21.70	10.90	
17-187	- Ditto - but 18.70 mm	460.00	32.60	16.30	
17-188	- Ditto - but 25.00 mm	661.00	32.60	16.30	
17-189	- Ditto - but 37.50 mm	743.00	43.50	21.70	
17-190	- Ditto - but 50.00 mm	765.00	65.20	32.60	
17-191	- Ditto - but with plastic ball size 12.50 mm	264.00	21.70	10.90	
17-192	- Ditto - but 18.70 mm	326.00	32.60	16.30	
17-193	- Ditto - but 25.00 mm	441.00	32.60	16.30	
17-194	- Ditto - but 37.50 mm	580.00	43.50	21.70	
	<u>GI WATER TANK</u>				
	Each				
17-195	GI water tank 1600 litre capacity complete with top cover and locking arrangement made with 16 BG plain sheet as required.	12,609.00	1,779.00	356.00	118.50
17-196	- Ditto - made with 18 BG plain sheet	10,915.00	1,779.00	356.00	118.50
17-197	GI water tank 800 litre capacity complete with top cover and locking arrangement made with 16 BG plain sheet as required.	8,358.00	890.00	213.00	70.90

RESTRICTED

17-198	- Ditto - made with 18 BG plain sheet	6,912.00	890.00	213.00	70.90
17-199	Ferro cement water tank 1800 litre capacity complete with top cover and locking arrangement made by as per specification of latest Engineering practice.	11,232.00	1,661.00	1,245.00	554.00
17-199 A	PVC/Plastic food grade water Tank approved brand, capacity 300 Litre.	3,603.00	-	222.00	111.00
17-199 B	- Ditto - but 500 litre	5,856.00	-	222.00	111.00
17-199 C	- Ditto - but 1000 litre	11,564.00	-	297.00	149.00
17-199 D	- Ditto - but 1500 litre	17,346.00	-	445.00	222.50

SECTION-17

WATER SUPPLY AND PLUMBING

Item	Description	Rate in Taka		
<u>FLANGE JOINTS</u>				
	Pair	Materials and Labour	Fixing only	Add if fixed in r/r
17-200	Flanges GI complete with nut, bolts and washers for 50.00 mm dia GI water line approved quality	366.00	111.20	55.60
17-201	- Ditto - but 75.00 mm dia	748.00	111.20	55.60
17-202	- Ditto - but 100.00 mm dia	1245.00	178.00	89.00
17-203	- Ditto - but 150.00 mm dia	1483.00	178.00	89.00
17-204	- Ditto - but 200.00 mm dia	1,661.00	178.00	89.00
<u>HAND TUBE WELL</u>				
	Per Metre	Bore of pipe (in mm)		
		37.50 mm	50.00 mm	75.00 mm
17-205	Boring/sinking of hand tube well with required tools and equipment up to the depth of 30 meter as per direction of Engineer-in-Charge for installation of tube well (Tube well materials is to be paid separately)	107.00	120.30	133.70
17-206	-Ditto-but depth above 30 metre	117.00	132.00	147.10
17-207	Complete installation (Lowering) tube well fixture i.e. blind pipe, strainer (Filter) etc.	23.00	23.00	23.00
17-208	Successful removal (Lifting) complete tube well fixture.	59.30	59.30	59.30

SECTION-17

WATER SUPPLY AND PLUMBING

Item	Description			
	<u>HAND PUMP</u>			
	Each	Materials and Labour	Fixing only	Add if fixed in r/r
17-209	Hand pump no. 6 complete with all accessories i.e. handle, plunger, head, bucket, base etc approved quality. (Extra fittings if required for maintenance work only)	3,013.00	297.00	148.00
17-210	Handle for hand pump no. 6	480.00	32.60	16.30
17-211	Base plate for hand pump.	452.00	65.20	32.60
17-212	Plunger for hand pump	174.00	54.40	27.20
17-213	Head cover for hand pump	494.00	54.40	27.20
17-214	Seat valve for hand pump	48.60	26.10	13.00
17-215	Bucket for hand pump (leather)	45.10	26.10	13.00
	<u>STRAINER / FILTER (Hand tube well)</u>			
	Per Metre	Rate in Taka		
		Bore of pipe in mm		
		37.50 40 mm	50.00 mm	75.00 mm
			Fixing only	Add if fixed in r/r
17-216	Strainer / filter made with brand new GI water tubing best and approved quality brass / copper netting for tube well.	872.00	980.00	0.00
17-217	- Ditto - but PVC Strainer	153.00	189.00	0.00
	<u>PUMPING SET (Centrifugal)</u>	Rate in Taka		

SECTION-17

WATER SUPPLY AND PLUMBING

Item	Description	Materials and Labour	Fixing only	Add if fixed in r/r
	Each set			
17-218	Centrifugal pumping set single / multistage, as required suction / delivery mains, approved quality local/foreign made having capacity to lift, 60-100 LPM static head 15-18 metre single phase 220/230 volt 50 Hz. 0.75/1 HP motor, starter, check valve and connection cables including testing and commissioning.	51,632.00	549.00	274.00
17-219	- Ditto - but 100-120 LPM static head 15-18 metre single phase 220 / 230 volt 50 Hz. 1.5 HP motor, starter, check valve and connection cables including testing and commissioning.	62,573.00	652.00	326.00
17-220	- Ditto - but 200-300 LPM static head 15-18 metre single phase 220 / 230 volt 50 Hz. 2 HP motor , starter, check valve and connection cables including testing and commissioning.	69,788.00	979.00	489.00
17-221	Submersible type pumping set complete with electric Motor SP 220 Volts 50 Hz, Brand CALAMA having lifting head 78-45 M capacity 2.4-4.5 M3/hr, Model no. Gold 3/17+2 HP	86,130.00	979.00	489.00
17-222	Centrifugal pumping set (KSB/ Milnars) single/ multistage, as required suction/delivery mains, complete with local / foreign origin Horizontal Induction Motor electric 3 HP AC 3 ph 400 volt 50 hz 1400/2900 rpm, Star-Delta starter, Check valve connecting cables etc. having capacity to lift, 180-20 LPM of water against static head 25-55 metre including testing, trial run and commissioning.	56,050.00	1,305.00	652.00
17-223	- Ditto - but 300-400 LPM against working static water head not less than 25 metre complete with 1450 / 2900 RPM 5 HP 3 phase 380 / 400 volt 50 Hz. Horizontal induction Motor	59,909.00	2,016.00	1,008.00
17-224	Submersible type pumping set complete with electric motor 3 ph, Brand CALAMA, head 50 - 27 M capacity 12-20 M3 / hr , Model no Gold 5/13.2 + 5 HP.	97,308.00	2,016.00	1,008.00

SECTION-17

WATER SUPPLY AND PLUMBING

Item	Description	Rate in Taka		
		Materials and Labour	Fixing only	Add if fixed in r/r
	<u>PUMPING SET (Centrifugal)</u>			
	Each set			
17-225	Centrifugal pumping set with Motor electric complete as above item no. 17-218 but 600-750 LPM against working static water head not less than 25 metre complete with 1450 / 2900 RPM 7.5 HP 3 phase 380 / 400 volt 50 Hz. - Ditto -	77,284.00	2,254.00	1,127.00
17-226	Centrifugal pumping set with Motor electric complete as 900-1150 LPM against working static water head not less than 35 metre complete with 1450 / 2900 RPM 10 HP 3 phase 380/400 volt 50 Hz. - Ditto -	83,344.00	2,254.00	1,127.00
17-227	KSB (India) Brand, Centrifugal Pump only, 1450 rpm Model Mega G 40-315, rated HP 10, Head 40 - 20 M, Discharge "Q" 9 - 31 m ³ /hr, Suction 65 mm Delivery 40 mm Complete.	60,123.00	1,127.00	563.00
17-228	Centrifugal pumping set having capacity 1100-1350 LPM against working static water head not less than 35 metre complete with 1450 / 2900 RPM 15 HP 3 phase 380 / 400 volt 50 Hz Horizontal Induction Motor.	100,264.00	2,254.00	1,127.00
17-229	KSB (India) Brand, Centrifugal Pump only, 2900 rpm Model Mega G 40-200, rated HP 15/16, Head 60 - 24 M, Discharge "Q" 16 - 62 m ³ /hr, Suction 65 mm Delivery 40 mm Complete.	43,910.00	1,364.00	682.00
17-230	Centrifugal pumping set having capacity 1300-1500 LPM against working static water head not less than 35 metre complete with 1450 / 2900 RPM 20 HP 3 phase 380 / 400 volt 50 Hz Horizontal Induction Motor.	107,699.00	2,254.00	1,127.00
17-231	Centrifugal Pumping set KSB (India) 1450 rpm model Mega GM 125-250, rated HP 25, Head 23-9 metre, Discharge "Q" 100-350 m ³ / hr, Suction 150 mm Delivery 125 mm with Horizontal Induction Electric Motor AC 400 volt, 3 phase, 50 Hz, Brand GEC / China / Crompton including Star-Delta auto starter, Check Valve, connecting cables, lugs, flexible Pipe etc. complete installation and Testing commissioning.	165,639.00	3,084.00	1,542.00

SECTION-17

WATER SUPPLY AND PLUMBING

Item	Description	Materials and Labour	Fixing only	Add if fixed in r/r
	Each set			
17-232	Centrifugal Pumping set KSB (India) 1450 rpm model Mega GM 80-315, rated HP 30, Head 40-23 metre, Discharge "Q" 50-160 m ³ / hr, Suction 125 mm Delivery 80 mm with Horizontal Induction Electric Motor AC 400 volt, 3 phase, 50 Hz, Brand GEC / China / Crompton including Star-Delta auto starter, Check Valve, connecting cables, lugs, flexible Pipe etc. complete installation and Testing commissioning.	191,519.00	4,211.00	2,105.00
17-233	Centrifugal Pumping set KSB (India) 1450 rpm model Mega GM 80-400, rated HP 40/42, Head 56-30 metre, Discharge "Q" 60-170 m ³ / hr, Suction 125 mm Delivery 80 mm with Horizontal Induction Electric Motor AC 400 volt, 3 phase, 50 Hz, Brand GEC / China / Crompton including Star-Delta auto starter, Check Valve, connecting cables, lugs, flexible Pipe etc. complete installation and Testing commissioning.	207,819.00	4,448.00	2,224.00

SUBMERSIBLE PUMPING SET (Deep tube well)

Rate in Taka

Item	Description	Rate in Taka				
		Materials and Labour	Installation / Fixing	Add to if removal	Add to for cleaning / checking	Add / deduct beyond 30 metre column length (Rate per metre)
	Each Set					
17-234	Bore well type submersible pumping set having capacity 12-18 M³ against water head 110 - 30 metre at 2900 rpm powered with 3 ph , 50 hz, 400 volt, AC primeover (Motor) 6 HP complete as per manufacturer's specification including 50 mm dia column / riser pipe 30 metre in length with starter, marine cable, butter fly valve etc. as required size and capacity. Brand : KSB (India), Model : CORA 100-18/14 or 100-7c/22 + UMA/UMT 100-4.5/22	205,444.00	1,933.00	967.00	1,450.00	1,408.00

SECTION-17

WATER SUPPLY AND PLUMBING

Item	Description	Rate in Taka				
		Materials and Labour	Installation / Fixing	Add to if removal	Add to for cleaning / checking	Add / deduct beyond 30 metre column length (Rate per metre)
	<u>SUBMERSIBLE PUMPING SET (Deep tube well)</u>					
	Each Set					
17-235	Bore well type submersible pumping set, size as per manufacturer, head 70-15M capacity 0.60-0.90 cusec , Brand KSB (India) , Model no BPD-242/7+ UMA 150-8/22 or BPD-273/6+ UMA 150-8/22 or BPD-302/4+ UMA 150-8/22 or BPH-333/2+ UMA 150-8/22 , or any other model appropriate for 10 HP (3 ph)	174,211.00	2,171.00	1,085.00	1,628.00	-
17-236	Bore well type submersible pumping set, size as per manufacturer, head 20-48M capacity 0.45-0.10 cusec , Brand KSB (India) , Model no BPD-273/8+ UMA 150-13/21 or BPD-302/6+ UMA 150-13/21 or BPD-302/7+ UMA 150-13/21 or BPH-333/2+ UMA 150-13/22 or BPH-384/2+ UMA 150-13/21 , 15 HP (3 ph)	220,112.00	2,171.00	1,085.00	1,628.00	-
17-237	Bore well type submersible pumping set, size as per manufacturer, capacity 0.15-1.10 cusec against water head 80-24 metre, as per manufacturer, 20 HP Brand : KSB (India), Model : BPD-302/8 + UMA 150 -21/21 or BPD-273/10 + UMA 150 -21/21 or BPH-333/3 + UMA 150 -21/21 or BPH-333/3 + HB - 303 or BPH 384/2 + HB 303	245,227.00	3,060.00	1,530.00	2,295.00	-

SECTION-17

WATER SUPPLY AND PLUMBING

Item	Description	Rate in Taka				
		Materials and Labour	Installation / Fixing	Add to if removal	Add to for cleaning / checking	Add / deduct beyond 30 metre column length (Rate per metre)
	SUBMERSIBLE PUMPING SET (Deep tube well)					
	Each Set					
17-238	Bore well type submersible pumping set, size as per manufacturer, capacity 0.10-1.10 cusec against water head 125-30 metre, size as per manufacturer, Brand : KSB (India), Model : BPD 273/12 + UMA 150-24/21 or BPD 302/10 + UMA 150-24/21 or BPH 333/4 + UMA 150-24/21 or BPH 384/2 + HB-253 or BPH 384/3 + UMA 150-24/21 or other model for 25 HP	289,853.00	3,060.00	1,530.00	2,295.00	-
17-239	Bore well type submersible pumping set, size as per manufacturer, capacity 0.4-1.95 cusec against water head 75-15 metre, Brand : KSB (India), Model : BPH 333/4 + HB 303 or BPN 274/2 + HB 303 or BPH 425/1 + HB-303 or BPH 384/3 + HB 303 or other model for 30 HP	361,255.00	3,060.00	1,530.00	2,295.00	-
17-240	Bore well type submersible pumping set, size as per manufacturer, capacity 0.4-1.80 cusec against water head 115-30 metre, Brand : KSB (India), Model : BPH 333/5 + HB 413 or BPN 373/3 + HB 413 or BPN 394/2 + HB-413 or BPH 384/4 + HB 413 or other model for 40/41 HP	443,746.00	3,950.00	1,975.00	2,962.00	-

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WATER SUPPLY AND PLUMBING

Item	Description	Rate in Taka				
		Materials and Labour	Installation / Fixing	Add to if removal	Add to for cleaning / checking	Add / deduct beyond 30 metre column length (Rate per metre)
	<u>SUBMERSIBLE PUMPING SET</u> <u>(Deep tube well)</u>					
	Each Set					
17-241	Bore well type submersible pumping set, size as per manufacturer, capacity 0.6-1.4 cusec against water head 120-45 metre, with prime over (Motor) 50/52 HP Brand : KSB (India), Model : BPH 384/4 + HB 523 or BPH 384/5 + HB 523 or BPH 384/3 + NB 523	584,000.00	3,950.00	1,975.00	2,962.00	-
17-242	Bore well type submersible pumping set, size as per manufacturer, capacity 0.65-1.4 cusec against water head 103 - 60 metre, with prime over (Motor) 60/62 HP Brand : KSB (India), Model : BPN 374/4 + NB 623 or BPN 425/2 + NB 623	642,651.00	3,950.00	1,975.00	2,962.00	-
17-243	Bore well type submersible pumping set, size as per manufacturer, capacity 0.65- 1.4 cusec against water head 103 - 60 metre, with primeover (Motor) 75 HP Brand : KSB (India), Model : BPN 374/4 + NB 753 or BPN 425/2 + NB 753	736,624.00	6,120.00	3,060.00	4,590.00	-

SECTION-17

WATER SUPPLY AND PLUMBING

Item Description

TURBINE PUMPING SET (Deep tube well)

Deep tube well turbine pumping set, suitable for the tube well as per actual requirement consisting of the following items :

		Rate in Taka				
Item	Description	Unit	Materials and Labour	Installation/ Fixing	Add to if removal	Add to for cleaning / checking
17-244	Multi stage pump set, workable against static water head 25 to 65 meter at 1450 RPM, having 100 / 75 mm dia 450-600 liter per minute capacity Model B7B	Per Stage	15,862.00	180.00	108.00	72.00
17-245	125 / 125 mm dia 900-1200 liter per minute capacity Model B8B	Per Stage	22,001.00	216.00	129.60	86.40
17-246	150 / 125 mm dia 1200-1350 liter per minute capacity Model B8D	Per Stage	21,596.00	216.00	129.60	86.40
17-247	150 / 125 mm dia 1500- 1700 liter per minute capacity B10B	Per Stage	36,279.00	370.00	222.00	148.00
17-248	150 / 125 mm dia 2475 - 2625 liter per minute capacity B10D Column pipe 3.04 metre in length, wall thickness as spd complete with column shaft, bush and socket etc:	Per Stage	34,998.00	370.00	222.00	148.00
17-249	75 mm dia 4 mm thick	Metre	7936.00	119.80	71.88	47.92
17-250	100 mm dia 4.5 mm thick	Metre	10166.00	119.80	71.88	47.92
17-251	125 mm dia 4,85 mm thick	Metre	12538.00	120.00	71.90	48.00
17-252	150 mm dia 4.85 mm thick	Metre	13443.00	123.30	74.00	49.30
17-253	200 mm dia 7.04 mm thick	Metre	19816.00	126.70	76.00	50.70

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WATER SUPPLY AND PLUMBING

Item	Description					
17-253A	Both ends flanged type MS column pipe API-5L grade-B with special cable groove, nut bolts , gasket including anti corrosive painting:size : 150 mm dia	Metre	1554.00	144.00	72.00	-
17-253 B	-Ditto- but 100 mm dia	Metre	994.00	144.00	72.00	-
17-253 C	-Ditto- but 75 mm dia	Metre	755.00	114.00	57.00	-
17-253 D	-Ditto- but 50 mm dia	Metre	580.00	114.00	57.00	-
	Discharge head complete with priming funnel and pressure meter gauge, for the pumping set of :	Unit	Materials and Labour	Installation / Fixing	Add to if removal	Add to for cleaning / checking
17-254	100 / 75 mm dia	Each	27532.00	1438.00	862.80	575.20
17-255	100 mm dia	Each	28125.00	1438.00	862.80	575.20
17-256	125 mm dia	Each	31090.00	1438.00	862.80	575.20
17-257	150 mm dia	Each	31724.00	1479.00	887.00	592.00
17-258	200 mm dia	Each	37103.00	1521.00	913.00	608.00

Vertical hollow shaft Induction Motor AC 380/400 volt, 50 Hz 3 phase, 1450/2900 RPM suitable for the driving of selected pumping set with the above mentioned accessories as required including starter, and connecting cables having the capacity of

			SIEMENS	GEC / Other brand	Installation / Fixing	Add to if removal	Add for cleaning / checking
17-259	10 HP	161,373.00	53,618.00	1,438.00	719.00	863.00	
17-260	15 HP	163,203.00	64,013.00	1,438.00	719.00	863.00	
17-261	20 HP	190,843.00	71,595.00	1,604.00	802.00	962.00	
17-262	30 HP	305,321.00	109231.00	2156.00	1078.00	1294.00	
17-263	40 HP	372,505.00	159967.00	2156.00	1078.00	1294.00	
17-264	50 HP	449,310.00	0.00	2329.00	1165.00	1397.00	
17-265	60 HP	478,881.00	0.00	2329.00	1165.00	1397.00	

SECTION-17

WATER SUPPLY AND PLUMBING

Item	Description	Rate in Taka	
	<u>DEEP TUBE WELL</u>		
	Per Job		
17-266	Transportation / Mobilization of boring equipments, plants and materials to and from work site as required.		86,033.00
	<u>TEST TUBE WELL</u>		
	Rate Per Metre		
		Test tube well Boring charges	Lowering of 37.50 mm dia GI tube for collection of water
			Tubewell fixture (Per metre) Water Test (Per sample)
17-267	Excavation / boring of exploratory / test bore hole with 37.50mm dia. GI tubing upto the depth as per order of Engineer-in-charge and collection of fresh water including laboratory test.	243.00	132.30 8,896.00
	<u>DEEP TUBE WELL</u>		
	Per Metre / per cu.m		
	Drilling / excavation of bore hole minimum 500mm diameter either by rotary or percussion or any other approved engineering method upto a required and designed depth for the installation of 400x200 / 350x150 / 300x150 / 300x100 / 250x75 mm production deep tube well.	Bore dia up to 750 mm (Rate per Metre)	Bore dia over 750 mm (Rate per cu.m)
17-268	For 0-50 metre depth	2,041.00	4,622.00
17-269	For above 50 to 125 metre depth	2,226.00	5,041.00
17-270	For above 125 to 200 metre depth	2,404.00	5,444.00
17-271	For above 200 metre up to the required depth	2,572.00	5,825.00
	Supply at site MS/GI bail plug 1.5 M length		Rate in Taka
17-272	200 mm diameter		4,241.00
17-273	150 mm diameter		3,171.00
17-274	100 mm diameter		2,692.00

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17-275

75 mm diameter

1,903.00

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SECTION-17

WATER SUPPLY AND PLUMBING

Item	Description	Rate in Taka			
		Stainless Steel Strainer (SS)	Brass Strainer (BS)	uPVC Strainer having wall thickness as specified in section-29	
<u>DEEP TUBE WELL</u>					
Per Metre					
Supply at site strainer foreign origin, having minimum wall thickness 2.75 mm					
17-276	200 mm diameter	19,870.00	-	3,042.00	-
17-277	150 mm diameter	14,945.00	-	2,135.00	-
17-278	100 mm diameter	9,785.00	-	1,008.00	-
17-279	75 mm diameter	7,591.00	-	652.00	-
Per Metre					
Supply and installation of extra MS casing / housing pipe having 4 mm wall thickness, 600 mm dia required for tube well as per drawing design.		5,480.00			
17-281	- Ditto - but 650 mm diameter	-	6,083.00	-	-
17-282	- Ditto - but 700 mm diameter	-	7,283.00	-	-
17-283	Supply at site deep tube well casing / housing pipe having 8 mm wall thickness approved quality, 400 mm dia.	-	7,789.00	-	-
17-284	Supply at site deep tube well casing / housing pipe having 10 mm wall thickness approved quality, 400 mm dia.	-	9,176.00	-	-
17-285	Supply at site deep tube well casing / housing pipe having 6.35 mm wall thickness approved quality, 400 mm dia.	5,930.00			
17-286	350 mm diameter	5,337.00			
17-287	300 mm diameter	4,744.00			
17-287	250 mm diameter	4,033.00			
A	GI blind pipe	Rate is to be taken from section 25 or previous item duly			

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| deducting fixing charge

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SECTION-17

WATER SUPPLY AND PLUMBING

Item	Description	Rate in Taka
	<u>DEEP TUBE WELL</u>	
	Each	
	Supply at site MS reducer having wall thickness 6.35mm as required length.	
17-288	400x200 mm diameter	7,650.00
17-289	350x150 mm diameter	6,850.00
17-290	300x150 mm diameter	5,100.00
17-291	300x100 mm diameter	4,460.00
17-292	250x75 mm diameter	3,570.00
17-293	Supply at site centraliser made by 12.50mm round bar.	640.00
	Per cubic metre	
17-294	Supply at site well graded gravels approved quality for filling / surrounding the tube well	3,131.00
	Per Metre	
17-295	Complete installation of deep tube well fixture i.e. housing, blind pipe, bail plug, strainer, reducer gravel etc. including welding both SS and MS.	541.00
	Per Job	
17-296	Cleaning and developing of tube well by Air lifting system or any other approved method till the water is found free from sand but not less than 50 hours continuous pumping including measuring of water table, yield, draw down etc. and preparation of 3 copies test and development result for records.	29,231.00
17-297	Water quality test (4x sample) from any Govt. laboratory and obtained fitness certificate from authorised Govt. authorities.	29,059.00
-	Electric connection including control and protective devices	Rate is to be taken from similar item of works of sec 21 & 22
-	Fire protection equipments	Rate is to be taken from similar item of works of sec 21 & 22

SECTION-17

WATER SUPPLY AND PLUMBING

Item	Description	Rate in Taka		
		Materials and Labour	Fixing only	Add if fixed in r/r
	<u>Starter for Motor</u>			
	Each			
17-298	Star delta push button starter with automatic tripping arrangement suitable for the control and operation 380 / 400 volt, 50 Hz, 3 phase, induction motor having capacity upto 7.5 - 15 HP	5,035.00	359.00	179.50
17-299	-Ditto- but 20 to 30 HP	5,715.00	401.00	201.00
17-300	-Ditto- but 40 to 50 HP	7,426.00	582.00	291.00
17-301	-Ditto- but above 50 HP	9,083.00	582.00	291.00
17-302	Panel Box (275x125x175 mm) type Auto Starter Complete with 1xMCB, 1xAmmeter with ASS, 1xVoltmeter with VSS, 3xPh indicator, 1xpneumatic timer, 2xPush button, indicator lamp for ON/TRIP, Thermal over load relay for protection against phase failure, phase reverse and dry run complete with cables and lugs having rating for 5 / 6 HP motor foreign made	44,748.00	611.00	306.00
17-303	- Ditto - but (size 450x350x200) for 30 HP motor	88,749.00	878.00	439.00
17-304	- Ditto - but (575x500x200 mm) for 41 HP motor	105,261.00	1,085.00	543.00
17-305	- Ditto - but (625x500x200 mm) for 52 HP motor	121,390.00	1,085.00	543.00
17-306	- Ditto - but (625x500x200 mm) for 62/75 HP motor	154,350.00	1,085.00	543.00
17-306 A	Submersible marine cable flat 3 core size 4mm suitable for the operation of 380 / 400 volt, 50 Hz, 3 phase, submersible motor.	472.00	13.00	6.00
17-306 B	- Ditto - but size 6 mm	714.00	13.00	6.00
17-306 C	- Ditto - but size 10 mm	1,097.00	13.00	6.00
17-306 D	- Ditto - but size 16 mm	1,624.00	18.00	9.00
17-306 E	- Ditto - but size 25 mm	2,084.00	18.00	9.00

SECTION-17

WATER SUPPLY AND PLUMBING

Item	Description	Rate in Taka		
		Materials and Labour	Fixing only	Add if fixed in r/r
	<u>Water heater (Geyser)</u>			
	Each			
17-307	Water heater electric, AC 220/230 volt, 50 Hz, having capacity upto 45 litre complete local made, approved quality.	8,454.00	549.00	274.00
17-308	Water heater electric, AC 220/230 volt, 50 Hz, having capacity 45.00 to 70.00 litre local made, approved quality.	9,832.00	652.00	326.00
17-309	-Ditto-but 70.00 to 90.00 litre	12,973.00	756.00	378.00
17-310	-Ditto-but gas operated	19,156.00	756.00	378.00
17-311	Water heater 1000/2000 watt (USA/Italy) electric, AC 220/230 volt, 50 Hz, having capacity upto 90.00 to 115.00 litre local made, approved quality.	15,434.00	964.00	482.00
17-312	-Ditto-but gas operated	23,025.00	964.00	482.00
17-313	-Ditto-but 115.00 to 140.00 litre	25,293.00	1,067.00	534.00
17-314	-Ditto-but 140.00 to 230.00 litre	26,628.00	1,127.00	563.00
17-315	Pressure relief valve (Water heater)	1,607.00	65.00	33.00
17-316	Gas thermocouple (Water heater)	2,082.00	65.00	32.60
17-317	Element for Water heater	2,360.00	65.20	32.60
17-318	Supply and fixing of angle stop cock 12.5 mm CP local made best qty.	674.00	43.50	21.70
17-319	Supply and fixing of push / commode hand shower 12.5 mm for toilet use complete in all respect approved brand	615.00	81.50	40.80

SECTION-18

DRAINAGE AND SEPTIC TANKS

SPECIFICATIONS

General

1. **Cement Concrete Pipe (Cylindrical)**. These shall be of an approved manufacturer. The un-reinforced pipes are suitable for sub-soil drainage and the reinforced (non-pressure) pipes are suitable for drainage, sewers, irrigation and culverts. Pipes for sub-soil drainage shall be laid dry. The pipes shall not be more than 6 x lengths of pipes to the required gradient, fill in the groove at the end of each pipe with hemp soaked in molten bitumen shall be of size sufficient to fill the groove while pressed. These 6 x lengths of pipes should be pressed tight by means of jack and the loose collars. Slided over joints of two pipes and kept concentric by means of few wooden wedges. The cement mortar 1:1 shall then be pressed into the joints and the edges finished off a beveled joint. Laying and joining shall be carried out in sets of not more than 6 pipes each time.

2. **Cast Iron Soil Waste and Ventilating Pipes**.

a. Pipes to be as BS No.416 and to be of "Extra Heavy" grade for soil pipes "Heavy" grade for waste pipes less than 75 mm. dia and medium grade for ventilating and waste pipe 75 mm dia and over made of **MAANCO/ NISSAN/SNC SUPER/ NANAKHAI** or any other approved brands.

b. Pipes without ears shall be secured with holder bats let into equal and pinned and those with ears will be secured to wall with strong galvanized wrought iron pipe nail passing 75 mm tin to wall through distance pieces all as described below.

c. Pipes to be in 0.60,1.20 and 1.80 metre lengths socket jointed with or without ears for fixing as ordered and coated inside and outside with DR. ANGUS SMITHS composition before leaving the manufacturer's works.

d. Pipes to be blocked out from walls at least 25mm and securely fixed by means of short pieces of 19 mm G.I pipe and stout pipe nail or by standard pattern malleable cast iron Lewis ended holder bats let into walls. The two portions of the holder bats to be secured with and including gunmetal bolts and nuts. Pipe nails to be stout wrought iron and after allowing for thickness of distance pieces, to run not less than 75 mm in to the wall.

- e. All pipes and connections to be jointed with molten lead well caulked. Joints in inverted and difficult positions, however, may be made with lead wool well caulked. Access doors to be jointed with oil dressed leather end and secured with gunmetal set screws.
3. **PVC Pipe.** PVC (non pressure type) down pipe to be connected in accordance with the latest engineering practice. Pipe will be **Lira / Aziz / Zakaria / Rina (BRB) / Adcon Polymer** or any other approved brands and to be connected by approved suitable consumables.
4. **U PVC Pipes.** U PVC pipe shall be product of any approved manufacturer and to be connected in accordance with the latest engineering practices
5. **Cast Iron Drains.** Drains passing under building and under roads railways etc. where damage from traffic is feared, are to be laid with cast-iron spigot and socket drain pipes in accordance with the lasted edition of BS No. 437 with bends junctions and other fittings in accordance with the latest edition of BS No. 78 all as described in water supply section. All cast iron pipes and fittings are to be coated outside and with DR. ANGUS SMITHS solution by dipping at the manufacturer's works. Pipes to be jointed with molten lead and picked gasket well caulked.
6. **Concrete for Cover Benching etc.** The concrete for benching and for pre-cast covers, to manholes etc, is to be composed of one part of cement to two parts of sand and four parts of 19 mm graded aggregate. The concrete in main and branch benching to be trowelled up to a smooth hard face with a steel trowel, additional cement being added as required, benching to be brought up to an average height of 25 mm above main, invert level, so as to ensure quick falls forwards the various channels.
7. **Drain Pipes Connections Accessories etc.** These are to be salt glazed ware, with plain spigot and socket joints, thoroughly burnt throughout the whole thickness of clean and even texture, free from air blows fire blister cracks and other imperfections and the surfaces, both external and internal to be smooth and perfectly glazed. All joints and connections are to be carefully made, the spigot are to be wound with one turn of 13 mm tarred yarn and accurately fitted to and concentric with the sockets and to be solidly bedded and jointed in cement mortar (1:1) and finished with a bold collar in cement mortar on the outside of each joint. Each joint to be carefully wiped clean in-side as the works proceeds.

8. **Foundation Concretes.** Concrete in foundations under drains, manholes traps, gullies etc. to be either cement concrete (1:3:6) or (1:4:8) as may be ordered. The composition, mixing and laying of concrete to conform to the conditions laid down in " CONCRETE SECTION"
9. **Foundation Beds to Drains.** The concrete beds to be 100mm thick under collars of the pipes add 300 mm wider than the internal diameter of the pipes after the pipes are laid and tested they are to be hunched with similar concrete. The hunching to extended from the edge of the foundation concrete to at least half -way up the side of the pipes and include packing solid under the pipes.
10. **Gullies.** To be strong salt glazed ware, conforming to the specification laid down for salt glazed ware pipes connections etc. These are to be set truly level and jointed to drain pipes in cement mortar (1:1) Gullies to be encased in cement concrete (1:3:6). Cleaning eyes are to be provided to gullies when the distance between the gully and the manhole exceeds 6 metre.
11. **Galvanizing.** Galvanizing shall be a thorough even coat of zinc, free from stains, bare spots or defects.
12. **Inlet Ventilators.** let ventilators for drain ventilation shall be of inlet type of galvanized iron with mica valve to be fixed to vertical or horizontal pipes with run lead or lead wool joints.
13. **Intercepting Chambers.** To be as described for manholes but to include a salt-glazed intercepting trap of approved pattern with cleaning arm having an approved stopper fitted with a galvanized iron lever and chain complete. This trap to be carefully bedded in concrete on the discharge side of the manhole and set so as to ensure that the normal "drop" from inlet to outlet is preserved.
14. **Laying Drains.** Every line of drain shall be accurately laid and be perfectly true to line and gradient from point to point. Every main drain shall be true from manhole to manhole and any change in direction shall take place inside the manhole by the use of curved main channels similar changes in internal diameter of drain shall be made in manholes by the use of tapers channels, straight or curved as necessary and not by the use of tapers or bend in the line of drain outside the manhole.

15. **Manholes.**

- a. Excavate in any soil, make good and dispose of surplus spoil.
- b. Foundations shall be 150 mm thick, projecting 150 mm beyond the outside of the walls and to be of C.C. 1:3:6.
- c. Bolsters around manhole covers shall be of 150 mm x 180 mm of C.C. 1:2:4.
- d. Benching shall be of cement concrete (1:3:6) with main and branch channels formed therein rising 45 degree from channel edges and all surfaces trowelled smooth.
- e. Cover slabs shall be of concrete bedded in cement mortar :
- f. 75 mm thick cement concrete 1:2:4 reinforced with 10 mm dia bars at 150 mm centers both ways and surfaces and edges finished fair.
- g. Cover and frame shall be supplied by the contractor will be bedded in mortar, bolstered round with 150 mm x 150 mm cement concrete 1:2:4 and to be paid under relevant item.
- h. Mortar shall be cement mortar 1:4.
- j. Walls shall be :
 - (1) Burnt brick works in CM, 250 mm thick.
 - (2) Approved rubble stone in CM, 300 mm thick.
 - (3) Solid concrete blocks 1:2:4 in CM, 200 mm thick.
 - (4) Poured concrete 1:3:6, 225 mm thick.
 - (5) 150mm thick RCC 1:2:4 with 8 mm dia bar, at n.exc. 150 mm centers both ways.
- k. Internal faces of wall shall be hacked for plaster key, cleaned, dubbed out with mortar and rendered not less than 12 mm thick with CM 1:4. If rock is encountered in Excavation of the manholes, prior orders of the Engineer in Charge shall be obtained before starting excavation. Extra payment for rock shall be made under Excavation Section and the cost of excavation shall be deducted at the av. rate of ordinary and hard soil rates.

16. **Testing.** All new drains, manholes, etc shall be tested before hunching with concrete or the trenches are filled in.

a. All drains are to be tested by filling with water having a head of, not less than 0.60 meter and not more than 1.80 metre above the top of the lowest pipe in the length to be tested.

b. Manholes and branch drains discharging into manholes shall be tested independently. All vent pipes and soil pipes shall be tested by a smoke test.

c. The contractor is to be responsible for any disturbance of the drains, etc, after have passed the test satisfactorily . After drains are laid, an interval of at least 48 hours must elapse before testing to allow sufficient time for the joints to set.

d. For smoke testing the smoke machine and necessary chemicals or smoke rockets to be provided by the contractor. The tests shall be carried out in such a manner as the Engineer –in- Charge shall direct to his satisfaction.

17. **Wire Guard.** To be of stout wire, galvanized after manufacture, dome or balloon pattern as ordered, to be fixed over outlets of down pipes of tops of ventilating pipes.

Method of Measurments

18. **Pipe Work Generally shall be Measured.**

a. Net overall length of pipes and fittings as fixed, except where otherwise indicated.

b. Fittings shall be enumerated and described as extra over “ pipes and fittings” except where otherwise indicated.

c. Fittings of unequal bores shall be classified according to the larger bore.

19. **Manholes.** Internal plan area x height (as defined below) :

a. Uniform area on plan:

Height = From invent to top of manhole cover.

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- b. With shaft of reduced area:
- (1) Chamber height = From invert to junction of shaft with chamber.
Internal plan area of chamber.
 - (2) Shaft height = From junction of shaft with chamber to top of
manhole cover. Internal plan area of shaft.

The internal area of circular manholes shall be the internal diameter squared. In calculating internal area of shaft, ignore any corbelling out.

Clarification of Rates

20. The rates inter alia include particularly:

- a. Fixing complete in long or short lengths, including running joints in the length.
- b. Fixing soil waste and ventilation pipes.
 - (1) Distance pieces, supported or un-supported.
 - (2) Making good surfaces disturbed.
 - (3) Cutting holes in walls, and roofs and making good.

21. The contractor shall provide lead and gasket.

22. The manhole rates are ONLY applicable to manholes with a total depth of 1.80 metre from invert to top of manhole. Setting of manhole cover is not included. Manholes deeper than 1.80 metre shall be measure in details under relevant sections.

23. For cast iron drainage pipe, use relevant items and rates from water supply section.

SECTION-18

DRAINAGE AND SEPTIC TANK RATES

Item	Description	Rate in Taka		
		Materials & Labour		
		Bore of pipe, mm		
		100	150	225
	Per metre			
18-1	Reinforced cement concrete pipes, non-pressure, laid & jointed in cement mortar with collars as specified (Machine Made)	318.00	414.00	651.00
18-2	- Ditto - but except pipes, collar and fittings.	128.70	129.20	236.00
	Each			
18-3	Extra to Last item for Tee 150 mm bore		348.00	51.90
	<u>SOIL, WASTE AND VENTILATION PIPES</u>			
	Per metre			
18-4	Cast iron soil, waste & vent pipes fixed as spd.	821.00	1683.00	1969.00
18-5	- Ditto - but except pipes, collar and fittings.	50.40	70.30	71.50
	<u>EXTRA OVER PIPES AND FITTINGS (CI)</u>			
	Each			
			Bore of pipe, mm	
			50 mm	100 mm
18-6	Bends Plain, tapers, double socket & oval pattern accessories, with gun metal bolts & rubber joints as required.		145.00	383.00
18-7	Door bend - ditto -		156.00	381.00
18-8	Tee (Plain Type) - ditto -		186.00	500.00
18-9	Tee (Door Type) - ditto -		213.00	507.00
	<u>EXTRA OVER PIPES AND FITTINGS (CI)</u>			
	Each			
18-10	Branch pieces 100mm bore (Double Branch) equal or unequal arms, ordinary or inverted, swan neck offsets exc 75mm but n.exc 300 mm projection		506.00	77.80
18-11	Cast iron floor trap 100 mm bore fixing in position with all requirement.		576.00	77.80

SECTION-18

DRAINAGE AND SEPTIC TANK RATES

Item	Description	Rate in Taka		
<u>GUARD COWL (STOUT) CAST IRON</u>				
	Each	Bore of pipe		Add if fixed in repair
		50mm	100mm	
18-12	Over outlet of down pipes or tops of ventilating pipes etc fixed complete dome or balloon pattern	101.00	268.00	38.90
<u>MANHOLE COVER (HEAVY TYPE)</u>				
	Each	Materials & Labour		
		Inside clear diameter		
		375 mm	450 mm	525 mm
				Taking up or down & removing to store
18-13	Cast iron manhole cover set in cement mortar including hunching in concrete	547.00	729.00	1028.00
				70.40
<u>TESTING DRAINS</u>				
	Each	Rate in Taka		
18-14	Provide water and temporary apparatus and test drains till perfect (0.60 to 1.83 metre head)			99.60
18-15	Provide water and temporary apparatus and test manhole full depth of manhole but not exc. 1.83 metre.			623.00
18-16	Provide apparatus, materials, labour etc & smoke test till perfect, soil waste, ventilating pipes & connecting drain to nearest manhole			311.00
<u>SURFACE GULLIES</u>				
	Each	Rate in Taka		
		Distance between manholes		
		N. exc 30 metre	Exc 30 metre but not exc 92 metre	
18-17	Clearing drains by Roding & well flushing.	356.00	712.00	
	Per Cubic metre	Rate in Taka		
18-18	Clearing of night soil (Solid or liquid) from septic tank, manhole etc including disposing off or burying up as per direction (beyond 100 metre distance)		391.00	

SECTION-18

DRAINAGE AND SEPTIC TANK RATES

Item	Description	Rate in Taka			
		Type of walls & thickness			
	<u>MANHOLES</u>				
	Per Cubic metre	250mm brick	150mm RCC		
18-19	Manhole complete rectangular or circular as described n. exc 0.60 meter depth from invert to surface of cover including main channel set in CM (1:4)	18444.00		20054.00	
18-20	Manhole exc 0.60 metre but n. exc 1.83 metre depth with iron steps (with 20 mm dia MS bar and size 370x150 mm @ 300 mm c/c) Manhole more than 1.83 metre to top of manhole cover will be measured in details under respective sections.	12119.00		15634.00	
		Rate in Taka			
	<u>AC PIPE</u>	Bore of pipes in mm		Add if fixed in repair	
	Per metre	100	75	100	75
18-21	Supply and fixing of AC down pipes as specified	196.00	151.00	46.70	37.40
		Bore of pipe & wall thickness in mm or grade.			
	<u>PVC PIPE</u>	38/40x2 mm	50x2.4 mm	75x2.5mm	100x3.4 mm
	Per metre				
18-22	Supply and fixing of PVC non-pressure down pipe or used under floor / concrete or in any other places as required and jointed as per specification (Excavation of trenches will be paid separately).	126.00	187.00	282.00	375.00
18-23	Fixing only	39.10	52.20	65.20	78.30
18-24	Add fixed in R/R	9.80	13.10	16.30	19.60

SECTION-18

DRAINAGE AND SEPTIC TANK RATES

Item	Description	Bore of pipe & wall thickness in mm or grade.			
	<u>PVC PIPE</u>				
	Per metre	150x4.5mm	200x5.5mm	250x10mm	-
18-25	Supply and fixing of PVC non-pressure down pipe or used under floor / concrete or in any other places as required and jointed as per specification (Excavation of trenches will be paid separately).	624.00	1,054.00	2,268.00	-
18-26	Fixing only	91.30	104.40	130.50	-
18-27	Add fixed in R/R	22.80	26.10	32.60	-
		Bore of pipe & wall thickness in mm or grade.			
	<u>uPVC PIPE</u>	38/40x2.5 mm	50x2.8 mm	75x3.2mm	100x4.3 mm
18-28	Supply and fixing of uPVC pipe used as down pipe or under floor / concrete or in any other place as required as spd. (Excavation of trenches will be paid separately)	126.00	187.00	276.00	362.00
18-29	Fixing only	39.10	52.20	58.70	65.20
18-30	Add fixed in R/R	9.80	13.10	14.70	16.30
		Bore of pipe & wall thickness in mm or grade.			
		150x4.8mm	200x7.9mm	250x7.9mm	300x7.9 mm
18-31	Supply and fixing of uPVC pipe used as down pipe or under floor / concrete or in any other place as required as spd. (Excavation of trenches will be paid separately)	624.00	2,157.00	3,183.00	3,721.00
18-32	Fixing only	91.30	104.40	117.40	130.50
18-33	Add fixed in R/R	22.80	26.10	29.40	32.60

SECTION-18

DRAINAGE AND SEPTIC TANK RATES

Item	Description	Bore of pipe, mm		
		50 mm	100 mm	150 mm
	<u>uPVC EXTRA OVER PIPES AND FITTINGS</u>			
	Each			
18-34	S/F of uPVC Plain bends, tapers, double socket & oval pattern accessories, with solution.	104.00	243.00	-
18-35	Fixing only	38.90	51.90	-
18-36	Add fixed in R/R	9.70	13.00	-
18-37	S/F uPVC Door bend complete with accessories and solution as spd.	-	252.00	762.00
18-38	Fixing only	-	38.90	38.90
18-39	Add fixed in R/R	-	9.70	9.70
18-40	S/F of uPVC Plain Tee equal / unequal complete as spd.	124.00	264.00	988.00
18-41	Fixing only	46.70	38.90	38.90
18-42	Add fixed in R/R	11.70	9.70	9.70
18-43	S/F of uPVC Door Tee equal / unequal complete as spd.	-	319.00	-
18-44	Fixing only	-	46.70	-
18-45	Add fixed in R/R	-	11.70	-
18-46	S/F of uPVC Y / Tee section equal / unequal complete as spd. (Large end will be measured)	274.00	454.00	657.00
18-47	Fixing only	77.80	124.50	156.00
18-48	Add fixed in R/R	19.50	31.10	38.90

SECTION-18

DRAINAGE AND SEPTIC TANK RATES

Item	Description	Rate in Taka		
<u>uPVC EXTRA OVER PIPES AND FITTINGS</u>				
	Each	Rate in Tk		
18-49	S/F of Branch pieces 100 mm bore (Double Branch) equal or unequal arms, ordinary or inverted, swan neck offsets exc 75mm but n.exc 300 mm projection			380.00
18-50	Fixing only			77.80
18-51	Add fixed in R/R			19.50
18-52	uPVC floor trap 100 mm bore fixing in position with all requirement.			742.00
18-53	Fixing only			77.80
18-54	Add fixed in R/R			38.90
<u>u PVC GUARD COWL (STOUT)</u>				
	Each	Rate in Taka		
		Bore of pipe		Add if fixed in repair
		50mm	100mm	
18-55	S/F of Over outlet of down pipes or tops of ventilating pipes etc fixed complete dome or balloon pattern	175.00	240.00	31.10
		150mm Bore	-	
18-56	S/F of Over outlet of down pipes or tops of ventilating pipes etc fixed complete dome or balloon pattern	331.00	-	46.70
	Each	Rate in Taka		
		Materials & Labour	Except pipe fitting	
18-57	Reinforced cement concrete 'Tee' 100 mm bore as extra fittings for RCC non-pressure pipe as spd. (Machine made)	289.00	51.90	

SECTION - 19

SEWERAGE AND SEWAGE DISPOSAL

SPECIFICATION

General

1. **Drainage.** Pipe up to 225 mm dia and under for drainage work and are payable under section 18.
2. **Sewage Lines.** Pipe 300 mm dia and above, are covered under this section i.e. Sewage section.
3. **Pipes.** The pipes shall be reinforced cement concrete, obtained from approved manufacturers and shall conform to respective BS.
4. **Laying.** The pipes shall be laid according to the gradients required, in straight lines, manhole to manhole. The pipe shall rest on PCC 1:2:4 Saddles, pre cast/cast in situ at distances as directed. Any change in direction shall take place inside the manhole by the use of curved main half round channels, straight or curved as necessary, and NOT by the use of tapers or bend in the sewage line outside the manhole. Lay not more than 6 x lengths of pipes to the required gradient, fill in the groove at the end of each pipe with hemp soaked in molten bitumen. The hemp will be of a size sufficient to fill the groove while pressed. These 6 x lengths of pipes should be pressed tight by means of jack and the loose collars slide over the joints of two pipes and kept concentric by means of few wooden wedges. The cement mortar 1:1 is then pressed into the joints and the edges finished off with a bevelled joint. Laying and jointing shall be carried out in sets of not more than 6 pipes each time.
5. **Manholes.** The manholes shall be designed according to the depth and the No. of sewage lines meeting at that point.
6. **Manholes Covers.** Only, cast iron heavy pattern manholes covers of approved manufactures shall be used.

7. **Testing.** All new sewage lines, manholes, etc. shall be tested before heaunching with concrete or the trenches are filled. All sewage lines shall be tested by filling with water having a head of not less than 0.60 Metre and not more than 1.80 Metre above the top of the lowest pipe in the length to be tested, preference will however be given to a method of test specified by the manufactures.

8. **Damage, etc.** The Contractor shall be responsible for any disturbance of the sewage lines, etc, after they have passed the test satisfactorily.

Method of Measurements

9. **Sewage pipes shall be measured :**

- a. Net, between manholes, length of pipes excluding fittings, as fixed.
- b. Fittings shall be enumerated and paid for extra as supplied and fixed.
- c. Fittings of un-equal bore shall be classified according to the larger bore.

Clarification of Rates

10. **The rates, inter alia, include particularly :**

- a. Fixing complete in long or short lengths.
- b. Making good, surfaces disturbed.
- c. Lowering of pipes with tackles or cranes etc.

SECTION-19

SEWERAGE AND SEWAGE DISPOSAL RATES

Item **Description**

Rate in Taka

Bore of pipe, mm						
300mm (37.5mm thick)	375mm (37.5mm thick)	450mm (62.5mm thick)	600mm (75.0mm thick)	750mm (75 mm thick)	900mm (100mm thick)	1200mm (125mm thick)

Per metre
Reinforced
cement concrete
pipes (Machine
Made) non-
pressure type,
laid & jointed
with collars as
specified

19-1	Supply & Materials	795.00	981.00	1460.00	2461.00	3135.00	5558.00	9469.00
19-2	Fixing only	196.00	228.00	261.00	294.00	326.00	359.00	391.00
19-3	Add in repair / removal	49.00	57.00	65.30	73.50	81.50	89.80	97.80

SECTION-20

DEMOLITION AND DISMANTLING

SPECIFICATIONS

General

1. When there are rates elsewhere in the schedule for "add if in repairs" the demolition or dismantling rates in this section will NOT be applicable either in addition to or in substitution of the "add if in repairs" items.
2. **Demolition.** Implies taking down or breaking up, removing as ordered and spreading and leveling as required and will normally be applied to:
 - a. Matting, thatching, bamboo framing.
 - b. Ordinary concrete cast in situ, reinforced concrete generally, brickwork etc.
 - c. Asphalt work.
3. **Dismantling.** Implies carefully taking up or down without damage (either large or small quantities, in patches or for work in repairs or replacement of parts where not otherwise provided for in the schedule) and carting to store (if directed by Engineer in Charge) any useful materials, sorting, stacking, cleaning and the removals of normally be applied to all other classes of work.
4. **Damage to.** The contractor at his expense will make any part of the work, which is to be left intact, good.
5. **Cutting Opening Through Walls.**
 - a. For doors, windows and other purposes not covered by (b) below includes forming reveals and rough face work, except provisions of arches, lintels and new finishing around opening which will be paid for separately under the relevant items.
 - b. For small holes for pipes, etc. where surface areas does not exceed 900 sq.cm includes all works including filling, finishing and making good.

6. **New Works in Making Good.** After dismantling, etc., shall be paid for under the respective items in the other sections of the schedule. No additional payment for connecting up to existing work etc., shall be made.
7. **Cutting Through.** Or excavating and grubbing up concrete, brick works, etc., in ground floors roads, paving and foundations shall be paid for under the items for “Excavation Section” as applicable.
8. **Method of Measurements**
 - a. **Measurements of all Works.** Shall be made before dismantling and as described for new works in respect of deductions for voids, openings, etc. and no allowance shall be made for any increase in bulk.
 - b. **Measurement for Brick Work.** Plastered one or both side are to exclusive of plaster thickness, but the rates for demolition include taking down the plaster.
 - c. **In Cutting for Openings.** Measurements shall be the net finished size of the new opening or enlarged portion of opening.
 - d. **No Additional Allowance.** Shall be made for cutting and pinning in bolts, holdfast, ends of steps, timbers, etc.

Clarification of Rates

9. **The rates, inter alia, include particularly:**
 - a. Use and waste of all temporary strutting and shorting required, and clearing away after use, together with any scaffolding, tools, plants, watching, etc.
 - b. Removal of all serviceable materials to store, or fresh site within the contract area if so required.
 - c. Removal of all un-serviceable materials on MD premises within a distance of 4 Kilometer and spreading leveling, stacking, etc., as directed.
 - d. As an alternative to (c) above, removal of all un-serviceable materials off MD premises, in which case the materials shall be come the property of the contractor and no deduction shall be made for their value.

SECTION-20**DEMOLITION AND DISMANTLING RATES**

Item	Description	Rate in Taka		
		Demolition	Add for portion dismantled	
<u>CONCRETE</u>				
	Per Cubic metre			
20-1	Demolition of un-reinforced cement concrete including lime concrete	778.00	94.60	
20-2	Demolition of reinforced concrete floor or roof slabs etc, separating reinforcement from concrete including cleaning and straightening the same.	996.00	94.60	
20-3	- Ditto - when reinforcement is not required to be separated	913.00	90.70	
<u>WALLS, FOUNDATIONS ETC.</u>				
20-4	Demolition of brick work or stone masonry incl. coping, quoins etc	695.00	88.80	
20-5	Demolition of walls built in brick work concrete block or stone masonry built in lime or cement mortar incl. pillars, lintels, struts etc.	984.00	88.80	
20-6	Removing mud from roofs including plastering and leeping, if any	436.00	-	
<u>FLOORS</u>				
	Per Square metre			
20-7	Take up stone or precast concrete slab, floors etc having thickness 100 to 150 mm laid in any mortar	95.00	17.60	
<u>CUTTING OPENINGS</u>				
	Per Cubic metre	Rate in Taka		
		Burnt brick work or concrete block in any mortar	Lime or cement concrete	RCC incl. cutting of reinforcement
20-8	Cutting through walls etc for door, window or other opening or enlarging existing opening and from reveals as specified.	1111.00	1146.00	714.00
20-9	Cutting small openings for pipes etc where surface area does not exc. 0.1 sq.m & make good around the same	1824.00	2002.00	3647.00

SECTION-20**DEMOLITION AND DISMANTLING RATES**

Item	Description	Rate in Taka
<u>WOOD WORK</u>		
Per Cubic metre		Rate in Taka
20-10	Cut out & demolish timber in scantling in any position not else where provided for , clear out nails etc , remove and stack at site	1,005.00
20-11	-Ditto-but timber boarding (incl. Flooring) or pharas any thickness	901.00
Per metre		
20-12	All as last item, but ballies of any diametre.	10.40
<u>IRON AND STEEL WORK</u>		Rate in Taka
Per metre		
20-13	Take down cast(or sheet) iron or asbestos cement flue (or smoke) pipes, caves, gutters rain water pipes, valley gutters or flashings, ridges & hips incl. bends, swan necks, shoes, etc & any supports or brackets there to (gutters, flashings, ridges & hips to be measured under this item only when not taken down as part of roofing).	18.70
Per Kg		
20-14	Dismantle steel or iron work of any description and in any position not else where provided for	15.40
Per Square metre		
20-15	-Ditto- iron or steel sheeting in hearths, iron covering to doors, frames, curves, mongaries, & similar fittings of any description or gauge.	35.00
<u>ROOF ETC</u>		
Per Square metre		
20-16	- Ditto - but AC/GI corrugated sheets & any type of plain sheeting to wall, ceiling, roofing gates etc incl. ridges, hips valleys, wind ties, barge & eaves boarding (net area of roof &/or walls to be measured)	41.20

SECTION-20**DEMOLITION AND DISMANTLING RATES**

Item	Description	
<u>MISCELLANEOUS</u>		
Per Square metre		
20-17	Dismantling single tiling of brick or PCC in roof or floors laid in cement mortar incl. half bricks or block on edge in any position	44.50
20-18	- Ditto – but of any other description incl. ridges, hips or vallyes (Net area of roof surface measured, no additional allowances for ridges, hips and vallyes)	44.00
20-19	Dismantling double tiling of brick or PCC in roof laid in cement mortar incl. half bricks or block on edge in any position	66.00
20-20	- Ditto – but any other description incl. ridges, hips and vallyes (Net surface or roof area to be measured)	65.80
20-21	- Ditto – but single tiling to roof , -ditto-	31.10
<u>MISCELLANEOUS</u>		
Per Square metre		
		Rate in Taka
20-22	Taking down bamboo framing, mattings (incl. matting doors & windows) or trellis work or tile batten of any number or layers, size gauge, spacing or description	31.10
20-23	Dismantling of hard board, soft board or cloth etc from ceiling & partition of any description incl. removing fillets, moulding, nail, screws etc.	32.60
<u>FINISHING</u>		
20-24	Carefully taking up or down glazed or acoustic tiling to floors, hearths or walls incl. border, skirtings, moulding coppings etc & cement mortar setting but not backing.	62.00

SECTION-20

DEMOLITION AND DISMANTLING RATES

Item Description
PLUMBING AND DRAINS

Per Kg

20-25	Taking down sheet lead in flats, gutters, dormers flashings, ridges, hips, cistern etc & similar work (Not to be paid when gutters, ridges & hips are taken down as part of roofing)	6.50
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Rate in Taka

BOTTOMING

Per Square metre

Flat soling		Herring bone	
Demolition & Removing	Re-use after cleaning	Demolition & Removing	Re-use after cleaning

20-26	Demolition / Dismantling of bottoming (Flat soling /herring bone) in any description incl. re-using after cleaning where necessary.	11.90	23.90	19.00	37.60
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Rate in Taka

Per Meter

Bore of Pipe			Remove to store
10 cm	15 cm	22.5 cm	

20-27	Demolition/Taking up of RCC pipe from any places	33.90	47.40	59.30	20.80
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Rate in Taka

Per Square metre

Edging	
Demolition & Removing	Re-use after cleaning

20-28	Demolition / Dismantling of bottoming (Edging) in any description incl. re-using after cleaning where necessary.	39.60	66.90
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RESTRICTED

MILITARY ENGINEER SERVICES

BANGLADESH ARMED FORCES



CHAPTER – II

ELECTRICAL AND MECHANICAL WORKS

RESTRICTED

RESTRICTED

SECTION-21

EXTERNAL ELECTRIFICATION

SPECIFICATIONS

FOR

DISTRIBUTION AND TRANSMISSION SYSTEM

(LOW, MEDIUM, HIGH & EXTRA HIGH-PRESSURES)

General

1. **Standard Requirements.** All external electrification work shall be executed in accordance with the "Indian Electricity Rules-1937" and as amended later on as adopted by Bangladesh. All internal works shall be carried out in accordance with latest edition of the "IEE regulation for the electrical equipment buildings " hereinafter referred to as "Rules & Regulations" are modified by these specifications.

2. **Materials.**
 - a. **Line Conductor.** Conductor shall be of copper, either solid hard drawn or stranded and of aluminium stranded/insulated either AAC or ACSR and shall comply with latest BSS/VDE/BDS.

 - b. **Poles and Supports.** Poles and supports shall be of creosote wood, MS iron sheet/tube, reinforced, pre-stressed concrete and lattice all as per drawings & type.

 - c. **Stay and Stay Wires.** Stay assembly shall be of MS/GI complying with BS 16 of 1949. Stay wire shall be of GI wires complying with BS 183 of 1938.

 - d. **Cross Arms and Clamps.** Cross arms shall be of MS Angle/channel iron duly painted or GI for distribution and transmission line as per drawings. Pole band/clamps shall be of flat bars of approved size.

 - e. **Bolts, Nuts and Washers.** All bolts, nuts and washers shall be GI/MS as approved size, shape and strength.

 - f. **Insulators.** Insulators shall be of glazed porcelain with mechanical strength to carry the loads on them and shall comply with the latest BS.

g. **Cables LT/ HT.** Cables shall be of PVC sheathed and XLPE for LT. and PVC sheathed with armoured for HT. either single or multi core having various diameter / size and shall comply with latest BS & VDE standard manufactured in Bangladesh and approved by AHQ, E-in-C's branch from time to time. These are the approved (cables) brand: for LT

1. Eastern

2. (i) BRB (ii) Paradise (iii) Poly (iv) Supersign (v) Citizen.

3. Other than BRB/Paradise/Poly/Supersign/Citizen, i.e. (i) Sunshine (ii) "777" Energy (iii) Evana (iv) MEP

For HT (11 KV)

1. Eastern 2. BRB 3. Paradise 4. Poly 5. Supersign or any other brand approved by AHQ, E-in-C's branch from time to time. All cables shall be of specified as per approved manufacturer manuals and allowed for use.

h. **Cable Box/Joints.** All cable boxes/joints shall be of latest design & specifications suitable for PVC single or multi core cable and shall be approved by the engineer-in charge before erection/ installation.

3. **Aerial Lines.**

a. **Strength of Conductor.** Strength of line conductors and service line shall be in accordance with latest standard of electricity rule. Maximum interval between supports (span) for L T & medium pressure line shall not exceed 50 metre, and for HT shall comply with electricity rules.

b. **Height from Ground Level.** The minimum computed height from the ground of any line conductor at a temperature of 50⁰ C shall be 6 metre. The conductors must not be accessible without the aid of ladder or other special appliances. In all respect electricity rules should be followed strictly.

c. **Height and Distance.** From building or structure where the aerial line is on the building or structure to which persons have access the minimum height shall be 5 metre and in accessible without the aid of a ladder or other special appliances. In all respect electricity rules should be followed strictly. In case of road (Highway)

crossing minimum height shall not be less than 9 metre from ground level. In case of river crossing, height shall be ascertained as per navigation rules. In case of railway track crossing, the line shall be of right angles to the track, and the height not less than 12 metre.

d. **Connection with Earth of Metal Supports, Stay Wires and Other Metallic Accessories.**

All metal supports and metals not live shall be permanently and efficiently earthed. For this purpose continuous earth wire shall be secured by fastening to each support and connected with earth, the spacing between the points being as nearly equidistant as possible. Each stay wire shall be similarly earthed unless an insulator has been placed in it at a height of not less than 3 metre from the ground.

e. **Danger Plate.** It shall be of sheet iron, vitreous enameled 250x 200x 3mm thick or as required size as directed by the Engineer-in –charge, and shall be red lettering on white back ground. The lettering shall be in English as well as in Bengali stating “DANGER **ৱেচ` RbK**” or “CAUTION **মবোব**” and the pressures.

f. **Phase Indication.** Phase indication of the following description shall be displayed in each H T conductors. It shall be of enameled iron or plastic 75mm in diameter with 9mm fixing hole and of appropriate colour.

g. **Non-climbable Device.** It shall be of a flat iron clamp with round iron spikes welded to the clamp as shown in drawing and shall be provided in each HT poles.

h. **Factor of Safety.** The factor of safety shall comply with the following values:

(1)	For iron or steel support	=4.00
(2)	For wood & concrete supports	=3.50
(3)	For guard & earth wires	=5.00
(4)	For conductors	=2.00

For the purpose of calculating the factor of safety following points shall be considered: -

- (1) Maximum wind pressure 40 kg/sq.m or 80 km/ hour

(2) Cylindrical bodies the effective area is taken as $\frac{2}{3}$ rd of the sectional area exposed to the wind pressure.

(3) Temperature shall be taken as 0° or such other temperature as the Engineer-in -charge specifies.

(4) For lattice steel or other compound structure the wind pressure on the lee side members shall be taken as $\frac{1}{2}$ of the wind pressure on the windward side.

j. **Line Crossing or Approaching Each Other.** Any telegraph or other aerial line shall be protected and guarded with approved and efficient means against the possibility of coming into contact with each other.

k. **Protection from Lightning.** Every line or portion thereof which is so exposed as to be liable to injury from lightning shall be protected by approved and efficient means.

l. **Guard Wire.** Safety devices, cradle/ catch guard or other approved means shall be provided for rendering a fallen wire dead. Every guard wire shall have an actual breaking strength not less than 700 kg and shall be made of iron or steel galvanized. Every guard wire or cross connected system of guard wire shall be of sufficient current carrying capacity to ensure the fallen wire rendering dead, with the risk of fusing the guard wire or wires. Every guard wire or system of guard wires and supports shall be of sufficient strength to carry without breaking the extra load put on them by the fall of any or all the wires guarded.

m. **Conductors of Different Pressures on Same Supports.** Where conductors forming part of systems at different pressures are erected on the same support, the clearance shall be at least 1 metre between line conductors of different systems. Adequate provisions shall be made to guard against the possibility of danger to lineman and lower pressure being charged above its normal working pressure by leakage from or contact with higher pressure systems. The higher-pressure system shall always be placed above the lower pressure. Not more than two different pressure systems shall be erected on the same support. High-pressure more than 11KV shall not be erected on supports carrying low /medium pressure systems.

- n. **Dip and Stress of Wires.** The dip or sag shall be assumed such that wires are subject to 1/5 of breaking stress under worst conditions. Sag will be within limit according to chart given in this schedule.
- p. **Spacing of Conductors.** This shall be regulated by two factors i.e. pressure and sag, but shall not be less than 300mm for low/medium pressure and 1 metre for high pressure upto 11 K V.
- q. **Digging Holes and Concrete Beds.** The earth excavation for digging holes shall be as required depth but not less than 1700mm or 1/6th of total pole height. Width shall be diagonal dimension of base plate +(plus) 100mm for steel, RCC or prestressed pole and for wooden pole diameter of pole + (plus) 225mm. 150mm thick CC (1: 4: 8) shall be laid in the bed.
- r. **Steel Poles.** It shall be given two coats of anticorrosive paint upto 2 metre from bottom end before erecting, and erected straight in hole, 75mm CC (1:4:8) muffler shall be provided around the pole to the entire depth upto 150mm above ground level. After setting of muffler the remaining portion of holes shall be filled with pebbles or brick bats upto 1 metre from bed and rammed in layers n. exc. 150mm. The rest portion shall be filled with earth, well watered, rammed in layers n. exc. 150mm. All surplus spoil shall be removed and the site shall be made good/clear. The complete structure shall be guarded against corrosion by applying two coats of anti corrosive paints. The second coat shall not be applied less than 24 hours before the first.
- s. **RCC & Pre Stressed Concrete Poles.** Same as above but except painting.
- t. **Stringing of conductors.** All conductors shall be placed on the groove of the pin type insulators in straight length except in small curves or bends where they shall be placed on side grooves with the prior approval of the Engineer-in-charge. The conductors shall be fixed to the shackle/strain insulators at the terminal or intermediate or terminal poles. The maximum length shall not exceed 375 metre or 8 spans whichever is less on straight runs and at bends. At the points of termination the conductors shall be fixed to the shackle /strain insulators. All conductors shall be

secured efficiently in approved manner to insulators with soft tinned copper binding wire of the approved size. Particular attention shall be paid to see dip or sag, so that all conductors on the cross arms shall be of equal height from ground throughout the span and also to avoid "kinks" sharp bends any other injury to the conductors during straining.

u. **Jointing and Binding.** Britannia or any other suitable method shall be employed in jointing solid conductors. Twisting of solid conductors is not allowed.

v. **Method.** Married or any other suitable method shall be employed in jointing stranded conductors. The proposed method of jointing shall be approved by the Engineer-in –charge before jointing of stranded conductors commences.

w. **Stay and Stay Wires.** Stay assemblies and stay wires shall be of sufficient strength to withstand the load on them. This shall be provided either to strengthen the line at terminal poles or to bring up construction on straight length to the required strength. They shall be fixed to post if possible above the line wires or at the resultant point between them, not below. They shall be fixed at an angle in each alignment rather than in the resultant direction, if sufficient space is available. Stay wires shall not be directly fixed on poles by twisting them round the pole, but shall be fixed through suitable clamps of sufficient strength. An insulator shall be fixed to the stay wire not less than 3 metre from ground.

4. **Under Ground System.**

a. **Excavation for Trenches.** The excavation shall be 1 metre deep and width shall be maximum outer diameter of cable or cable cover (brick / tiles) width +225 mm. The surface of the bed shall be leveled and be made free from any pointed / sharp edged materials. At places where cables are to be jointed, 450 mm the depth shall be increased by and the width & breadth shall also be increased by 300 mm & 900mm respectively on the both sides of the trench to provide space for workmen for jointing.

- b. **Lying.** After completion of trench excavation works as specified above, a layer of 75mm thick river sand, free from any edged materials like pebbles, stones or other inorganic matters shall be spread and then cable be laid. After laying of cable two row of burnt brick shall be laid dry on both side of the cable longitude vertically to make box wall, and then 75 mm thick river sand shall be spread same as previous. After that cable shall be covered with burnt bricks laid dry flat to obtain width 250 mm, over which 75 mm sand shall be spread. The remaining portion of the trench shall be filled with earth and well rammed. Similarly proper size burnt tiles (cable cover), Size 300x50x75 mm shall be used for 4 mm² to 35 mm² and 50 mm² to 300 mm² single core LT cables. Size 300x78x125 shall be used for 50 mm² to 240 mm² and 300 mm² to 600 mm² single core LT and 16 mm² to 50 mm² HT cables, Size 300x100x150 mm shall be used for 300 mm² to 600 mm² three, three & half and four core LT and 70 mm² to 120 mm² HT cables, as per approval and direction of Engineer-in-Charge.
- c. **Crossing Roads, Streets & Pavements.** The cable shall be drawn in suitable size of steel, GI, CI tubing as per approval and direction of Engineer-in Charge.
- d. **Crossing of Culverts and Bridges.** The cable shall be drawn in suitable size of steel, GI, CI tubing. The tubing shall be properly secured by suitable hooks or clamps etc. to the culverts and bridges, as per approval and direction of Engineer-in-Charge.
- e. **Jointing of Cables.** While laying the cable it shall be so arranged that cables to be jointed overlap each other by about 300 mm to provide ample length for jointing. The joints shall be made with necessary consumable as per latest engineering practice for PVC sheathed & PVC armoured multi core cables. All joints shall be sweated, wiped clean and properly insulated as per latest BSS.
- f. **Route and Joint Signs.** Casted embossed signs stating pressure and owners name shall be provided at every hundred metre along the route. At joints similar sign stating the above particulars and the work “cable joint” shall be provided. All sign will be approved by the Engineer-in-Charge.

5. **Sitting of External Service to Important Buildings.**

a. Electrical service connection to officer's bungalows and important buildings, where appearance is important, shall be brought to the rear of the buildings or failing that on the side.

b. In case of buildings, which are especially important, the service shall be brought in underground cable.

6. **Working Contractors.** No work will be entrusted to a contractor who has no license and no proper license holder employee as required under the electricity rules.

7. **Sodium/Halogen Lamps.** Sodium light fittings shall be low /high pressure of 230/220 volts, 50 Hz single phase shall be approved by the Engineer-in-Charge before incorporation. All types of sodium/halogen light fittings including lamps shall be foreign origin.

8. **Test.** The erected lines and works shall be complying with the following tests:

- a. Earth continuity resistance test.
- b. Cable insulation and continuity test.
- c. Overhead conductor's continuity test.

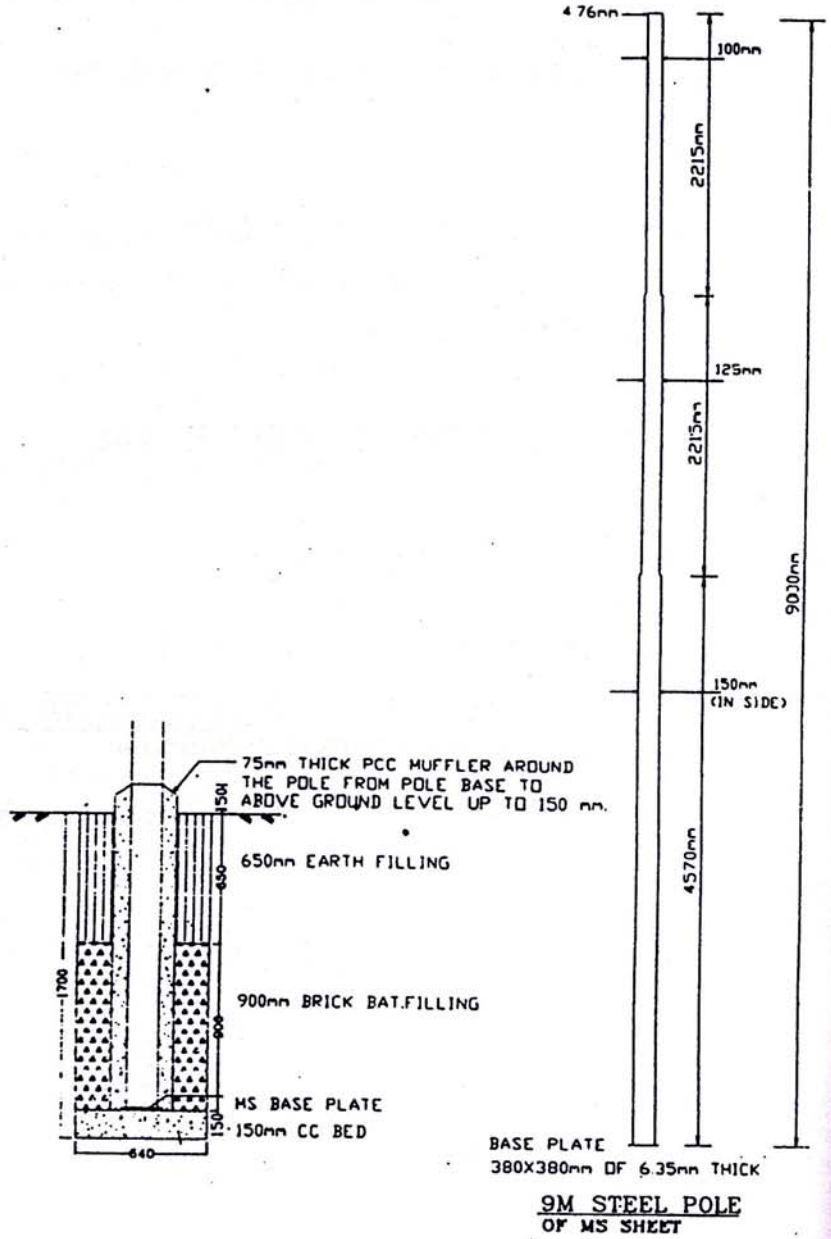
The time at which these tests are carried out shall be arranged between the contractors and Engineer-in Charge. The contractor shall supply the necessary apparatus, labour and instruments but the Engineer-in-Charge is at liberty to use for this purpose any instruments he may wish to employ. The results of the tests shall be recorded in triplicate by the contractor and signed both by the contractor and the Engineer-in-Charge.

9. **Commissioning.** The complete system shall be put in to commission by the contractor in presence of the Engineer-in-Charge. The contractor or his licensed employee shall prepare three set of complete drawing for the installation with test results.

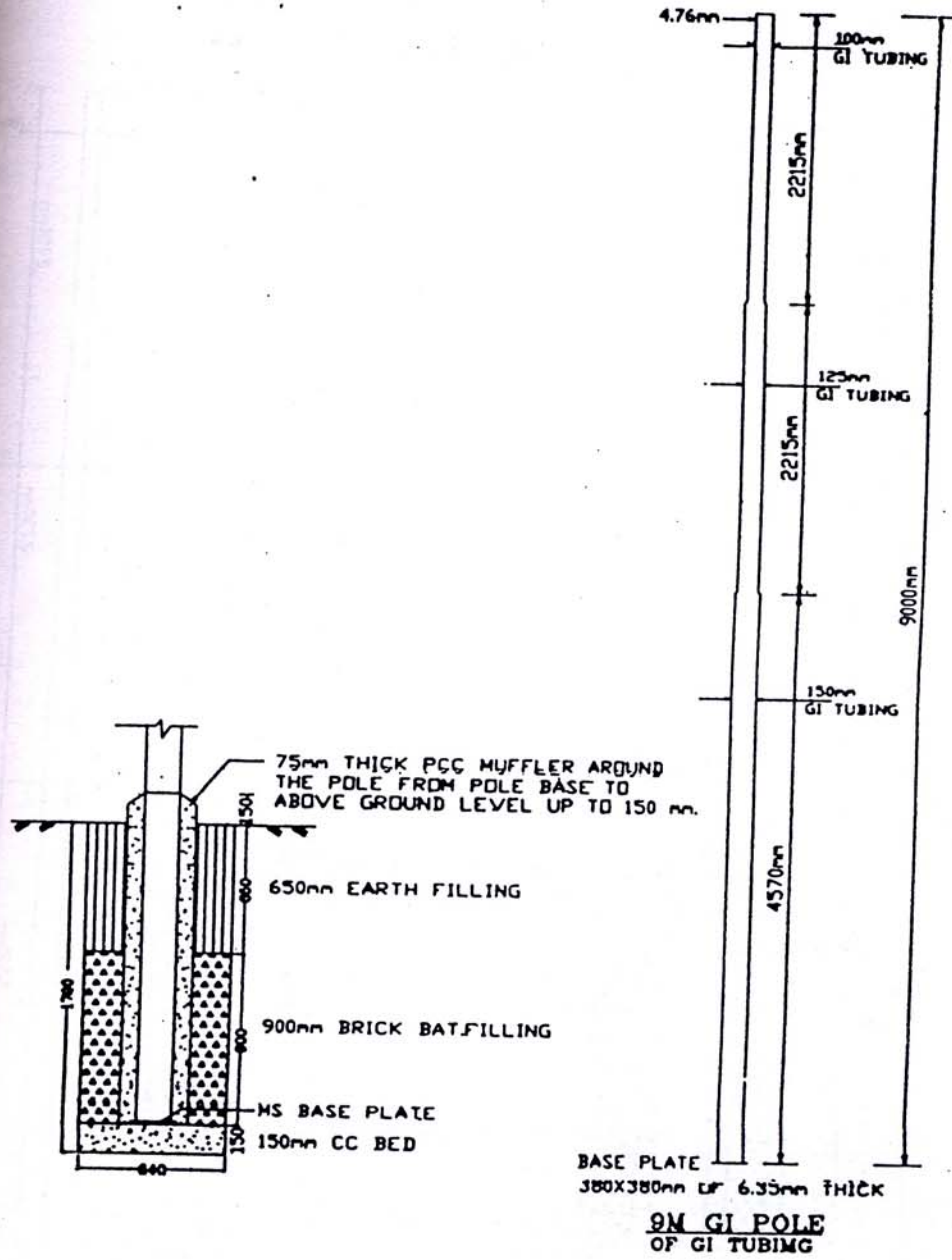
Clarification of Cable Rates.

10. The rates for LT under column heading **BRB/Paradise/Poly/Supersign & Citizen** is directly applicable only for BRB, Paradise, Poly, Supersign & Citizen brand. for cables other than BRB/Paradise/Poly/Supersign & Citizen like **i) Sunshine ii) “777” Energy , iii) Evana iv) MEP** and any other brand approved by AHQ, E-in-C' branch from time to time. Rate will be deducted as shown in under column “P” and “Q” from rate column of BRB/Paradise etc.

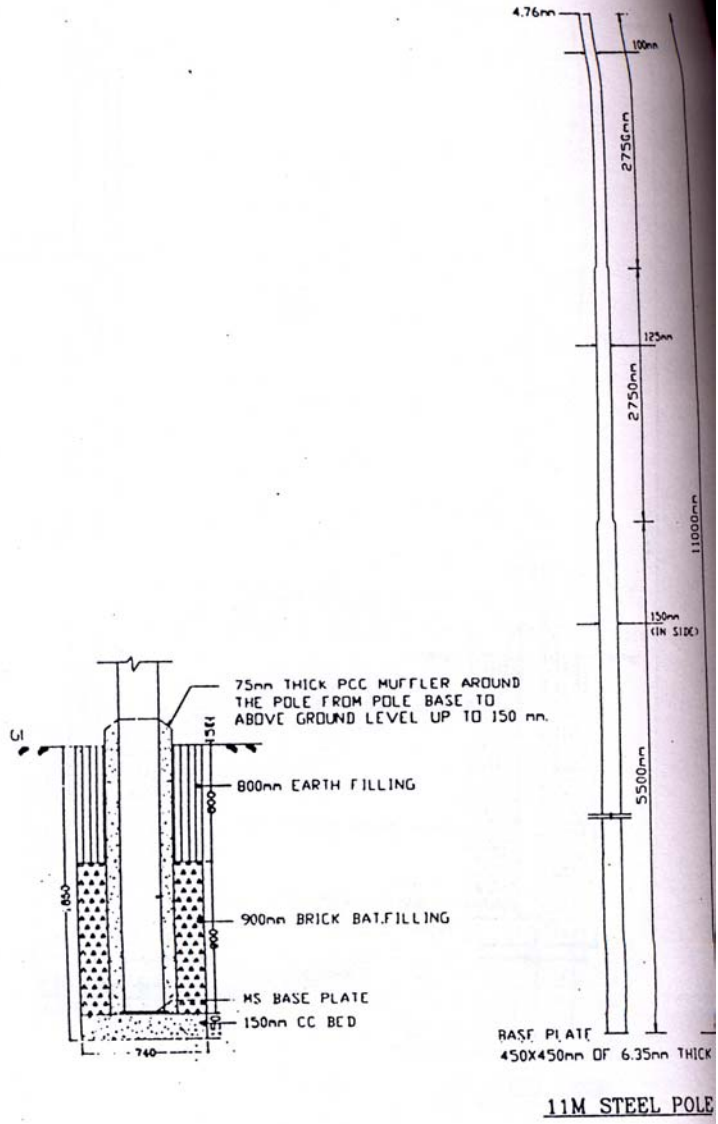
**STEEL POLE
TYPE - A**



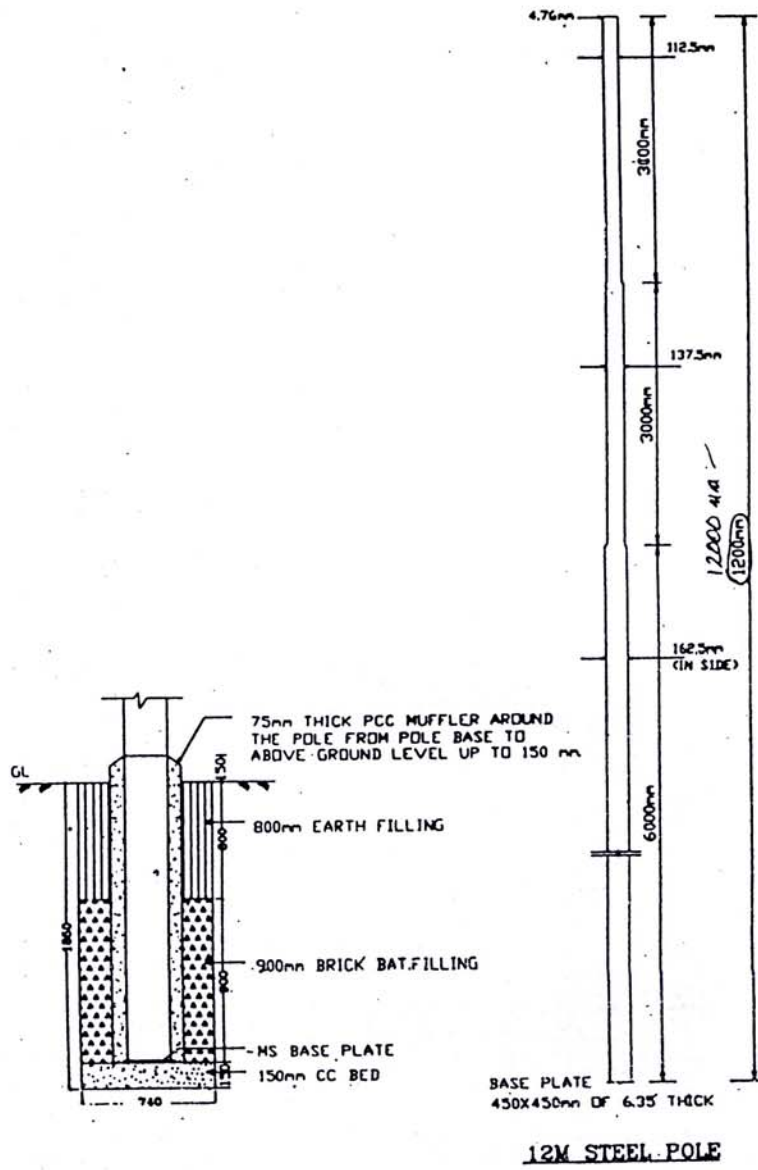
TYPE - AA



TYPE - B

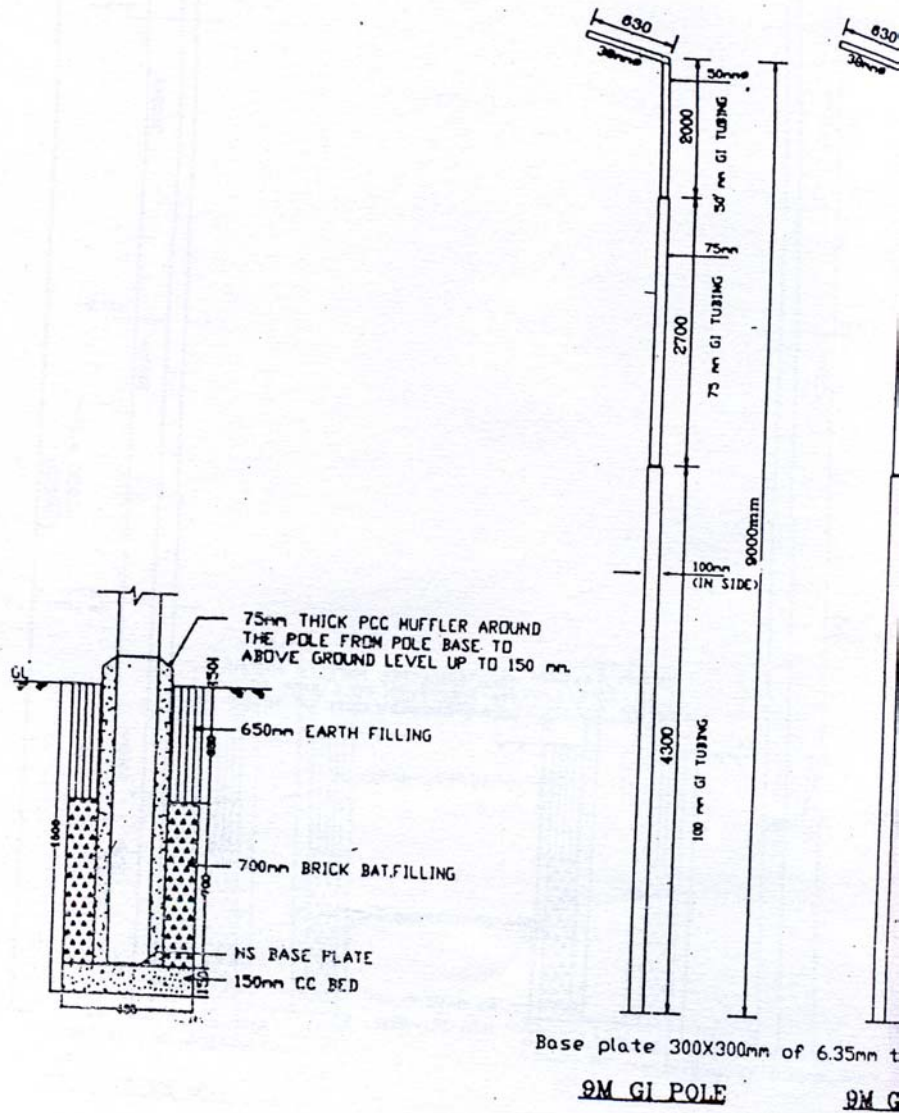


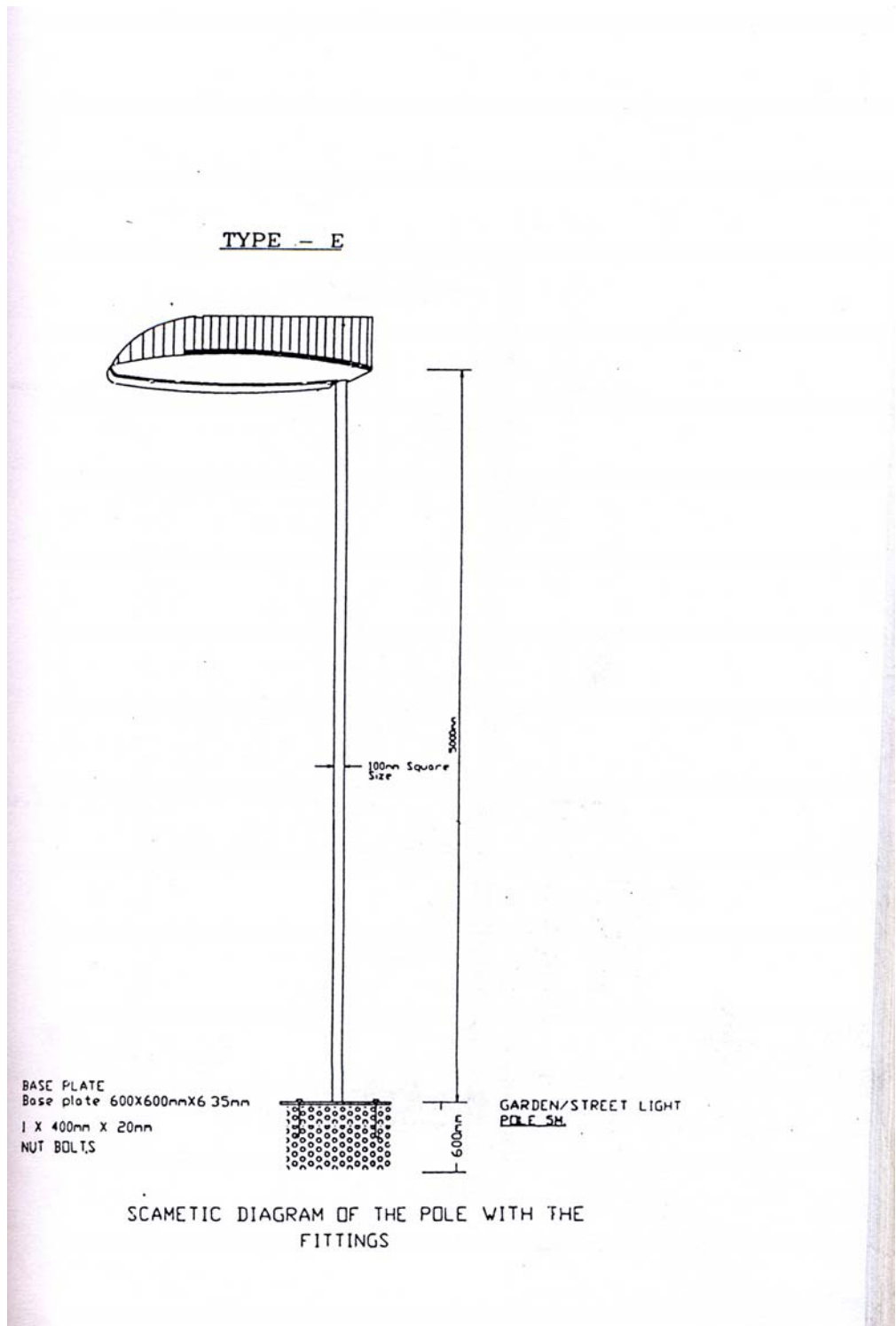
TYPE - C



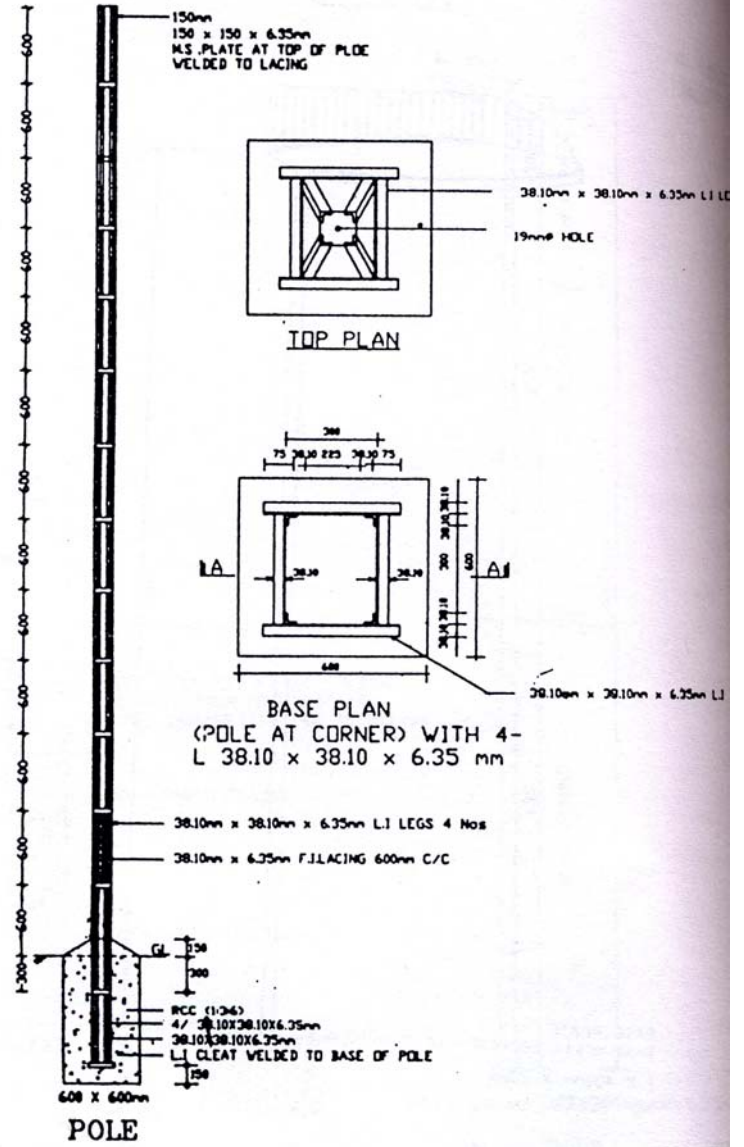
TYPE - D

TYPE

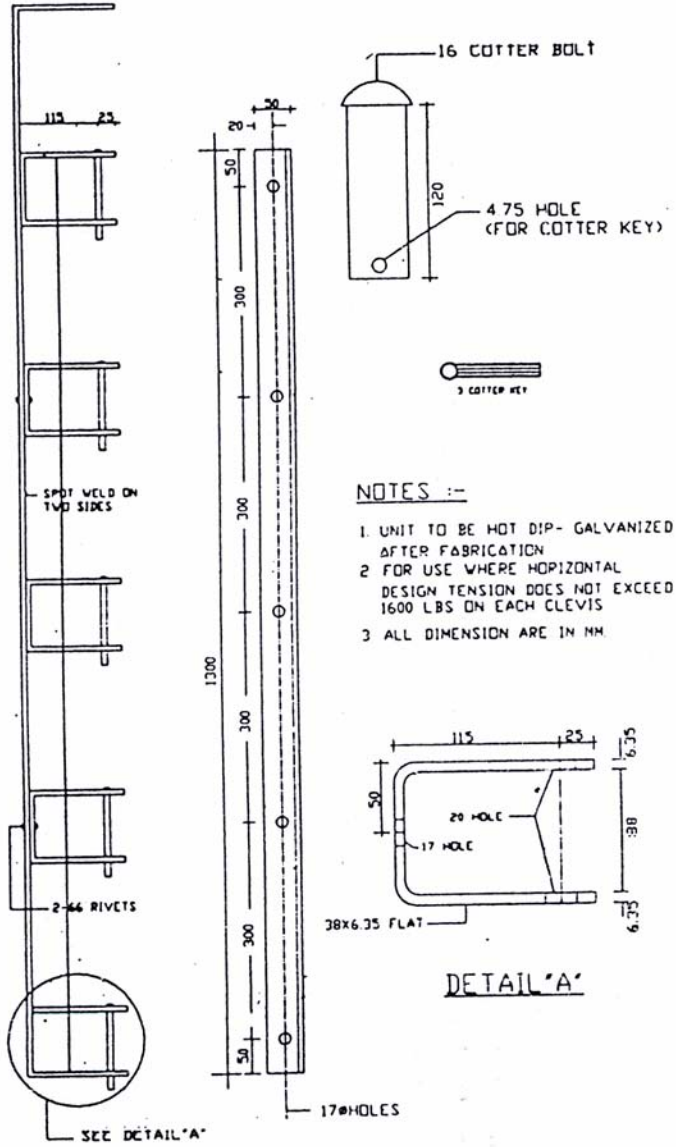




LATTICE POLE

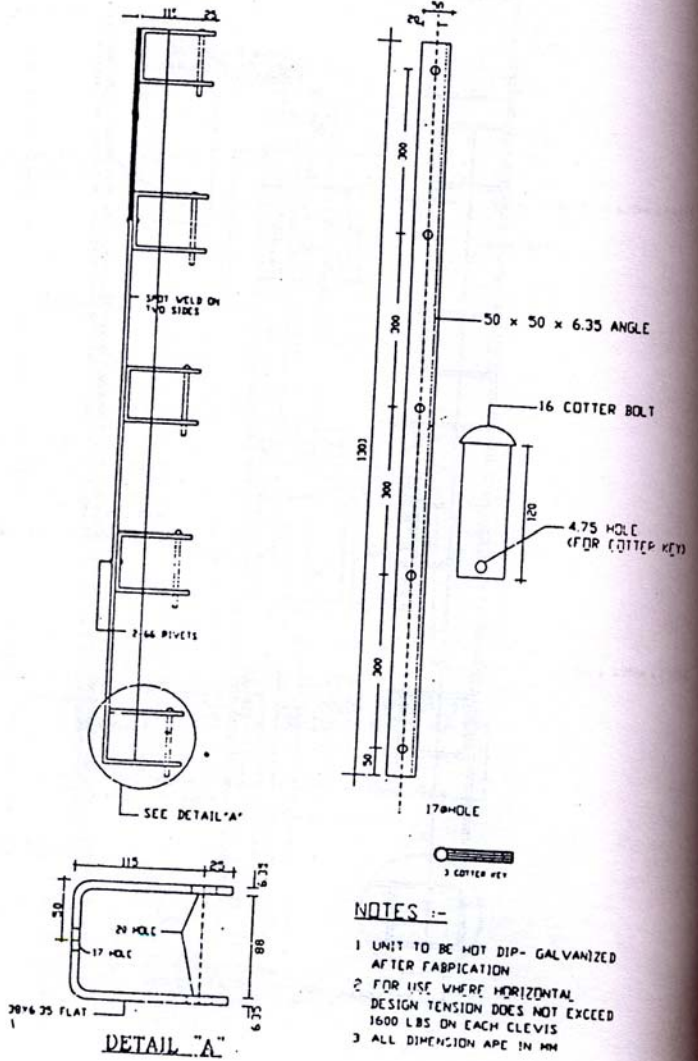


CROSS ARMS TYPE "F"

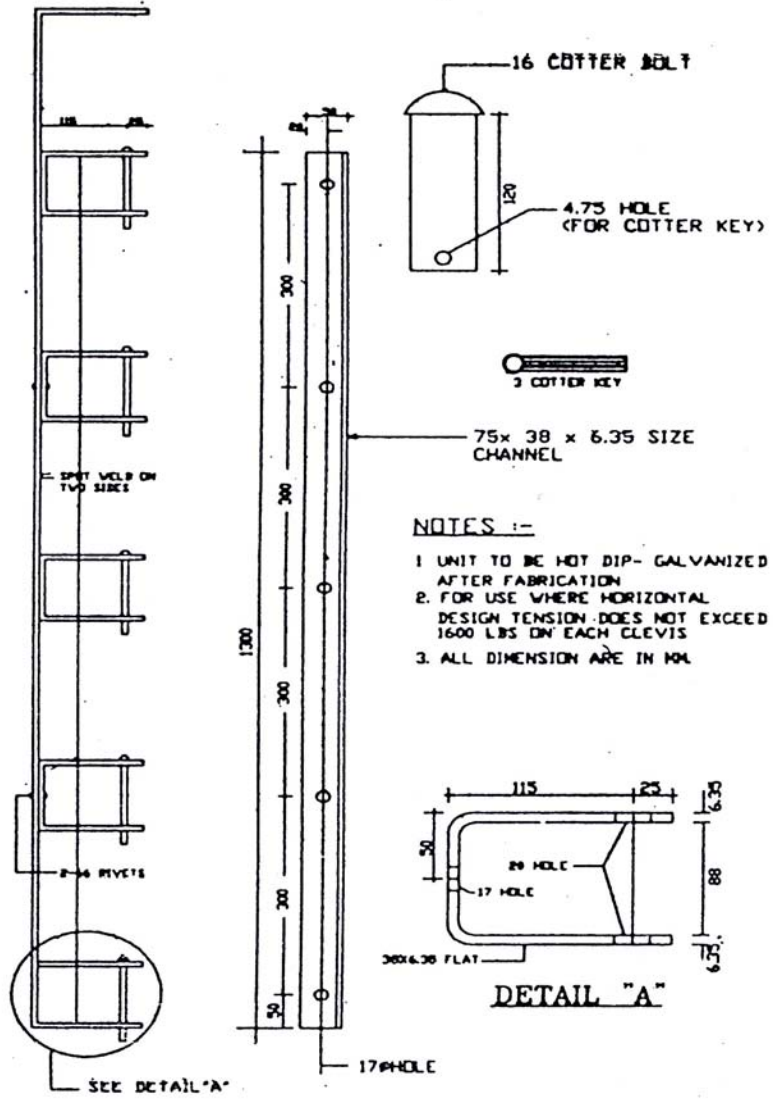


- NOTES :-
- 1. UNIT TO BE HOT DIP- GALVANIZED AFTER FABRICATION
 - 2. FOR USE WHERE HORIZONTAL DESIGN TENSION DOES NOT EXCEED 1600 LBS ON EACH CLEVIS
 - 3. ALL DIMENSION ARE IN MM.

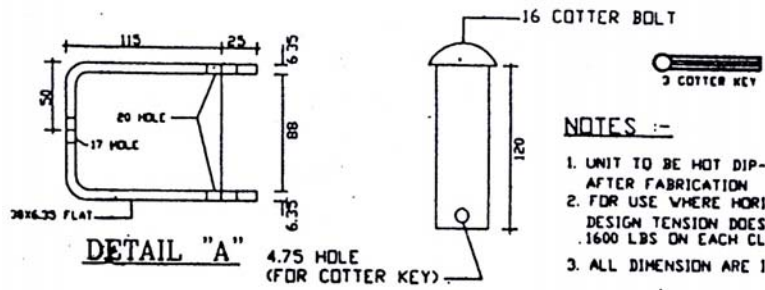
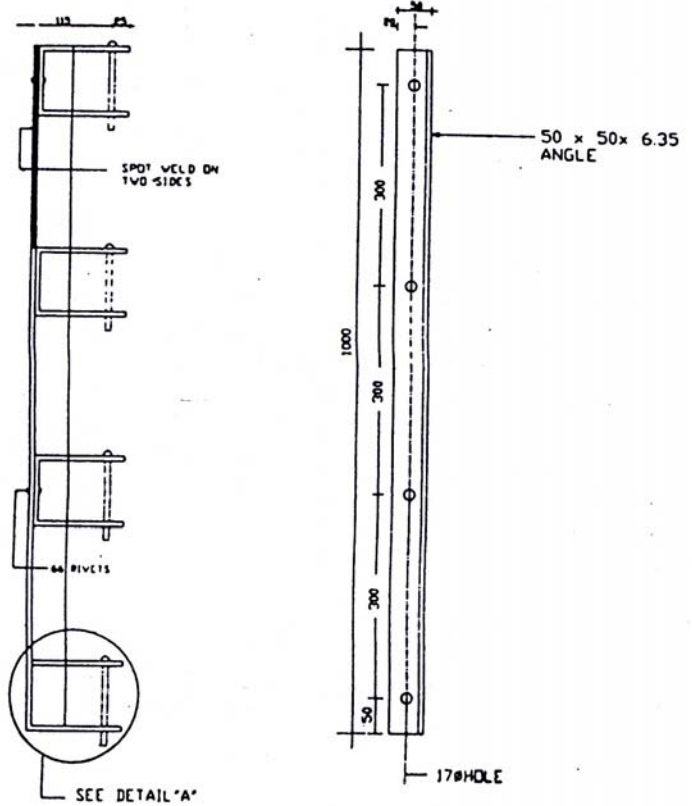
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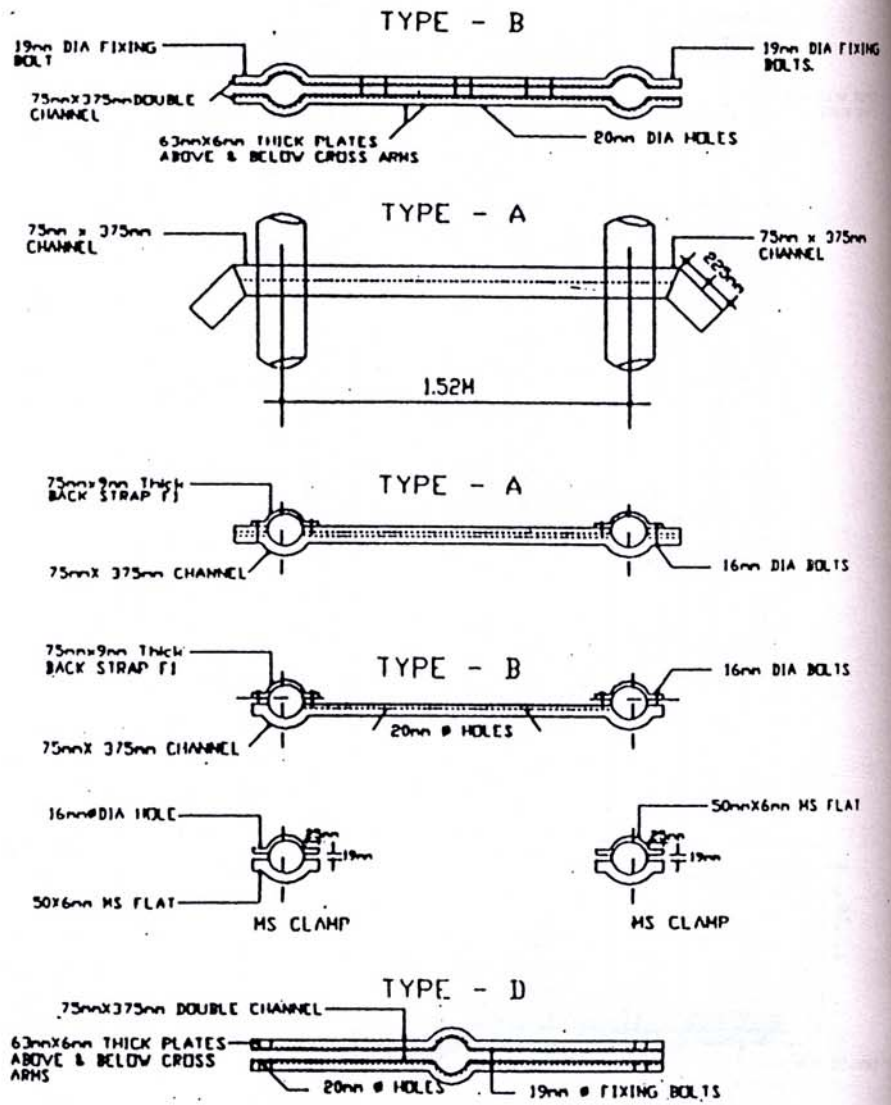


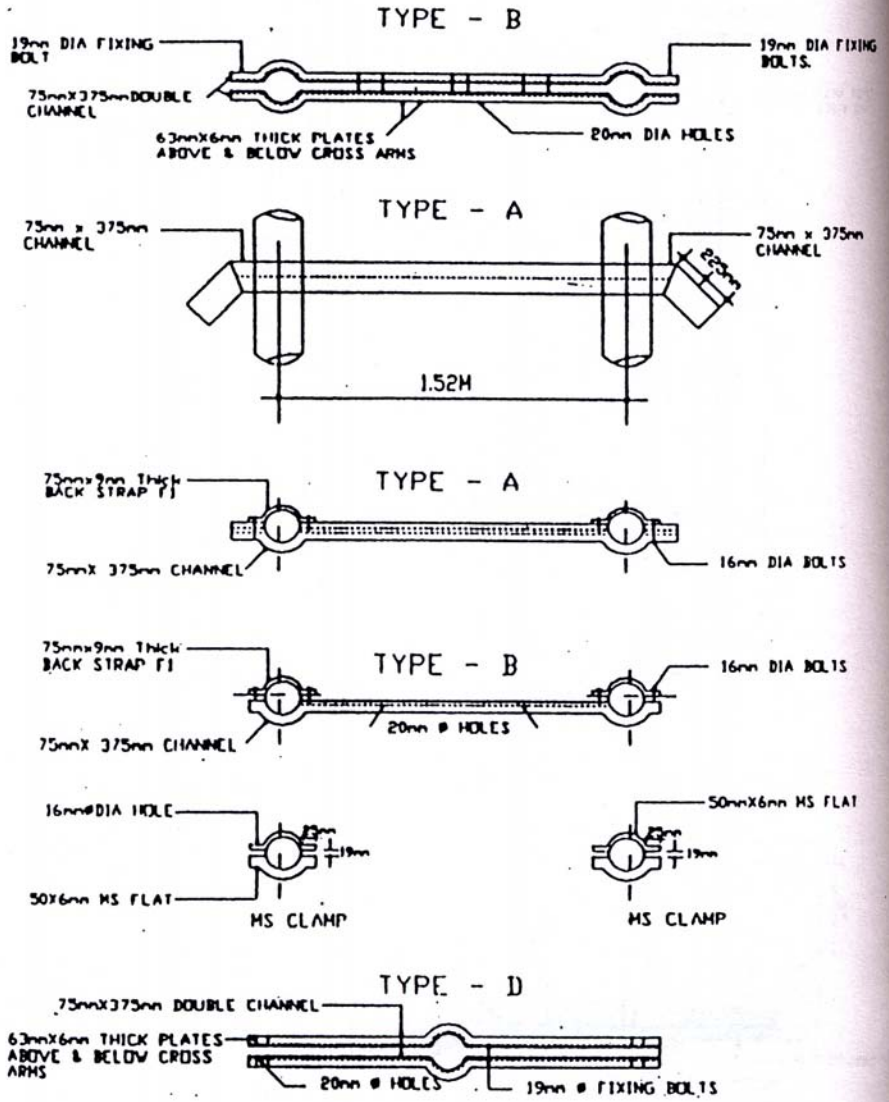
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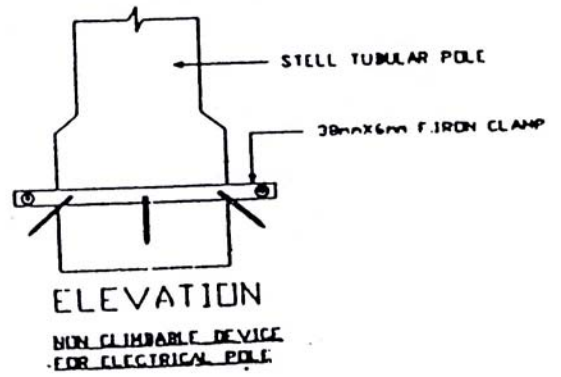
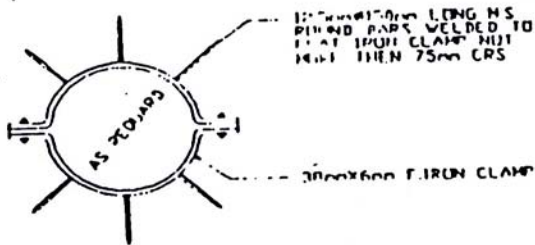
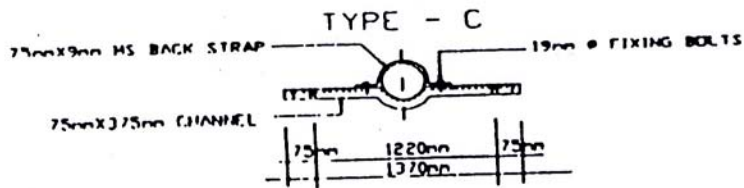
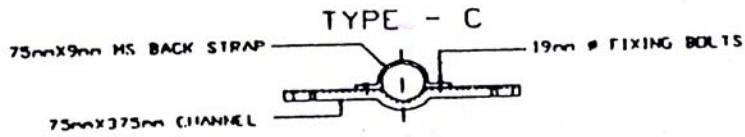
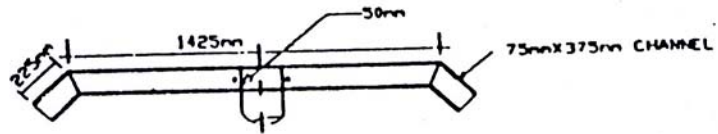
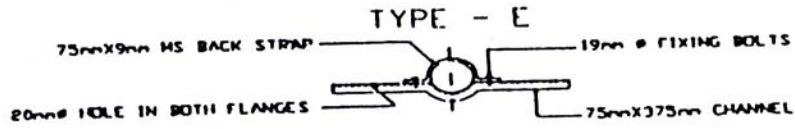
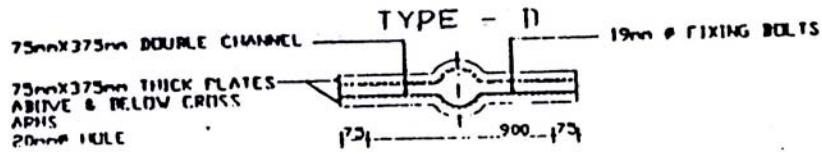


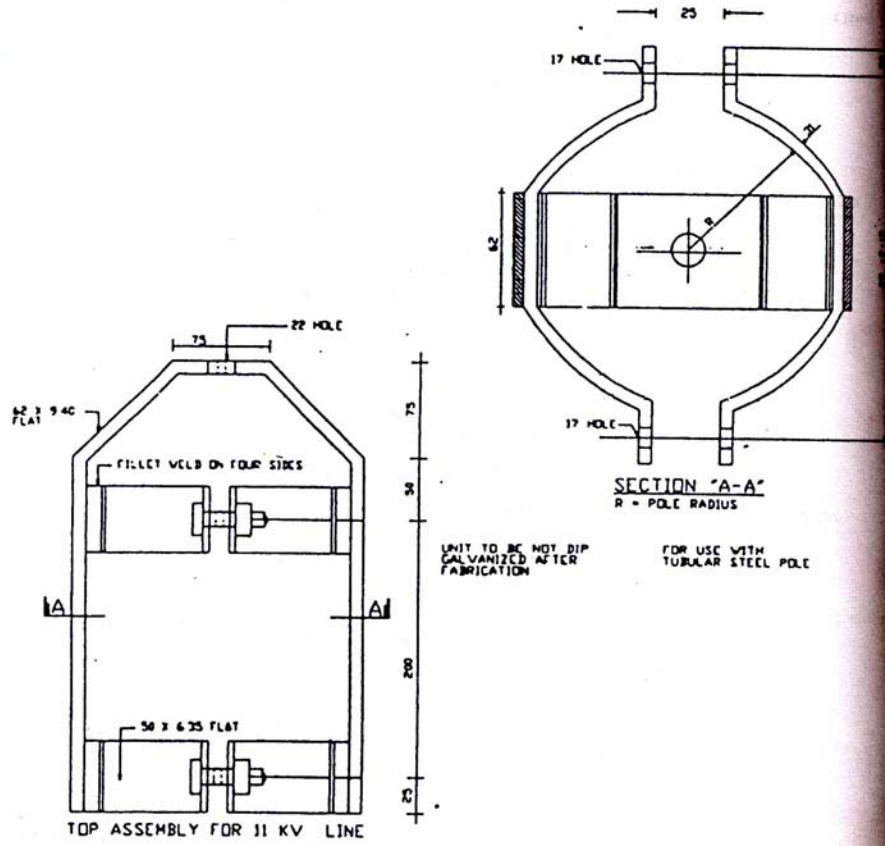
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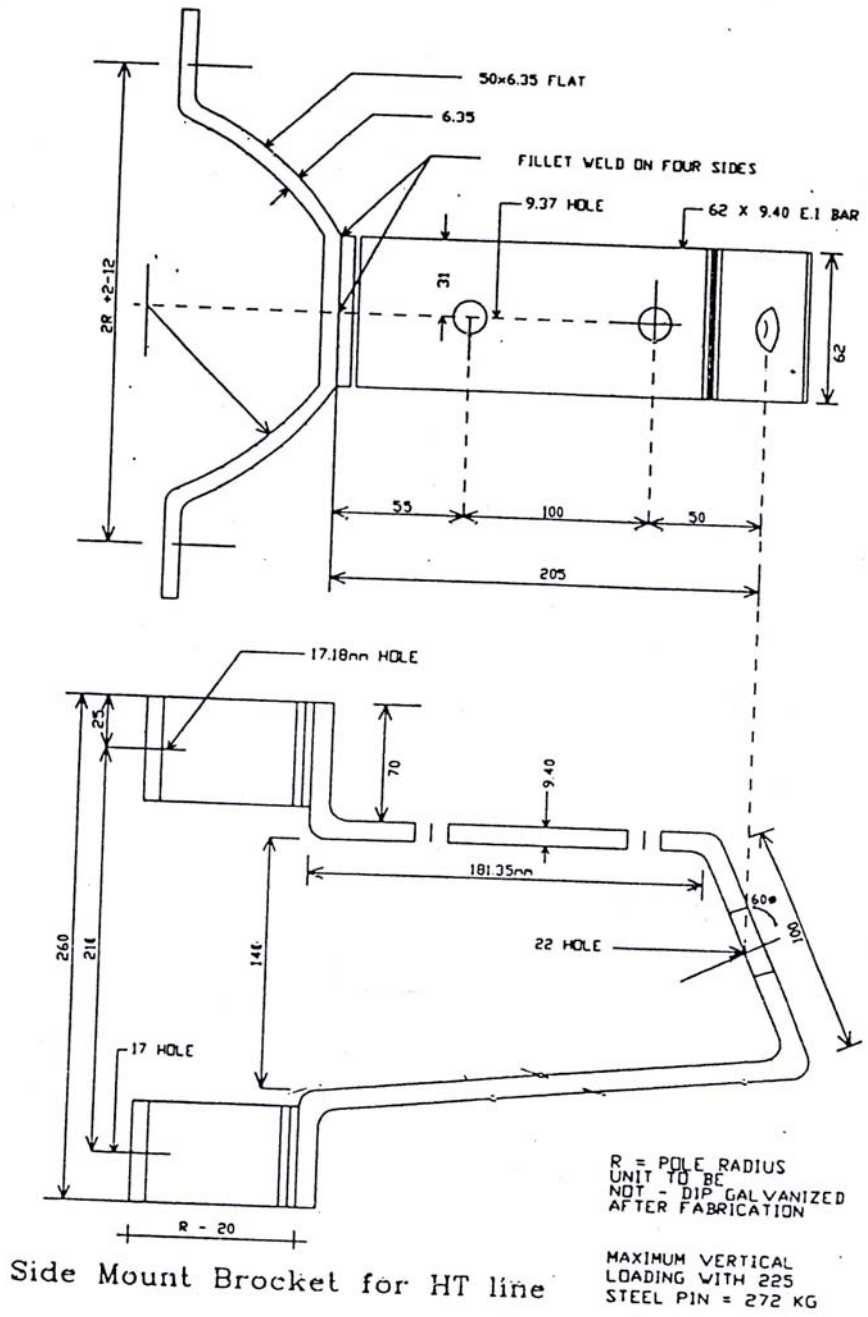


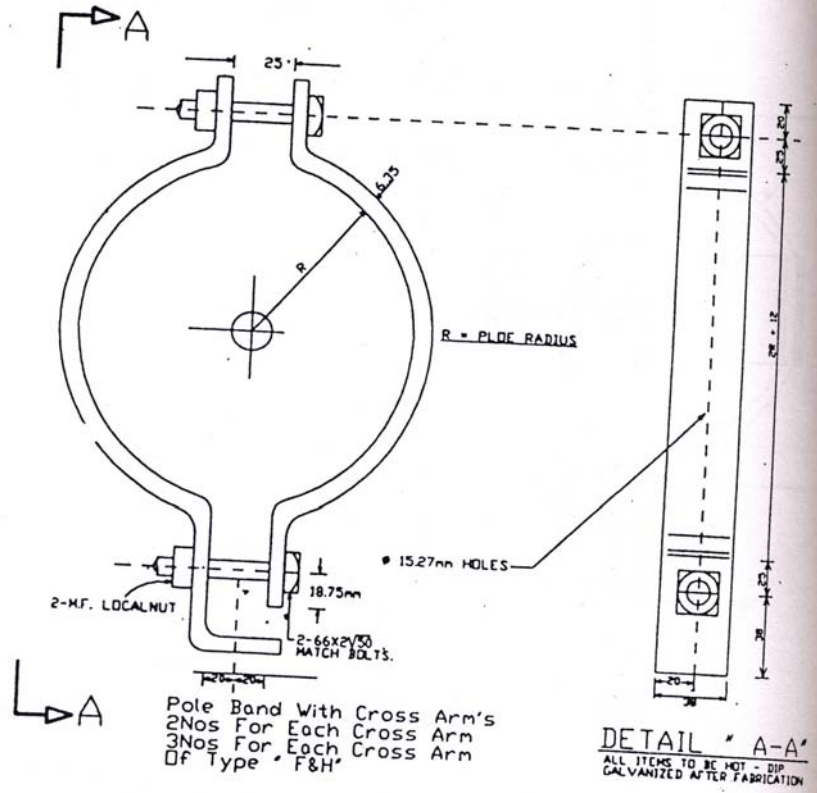












H.V. OVERHEAD LINES

EXTRACT OF MAXIMUM SAGS OF HARD DRAWN COPPER LINES COMPLYING WITH THE ELECTRICITY COMMISSIONER'S REGULATIONS EI-C-53 (0.95 CM RADIAL ICE, 3.64 KG/930 CM² WIND, SAFETY FACTOR-2)

SAGS AT 68⁰ C IN STILL AIR

AREA OF CONDUCTOR	MAX WORKING TENSION	SAG IN AT 68 ⁰ C FOR SPANS OF			
		Metre	Metre	Metre	Metre
mm ²	Kg				
		45.00	55.00	64.00	73.00
16.00	0.345	0.607	0.96	1.42	1.92
25.00	0.556	0.366	0.58	0.86	1.19
30.00	0.662	0.366	0.56	0.82	1.01
35.00	0.785	0.344	0.52	0.74	1.01
50.00	0.966	0.323	0.48	0.68	0.94
70.00	1.334	0.280	0.47	0.56	0.74
82.50	1.643	0.270	0.40	0.55	0.71
95.00	1.937	0.280	0.40	0.54	0.70
107.50	2.258	0.280	0.40	0.54	0.69
120.00	2.569	0.290	0.41	0.54	0.69
150.00	3.135	0.290	0.41	0.54	0.68

SECTION-21

UNDER GROUND CABLE RATES

Item no	Description of works					Rate in Taka					
						Materials & Labour					
Per Metre						Using					
Cable electric Low and medium tension laid in trenches / pipe / conduit / duct including trench excavation, embankments, required bricks / tiles, sand etc. (Excluding pipe / conduit / duct, is to be paid separately) as specified voltage & current ratings according to cable code BYA / NYY / BYM / A2xY / NYSEYFG by to VDE standard.						Bricks			Tiles		
						Eastern	BRB / Paradise / Poly / Supersign / Citizen		Eastern	BRB / Paradise / Poly / Supersign / Citizen	
							PVC	XLPE		PVC	XLPE
						A	B	C	D	E	F
Size 4 mm²											
21-001	BYA	1	x	4	rm (7-w)	233.00	229.00	0.00	162.00	158.00	0.00
21-002	NY Y	1	x	4	rm (7-w)	254.00	252.00	252.00	183.00	181.00	181.00
21-003	NY Y	2	x	4	rm (7-w)	354.00	351.00	351.00	283.00	281.00	281.00
21-004	NY Y	3	x	4	rm (7-w)	411.00	398.00	398.00	341.00	328.00	328.00
21-005	NY Y	4	x	4	rm (7-w)	474.00	458.00	458.00	404.00	387.00	387.00
21-006	BY M	4	x	4	rm (7-w)	433.00	418.00	0.00	363.00	347.00	0.00
21-007	A2xY	1	x	4	rm (7-w)	0.00	0.00	215.00	0.00	0.00	144.00
21-008	A2xY	2	x	4	rm (7-w)	0.00	0.00	269.00	0.00	0.00	198.00
21-009	A2xY	3	x	4	rm (7-w)	0.00	0.00	289.00	0.00	0.00	219.00
21-010	A2xY	4	x	4	rm (7-w)	0.00	0.00	0.00	0.00	0.00	0.00
Size 6 mm²											
21-011	BY A	1	x	6	rm (7-w)	254.00	249.00	0.00	184.00	178.00	0.00
21-012	NY Y	1	x	6	rm (7-w)	281.00	257.00	277.00	210.00	206.00	206.00
21-013	NY Y	2	x	6	rm (7-w)	411.00	407.00	407.00	341.00	337.00	337.00
21-014	NY Y	3	x	6	rm (7-w)	491.00	473.00	473.00	420.00	402.00	402.00
21-015	NY Y	4	x	6	rm (7-w)	570.00	564.00	564.00	499.00	493.00	493.00
21-016	BY M	4	x	6	rm (7-w)	532.00	517.00	0.00	461.00	446.00	0.00
21-017	A2xY	1	x	6	rm (7-w)	0.00	0.00	229.00	0.00	0.00	158.00
21-018	A2xY	2	x	6	rm (7-w)	0.00	0.00	302.00	0.00	0.00	232.00
21-019	A2xY	3	x	6	rm (7-w)	0.00	0.00	333.00	0.00	0.00	262.00
21-020	A2xY	4	x	6	rm (7-w)	0.00	0.00	0.00	0.00	0.00	0.00

SECTION-21

UNDER GROUND CABLE RATES

Rate in Taka

Materials & Labour			Supply & Fixing cable only (Except bricks / tiles and trenches)			Deduct from the rates of BRB / Paradise etc. if other approved cables like Sunsine/ "777" Energy / Evana / MEP etc. are used.		Fixing only		Add in repair / removal		Add if rock
Except Bricks / Tiles								Cable only	Including trench, bricks / tiles laying with sand	Cable only	Including bricks / tiles and back filling	
Eastern	BRB / Paradise / Poly / Supersign / Citizen		Eastern	BRB / Paradise / Poly / Supersign / Citizen		PVC	XLPE					R
	PVC	XLPE		PVC	XLPE							
G	H	I	M	N	O	P	Q	R	S	T	U	V
92.50	88.40	0.00	50.20	46.10	0.00	2.30	0.00	6.50	48.80	3.90	10.10	86.50
113.20	111.70	111.70	70.90	69.40	69.40	3.50	3.50	6.50	48.80	3.90	10.10	86.50
214.00	211.00	211.00	172.00	169.00	169.00	8.50	8.50	6.70	49.00	4.00	10.20	86.50
271.00	258.00	258.00	229.00	216.00	216.00	10.80	10.80	6.80	49.10	4.10	10.30	86.50
334.00	318.00	318.00	292.00	276.00	276.00	13.80	13.80	7.20	49.50	4.30	10.50	86.50
293.00	278.00	0.00	251.00	235.00	0.00	11.80	0.00	7.20	49.50	4.30	10.50	86.50
0.00	0.00	75.00	0.00	0.00	32.50	0.00	1.60	6.50	48.80	3.90	10.10	86.50
0.00	0.00	129.00	0.00	0.00	86.00	0.00	4.30	6.70	49.00	4.00	10.20	86.50
0.00	0.00	149.00	0.00	0.00	107.00	0.00	5.40	6.70	49.00	4.00	10.20	86.50
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
114.00	108.00	0.00	71.70	66.00	0.00	3.30	0.00	6.80	49.10	4.10	10.30	86.50
141.00	137.00	137.00	98.30	94.30	94.30	4.70	4.70	6.80	49.10	4.10	10.30	86.50
271.00	267.00	267.00	229.00	225.00	225.00	11.30	11.30	7.00	49.30	4.20	10.40	86.50
350.00	333.00	333.00	308.00	291.00	291.00	14.60	14.60	7.10	49.40	4.30	10.50	86.50
430.00	424.00	424.00	388.00	381.00	381.00	19.10	19.10	7.50	49.80	4.50	10.70	86.50
391.00	377.00	0.00	349.00	334.00	0.00	16.70	0.00	7.50	49.80	4.50	10.70	86.50
-	-	88.00	-	0.00	46.00	0.00	2.30	6.80	49.10	4.10	10.30	86.50
-	-	162.00	-	0.00	120.00	0.00	6.00	7.00	49.30	4.20	10.40	86.50
-	-	193.00	-	0.00	150.00	0.00	7.50	7.10	49.40	4.30	10.50	86.50
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

SECTION-21

UNDER GROUND CABLE RATES

Item no	Description of works						Rate in Taka					
							Materials & Labour					
Per Metre							Using					
Cable electric Low and medium tension laid in trenches / pipe / conduit / duct including trench excavation, embankments, required bricks / tiles, sand etc. (Excluding pipe / conduit / duct, is to be paid separately) as specified voltage & current ratings according to cable code BYA / NYY / BYM / A2xY / NYSEYFG by to VDE standard.							Bricks			Tiles		
							Eastern	BRB / Paradise / Poly / Supersign / Citizen		Eastern	BRB / Paradise / Poly / Supersign / Citizen	
								PVC	XLPE		PVC	XLPE
							A	B	C	D	E	F
Size 10 mm²												
21-021	BYA	1	x	10	rm	(7-w)	296.00	287.00	0.00	225.00	216.00	0.00
21-022	NYY	1	x	10	rm	(7-w)	326.00	320.00	320.00	256.00	249.00	249.00
21-023	NYY	2	x	10	rm	(7-w)	518.00	512.00	512.00	448.00	441.00	441.00
21-024	NYY	3	x	10	rm	(7-w)	637.00	617.00	617.00	566.00	546.00	546.00
21-025	NYY	4	x	10	rm	(7-w)	780.00	754.00	754.00	709.00	683.00	683.00
21-026	BYM	4	x	10	rm	(7-w)	740.00	710.00	0.00	670.00	639.00	0.00
21-027	A2xY	1	x	10	sm	(7-w)	-	-	249.00	-	-	179.00
21-028	A2xY	2	x	10	sm	(7-w)	-	-	346.00	-	-	275.00
21-029	A2xY	3	x	10	rm	(7-w)	-	-	389.00	-	-	319.00
21-030	A2xY	4	x	10	rm	(7-w)	-	-	0.00	-	-	0.00
Size 16 mm²												
21-031	BYA	1	x	16	rm	(7-w)	358.00	344.00	0.00	288.00	273.00	0.00
21-032	NYY	1	x	16	rm	(7-w)	397.00	384.00	384.00	326.00	314.00	314.00
21-033	NYY	2	x	16	rm	(7-w)	677.00	653.00	653.00	607.00	583.00	583.00
21-034	NYY	3	x	16	rm	(7-w)	884.00	836.00	836.00	813.00	765.00	765.00
21-035	NYY	4	x	16	rm	(7-w)	1099.00	1038.00	1038.00	1028.00	968.00	968.00
21-036	BYM	4	x	16	rm	(7-w)	1046.00	990.00	0.00	976.00	919.00	0.00
21-037	BYA	1	x	16	rm	(19-w)	362.00	348.00	0.00	291.00	277.00	0.00
21-038	NYY	4	x	16	rm	(19-w)	0.00	1045.00	1045.00	0.00	975.00	975.00
21-039	A2xY	1	x	16	rm	(7-W)	-	-	279.00	-	-	208.00
21-040	A2xY	1	x	16	rm	(19-W)	-	-	285.00	-	-	214.00

RESTRICTED

SECTION-21

UNDER GROUND CABLE RATES

Rate in Taka

Materials & Labour			Supply & Fixing cable only (Except bricks / tiles and trenches)			Deduct from the rates of BRB / Paradise etc. if other approved cables like Sunsine/ "777" Energy / Evana / MEP etc. are used.		Fixing only		Add in repair / removal		Add if rock
Except Bricks / Tiles								Cable only	Including trench, bricks / tiles laying with sand	Cable only	Including bricks / tiles and back filling	
Eastern	BRB / Paradise / Poly / Supersign / Citizen		Eastern	BRB / Paradise / Poly / Supersign / Citizen		PVC	XLPE					R
	PVC	XLPE		PVC	XLPE							
G	H	I	M	N	O	P	Q	R	S	T	U	V
156.00	147.00	0.00	113.50	105.00	0.00	5.30	0.00	7.10	49.40	4.30	10.50	86.50
186.00	179.00	179.00	144.00	137.00	137.00	6.90	6.90	7.10	49.40	4.30	10.50	86.50
378.00	371.00	371.00	336.00	329.00	329.00	16.50	16.50	7.30	49.60	4.40	10.60	86.50
497.00	476.00	476.00	455.00	434.00	434.00	21.70	21.70	7.40	49.70	4.40	10.60	86.50
640.00	614.00	614.00	597.00	571.00	571.00	28.60	28.60	7.80	50.10	4.70	10.90	86.50
600.00	569.00	0.00	558.00	527.00	0.00	26.40	0.00	7.80	50.10	4.70	10.90	86.50
-	-	109.00	0.00	0.00	67.00	0.00	3.40	7.10	49.40	4.30	10.50	86.50
-	-	206.00	0.00	0.00	163.00	0.00	8.20	7.30	49.60	4.40	10.60	86.50
-	-	249.00	0.00	0.00	207.00	0.00	10.40	7.40	49.70	4.40	10.60	86.50
				0.00		0.00						
218.00	204.00	0.00	175.80	161.50	0.00	8.10	0.00	7.60	49.90	4.60	10.80	86.50
256.00	244.00	244.00	214.00	202.00	202.00	10.10	10.10	7.60	49.90	4.60	10.80	86.50
537.00	513.00	513.00	495.00	471.00	471.00	23.60	23.60	7.80	50.10	4.70	10.90	86.50
744.00	695.00	695.00	701.00	653.00	653.00	32.70	32.70	8.00	50.30	4.80	11.00	86.50
959.00	898.00	898.00	916.00	856.00	856.00	42.80	42.80	8.30	50.60	5.00	11.20	86.50
906.00	850.00	0.00	864.00	807.00	-	40.40	0.00	8.30	50.60	5.00	11.20	86.50
221.00	208.00	0.00	179.00	165.00	0.00	8.30	0.00	7.60	49.90	4.60	10.80	86.50
0.00	905.00	905.00	0.00	863.00	863.00	43.20	43.20	8.30	50.60	5.00	11.20	86.50
-	-	139.00	0.00	0.00	96.00	0.00	4.80	7.60	49.90	4.60	10.80	86.50
-	-	144.00	0.00	0.00	102.00	0.00	5.10	7.60	49.90	4.60	10.80	86.50

SECTION-21

UNDER GROUND CABLE RATES

Item no	Description of works						Rate in Taka					
							Materials & Labour					
Per Metre												
Cable electric Low and medium tension laid in trenches / pipe / conduit / duct including trench excavation, embankments, required bricks / tiles, sand etc. (Excluding pipe / conduit / duct, is to be paid separately) as specified voltage & current ratings according to cable code BYA / NYY / BYM / A2xY / NYSEYFG by to VDE standard.												
Using												
Bricks												
Tiles												
Eastern												
BRB / Paradise / Poly / Supersign / Citizen												
Eastern												
BRB / Paradise / Poly / Supersign / Citizen												
PVC												
XLPE												
A												
B												
C												
D												
E												
F												
Size 16 mm²												
21-041	A2xY	2	x	16	rm	(7-W)	-	-	414.00	-	-	343.00
21-042	A2xY	2	x	16	rm	(19-W)	-	-	424.00	-	-	354.00
21-043	A2xY	3	x	16	rm	(7-W)	-	-	488.00	-	-	417.00
21-044	A2xY	3 ^{1/2}	x	16/10	rm	(7-W)	-	-	488.00	-	-	418.00
21-045	A2xY	4	x	16	rm	(7-W)	-	-	591.00	-	-	520.00
Size 25 mm²												
21-046	BYA	1	x	25	rm	(7-w)	474.00	448.00	0.00	403.00	378.00	0.00
21-047	NYY	1	x	25	rm	(7-w)	510.00	493.00	493.00	439.00	422.00	422.00
21-048	NYY	2	x	25	rm	(7-w)	942.00	901.00	901.00	751.00	830.00	830.00
21-049	NYY	3	x	25	rm	(7-w)	1251.00	1175.00	1175.00	1180.00	1104.00	1104.00
21-050	NYY	3 ^{1/2}	x	25/16	rm	(7/7-w)	1475.00	1375.00	1375.00	1404.00	1305.00	1305.00
21-051	NYY	4	x	25	rm	(7-w)	1590.00	1490.00	1490.00	1519.00	1419.00	1419.00
21-052	BYM	4	x	25	rm	(7-w)	1529.00	1433.00	0.00	1458.00	1362.00	0.00
21-053	BYA	1	x	25	rm	(19-w)	479.00	451.00	0.00	408.00	380.00	0.00
21-054	NYY	1	x	25	rm	(19-w)	0.00	495.00	495.00	0.00	424.00	424.00
21-055	NYY	4	x	25	rm	(19-w)	0.00	1494.00	1494.00	0.00	1424.00	1424.00
21-056	BYM	4	x	25	rm	(19-w)	0.00	1439.00	0.00	0.00	1368.00	0.00
21-057	A2xY	1	x	25	rm	(7-w)	-	-	327.00	-	-	256.00
21-058	A2xY	1	x	25	rm	(19-w)	-	-	358.00	-	-	287.00
21-059	A2xY	2	x	25	rm	(7-w)	-	-	534.00	-	-	463.00
21-060	A2xY	2	x	25	rm	(19-w)	-	-	546.00	-	-	476.00
21-061	A2xY	3	x	25	rm	(7-w)	-	-	628.00	-	-	556.00
21-062	A2xY	3 ^{1/2}	x	25/16	rm	(7/7-w)	-	-	1057.00	-	-	986.00
21-063	A2xY	4	x	25	sm	(7-w)	-	-	815.00	-	-	744.00

RESTRICTED

SECTION-21

UNDER GROUND CABLE RATES

Rate in Taka

Materials & Labour			Supply & Fixing cable only (Except bricks / tiles and trenches)			Deduct from the rates of BRB / Paradise etc. if other approved cables like Sunsine/ "777" Energy / Evana / MEP etc. are used.		Fixing only		Add in repair / removal		Add if rock
Except Bricks / Tiles								Cable only	Including trench, bricks / tiles laying with sand	Cable only	Including bricks / tiles and back filling	
Eastern	BRB / Paradise / Poly / Supersign / Citizen		Eastern	BRB / Paradise / Poly / Supersign / Citizen		PVC	XLPE					
	PVC	XLPE		PVC	XLPE							
G	H	I	M	N	O	P	Q	R	S	T	U	V
-	-	274.00	0.00	0.00	231.00	0.00	11.60	7.80	50.10	4.70	10.90	86.50
-	-	284.00	0.00	0.00	242.00	0.00	12.10	7.80	50.10	4.70	10.90	86.50
-	-	348.00	0.00	0.00	306.00	0.00	15.30	8.00	50.30	4.80	11.00	86.50
-	-	348.00	0.00	0.00	306.00	0.00	15.30	8.20	50.50	4.90	11.10	86.50
-	-	450.00	0.00	0.00	408.00	0.00	20.40	8.30	50.60	5.00	11.20	86.50
334.00	308.00	0.00	291.00	266.00	0.00	13.30	0.00	8.30	50.60	5.00	11.20	86.50
369.00	352.00	352.00	327.00	310.00	310.00	15.50	15.50	8.30	50.60	5.00	11.20	86.50
802.00	761.00	761.00	760.00	718.00	718.00	35.90	35.90	8.60	50.90	5.20	11.40	86.50
1110.00	1034.00	1034.00	1068.00	992.00	992.00	49.60	49.60	8.70	51.00	5.20	11.40	86.50
1335.00	1235.00	1235.00	1292.00	1193.00	1193.00	59.70	59.70	9.00	51.30	5.40	11.60	86.50
1449.00	1349.00	1349.00	1407.00	1307.00	1307.00	65.40	65.40	9.10	51.40	5.50	11.70	86.50
1388.00	1293.00	0.00	1346.00	1250.00	0.00	62.50	0.00	9.10	51.40	5.50	11.70	86.50
338.00	311.00	0.00	296.00	268.00	0.00	13.40	0.00	8.60	50.90	5.20	11.40	86.50
0.00	355.00	355.00	0.00	312.00	312.00	15.60	15.60	8.60	50.90	5.20	11.40	86.50
0.00	1354.00	1354.00	0.00	1312.00	1312.00	65.60	65.60	9.50	51.80	5.70	11.90	86.50
0.00	1299.00	0.00	0.00	1256.00	0.00	62.80	0.00	9.50	51.80	5.70	11.90	86.50
-	-	187.00	-	0.00	144.00	0.00	7.20	8.60	50.90	5.20	11.40	86.50
-	-	217.00	-	0.00	175.00	0.00	8.80	8.60	50.90	5.20	11.40	86.50
-	-	393.00	-	0.00	351.00	0.00	17.60	8.90	51.20	5.30	11.50	86.50
-	-	406.00	-	0.00	364.00	0.00	18.20	8.90	51.20	5.30	11.50	86.50
-	-	488.00	-	0.00	446.00	0.00	22.30	9.10	51.40	5.50	11.70	86.50
-	-	917.00	-	0.00	874.00	0.00	43.70	9.30	51.60	5.60	11.80	86.50
-	-	675.00	-	0.00	632.00	0.00	31.60	9.50	51.80	5.70	11.90	86.50

RESTRICTED

SECTION-21

UNDER GROUND CABLE RATES

Item no	Description of works						Rate in Taka					
							Materials & Labour					
Per Metre												
Cable electric Low and medium tension laid in trenches / pipe / conduit / duct including trench excavation, embankments, required bricks / tiles, sand etc. (Excluding pipe / conduit / duct, is to be paid separately) as specified voltage & current ratings according to cable code BYA / NYY / BYM / A2xY / NYSEYFG by to VDE standard.												
Using												
						Bricks			Tiles			
						Eastern		Eastern				
						BRB / Paradise / Poly / Supersign / Citizen		BRB / Paradise / Poly / Supersign / Citizen				
						PVC	XLPE	PVC	XLPE			
						A	B	C	D	E	F	
Size 35 mm²												
21-064	BYA	1	x	35	rm	(19-w)	581.00	547.00	0.00	511.00	477.00	0.00
21-065	NYY	1	x	35	rm	(19-w)	624.00	597.00	597.00	553.00	526.00	526.00
21-066	NYY	3	x	35	sm	(19-w)	1590.00	1408.00	1408.00	1519.00	1337.00	1337.00
21-067	NYY	3½	x	35/16	sm	(19/7-w)	1722.00	1637.00	1637.00	1651.00	1566.00	1566.00
21-068	NYY	4	x	35	sm	(20-w)	1980.00	1946.00	1946.00	1910.00	1875.00	1875.00
21-069	BYM	4	x	35	sm	20-w)	1998.00	1866.00	0.00	1927.00	1795.00	0.00
21-070	A2xY	1	x	35	rm	(19-w)	-	-	383.00	-	-	312.00
21-071	A2xY	2	x	35	rm	(19-w)	-	-	726.00	-	-	655.00
21-072	A2xY	3	x	35	rm	(20-w)	-	-	949.00	-	-	878.00
21-073	A2xY	3½	x	35/16	rm	(19/7-w)	-	-	1116.00	-	-	1046.00
21-074	A2xY	4	x	35	sm	(20-w)	-	-	1208.00	-	-	1138.00
Size 50 mm²												
21-075	BYA	1	x	50	rm	(19-w)	755.00	701.00	0.00	684.00	631.00	0.00
21-076	NYY	1	x	50	rm	(19-w)	804.00	765.00	765.00	733.00	694.00	694.00
21-077	NYY	3	x	50	sm	(19-w)	2052.00	1913.00	1913.00	1997.00	1858.00	1858.00
21-078	NYY	3½	x	50/25	sm	(19/7-w)	2367.00	2237.00	2237.00	2312.00	2182.00	2182.00
21-079	NYY	4	x	50	sm	(20-w)	2695.00	2636.00	2636.00	2639.00	2581.00	2581.00
21-080	A2xY	1	x	50	rm	(19-w)	-	-	398.00	-	-	327.00
21-081	A2xY	3	x	50	sm	(20-w)	-	-	1087.00	-	-	1016.00
21-082	A2xY	3½	x	50/25	rm	(19/7-w)	-	-	1313.00	-	-	1242.00
21-083	A2xY	4	x	50	sm	(20-w)	-	-	1449.00	-	-	1379.00

RESTRICTED

SECTION-21

UNDER GROUND CABLE RATES

Rate in Taka

Materials & Labour			Supply & Fixing cable only (Except bricks / tiles and trenches)			Deduct from the rates of BRB / Paradise etc. if other approved cables like Sunsine/ "777" Energy / Evana / MEP etc. are used.		Fixing only		Add in repair / removal		Add if rock	
Except Bricks / Tiles			Eastern	BRB / Paradise / Poly / Supersign / Citizen		PVC	XLPE	Cable only	Including trench, bricks / tiles laying with sand	Cable only	Including bricks / tiles and back filling		
Eastern	BRB / Paradise / Poly / Supersign / Citizen			PVC	XLPE								
	PVC	XLPE											
G	H	I	M	N	O	P	Q	R	S	T	U	V	
441.00	407.00	0.00	399.00	365.00	0.00	18.30	0.00	0.00	9.40	51.70	5.60	11.80	86.50
483.00	457.00	457.00	441.00	414.00	414.00	20.70	20.70	20.70	9.40	51.70	5.60	11.80	86.50
1449.00	1268.00	1268.00	1407.00	1225.00	1225.00	61.30	61.30	61.30	9.90	52.20	5.90	12.10	86.50
1581.00	1496.00	1496.00	1539.00	1454.00	1454.00	72.70	72.70	72.70	10.20	52.50	6.10	12.30	86.50
1840.00	1806.00	1806.00	1798.00	1763.00	1763.00	88.20	88.20	88.20	10.40	52.70	6.20	12.40	86.50
1858.00	1725.00	0.00	1816.00	1683.00	0.00	84.20	0.00	0.00	10.40	52.70	6.20	12.40	86.50
-	-	242.00	-	0.00	200.00	0.00	10.00	10.00	9.43	51.70	5.70	11.90	86.50
-	-	585.00	-	0.00	543.00	0.00	27.20	27.20	9.72	52.00	5.80	12.00	86.50
-	-	808.79	-	0.00	767.00	0.00	38.40	38.40	9.91	52.20	5.90	12.10	86.50
-	-	976.00	-	0.00	934.00	0.00	46.70	46.70	10.19	52.50	6.10	12.30	86.50
-	-	1068.00	-	0.00	1026.00	0.00	51.30	51.30	10.38	52.70	6.20	12.40	86.50
615.00	561.00	0.00	572.00	519.00	0.00	26.00	0.00	0.00	12.10	54.40	7.30	13.50	86.50
663.00	624.00	624.00	621.00	582.00	582.00	29.10	29.10	29.10	12.10	54.40	7.30	13.50	86.50
1912.00	1773.00	1773.00	1870.00	1731.00	1731.00	86.60	86.60	86.60	12.70	55.00	7.60	13.80	86.50
2227.00	2097.00	2097.00	2185.00	2054.00	2054.00	102.70	102.70	102.70	13.10	55.40	7.90	14.10	86.50
2554.00	2496.00	2496.00	2512.00	2454.00	2454.00	122.70	122.70	122.70	13.30	55.60	8.00	14.20	86.50
-	-	258.00	-	0.00	215.00	0.00	10.80	10.80	9.43	51.70	5.70	11.90	86.50
-	-	946.00	-	0.00	904.00	0.00	45.20	45.20	9.72	52.00	5.80	12.00	86.50
-	-	1130.00	-	0.00	1120.00	0.00	56.00	56.00	9.91	52.20	5.90	12.10	86.50
-	-	1267.00	-	0.00	1256.00	0.00	62.80	62.80	10.38	52.70	6.20	12.40	86.50

RESTRICTED

SECTION-21

UNDER GROUND CABLE RATES

Item no	Description of works						Rate in Taka					
							Materials & Labour					
Per Metre												
Cable electric Low and medium tension laid in trenches / pipe / conduit / duct including trench excavation, embankments, required bricks / tiles, sand etc. (Excluding pipe / conduit / duct, is to be paid separately) as specified voltage & current ratings according to cable code BYA / NYY / BYM / A2xY / NYSEYFG by to VDE standard.						Using						
						Bricks			Tiles			
						Eastern	BRB / Paradise / Poly / Supersign / Citizen		Eastern	BRB / Paradise / Poly / Supersign / Citizen		
							PVC	XLPE		PVC	XLPE	
A	B	C	D	E	F							
Size 70 mm²												
21-084	BYA	1	x	70	rm	(19-w)	978.00	902.00	0.00	907.00	831.00	0.00
21-085	NYY	1	x	70	rm	(19-w)	1035.00	977.00	977.00	965.00	906.00	906.00
21-086	NYY	3	x	70	sm	(19-w)	2771.00	2554.00	2554.00	2716.00	2499.00	2499.00
21-087	NYY	3 ^{1/2}	x	70/35	sm	(19/19-w)	3208.00	3060.00	3060.00	3153.00	3005.00	3005.00
21-088	NYY	4	x	70	sm	(20-w)	3650.00	2099.00	2099.00	3594.00	2043.00	2043.00
21-089	A2xY	1	x	70	rm	(19-w)	-	-	471.00	-	-	400.00
21-090	A2xY	3	x	70	sm	(20-w)	-	-	1321.00	-	-	1250.00
21-091	A2xY	3 ^{1/2}	x	70/50	rm	(19/7-w)	-	-	1731.00	-	-	1660.00
21-092	A2xY	4	x	70	sm	(20-w)	-	-	1971.00	-	-	1900.00
Size 95 mm²												
21-093	BYA	1	x	95	rm	(19-w)	1254.00	1147.00	0.00	1183.00	1077.00	0.00
21-094	NYY	1	x	95	rm	(19-w)	1324.00	1239.00	1239.00	1253.00	1168.00	1168.00
21-095	NYY	3	x	95	sm	(19-w)	3700.00	3374.00	3374.00	3645.00	3318.00	3318.00
21-096	NYY	3 ^{1/2}	x	95/50	sm	(19/19-w)	4294.00	4081.00	4081.00	4239.00	4026.00	4026.00
21-097	NYY	4	x	95	sm	(20-w)	4807.00	4499.00	4499.00	4752.00	4443.00	4443.00
21-098	A2xY	1	x	95	rm	(19-w)	-	-	556.00	-	-	486.00
21-099	A2xY	3	x	95	sm	(20-w)	-	-	1451.00	-	-	1380.00
21-100	A2xY	3 ^{1/2}	x	95/50	rm	(19/19-w)	-	-	2336.00	-	-	2265.00
21-101	A2xY	4	0	70	sm	(20-w)	-	-	2468.00	-	-	2397.00

SECTION-21

UNDER GROUND CABLE RATES

Rate in Taka

Materials & Labour			Supply & Fixing cable only (Except bricks / tiles and trenches)				Deduct from the rates of BRB / Paradise etc. if other approved cables like Sunsine/ "777" Energy / Evana / MEP etc. are used.		Fixing only		Add in repair / removal		Add if rock
Except Bricks / Tiles			Eastern				PVC	XLPE	Cable only	Including trench, bricks / tiles laying with sand	Cable only	Including bricks / tiles and back filling	
Eastern	BRB / Paradise / Poly / Supersign / Citizen												
	PVC	XLPE	M	N	O	P	Q	R	S	T	U	V	
838.00	761.00	0.00	795.00	719.00	0.00	36.00	0.00	12.60	54.90	7.60	13.80	86.50	
895.00	836.00	836.00	853.00	794.00	794.00	39.70	39.70	12.60	54.90	7.60	13.80	86.50	
2631.00	2414.00	2414.00	2588.00	2372.00	2372.00	118.60	118.60	13.20	55.50	7.90	14.10	86.50	
3068.00	2920.00	2920.00	3026.00	2878.00	2878.00	143.90	143.90	13.60	55.90	8.20	14.40	86.50	
3509.00	1958.00	1958.00	3467.00	1916.00	1916.00	95.80	95.80	13.90	56.20	8.30	14.50	86.50	
-	-	331.00	-	0.00	289.00	0.00	14.50	12.60	54.90	7.60	13.80	86.50	
-	-	1181.00	-	0.00	1138.00	0.00	56.90	13.23	55.50	7.90	14.10	86.50	
-	-	1590.00	-	0.00	1548.00	0.00	77.40	13.61	55.90	8.20	14.40	86.50	
-	-	1830.00	-	0.00	1788.00	0.00	89.40	13.86	56.10	8.30	14.50	86.50	
1114.00	1007.00	0.00	1071.00	965.00	0.00	48.30	0.00	13.70	56.00	8.20	14.40	86.50	
1184.00	1099.00	1099.00	1141.00	1056.00	1056.00	52.80	52.80	13.70	56.00	8.20	14.40	86.50	
3560.00	3233.00	3233.00	3517.00	3191.00	3191.00	159.60	159.60	14.40	56.70	8.60	14.80	86.50	
4154.00	3941.00	3941.00	4112.00	3899.00	3899.00	195.00	195.00	14.80	57.10	8.90	15.10	86.50	
4667.00	4358.00	4358.00	4624.00	4316.00	4316.00	215.80	215.80	15.10	57.40	9.10	15.30	86.50	
-	-	416.00	-	0.00	374.00	0.00	18.70	13.75	56.00	8.20	14.40	86.50	
-	-	1311.00	-	0.00	1268.00	0.00	63.40	14.44	56.70	8.70	14.90	86.50	
-	-	2196.00	-	0.00	2154.00	0.00	107.70	14.85	57.10	8.90	15.10	86.50	
-	-	2327.00	-	0.00	2285.00	0.00	114.30	15.12	57.40	9.10	15.30	86.50	

SECTION-21

UNDER GROUND CABLE RATES

Item no	Description of works						Rate in Taka					
							Materials & Labour					
Per Metre												
Cable electric Low and medium tension laid in trenches / pipe / conduit / duct including trench excavation, embankments, required bricks / tiles, sand etc. (Excluding pipe / conduit / duct, is to be paid separately) as specified voltage & current ratings according to cable code BYA / NYY / BYM / A2xY / NYSEYFG by to VDE standard.												
Using												
Bricks												
Tiles												
Eastern			BRB / Paradise / Poly / Supersign / Citizen			Eastern			BRB / Paradise / Poly / Supersign / Citizen			
			PVC		XLPE				PVC		XLPE	
A			B		C	D			E		F	
Size 120 mm²												
21-102	BYA	1	x	120	rm	(37-w)	1529.00	1393.00	0.00	1458.00	1323.00	0.00
21-103	NYY	1	x	120	rm	(37-w)	1612.00	1500.00	1500.00	1541.00	1429.00	1429.00
21-104	NYY	3	x	120	sm	(37-w)	4572.00	4157.00	4157.00	4517.00	4102.00	4102.00
21-105	NYY	3 ^{1/2}	x	120/70	sm	(37/19-w)	5421.00	5066.00	5066.00	5366.00	5011.00	5011.00
21-106	NYY	4	x	120	sm	(39-w)	5963.00	5518.00	5518.00	5908.00	5463.00	5463.00
21-107	A2xY	1	x	120	rm	(37-w)	-	-	642.00	-	-	571.00
21-108	A2xY	3	x	120	sm	(39-w)	-	-	2460.00	-	-	2390.00
21-109	A2xY	3 ^{1/2}	x	120/70	rm	(37/19-w)	-	-	3158.00	-	-	3087.00
21-110	A2xY	4	x	120	sm	(39-w)	-	-	2953.00	-	-	2882.00
Size 150 mm²												
21-111	BYA	1	x	150	rm	(37-w)	0.00	1696.00	0.00	0.00	1625.00	0.00
21-112	NYY	1	x	150	rm	(37-w)	1972.00	1823.00	1823.00	1901.00	1753.00	1753.00
21-113	NYY	3	x	150	sm	(37-w)	5633.00	5123.00	5123.00	5577.00	5067.00	5067.00
21-114	NYY	3 ^{1/2}	x	150/70	sm	(37/19-w)	6504.00	6029.00	6029.00	6449.00	5974.00	5974.00
21-115	NYY	4	x	150	sm	(39-w)	7446.00	6844.00	6844.00	7390.00	6788.00	6788.00
21-116	A2xY	1	x	150	rm	(37-w)	-	-	757.00	-	-	686.00
21-117	A2xY	3	x	150	sm	(39-w)	-	-	2604.00	-	-	2534.00
21-118	A2xY	3 ^{1/2}	x	150/70	rm	(37/19-w)	-	-	3673.00	-	-	3603.00
21-119	A2xY	4	x	150	sm	(39-w)	-	-	3527.00	-	-	3456.00

RESTRICTED

SECTION-21

UNDER GROUND CABLE RATES

Rate in Taka

Materials & Labour			Supply & Fixing cable only (Except bricks / tiles and trenches)			Deduct from the rates of BRB / Paradise etc. if other approved cables like Sunsine/ "777" Energy / Evana / MEP etc. are used.		Fixing only		Add in repair / removal		Add if rock
Except Bricks / Tiles								Cable only	Including trench, bricks / tiles laying with sand	Cable only	Including bricks / tiles and back filling	
Eastern	BRB / Paradise / Poly / Supersign / Citizen		Eastern	BRB / Paradise / Poly / Supersign / Citizen		PVC	XLPE					R
	PVC	XLPE		PVC	XLPE							
G	H	I	M	N	O	P	Q	R	S	T	U	V
1389.00	1253.00	0.00	1346.00	1211.00	0.00	60.60	0.00	15.10	57.40	9.10	15.30	86.50
1472.00	1359.00	1359.00	1429.00	1317.00	1317.00	65.90	65.90	15.10	57.40	9.10	15.30	86.50
4432.00	4017.00	4017.00	4390.00	3975.00	3975.00	198.80	198.80	15.90	58.20	9.50	15.70	86.50
5281.00	4926.00	4926.00	5239.00	4883.00	4883.00	244.20	244.20	15.90	58.20	9.50	15.70	86.50
5823.00	5378.00	5378.00	5781.00	5336.00	5336.00	266.80	266.80	16.30	58.60	9.80	16.00	86.50
-	-	502.00	-	0.00	459.00	0.00	23.00	15.12	57.40	9.10	15.30	86.50
-	-	2320.00	-	0.00	2278.00	0.00	113.90	15.88	58.20	9.50	15.70	86.50
-	-	3017.00	-	0.00	2975.00	0.00	148.80	16.33	58.60	9.80	16.00	86.50
-	-	2812.00	-	0.00	2770.00	0.00	138.50	16.63	58.90	10.00	16.20	86.50
0.00	1555.00	0.00	0.00	1513.00	0.00	75.70	0.00	18.10	60.40	10.90	17.10	86.50
1831.00	1683.00	1683.00	1789.00	1641.00	1641.00	82.10	82.10	18.60	60.90	11.20	17.40	86.50
5492.00	4982.00	4982.00	5450.00	4940.00	4940.00	247.00	247.00	19.00	61.30	11.40	17.60	86.50
6364.00	5889.00	5889.00	6322.00	5846.00	5846.00	292.30	292.30	19.50	61.80	11.70	17.90	86.50
7305.00	6703.00	6703.00	7263.00	6661.00	6661.00	333.10	333.10	19.90	62.20	11.90	18.10	86.50
-	-	617.00	-	0.00	575.00	0.00	28.80	18.09	60.40	10.90	17.10	86.50
-	-	2464.00	-	0.00	2422.00	0.00	121.10	18.99	61.30	11.40	17.60	86.50
-	-	3533.00	-	0.00	3491.00	0.00	174.60	19.53	61.80	11.70	17.90	86.50
-	-	3387.00	-	0.00	3344.00	0.00	167.20	19.90	62.20	11.90	18.10	86.50

RESTRICTED

SECTION-21

UNDER GROUND CABLE RATES

Item no	Description of works						Rate in Taka					
							Materials & Labour					
Per Metre												
Cable electric Low and medium tension laid in trenches / pipe / conduit / duct including trench excavation, embankments, required bricks / tiles, sand etc. (Excluding pipe / conduit / duct, is to be paid separately) as specified voltage & current ratings according to cable code BYA / NYY / BYM / A2xY / NYSEYFG by to VDE standard.							Using					
							Bricks			Tiles		
							Eastern	BRB / Paradise / Poly / Supersign / Citizen		Eastern	BRB / Paradise / Poly / Supersign / Citizen	
								PVC	XLPE		PVC	XLPE
A	B	C	D	E	F							
Size 185 mm²												
21-120	BYA	1	x	185	rm	(37-w)	0.00	2045.00	0.00	0.00	1974.00	0.00
21-121	NYY	1	x	185	rm	(37-w)	2380.00	2202.00	2202.00	2309.00	2131.00	2131.00
21-122	NYY	3	x	185	sm	(37-w)	6879.00	6290.00	6290.00	6824.00	6235.00	6235.00
21-123	NYY	3½	x	185/95	sm	(37/19-w)	8086.00	7450.00	7450.00	8030.00	7395.00	7395.00
21-124	NYY	4	x	185	sm	(39-w)	9149.00	8357.00	8357.00	9093.00	8302.00	8302.00
21-125	A2xY	1	x	185	rm	(37-w)	-	-	882.00	-	-	811.00
21-126	A2xY	3	x	185	sm	(39-w)	-	-	3197.00	-	-	3127.00
21-127	A2xY	3½	x	185/95	rm	(37/19-w)	-	-	3793.00	-	-	3723.00
21-128	A2xY	4	x	185	sm	(39-w)	-	-	4174.00	-	-	4103.00
Size 240 mm²												
21-129	BYA	1	x	240	rm	(61-w)	2864.00	2601.00	0.00	2794.00	2530.00	0.00
21-130	NYY	1	x	240	rm	(61-w)	3056.00	2789.00	2789.00	2985.00	2718.00	2718.00
21-131	NYY	3	x	240	sm	(61-w)	8851.00	8068.00	8068.00	8796.00	8013.00	8013.00
21-132	NYY	3½	x	240/120	sm	(37/19-w)	10532.00	9582.00	9582.00	10477.00	9526.00	9526.00
21-133	NYY	4	x	240	sm	(39-w)	11932.00	10868.00	10868.00	11877.00	10812.00	10812.00
21-134	A2xY	1	x	240	rm	(61-w)	-	-	1076.00	-	-	1005.00
21-135	A2xY	3	x	240	sm	(39-w)	-	-	3812.00	-	-	3741.00
21-136	A2xY	3½	x	240/120	rm	(37/19-w)	-	-	4538.00	-	-	4468.00
21-137	A2xY	4	x	240	sm	(39-w)	-	-	5177.00	-	-	5107.00

RESTRICTED

SECTION-21

UNDER GROUND CABLE RATES

Rate in Taka

Materials & Labour			Supply & Fixing cable only (Except bricks / tiles and trenches)			Deduct from the rates of BRB / Paradise etc. if other approved cables like Sunsine/ "777" Energy / Evana / MEP etc. are used.		Fixing only		Add in repair / removal		Add if rock
Except Bricks / Tiles			Eastern			PVC XLPE		Cable only	Including trench, bricks / tiles laying with sand	Cable only	Including bricks / tiles and back filling	
Eastern	BRB / Paradise / Poly / Supersign / Citizen											
	PVC	XLPE	PVC	XLPE	PVC	XLPE	R	S	T	U	V	
G	H	I	M	N	O	P	Q	R	S	T	U	V
0.00	1905.00	0.00	0.00	1862.00	0.00	93.10	0.00	19.40	61.70	11.60	17.80	86.50
2240.00	2062.00	2062.00	2197.00	2019.00	2019.00	101.00	101.00	20.00	62.30	12.00	18.20	86.50
6739.00	6150.00	6150.00	6696.00	6108.00	6108.00	305.40	305.40	20.30	62.60	12.20	18.40	86.50
7945.00	7310.00	7310.00	7903.00	7267.00	7267.00	363.40	363.40	20.90	63.20	12.50	18.70	86.50
9009.00	8217.00	8217.00	8966.00	8175.00	8175.00	408.80	408.80	21.30	63.60	12.80	19.00	86.50
-	-	742.00	-	0.00	700.00	0.00	35.00	19.38	61.70	11.60	17.80	86.50
-	-	3057.00	-	0.00	3015.00	0.00	150.80	20.35	62.60	12.20	18.40	86.50
-	-	3653.00	-	0.00	3611.00	0.00	180.60	20.93	63.20	12.60	18.80	86.50
-	-	4033.00	-	0.00	3991.00	0.00	199.60	21.32	63.60	12.80	19.00	86.50
2724.00	2461.00	0.00	2682.00	2418.00	0.00	120.90	0.00	20.90	63.20	12.50	18.70	86.50
2915.00	2648.00	2648.00	2873.00	2606.00	2606.00	130.30	130.30	21.50	63.80	12.90	19.10	86.50
8711.00	7928.00	7928.00	8668.00	7885.00	7885.00	394.30	394.30	21.90	64.20	13.10	19.30	86.50
10392.00	9441.00	9441.00	10350.00	9399.00	9399.00	470.00	470.00	22.50	64.80	13.50	19.70	86.50
11792.00	10727.00	10727.00	11749.00	10685.00	10685.00	534.30	534.30	23.00	65.30	13.80	20.00	86.50
-	-	936.00	-	0.00	894.00	0.00	44.70	20.87	63.20	12.50	18.70	86.50
-	-	3672.00	-	0.00	3629.00	0.00	181.50	21.91	64.20	13.10	19.30	86.50
-	-	4398.00	-	0.00	4356.00	0.00	217.80	22.54	64.80	13.50	19.70	86.50
-	-	5037.00	-	0.00	4995.00	0.00	249.80	22.96	65.20	13.80	20.00	86.50

SECTION-21

UNDER GROUND CABLE RATES

Item no Description of works

Per Metre

Rate in Taka

Cable electric Low and medium tension laid in trenches / pipe / conduit / duct including trench excavation, embankments, required bricks / tiles, sand etc. (Excluding pipe / conduit / duct, is to be paid separately) as specified voltage & current ratings according to cable code **BYA / NYY / BYM / A2xY / NYSEYFG** by to VDE standard.

Materials & Labour					
Using					
Bricks			Tiles		
Eastern	BRB / Paradise / Poly / Supersign / Citizen		Eastern	BRB / Paradise / Poly / Supersign / Citizen	
	PVC	XLPE		PVC	XLPE
A	B	C	D	E	F

Size 300 mm²

21-138	BYA	1	x	300	rm	(61-w)	3539.00	3189.00	0.00	3484.00	3133.00	0.00
21-139	NYY	1	x	300	rm	(61-w)	3784.00	3413.00	3413.00	3728.00	3357.00	3357.00
21-140	NYY	3	x	300	sm	(61-w)	11140.00	9978.00	9978.00	11094.00	9932.00	9932.00
21-141	NYY	3 ^{1/2}	x	300/150	sm	(61/19-w)	13168.00	11869.00	11869.00	13123.00	11824.00	11824.00
21-142	NYY	4	x	300	sm	(39-w)	14972.00	13406.00	13406.00	14927.00	13361.00	13361.00
21-143	A2xY	1	x	300	rm	(61-w)	-	-	1289.00	-	-	1234.00
21-144	A2xY	3	x	300	sm	(39-w)	-	-	4665.00	-	-	4620.00
21-145	A2xY	3 ^{1/2}	x	300/150	rm	(61/37-w)	-	-	5444.00	-	-	5399.00
21-146	A2xY	4	x	240	sm	(61-w)	-	-	6351.00	-	-	6306.00

Size 400 mm²

21-147	BYA	1	x	400	rm	(61-w)	4520.00	4185.00	0.00	4465.00	4129.00	0.00
21-148	NYY	1	x	400	rm	(61-w)	4896.00	4471.00	4471.00	4840.00	4416.00	4416.00
21-149	NYY	3	x	400	rm	(61-w)	0.00	13260.00	13260.00	0.00	13215.00	13215.00
21-150	A2xY	1	x	400	rm	(61-w)	-	-	1631.00	-	-	1575.00
21-151	A2xY	3	x	400	sm	(61-w)	-	-	5964.00	-	-	5919.00
21-152	A2xY	3 ^{1/2}	x	400/185	rm	(61/37-w)	-	-	7053.00	-	-	7007.00
21-153	A2xY	4	x	400	sm	(61-w)	-	-	7966.00	-	-	7921.00

Size 500 mm²

21-154	BYA	1	x	500	rm	(61-w)	0.00	5171.00	0.00	0.00	5116.00	0.00
21-155	NYY	1	x	500	rm	(61-w)	6048.00	5526.00	5526.00	5993.00	5471.00	5471.00
21-156	NYY	3	x	500	rm	(61-w)	0.00	0.00	0.00	0.00	0.00	0.00
21-157	A2xY	1	x	500	rm	(61-w)	-	-	1965.00	-	-	1909.00
21-158	A2xY	3	x	500	sm	(61-w)	-	-	7496.00	-	-	7451.00
21-159	A2xY	3 ^{1/2}	x	500/240	rm	(61/37-w)	-	-	8127.00	-	-	8081.00
21-160	A2xY	4	x	500	sm	(61-w)	-	-	9350.00	-	-	9305.00

RESTRICTED

SECTION-21

UNDER GROUND CABLE RATES

Rate in Taka

Materials & Labour			Supply & Fixing cable only (Except bricks / tiles and trenches)			Deduct from the rates of BRB / Paradise etc. if other approved cables like Sunsign/ "777" Energy / Evana / MEP etc. are used.		Fixing only		Add in repair / removal		Add if rock	
Except Bricks / Tiles			Eastern			PVC XLPE		Cable only	Including trench, bricks / tiles laying with sand	Cable only	Including bricks / tiles and back filling		
Eastern	BRB / Paradise / Poly / Supersign / Citizen												PVC
G	H	I	M	N	O	P	Q	R	S	T	U	V	
3399.00	3049.00	0.00	3356.00	3006.00	0.00	150.30	0.00	0.00	23.60	65.90	14.20	20.40	86.50
3643.00	3272.00	3272.00	3601.00	3230.00	3230.00	161.50	161.50	161.50	24.30	66.60	14.60	20.80	86.50
10999.00	9837.00	9837.00	10957.00	9795.00	9795.00	489.80	489.80	489.80	24.80	67.10	14.90	21.10	86.50
13028.00	11729.00	11729.00	12985.00	11686.00	11686.00	584.30	584.30	584.30	25.50	67.80	15.30	21.50	86.50
14832.00	13266.00	13266.00	14790.00	13223.00	13223.00	661.20	661.20	661.20	26.00	68.30	15.60	21.80	86.50
-	-	1149.00	-	0.00	1107.00	0.00	55.40	55.40	23.60	65.90	14.20	20.40	86.50
-	-	4525.00	-	0.00	4482.00	0.00	224.10	224.10	24.78	67.10	14.90	21.10	86.50
-	-	5304.00	-	0.00	5261.00	0.00	263.10	263.10	25.49	67.80	15.30	21.50	86.50
-	-	6211.00	-	0.00	6168.00	0.00	308.40	308.40	25.96	68.20	15.60	21.80	86.50
4380.00	4044.00	0.00	4337.00	4002.00	0.00	200.10	0.00	0.00	25.70	68.00	15.40	21.60	86.50
4755.00	4331.00	4331.00	4713.00	4289.00	4289.00	214.50	214.50	214.50	26.50	68.80	15.90	22.10	86.50
0.00	13120.00	13120.00	0.00	13077.00	13077.00	653.90	653.90	653.90	27.00	69.30	16.20	22.40	86.50
-	-	1490.00	-	0.00	1448.00	0.00	72.40	72.40	25.74	68.00	15.40	21.60	86.50
-	-	5824.00	-	0.00	5782.00	0.00	289.10	289.10	27.03	69.30	16.20	22.40	86.50
-	-	6912.00	-	0.00	6870.00	0.00	343.50	343.50	27.80	70.10	16.70	22.90	86.50
-	-	7826.00	-	0.00	7784.00	0.00	389.20	389.20	28.32	70.60	17.00	23.20	86.50
0.00	5031.00	0.00	0.00	4988.00	0.00	249.40	0.00	0.00	28.30	70.60	17.00	23.20	86.50
5908.00	5386.00	5386.00	5866.00	5344.00	5344.00	267.20	267.20	267.20	29.20	71.50	17.50	23.70	86.50
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	42.30	-	6.20	86.50
-	-	1824.00	-	0.00	1782.00	0.00	89.10	89.10	28.32	70.60	17.00	23.20	86.50
-	-	7356.00	-	0.00	7313.00	0.00	365.70	365.70	29.73	72.00	17.80	24.00	86.50
-	-	7986.00	-	0.00	7944.00	0.00	397.20	397.20	30.58	72.90	18.30	24.50	86.50
-	-	9210.00	-	0.00	9167.00	0.00	458.40	458.40	31.15	73.40	18.70	24.90	86.50

SECTION-21

UNDER GROUND CABLE RATES

Item no	Description of works	Rate in Taka					
		Materials & Labour					
Per Metre		Using					
		Bricks			Tiles		
		BRB / Paradise / Poly / Supersign / Citizen		Eastern	BRB / Paradise / Poly / Supersign / Citizen		
		PVC	XLPE		PVC	XLPE	
		A	B	C	D	E	F
Cable electric Low and medium tension laid in trenches / pipe / conduit / duct including trench excavation, embankments, required bricks / tiles, sand etc. (Excluding pipe / conduit / duct, is to be paid separately) as specified voltage & current ratings according to cable code BYA / NYY / BYM / A2xY / NYSEYFGb to VDE standard.							
Size 630 mm²							
21-161	NYY 1 x 630 rm (127-w)	7531.00	6901.00	6901.00	7476.00	6845.00	6845.00
21-162	NYY 3 x 630 rm (61-w)	0.00	0.00	0.00	0.00	0.00	0.00
21-163	A2xY 1 x 630 rm (61-w)	-	-	2435.00	-	-	2380.00
21-164	A2xY 3 x 630 sm (61-w)	-	-	9331.00	-	-	9286.00
Size 800 mm²							
21-165	A2xY 1 x 800 rm (61-w)	-	-	3026.00	-	-	2980.00
Size 1000 mm²							
21-166	A2xY 1 x 1000 rm (61-w)	-	-	3703.00	-	-	3658.00
H T (11 KV) ARMOURED 3 Core, Copper conductor cable (Eastern) and (BRB / Supersign as other than Eastern)							
21-167	NYSEYFGb _y 3 x 16 rm	2921.00	0.00	0.00	2866.00	0.00	0.00
21-168	NYSEYFGb _y 3 x 25 rm	3471.00	0.00	2811.00	3416.00	0.00	2756.00
21-169	NYSEYFGb _y 3 x 35 sm	3892.00	0.00	3287.00	3837.00	0.00	3232.00
21-170	NYSEYFGb _y 3 x 50 sm	4671.00	0.00	3869.00	4616.00	0.00	3814.00
21-171	NYSEYFGb _y 3 x 70 sm	5529.00	0.00	4679.00	5484.00	0.00	4678.00
21-172	NYSEYFGb _y 3 x 95 sm	6596.00	0.00	5768.00	6551.00	0.00	5722.00
21-173	NYSEYFGb _y 3 x 120 sm	7754.00	0.00	6747.00	7709.00	0.00	6702.00
H T (ARMOURED Single Core, Copper conductor) cable							
21-174	NYHSY-HT 1 x 50 rm	-	1191.00	-	-	1120.00	-
21-175	NYHSY-HT 1 x 70 rm	-	1459.00	-	-	1388.00	-
21-176	NYHSY-HT 1 x 95 rm	-	1820.00	-	-	1749.00	-
21-177	NYHSY-HT 1 x 120 rm	-	2141.00	-	-	2086.00	-
21-178	NYHSY-HT 1 x 185 rm	-	2976.00	-	-	2921.00	-
21-179	NYHSY-HT 1 x 240 rm	-	3760.00	-	-	3705.00	-
21-180 21-220	Blank						

RESTRICTED

SECTION-21
UNDER GROUND CABLE RATES

Rate in Taka

Materials & Labour			Supply & Fixing cable only (Except bricks / tiles and trenches)				Deduct from the rates of BRB / Paradise etc. if other approved cables like Sunsine/ "777" Energy / Evana / MEP etc. are used.		Fixing only		Add in repair / removal		Add if rock
Except Bricks / Tiles			Eastern	BRB / Paradise / Poly / Supersign / Citizen		PVC	XLPE	Cable only	Including trench, bricks / tiles laying with sand	Cable only	Including bricks / tiles and back filling		
Eastern	BRB / Paradise / Poly / Supersign / Citizen			PVC	XLPE								
	PVC	XLPE											
G	H	I	M	N	O	P	Q	R	S	T	U	V	
7391.00	6760.00	6760.00	7348.00	6718.00	6718.00	335.90	335.90	33.30	75.60	20.00	26.20	86.50	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	42.30	-	6.20	86.50	
-	-	2295.00	-	0.00	2253.00	0.00	112.70	32.36	74.60	19.40	25.60	86.50	
-	-	9191.00	-	0.00	9148.00	0.00	457.40	33.98	76.30	20.40	26.60	86.50	
-	-	2885.00	-	0.00	2843.00	0.00	142.20	34.95	77.20	21.00	27.20	86.50	
-	-	3563.00	-	0.00	3521.00	0.00	176.10	35.60	77.90	21.40	27.60	86.50	
2780.00	0.00	0.00	2738.00	0.00	0.00	0.00	0.00	32.40	74.70	19.40	25.60	86.50	
3331.00	0.00	2671.00	3288.00	0.00	2628.00	0.00	131.40	35.40	77.70	21.20	27.40	86.50	
3752.00	0.00	3147.00	3709.00	0.00	3105.00	0.00	155.30	37.80	80.10	22.70	28.90	86.50	
4530.00	0.00	3729.00	4488.00	0.00	3687.00	0.00	184.40	40.50	82.80	24.30	30.50	86.50	
5389.00	0.00	4539.00	5347.00	0.00	4497.00	0.00	224.90	43.60	85.90	26.20	32.40	86.50	
6456.00	0.00	5627.00	6414.00	0.00	5585.00	0.00	279.30	47.20	89.50	28.30	34.50	86.50	
7614.00	0.00	6607.00	7572.00	0.00	6565.00	0.00	328.30	56.60	98.90	34.00	40.20	86.50	
-	1050.00	-	-	1008.00	-	50.40	-	40.45	82.70	24.30	30.50	86.50	
-	1319.00	-	-	1276.00	-	63.80	-	41.95	84.20	25.20	31.40	86.50	
-	1680.00	-	-	1638.00	-	81.90	-	43.57	85.80	26.10	32.30	86.50	
-	2000.00	-	-	1958.00	-	97.90	-	45.31	87.60	27.20	33.40	86.50	
-	2835.00	-	-	2793.00	-	139.70	-	47.20	89.50	28.30	34.50	86.50	
-	3620.00	-	-	3578.00	-	178.90	-	51.49	93.80	30.90	37.10	86.50	

SECTION-21

RESTRICTED

EXTERNAL
ELECTRIFICATION

ITEM NO.	DESCRIPTION	Rate in Taka
	POLE ELECTRIC	Excavation in any soil with materials and Labour
	EACH	
21-221	Pole Steel/GI tubular, erection in position, setting including digging holes 150 mm CC foundation 75 mm muffler around as per drawing and specification for 9 metre height type 'A'	12,544.00
21-222	- Ditto - but 9 metre type 'AA'	18,962.00
21-223	- Ditto - but 11 metre type 'B'	15,839.00
21-224	- Ditto - but 12 metre type 'C'	17,540.00
21-225	- Ditto - but 9 metre type 'D'	10,931.00
21-226	- Ditto - but 9 metre type 'DD'	11,164.00
21-227	- Ditto - but 5 metre type 'E' street / garden light post	8,582.00
21-228	Pole PC tubular (PDB type) 9 / 10 metre height supply, setting & erection in position all as spd and direction of Engineer in charge.	19307.00
21-229	- Ditto - 11 metre height.	22109.00
21-230	- Ditto - 12 metre height.	25379.00
21-231	- Ditto - but RCC pole	0.00
21-232	Lattice pole setting / erecting in position, digging holes & CC foundation as spd upto 9 metre height	0.00
21-233	- Ditto - but upto 12 metre height as spd.	0.00
21-234	Digging hole, seting and erection in position of wooden pole REB type upto 9 metre height all as spd.	0.00
21-235	BLANK	
To 21-250		

RESTRICTED

SECTION-21

EXTERNAL ELECTRIFICATION

Rate in Taka

Excavation in any soil			Strengthening of pole in line	Recovery/ Removal or Add to if fixed in R/R	Add to if rock	Add to if Re- fixed with 2 coats anticorrosive paint	Remarks
Excluding pole (Digging Hole)							
Erection Only	Except Cement	Except CC Work					
1,742.00	1,541.00	1,052.00	294.00	277.00	277.00	47.40	
1,742.00	1,541.00	1,052.00	294.00	277.00	277.00	47.40	
2,295.00	2,054.00	1,467.00	397.00	372.00	402.00	71.10	
2,364.00	2,116.00	1,511.00	409.00	383.00	414.00	73.20	
816.00	695.00	402.00	135.80	101.90	0.00	0.00	
816.00	695.00	402.00	136.00	102.00	0.00	0.00	
1,613.00	1,203.00	206.00	0.00	0.00	0.00	0.00	
923.00	887.00	799.00	388.00	123.00	123.00	0.00	
1,234.00	1,197.00	1,109.00	629.00	472.00	168.00	0.00	
1,607.00	1,603.00	1,468.00	709.00	532.00	222.00	0.00	
796.00	759.00	668.00	267.00	201.00	0.00	0.00	
3,335.00	2,450.00	300.00	246.00	180.00	0.00	0.00	
3,407.00	2,522.00	372.00	298.00	223.00	0.00	0.00	
227.00	132.70	99.50	132.70	99.50	0.00	0.00	

RESTRICTED

SECTION-21

EXTERNAL ELECTRIFICATION

ITEM	DESCRIPTION	Rate in Taka			
		Materials and Labour	Fixing Only	Add if fixed in R/R	Add to Materials Lab. if galv.
	CROSS ARMS				
	Each				
21-251	Cross arms MS. Channels Iron with clamps, washers, bolts and nuts etc type 'A'	1551.00	114.90	57.50	114.90
21-252	- Ditto - but type 'B'	1363.00	114.90	57.50	99.80
21-253	- Ditto - but type 'C'	1051.00	102.10	51.10	75.90
21-254	- Ditto - but type 'D'	1254.00	91.90	46.00	92.90
21-255	- Ditto - but type 'E'	979.00	114.90	57.50	69.20
21-256	- Ditto - but type 'F'	1468.00	114.90	57.50	108.20
21-257	- Ditto - but type 'G'	2328.00	114.90	57.50	177.00
21-258	- Ditto - but type 'H'	1771.00	153.00	76.60	129.00
21-259	- Ditto - but type 'I'	796.00	91.90	46.00	56.30
21-260	- Ditto - but type 'J'	658.00	91.90	46.00	45.30
21-261	Side mounted bracket assembly for fixing of 11 kv pin insulator (Single arm)	454.00	114.90	57.50	27.10
21-262	- Ditto - but (Double arm)	713.00	114.90	57.50	27.10
21-263	Top mounted bracket assembly Ridge iron assembly complete for fixing of 11 KV pin Insulator	858.00	114.90	57.50	59.50
	POLE PAINTING				
	Each				
21-264	Painting of erected steel tubular pole with Aluminium paint above 1 M from CC muffler to top and bottom portion with black enameled paint (1M from CC muffler) including scraping as reqd. for 9 M long pole type 'A'	120.10	86.10	101.50	70.40
21-265	- Ditto - but upto 11M long pole type 'B'	140.60	106.50	133.60	102.50
21-266	- Ditto - but upto 12 M long pole type 'C'	147.00	108.40	140.20	104.30
21-267	Painting of garden/Street light pole upto 5M height square type 'E' or similar with best quality enameled paint.	104.54	70.00	100.14	65.60
	Per Pole				
21-268	Writing of pole number (Figure / Letter) with white enamelled paint on black enamelled paint background figure / letter size not less than 38 mm.	59.50	-	-	-

SECTION-21

RESTRICTED

Per Plate / board

Rate in Taka

EXTERNAL ELECTRIFICATION

ITEM	DESCRIPTION	Rate in Taka	-	-	-
21-269	Writing / re-writing of danger sign plate with reqd paint as Spd.	90.20	-	-	-
	Other authorized painting & figure/letter writing works	Rate is to be taken from similar item of painting works (section 15)			

Rate in Taka

INSULATOR

Materials and Labour	Fixing Only	Add to if fixed in R/R
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Each

21-270	Insulator glazed porcelain vitreous of glass caps with galvanized pin type for low & medium tension O/H distribution line.	120.00	18.40	9.20
21-271	- Ditto - but for 11KV high tension line	398.00	30.30	15.20
21-272	Insulator shackle glazed for low & medium tension O/H distribution line 75X87.5 mm for tangent pole & service poles cross arm	68.70	15.30	7.70
21-273	- Ditto -but 100x112.5 mm for terminal/section pole.	83.60	18.40	9.20
21-274	Insulator glazed porcelain disk type for 11Kv HT O/H distribution line (single)	758.00	46.00	23.00
21-275	- Ditto - but (double)	1485.00	61.30	30.60

STAY/GUY

Normal type	Bridle type
A	B

Each

21-276	Stay/Guy assemblies, fixing of stay wire complete including setting in earth PCC casting with 1:4:8 at base of stay, and stay assembly not exc. 14 meter in length complete with shaft excavation in any soil with clamps nut / bolts etc.	2,527.00	1,311.00
21-277	- Ditto-as above but except cement.	2,407.00	1,191.00
21-278	Fixing including PCC casting & excavation with cement.	661.00	541.00
21-279	- Ditto- as above but except cement.	541.00	149.00
21-280	Add to fixed in repair / removal including PCC casting	541.00	541.00
21-281	- Ditto-as above but except casting.	247.00	247.00
21-282	Add to item No 21- 276 & 21-277 if rock	149.00	149.00
21-283	Add to item No 21-276 & 21-277 if stay assembly galvanized.	284.00	284.00

RESTRICTED

SECTION-21

EXTERNAL ELECTRIFICATION

ITEM	DESCRIPTION	Rate in Taka		
	Per Plate / board	Rate in Taka		
	Each	Materials and Labour	Fixing Only	Add to if fixed in R/R
21-284	Stay /Guy assemblies fixing of stay wire, head type not exceeding 15 metre in length	1463.00	184.00	91.90
	OVER HEAD LINE COPPER CONDUCTOR	Rate in Taka		
	Per Metre	Materials and Labour	Fixing Only	Add to if fixed in R/R
21-285	Stringing, straining, tensioning and binding copper conductor bare solid or stranded 8.30 sq. mm cross section (10SWG)	48.90	2.60	1.30
21-286	- Ditto – but 12.97 sq. mm (8SWG)	75.80	3.10	1.50
21-287	- Ditto – but 18.68 sq. mm (6SWG)	107.00	3.70	1.80
21-288	- Ditto – but 27.27 sq. mm (4SWG)	155.20	4.60	2.30
21-289	- Ditto – but 38.60 sq. mm (2SWG)	219.00	5.50	2.80
21-290	- Ditto – but 45.60 sq. mm (1SWG)	258.00	6.10	3.10
21-291	- Ditto – but 53.19 mm ²	303.00	9.20	4.60
21-292	- Ditto – but 61.36 mm ²	348.00	9.20	4.60
21-293	- Ditto – but 70.12 mm ²	398.00	11.30	5.60
21-294	- Ditto – but 81.14 mm ²	458.00	11.30	5.60
21-295	- Ditto – but 95.00 mm ²	511.00	11.30	5.60
21-296	- Ditto – but 120.00 mm ²	734.00	13.60	6.80
21-297	- Ditto – but 150.00 mm ²	1066.00	15.70	7.90

RESTRICTED

SECTION-21

EXTERNAL ELECTRIFICATION

ITEM	DESCRIPTION	Rate in Taka		
Per Plate / board				
BARE ALUMINIUM CONDUCTOR (AAC)		Rate in Taka		
Per Metre		Materials and Labour	Fixing Only	Add to if fixed in R/R
21-298	Stringing, straining, tensioning and binding of aluminium contractor stranded AAC. cross sectional area 20.89sq.mm (code word MIDGE) equivalent cu area. 13mm	30.90	2.30	1.10
21-299	- Ditto - but 26.56 sq. mm (GNAT) 16mm	32.90	2.30	1.10
21-300	- Ditto - but 32.37 sq. mm (MOSQUITO) 20mm	39.90	2.60	1.30
21-301	- Ditto - but 42.33 sq. mm (LADY BIRD) 25mm	51.50	2.60	1.30
21-302	- Ditto - but 52.26 sq. mm (ANT) 30mm	63.20	3.10	1.50
21-303	- Ditto - but 62.86 sq. mm (FLY) 40mm	75.70	3.10	1.50
21-304	- Ditto - but 72.84 sq. mm (BLUE BOTTE) 45mm	88.00	4.60	2.30
21-305	- Ditto - but 77.70 sq. mm (EAR WIG) 48mm	94.00	4.60	2.30
21-306	- Ditto - but 83.13 sq. mm (Grass Hopper) 50mm	100.00	4.60	2.30
21-307	- Ditto - but 94.56 sq. mm (CLEGG) 60mm	115.00	6.10	3.10
21-308	- Ditto - but 104.80 sq. mm (WASP) 65mm	130.00	9.20	4.60
BARE ALUMINIUM CONDUCTOR (ACSR)		Materials and Labour	Fixing Only	Add to if fixed in R/R
Per Metre				
21-309	Stringing, straining, tensioning and binding of aluminium contractor stranded (ACSR). cross sectional area 20.71sq.mm code word SQUIRREL	41.00	3.10	1.50
21-310	- Ditto - but 25.92 sq. mm (GOPHER)	50.90	3.70	1.80
21-311	- Ditto - but 31.21 sq. mm (WEASEL)	61.40	4.60	2.30
21-312	- Ditto - but 41.87 sq. mm (FERRET)	80.30	4.60	2.30
21-313	- Ditto - but 52.21 sq. mm (RABBIT)	100.00	5.70	2.90
21-314	- Ditto - but 104.93 sq. mm (DOG)	180.00	6.90	3.40

RESTRICTED

SECTION-21

EXTERNAL ELECTRIFICATION

ITEM	DESCRIPTION	Materials and Labour		Fixing Only	Add to if fixed in R/R	
		PVC INSULATED	XLPE			
INSULATED ALUMINIUM CONDUCTOR (ACSR)						
Per Metre						
21-315	Stringing, straining, tensioning and binding of aluminium contractor stranded (ACSR). cross sectional area 20.71sq.mm code word SQUIRREL	60.20	68.50	9.20	4.60	
21-316	- Ditto – but 25.92 sq. mm (GOPHER)	70.80	76.70	11.50	5.70	
21-317	- Ditto – but 31.21 sq. mm (WEASEL)	80.20	87.30	13.80	6.90	
21-318	- Ditto – but 41.87 sq. mm (FERRET)	105.00	113.00	16.10	8.00	
21-319	- Ditto – but 52.21 sq. mm (RABBIT)	142.00	153.00	17.00	8.50	
21-320	- Ditto – but 104.93 sq. mm (DOG)	196.00	214.00	18.40	9.20	
INSULATED ALUMINIUM (AAC) CONDUCTOR						
Per Metre						
		Rate in Taka				
		Materials and Labour	Fixing Only	Add to if fixed in R/R		
21-321	Stringing, straining, tensioning and binding of aluminium contractor stranded AAC. cross sectional area 20.89sq.mm (MIDGE)		55.10	7.70	3.80	
21-322	- Ditto – but 28.84 sq. mm (GNAT)		59.40	8.40	4.20	
21-323	- Ditto – but 52.84 sq. mm (ANT)		98.10	9.20	4.60	
21-324	- Ditto – but 78.58 sq. mm (EARWIG)		122.00	10.20	5.10	
21-325	- Ditto – but 106.00 sq. mm (WASP)		148.00	11.50	5.70	
JUMPER COPPER						
Each						
		Materials & Labour			Fixing Only	Add to if fixed in R/R
		Bare conductor	Insulated copper conductor / cable	Deduct if clamps/Line tap not provided		
21-326	Jumpering with bare or stranded or insulated conductor not exc. 1.5 M in length including 2xPG clamps/Line taps for 8.30 sq. mm	319.00	348.00	202.00	49.00	24.50
21-327	- Ditto – but 12.97sq. mm	357.00	410.00	202.00	49.00	24.50
21-328	- Ditto – but 18.68sq. mm	410.00	508.00	202.00	54.40	27.20
21-329	- Ditto – but 27.27sq. mm	480.00	681.00	202.00	54.40	27.20
21-330	- Ditto – but 38.68sq. mm	581.00	847.00	202.00	61.20	30.60

RESTRICTED

SECTION-21

EXTERNAL ELECTRIFICATION

ITEM	DESCRIPTION	Materials & Labour			Fixing Only	Add to if fixed in R/R
		Bare conductor	Insulated copper conductor / cable	Deduct if clamps/Line tap not provided		
JUMPER COPPER						
	Each					
21-331	- Ditto – but 45.60sq. mm	638.00	847.00	202.00	61.20	30.60
21-332	- Ditto – but 53.19sq. mm	704.00	1,107.00	202.00	65.30	32.70
21-333	- Ditto – but 61.36sq. mm	772.00	1,107.00	202.00	65.30	32.70
21-334	- Ditto – but 70.12sq. mm	860.00	1,457.00	202.00	81.60	40.80
21-335	- Ditto – but 81.14sq. mm	950.00	1457.00	202.00	81.60	40.80
21-336	- Ditto – but 95.00sq. mm	1077.00	1886.00	202.00	98.00	49.00
21-337	- Ditto – but 120.00sq. mm	1,197.00	1,886.00	202.00	98.00	49.00
21-338	- Ditto – but 150.00sq. mm	1,341.00	1,886.00	202.00	98.00	49.00
JUMPER ALUMINIUM (AAC)						
	Each					
21-339	- Ditto – but 20.89sq. mm	290.00	340.00	202.00	49.00	24.50
21-340	- Ditto – but 26.56sq. mm	296.00	386.00	202.00	49.00	24.50
21-341	- Ditto – but 32.37sq. mm	319.00	422.00	202.00	54.40	27.20
21-342	- Ditto – but 42.33 sq. mm	336.00	453.00	202.00	61.20	30.60
21-343	- Ditto – but 52.86sq. mm	353.00	469.00	202.00	61.20	30.60
21-344	- Ditto – but 62.86 sq. mm	371.00	469.00	202.00	61.20	30.60
21-345	- Ditto – but 72.89 sq. mm	397.00	520.00	202.00	70.00	35.00
21-346	- Ditto – but 77.70 sq. mm	405.00	520.00	202.00	70.00	35.00
21-347	- Ditto – but 83.13 sq. mm	426.00	532.00	202.00	81.60	40.80
21-348	- Ditto – but 94.56 sq. mm	446.00	607.00	202.00	81.60	40.80
21-349	- Ditto – but 104.80 sq. mm	480.00	624.00	202.00	98.00	49.00
JUMPER ALUMINIUM (ACSR)						
	Each					
21-350	- Ditto – but 20.71 sq. mm	323.00	343.00	202.00	65.30	32.70
21-351	- Ditto – but 25.91 sq. mm	347.00	377.00	202.00	75.40	37.70
21-352	- Ditto – but 31.21 sq. mm	361.00	410.00	202.00	75.40	37.70
21-353	- Ditto – but 41.87 sq. mm	376.00	450.00	202.00	61.90	30.90
21-354	- Ditto – but 104.93 sq. mm	417.00	543.00	202.00	74.20	37.10

SECTION-21

EXTERNAL ELECTRIFICATION

ITEM	DESCRIPTION	Rate in Taka				
		Materials & Labour	Fixing Only	Add to if fixed in R/R		
GUARD / EARTH WIRE (GI)						
	Per Metre					
21-355	Stringing, Straining, Tensioning and binding of MS medium drawn GI wire, stranded 8.30 sq. mm (10SWG)	10.70	2.40	1.20		
21-356	- Ditto - but 12.97 sq. mm (8SWG)	16.90	2.40	1.20		
21-357	- Ditto - but 18.68 sq. mm (6SWG)	20.30	2.40	1.20		
	Pole Earthing	Rate is to be taken from similar item of work as described in sec. 22				
CRADLE / CATCH GUARD						
	Each	Materials & Labour			Fixing Only	Add to if fixed in R/R
		8.30 sq. mm	12.97 sq. mm	18.67 sq. mm		
		A	B	C		
21-358	Cradle type catch guard Ms drawn G I wire for horizontal line LT/HT	49.50	51.70	79.90	23.60	11.80
21-359	Box type catch guard MS drawn GI wire including 50 X 57mm insulator for 3 phase 4 wire with street light conductor for vertical law tension line.	166.00	175.00	186.00	31.40	15.70
21-360	- Ditto - but for 1 phase 2 wire or 3 phase 3 wire vertical LT line	137.00	159.00	165.00	26.90	13.50
Per sq.m						
21-361	Catch / cradle guard netting with 8/10 SWG GI wire 600 x 600mm mesh as per direction of Engineer.-in-charge.	48.90	59.00	74.80	9.40	4.70
POLE BAND / CLAMP						
	Each	Materials & Labour	Fixing only	Add to fixed in R/R	Add to if galv.	
21-362	Pole band/clamps with MS/F I bars for shackle insulator/stay as where used.	186.00	31.40	15.70	-	
21-363	Non/anti climbable devices made with MS/F I and round bars as spd.	317.00	31.40	15.70	-	

RESTRICTED

SECTION-21

EXTERNAL ELECTRIFICATION

ITEM	DESCRIPTION	Rate in Taka			
		Materials & Labour	Fixing only	Add to fixed in R/R	Add to if galv.
	DANGER SIGN / POSTER / DISPLAY BOARD.				
	Each				
21-364	Danger sign plate for HT / LT pole electric or installation as reqd.sign plate size not less than 250 mm x 120 mm complete as spq. including writing.	137.00	31.40	15.70	-
	Per sq.m				
21-365	Display / poster plate made with 20BG plain sheet and FI bar as required with 25x40 mm hard wood boarding complete in all respect including painting and letter.	1708.00	31.40	15.70	-
21-366	Phase indicator as spd.	34.40	14.20	7.10	
	SERVICE BOX ETC.				
	Each				
21-367	Line tap / PG clamp for up to 45 mm ²		120.00	18.80	9.40
21-368	- Ditto - but upto 95 mm ²		120.00	18.80	9.40
21-369	- Ditto - but over 95 mm ²		124.00	23.60	11.80
21-370	Service bale including cutting, forming from copper/aluminium conductor with two crime pit joint for line / phase	150.00	31.40	15.70	
21-371	- Ditto - but one crime pit joint for street light		75.00	15.70	7.90
21-372	Service box PDB type and quality including connecting cables from line to box busbar complete with anchoring bracket and consumable suitable for 3 phase	3,119.00	314.00	157.00	
	SERVICE BRACKET (GI)				
	Each				
21-373	Service bracket comprising GI tubing 4.5 M long with 2 nos. bands 90 degree with wood/rubber bushes both ends necessary nuts & bolts, stay wire etc. 50 mm dia.	3,806.00	184.00	91.90	
21-374	- Ditto - but 38/32mm dia.	3,012.00	184.00	91.90	
21-375	- Ditto - but 25mm dia.	1,789.00	118.60	59.30	

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SECTION-21

EXTERNAL ELECTRIFICATION

ITEM	DESCRIPTION	Rate in Taka			
		Materials & Labour		Fixing only	Add to fixed in R/R
CATENARY SERVICE					
	Per metre	2Xsingle core A2xY aluminium	Twin Core Druplex		
21-376	Catenary service connection from nearer LT distribution source with aluminium SC cables A2xY / Duplex copper cable as spd. fixed with brass link clips at 300 mm interval and 2 nos insulator at both ends, size of cable 2.5 re/rm (7/029) other than eastern run on 12 SWG GI wire.	51.70	76.20	8.90	4.40
21-377	- Ditto - but 4 re / rm run on 10 SWG GI wire.	71.30	111.00	8.90	4.40
21-378	- Ditto - but 6 re / rm run on 10 SWG GI wire.	97.90	153.00	8.90	4.40
21-379	- Ditto - but 10 re / rm run on 8 SWG GI wire.	143.00	235.00	9.20	4.60
TENSION / STRAINING CLAMPS					
	Each	Copper conductor A	Aluminium conductor B	Fixing only	Add to fixed in R/R
21-380	Tension/Straining clamp for HT or LT over head distribution line.	338.00	338.00		
FUSE AERIAL					
	Each	Materials & Labour		Fixing only	Add to fixed in R/R
21-381	Fuse aerial complete with 500 mm length connection cable suitable for 5 Amps.	45.40			
21-382	- Ditto - but for 10 Amps	47.20		22.20	11.10
21-383	- Ditto - but for 15 Amps	54.80		22.20	11.10
21-384	- Ditto - but for 30 Amps	77.90		29.70	14.80
21-385	- Ditto - but for 60 Amps	148.00		29.70	14.80
21-386	- Ditto - but for 100 Amps	181.00		29.70	14.80

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SECTION-21

EXTERNAL ELECTRIFICATION

ITEM	DESCRIPTION	Rate in Taka								
		Materials & Labour	Fixing only	Add to fixed in R/R						
	STREET / PERIMETER LIGHT FIXTURE									
	Each									
21-387	Bracket exterior water tight galv. swan projection type including GI tubing upto 1.5 metre long angle back plate reflector and complete in all respect with 12 mm dia tubing.	489.00	46.00	23.00						
21-388	- Ditto – but 19 mm dia.	612.00	46.00	23.00						
		<table border="1"> <thead> <tr> <th colspan="2">Materials & Labour</th> <th rowspan="2">Fixing only</th> <th rowspan="2">Add to fixed in R/R</th> </tr> <tr> <th>Single Fixture A</th> <th>Double Fixture B</th> </tr> </thead> </table>		Materials & Labour		Fixing only	Add to fixed in R/R	Single Fixture A	Double Fixture B	
Materials & Labour		Fixing only	Add to fixed in R/R							
Single Fixture A	Double Fixture B									
21-389	Street / Road / Perimeter tube light fixture complete with reflector, perfex shade, cover, choke, starter, holder, bracket, clamp etc. suitable for 1220 mm 40 watt. tube (except tube, is to be paid separately) CTLS 28x1x40 or GTF-765x1x40(single)/CTLS25x2x 40 or GTF- 768 x 2 x 40 (Double)	3,131.00	3865.00	114.90	57.50					
21-390	- Ditto – as above item but except bracket for 1220 mm 40 watt.	1,960.00	2694.00	86.20	43.10					
21-391	- Ditto – as above item no 21-389 CTLS 28x1x20 / 25x2x20 watt but for 610 mm.	2,486.00	3,078.00	91.90	46.00					
21-392	- Ditto – as above item no 21-391 but except bracket for 610 mm 20 watt.	1,344.00	1,936.00	68.90	34.50					
21-393	- Ditto – but 1220 mm 40 watt. fixture only (except all fittings i.e. choke, starter, holder etc)	1,097.00	1317.00	89.00	44.50					
21-394	- Ditto – but 610 mm 20 watt.	765.00	918.00	89.00	44.50					
			<table border="1"> <thead> <tr> <th>Materials & Labour</th> <th>Fixing only</th> <th>Add to fixed in R/R</th> </tr> </thead> </table>	Materials & Labour	Fixing only	Add to fixed in R/R				
Materials & Labour	Fixing only	Add to fixed in R/R								
21-395	S/F of Perimeter /road / street lamp fixtures complete with bracket, reflector, mercury bulb 160 watt etc 230 volts Crescent cat no. CST-1001 (N)	2,103.00	94.90	47.40						
21-396	S/F of Perimeter/road/ street lamp fixtures complete with bracket, reflector, mercury bulb 160 watt etc 230 volts Crescent cat no. CST-1004	1,982.00	94.90	47.40						
21-397	S/F of Perimeter/road/ street lamp fixtures complete with bracket, reflector, mercury bulb 160 watt etc 230 volts Crescent cat no. CST-1004 (N)	2,147.00	94.90	47.40						

RESTRICTED

SECTION-21

EXTERNAL ELECTRIFICATION

ITEM	DESCRIPTION	Materials & Labour		Fixing only	Add to if fixed in r/r	Cost of Lamp
		Crescent	Gloria			
		FLOOD/ HALOGEN / SODIUM LIGHT				
	Each					
21-407	Flood /search light shade complete with heat proof glass & 300/500 watt lamp crescent cat no. CFLD-3 / Gloria cat no. GFL-710.	4,231.00	1,821.00	89.00	44.50	110.00
21-408	- Ditto – but 1000 watt lamp with heat proof glass crescent cat no. CFLD 1 or 3 / GFL-711 or GFL 705.	4,290.00	2,243.00	88.96	44.00	165.00
21-409	Halogen light shade complete with 500 watt foreign origin lamp as per to Gloria cat no. GFL-715 as approved by Engineer-in-Charge	0.00	3,961.00	178.00	89.00	198.00
21-410	- Ditto – but 1000 watt as per to Gloria cat no. GFL-H-709 as approved by Engineer-in-Charge	0.00	8,325.00	178.00	89.00	461.00
21-411	Sodium light shade complete with low pressure lumenier of 230 volt, 50 Hz, 90 watt including all foreign origin accessories like lamp, ignator, capacitor, ballast, holder etc as per to Gloria cat no. GSLF-797 as approved by Engineer-in-Charge (with bulb)	0.00	16,240.00	445.00	222.00	1,760.00
21-412	- Ditto – but High pressure 250 watt as spd (with bulb)	0.00	16,170.00	445.00	222.00	2,247.00
	Each					
21-413	Sodium lamp fixture complete (Philips) with low pressure 90 watt bulb, ignator, choke, capacitor, fibre glass shade & other fittings. Made in Italy			9,985.00	496.00	248.00
21-414	S/F of Ballest 220 Volts 50 Hz for high pressure Sodium / Metal Halied lamps 400 watt foreign made			2,174.00	158.00	79.10
21-415	- Ditto – but for Low pressur 55 – 90 watt.			2,326.00	158.00	79.10
21-416	S/F of Capacitors 220 Volts 50 Hz for high pressure Sodium/Metal Halied lamps foreign made 10 -25 MFD.			334.00	79.00	39.50
21-417	S/F of Capacitors 220 Volts 50 Hz for high pressure Sodium/Matal Halied lamps foreign made 40 MFD.			525.00	79.10	39.50
21-418	S/F of Ignator 220 Volts 50 Hz for high pressure Sodium/Metal Halied lamps 90 – 400 watt foreign made			1,338.00	63.30	31.60

RESTRICTED

SECTION-21

EXTERNAL ELECTRIFICATION

ITEM	DESCRIPTION	Rate in Taka			
		Materials & Labour	Fixing only	Add to fixed in R/R	
FLOOD/ HALOGEN / SODIUM LIGHT					
	Each				
21-419	Supply and fixing of High pressure Mercury lamps 250 volts 400 watt Philips made in Holland model HPL-N.	1,961.00	47.40	23.70	
21-420	S/F of Metal halied lamp fixtures complete with reflector, ballast, capacitor, ignator, holder, bulb etc. 250 volts 400 watt foreign made.	9,860.00	297.00	148.00	
21-421	S/F of Metal halied lamp fixtures complete with reflector, ballast, capacitor, ignator, holder, bulb etc. 250 volts 250 watt foreign made.	9,322.00	237.00	118.60	
	Fluorescent tube and light fittings i.e. choke starter, holder etc. as reqd. for maintenance.	Rate is to be taken from similar item works as described in section -22 (internal electrification)			
	MDB WITH BREAKER (MCB / MCCB)	Materials & Labour with MCB / MCCB		Fixing only	
	Each set	LG, Korea	MEM / DORMAN (England) SIEMENS / AEG (Garmany)		Add to if fixed in r/r
				Add / Deduct breaker	
21-422	Main distribution board (MDB) fabricated with 16 BG, MS / plain sheet, FI bar and specified MCCBs / busbar etc including hammer paints & locking arrangement consisting of foreign origin MCB / MCCBs 1x30A, TP incoming, 10x20 Amps + 1x10 Amps SP outgoing MCB / MCCB.	6,406.00	19,025.00	136.40	68.20
21-423	- Ditto – but 1x40A, TP incoming & 4x20A, + 1x15A SP outgoing MCCBs	8,148.00	22,141.00	170.00	85.20
21-424	- Ditto – but 1x50/60A, TP incoming & 8x20A, 1x15A SP outgoing MCCB	9,192.00	25,301.00	227.00	113.60
21-425	- Ditto – but 1x60A, TP incoming & 3x30A, TP + 1x5A SP outgoing MCB / MCCB	12,514.00	58,761.00	227.00	113.60
21-426	- Ditto – but 1x60A, TP in coming & 2x40A, TP + 1x5A SP outgoing MCB / MCCB	12,764.00	48,613.00	227.00	113.60
21-427	- Ditto – but 1x100A, TP incoming & 4x30A, TP + 1x10A SP outgoing MCB / MCCB	15,900.00	75,378.00	341.00	170.00
21-428	- Ditto – but 1x100A, TP in coming & 2x60A, TP + 1x10A SP out going MCB / MCCB	14,178.00	54,776.00	341.00	170.00

RESTRICTED

SECTION-21

EXTERNAL ELECTRIFICATION

ITEM	DESCRIPTION	Materials & Labour with MCB / MCCB		Fixing only	Add to if fixed in r/r	Add / Deduct breaker
		LG, Korea	MEM / DORMAN (England) SIEMENS / AEG (Germany)			
	MDB WITH BREAKER (MCB / MCCB)					
	Each set					
21-429	- Ditto – but 1x200A, TP incoming & 1x10A, TP + 1x10A SP outgoing MCB / MCCB	25,956.00	139,073.00	682.00	341.00	Cost is to be taken from sec-22
21-430	- Ditto – but 1x200A, TP incoming & 4x60A, TP + 1x10A SP outgoing MCB / MCCB	22,392.00	98,278.00	682.00	341.00	
21-431	- Ditto – but 1x250A/300A, TP incoming & 10x30A, TP + 1x10A SP outgoing MCB / MCCB	36,918.00	185,378.00	890.00	445.00	
21-432	- Ditto – but 1x250A/300A, TP incoming & 3x100A, TP + 1x30A SP outgoing MCB / MCCB	29,290.00	111,900.00	890.00	445.00	
	MDB as reqd other than above specification					Rate is to be taken from similar item of works as described in section 22.
	CONTROL / PROTECTION DEVICES					
	Each					
		Materials & Labour		Fixing only	Add to fixed in r/r	
		With steel structure	Without steel structure			
21-433	11 KV gang isolator / disconnecter complete with all fixing steel structure/cross arms, clamps nut, bolts & link fuses having capacity upto 320 amps.	50,614.00	45,960.00	1,334.00	667.00	
21-434	11 KV drop out fuses complete with fixing arrangement on steel structure, having capacity upto 100 amps	5,343.00	3,792.00	445.00	222.00	
21-435	11 KV lighting arrestor complete with fixing arrangement as required but without earthing (earthing is to be paid seperatly) having maximum permissible stress 12.7 kilo volts	4,022.00	2,471.00	455.00	227.00	
21-436	Change over switch 500 volts TP & N complete with all accessories approved quality local made having capacity 200 amps	10,548.00	-	890.00	445.00	
21-437	- Ditto – but 400 amps	13,768.00	-	890.00	445.00	
21-438	- Ditto – but 600 amps	20,206.00	-	890.00	445.00	

RESTRICTED

SECTION-21

EXTERNAL ELECTRIFICATION

ITEM	DESCRIPTION	Rate in Taka			
		Materials & Labour	Installation with testing commissioning	Checking testing commissioning	Add if fixed r/r
	CONTROL / PROTECTION DEVICES				
	Each				
21-439	11 KV switch gear panel (LBS) complete with all accessories upto 630 amps all as per manufacuter specification held with MES concern office for brand Energypac	596,121.00	14,174.00	10,853.00	1,661.00
21-440	- Ditto – but brand GEC	489,375.00	14,174.00	10,853.00	1,661.00
21-441	Supply and Installation of switchgear 11 KV (VCB), 3 phase, 50 Hz, 630 amps drawout type breaker without KWH meter complete with all monitoring meter, protective devices as required for the satisfaction of the local PDB authority as per manufacturer detail specification held with concern MES office comprising foreign components but locally assembled brand GEC	1,023,108.00	14,174.00	10,853.00	1,661.00
21-442	- Ditto – but Brand Energypac (without KWH meter)	1,070,551.00	14,174.00	10,853.00	1,661.00
21-443	- Ditto – but Brand Micro (without KWH meter)	1,006,503.00	14,174.00	10,853.00	1,661.00
21-444	Supply and Installation of switchgear 11 KV (VCB), 3 phase, 50 Hz, 630 amps drawout type breaker with KWH meter complete with all monitoring meter, protective devices as required for the satisfaction of the local PDB authority as per manufacturer detail specification held with concern MES office comprising foreign components but locally assembled brand GEC	1,108,401.00	16,813.00	12,454.00	2,179.00
21-445	- Ditto – but Brand	-	-	-	-
21-446	- Ditto – but Brand Energypac	1,412,392.00	16,813.00	12,454.00	2,179.00
21-447	- Ditto – but Brand Micro	1,348,024.00	16,813.00	12,454.00	2,179.00

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SECTION-21

EXTERNAL ELECTRIFICATION

ITEM	DESCRIPTION	Rate in Taka			
		Materials & Labour	Erection installation with accessories	Checking testing commission	Add if fixed r/r
	CONTROL / PROTECTION DEVICES				
	Each				
21-448	LT switch gear panel 400/440 volt, 3 phase, 50 Hz, complete with all accessories / control / protective devices foreign components but locally assembled by GEC having capacity 200 amps (Adjustable) incoming and (200x1.25%) 250 amps total out going breakers capacity to control 100 KVA sub-station:	293,103.00	5,598.00	2,277.00	1,661.00
21-449	- Ditto – but Brand	-	-	-	-
21-450	- Ditto – but Brand Energypac	206,065.00	5,598.00	2,277.00	1,661.00
21-451	- Ditto – but Brand Micro	138,913.00	5,598.00	2,277.00	1,661.00
21-452	LT switch gear panel 400/440 volt, 3 phase, 50 Hz, complete with all accessories / control / protective devices foreign components but locally assembled by GEC having capacity 600 amps (Adjustable) incoming and (600x1.25%) 750 amps total out going breakers capacity to control 200 – 400 KVA sub-station:	432,268.00	7,001.00	3,368.00	1,816.00
21-453	Blank	-	-	-	-
21-454	- Ditto – but Brand Energypac	409,733.00	7,001.00	3,368.00	1,816.00
21-455	- Ditto – but Brand Micro	319,591.00	7,001.00	3,368.00	1,816.00
21-456	LT switch gear panel 400/440 volt, 3 phase, 50 Hz, complete with all accessories / control / protective devices foreign components but locally assembled by GEC having capacity 800 amps (Adjustable) incoming and (800x1.25%) 1000 amps total out going breakers capacity to control 500 – 600 KVA sub-station:	481,291.00	8,107.00	3,748.00	2,179.00
21-457	Blank	-	-	-	-
21-458	- Ditto – but Brand Energypac	553,642.00	8,107.00	3,748.00	2,179.00
21-459	- Ditto – but Brand Micro	356,754.00	8,107.00	3,748.00	2,179.00

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SECTION-21

EXTERNAL ELECTRIFICATION

ITEM	DESCRIPTION	Rate in Taka				
		GEC	Energypac	Micro	Fixing incl testing commissioning	Add fixed in R/R
CONTROL / PROTECTION DEVICES						
	Each					
21-460	LT Auto PFI 400/440 volt, 3 phase, 50 Hz complete with all accessories with foreign components locally assembled all as per manufacturer specification having capacity 40 KVAR	30,782.00	205,728.00	128,633.00	8,629.00	4,314.00
21-461	- Ditto – but 100 KVAR	342,316.00	318,595.00	188,126.00	8,629.00	4,314.00
21-462	- Ditto – but 160 KVAR	468,304.00	409,000.00	260,741.00	9,889.00	4,944.00
21-463	- Ditto – but 200 KVAR	527,608.00	450,513.00	308,184.00	9,889.00	4,944.00
21-464	- Ditto – but 300 KVAR	702,323.00	627,339.00	423,595.00	12,217.00	6,108.00
POWER TRANSFORMER						
	Each					
21-465	Pole mounted distribution power transformer 11/0.4 KV, 50 Hz, 3 phase, 100 KVA capacity complete as per manufacturer detail specification exist in concern MES office, brand GEC	435,316.00	7,111.00	4,566.00		1,272.00
21-466	- Ditto – but 100 KVA Energy Pac	443,351.00	7,111.00	4,566.00		1,272.00
21-467	- Ditto – but 100 KVA GEM	403,588.00	7,111.00	4,566.00		1,272.00
21-468	- Ditto - but 100 KVA Micro	340,430.00	7,111.00	4,566.00		1,272.00
21-469	- Ditto - but 100 KVA BETELCO	327,724.00	7,111.00	4,566.00		1,272.00
21-470	- Ditto - but 200 KVA GEC	625,936.00	7,959.00	4,566.00		1,696.00
21-471	- Ditto - but 200 KVA Energy Pac	626,426.00	7,959.00	4,566.00		1,696.00
21-472	- Ditto - but 200 KVA GEM	614,816.00	7,959.00	4,566.00		1,696.00
21-473	- Ditto - but 200 KVA Micro	507,328.00	7,959.00	4,566.00		1,696.00
21-474	- Ditto - but 200 KVA BETELCO	480,938.00	7,959.00	4,566.00		1,696.00
21-475	- Ditto - but 250 KVA GEC	752,193.00	9,678.00	5,871.00		1,904.00

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21-476	- Ditto - but 250 KVA	Energy Pac	722,156.00	9,678.00	5,871.00	1,904.00
21-477	- Ditto - but 250 KVA	GEM	760,496.00	9,678.00	5,871.00	1,904.00
21-478	- Ditto - but 250 KVA	Micro	580,212.00	9,678.00	5,871.00	1,904.00
21-478 A	- Ditto - but 250 KVA	BETELCO	553,423.00	9,678.00	5,871.00	1,904.00

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SECTION-21

EXTERNAL ELECTRIFICATION

ITEM	DESCRIPTION	Rate in Taka			
		Materials & Labour	Erection installation with accessories	Checking testing commission	Add if fixed r/r
	POWER TRANSFORMER				
	Each				
21-479	- Ditto – but 300 KVA Micro	629,008.00	11,030.00	5,871.00	2,580.00
21-480	- Ditto – but 300 KVA GEC	807,109.00	11,030.00	5,871.00	2,580.00
21-481	- Ditto – but 300 KVA Energypac	843,468.00	11,030.00	5,871.00	2,580.00
21-482	- Ditto – but 300 KVA GEM	879,459.00	11,030.00	5,871.00	2,580.00
21-483	- Ditto – but 400 KVA Energypac	996,009.00	15,170.00	8,718.00	3,226.00
21-484	- Ditto – but 400 KVA Micro / BETELCO	679,594.00	15,170.00	8,718.00	3,226.00
21-485	- Ditto – but 400 KVA GEC	989,159.00	15,170.00	8,718.00	3,226.00
21-486	- Ditto – but 500 KVA GEC	1,146,931.00	18,372.00	10,319.00	4,027.00
21-487	- Ditto – but 500 KVA Energypac	1,141,742.00	18,372.00	10,319.00	4,027.00
21-488	- Ditto – but 500 KVA GEM	1,218,689.00	18,372.00	10,319.00	4,027.00
21-489	- Ditto – but 500 KVA Micro / BETELCO	887,181.00	18,372.00	10,319.00	4,027.00
21-490	- Ditto – but 750 KVA GEC	1,767,995.00	22,678.00	14,411.00	4,133.00
21-491	- Ditto – but 750 KVA Energypac	1,696,757.00	22,678.00	14,411.00	4,133.00
21-492	- Ditto – but 750 KVA Micro / BETELCO	1,171,993.00	22,678.00	14,411.00	4,133.00
21-493	- Ditto – but 800 KVA GEC	1,767,995.00	22,678.00	14,411.00	4,133.00
21-494	- Ditto – but 800 KVA Energypac	1,171,993.00	22,678.00	14,411.00	4,133.00
21-495	- Ditto – but 1000 KVA GEC	2,114,780.00	37,361.00	25,619.00	5,871.00
21-496	- Ditto – but Single phase 6.35 / 0.24 KV Transformer 10 KVA GEM	126,422.00	5,885.00	2,991.00	1,447.00

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SECTION-21

EXTERNAL ELECTRIFICATION

ITEM	DESCRIPTION	Rate in Taka		
		Materials and Labour	Fixing only	Add to if fixed in r/r
	SUB - STATION PANEL (LOCAL)			
	Each			
21-497	Almirah type sub-station control panel 450mm depth 1300 mm width and 1800 mm height fabricated with 3mm thick MS plain sheet cover 50x50x6.35mm angle and 50x6.35mm FI bars frame fixed by welding/nut bolts as required with the provision for fixing of incoming and out going MCCB's/panel meters including painting & locking arrangement having with 4x500 amps copper busbar (bar dimension not less than 40x12mmx1 meter long) complete with necessary connecting insulating materials including testing & commissioning	35,137.00	1,364.00	682.00
21-498	- Ditto - but 450mm depth 1500mm width and 1800mm height having with 4x800 Amps copper bar (bar dimension not less than 50x12mmx1 metre long)	42,065.00	1,572.00	786.00
21-499	- Ditto - but 450mm depth 1500mm width and 1800mm height having with 4x1200 Amps copper bar (bar dimension not less than 50x20mmx1 metre long)	53,758.00	1,779.00	890.00
21-500	Earthing with boring by sinking of 12 M G.I. tubing having 38mm dia to be connected with suitable copper conductor not less than 2 SWG	10,248.00	1,670.00	835.00
21-501	Volt meter foreign origin (China) AC, O-500 volt.	493.00	47.40	23.70
	PANEL METER			
	Each			
21-502	Ammeter AC 220/230 volt 50 HZ foreign origin (China/ Taiwan/ Korea) 50 Amps	498.00	47.40	23.70
21-503	- Ditto - but 50 Amps foreign origin (Germany / England)	940.00	47.40	23.70
21-504	- Ditto - but 100 Amps (China / Taiwan / Korea) with suitable CT 100/5	1,489.00	94.90	47.40
21-505	- Ditto - but 200 Amps (China / Taiwan / Korea) with suitable CT 200/5	1,489.00	94.90	47.40
21-506	- Ditto - but 500 Amps (China / Taiwan / Korea) with suitable CT 500/5	1,752.00	94.90	47.40
21-507	- Ditto - but over 500 Amps (China / Taiwan / Korea) with suitable CT	1,894.00	118.60	59.30
21-508	Selector switch foreign origin	906.00	118.60	59.30
21-509	Indicating Lamp electric panel type	145.00	4.00	2.00

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SECTION-21

EXTERNAL ELECTRIFICATION

ITEM	DESCRIPTION	Rate in Taka			
		Materials & Labour	Fixing only	Add if fixed in r/r	Cost of re-fill in r/r
	FIRE EXTINGUISHER				
	Each				
21-510	Dry powder / Carbondi-oxide (CO) fire extinguisher foreign origin (China/Malyasia) 2 kg.	1,912.00	113.00	33.80	680.00
21-511	- Ditto - but 3 kg	2,359.00	113.00	33.80	839.00
21-512	- Ditto - but 5 kg	3,187.00	113.00	33.80	1,134.00
21-513	- Ditto - but (Germany) 1 kg	2,965.00	113.00	33.80	1,055.00
21-514	- Ditto - but 2 kg	4,744.00	113.00	33.80	1,688.00
21-515	Hellion gas fire extinguisher foreign origin (Germany) 4 kg.	5,930.00	113.00	33.80	2,110.00
21-516	Foam type fire extinguisher foreign origin (China) 8 litre capacity	949.00	113.00	33.80	169.00
21-517	Soda water type fire extinguisher foreign origin (China) 8 litre capacity	949.00	113.00	33.80	169.00
	MISC. ITEM				
	Each				
21-518	Battery charger output voltage 6v, 36 v & 48 v DC having capacity 30 Amps		18,191.00	949.00	474.00
21-519	Automatic water level controlled with sensors having the pump when the water level goes down to lower level and stop the pump when the water level goes upto upper level of the reservoir		5,456.00	949.00	474.00
21-520	Static inverter having capacity 1.5 KVA in put voltage 50v DC & output voltage 230V AC 50 Hz complete with all accessories		20,049.00	1,072.00	536.00
21-521	Supply and Installation of Auto Charge Over / Power Transfer Switch 500 Volts, 3 Phase 50 Hz Complete with foreign components foreign assembled in steel sheet cubical as req. having Capacity 200 Amps		215,907.00	949.00	475.00
21-522	Under ground cable joint straight through with necessary consumables required as per latest engineering method recognised by PDB / DESA / DESCO / REB (Trench excavation and embankment is to be paid under relevant item seperatly) for PVC / XLPE Low and medium tension (LT) cable size 16 to 50 mm ² Single core.		3,002.00	630.00	315.00
21-523	- Ditto - but 2 (Two) core		4,411.00	853.00	427.00
21-524	- Ditto - but 3 (Three) core		5,664.00	919.00	460.00
21-525	- Ditto - but 3 ¹ / ₂ / 4 (Three & half / Four) core		7,079.00	1,149.00	575.00

RESTRICTED

SECTION-21

EXTERNAL ELECTRIFICATION

ITEM	DESCRIPTION	Rate in Taka		
		Materials & Labour	Fixing only	Add if fixed in r/r
	MISC. ITEM			
	Eac h			
21-526	Same as above item no 21-522 but size 70 to 150 mm ² Single core.	3,595.00	630.00	315.00
21-527	- Ditto - but 2 (Two) core	5,004.00	853.00	427.00
21-528	- Ditto - but 3 (Three) core	6,257.00	919.00	460.00
21-529	- Ditto - but 3 ^{1/2} /4 (Three & half / Four) core	7,435.00	1,149.00	575.00
21-530	Same as above item no 21-522 but size over 150 mm Single core	5,896.00	914.00	457.00
21-531	- Ditto - but 2 (Two) core	6,406.00	1,068.00	534.00
21-532	- Ditto - but 3 (Three) core	7,322.00	1,154.00	577.00
21-533	- Ditto - but 3 ^{1/2} /4 (Three & half / Four) core	8,021.00	1,497.00	749.00
21-534	Under ground cable joint straight through with necessary consumables required as per latest engineering method recognised by PDB / DESA / DESCO / REB (Trench excavation and embankment is to be paid under relevant item seperatly) for PVC / XLPE Armoured High tension (HT) cable size 16 to 50 mm Single core	6,368.00	1,149.00	575.00
21-535	- Ditto - but 3 (Three) core	13,225.00	1,957.00	979.00
21-536	Same as above item no 21-534 but size over 50 mm Single core	8,139.00	1,379.00	690.00
21-537	- Ditto - but 3 (Three) core	15,108.00	2,535.00	1,268.00
21-538	Supply and fixing of End Termination water resistance Heats and Shrink Kits for 11 KV single core cable PDB type.	3,529.00	919.00	460.00
21-539	- Ditto - but 3 (Three) core	8,228.00	2,298.00	1,149.00
21-540	Supply and fixing of connecting / soldering Lugs for cable size 4 to 16 mm ²	79.00	45.10	22.50
21-541	Supply and fixing of connecting / soldering Lugs for cable size 25 to 50 mm ²	100.00	56.30	28.20
21-542	Supply and fixing of connecting / soldering Lugs for cable size 70 to 120 mm ²	139.00	75.10	37.60
21-543	Supply and fixing of connecting / soldering Lugs for cable size 150 to 240 mm ²	210.00	93.90	46.90
21-544	Supply and fixing of connecting / soldering Lugs for cable size over 300 mm ²	280.00	136.00	68.20

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SECTION-21

EXTERNAL ELECTRIFICATION

ITEM	DESCRIPTION			
21-545	Supply and fixing of Under ground cable route / joint sign plate (CI) size 150x100 mm with fixing stand casted and embossed writeup in top row "11 KV", middle row " CABLE LINE or CABLE JOINT ", bottom row MES (Army) or MES (Navy) or MES (Air) as and where applicable.	1,030.00	47.40	23.70
	Per square metre			
21-546	Supply and fixing of cable duct / tray made with 18 BG plain sheet (GP) perforated 6mm hole or non-perforated supported with MS angle / FI / round bar and fixed to ceiling, wall, beam, column etc.by rawl bolt at an interval of 1 metre as required.	1,987.00	318.00	159.00
21-547	- Ditto - but 20 BG	1,736.00	318.00	159.00

SECTION-22

INTERNAL ELECTRIFICATION

SPECIFICATIONS

General

1. **Electrical Standard Requirements, etc.** All electrical work shall be carried out in accordance with latest edition including amendments of "The IEE regulations for the Electrical Equipment of Buildings" except where such regulations are modified by this specification.

2. **Materials.**

a. Except where otherwise specified all materials shall be supplied, fixed, connected and completed by the contractor.

b. **Materials.**

(1) All materials shall comply with the relevant and latest B.S. or equivalent Bangladesh Standard specifications.

(2) **Fittings.** All fittings and accessories should conform to current British or its equivalent Bangladesh Standard specifications. No materials of inferior quality shall be allowed for use in work. Approved brands are (i) MEP (ii) any other brand approved by AHQ, E in C's branch

(3) **Cable and cords.** All cable and cords shall be of BSS, VDE/equivalent Bangladesh grade approved by E-in-C from time to time. E-in-C's Branch standardized the following local made cables:

- (a) Eastern Cable
- (b) BRB Cable
- (c) Paradise Cable
- (d) Sun Shine Cable
- (e) Super sign Cable
- (f) 777 Energy Cable
- (g) Poly Cable
- (h) Citizen Cable
- (j) Evana
- (k) MEP
- (l) Any other cable approved by AHQ EinC's Branch

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(4) **Size of conductors.** The minimum sizes of conductors shall be:

- | | | | |
|----|-------------------------------|---------------|------------|
| a. | Lighting cables | 1.3/1.5 re/rm | (3/.029) |
| b. | Lighting flexible | 0.65 re/rm | (23/.0076) |
| c. | 15 A socket point's cable | 2.50 re/rm | (7/.029) |
| d. | Final sub circuits cable | 1.50 re/rm | (3/.036) |
| e. | Sub mains cables as required. | | |

Any other sizes of conductors when required shall comply with IEE Regulations.

(5) **Socket outlet points.** (5 AMPS AND 15 AMPS)

- a. The 3rd conductor i.e. earth conductor shall be 2.012mm (14 SWG) / 1.610mm (16 SWG) solid bare copper conductor (soft) and shall be electrically continuous throughout the installation.
- b. Socket outlets shall be of shuttered pattern type unless otherwise specified by the Engineer -in-Charge.
- c. Socket outlet shall be controlled by switch.

(6) **Standard.** E -in-C's Branch standardized the following local made ceiling fans:

- (a) G E C
- (b) -
- (c) Habib
- (d) Jamuna
- (e) National (Tongi)
- (f) Singer

3. **Building Work.** The position of all holes or cutting away will be as agreed with the Engineer-in-Charge before the work is taken in hand. All making good shall match the existing surrounding.

4. **Sitting of Electrical Equipment.**

a. The sitting of cable conduit runs, controls, fittings, accessories, etc must be in accordance with the plans and settled on site in conjunction with the ‘Engineer-in – Charge before work commences.

b. **The height from the floor level to bottom of fittings shall be as follows:**

(1)	Main control	1750mm
(2)	Distribution board	1750 mm
(3)	Pendant and wall bracket	2400 mm
(4)	Wooden board for lighting switches and fan regulators	1200 mm
(5)	Socket outlets (generally)	220 mm
(6)	Ceiling fan	2450 mm

c. The sitting of main switches, meters and distribution boards for officer’s bungalows and important building shall be done inside the area/side verandah or in any suitable place in the building.

5. **Mounting of Fittings and Accessories.**

a. Ordinary pendant, batten and similar lighting fitting and accessories shall be mounted direct/in /on conduit box/wooden blocks, etc;.

b. Switch fuse, MCCB/SDB distribution board and the line shall be secured by means of wood screws, coach screws, rag bolts or other suitable method as approved by the Engineer-in –Charge.

c. Spacer bar saddle shall be secured by screws of minimum length of 25 mm.

6. a. **Conduit Wiring.**

(1) The system shall consist of single core PVC non -sheathed cables in screwed steel/PVC conduits installed for surface or concealed wiring as specified.

(2) The loop-in system shall be employed. Where necessary or advisable, teeing off by means of taped porcelains sheathed connectors in conduit boxes may be utilized as approved by the Engineer-in -Charge.

b. **Conduit and Conduit Fittings.**

(1) All conduits shall be class "B" screwed (in accordance with B.S. 31) heavy gauge welded except for magazines explosive stores and POL installation which shall be solid drawn.

(2) The conduit boxes and covers shall be of malleable cast iron hard drawn in conduit boxes. Tapped 3.18 cm or above shall be of oblong type. Solid fittings will not be permitted. Inspection elbows, tees or bends will be used for surface wiring at the ends of conduit immediately behind fittings or accessories where specifically approved.

(3) Fixing screws for conduit and inspection covers shall be of brass or rust proof material.

c. **Erection.**

(1) All conduit and conduit fittings shall be erected before any cables are drawn in. The number of cables allowed, in the conduits shall be in accordance with IEE Regulations. All screwed connections shall be metal to metal and exposed screw thread and parts where the galvanizing or enameling has been damaged shall be thoroughly cleaned and painted with two coats of anti-corrosive paint. Such painting being done as the work proceeds.

(2) All points shall be such as to ensure perfect electrical continuity and where running joints are necessary lock nuts shall be utilized.

(3) Where the conduit passes through principal, rafters purling or joints, whether of wood, iron or steel, these must be drilled in approved position to take the conduits, the holes being of the smallest possible dia consistent with requirements.

(4) Where the conduit passes through a floor, wall partition or ceiling the hole shall be made good with cement or similar incombustible materials to the full thickness of the floor, wall partition or ceiling and space through which a fire might spread shall not be left. Junction between conduit and adaptable boxes, back outlet boxes and the line, not provided with entry spouts, also between conduit and iron clad distribution board and controlled gear, shall be effected by means of lock nut and conduit couplers into which will be screwed a brass hexagonal smooth bore bush from the inside of box or case. In addition to ensure perfect continuity where boxes or cases have clearance holes, a brass compression washers shall be fitted between the bush and box or case, conduit system shall be erected as far as possible to avoid traps where water may accumulate from condensation. Where this is unavoidable, suitable provision for drainage shall be made. Conduit shall be kept at least 150mm clear off and preferably below steam or hot water pipes.

d. **Bonding and Earthing.** All conduits system shall be electrically continuous throughout the installation. The maximum conductivity resistance of the conduit together with earthing lead shall not exceed 1 (one) ohm. All conduits system shall be efficiently earthed.

7. **Surface Conduit Wiring.**

a. No conduit shall be less than 20/19mm dia.

b. Normally the conduit shall be carried on the surface of walls and ceilings, but where conditions permit the conduit may be run within hollow spaces of walls, floors, partitions and ceilings or in roof spaces. Diagonal run will not be permitted for surface wiring and particular attention shall be paid to "Sets which must fit as close to the walls, etc." as possible. The conduit shall be secured by means of spacer bar saddles made of CI pressed steel fixed at intervals of maximum 0.9 metre with a saddle within 10 mm of each fittings or accessory, spacer bar saddle plates shall be 3 mm thick for conduits upto 50 mm dia and 4 mm for larger sizes of conduit.

The saddle plates shall be secured by wood screws. Where conduits is attached to iron or steel joints or pillars suitable of girder clips spaced at 900 mm intervals shall be utilized.

8. **Concealed Conduit Wiring.**a. **Concealed Conduit.**

(1) No conduit shall be less than 20/19 mm dia. Normally the conduit shall be sunk in walls and ceilings to such depth that there is not less than 20 mm cover but where the construction of the buildings is such that it is found impossible or inadvisable to sink the conduit, the conduit may, with the approval of the Engineer-in-Charge, be installed as for surface wiring. The conduit shall be secured by means of hooks or other means fixed at intervals of 1200mm or within 10 mm of each fitting or accessory. Not more than four bends shall be provided in a single run of conduit.

(2) Where a concealed conduit is to traverse on RCC roofs, it shall be embedded in the concrete and not run on the surface of the slabs.

b. Where junction boxes are fixed in walls, etc. for drawing in the covers must fit flush with the plaster at all points.

c. Where junction boxes are laid under or in concrete or floors, traps of approved design having a flanged outer frame for keying into the concrete, etc., and fitted with a recessed cover suitable for filling in with the floor material shall be utilized.

d. Where junction boxes are laid under wooden floor, properly constructed traps shall be put in the flooring and secured with suitable counter sunk brass screws.

e. Number of traps in the floors must be kept to a minimum.

f. Where flush types switches or socket outlets are specified the plate must overlap the cavity and fit flush with the plaster at all points. No filling; or “packing” will be permitted.

Conduit buried in plaster is in ordinary circumstances deemed not to be in a damp situation.

9. **Flame Proof Conduit Wiring.**a. **Conduit Wiring.**

(1) The system shall consist of single core XLPE cables in screwed steel conduits installed for surface wiring as specified.

(2) The loop in system shall be employed. Where necessary or advisable, teeing off by means of taped porcelain in sheathed connectors in conduit boxes may be utilized as approved by the Engineer-in-Charge.

b. **Conduits.**

(1) All conduits shall be class 'B' screwed, solid drawn, heavy gauge in accordance with BS 31 of 1940.

(2) The fittings shall be flame proof only imported fittings manufactured confirming to the relevant BSS shall be used.

(3) Fixing screws for conduit boxes inspection covers shall be 7.9mmx14.3 mm. Tri head steel screws may be used or as specified by the Engineer-in-charge.

10. **PVC Sheathed Wiring.**

a. **Sheathed Wiring** .

(1) The system shall consist of single core PVC sheathed cable run and fixed on teak wood battens.

(2) The standard system of wiring i.e. loop-in system shall be employed in all works as specified.

(3) In the loop- in system where necessary or advisable and approved by the Engineer-in-Charge joints boxes with fixed terminals may be utilized.

(4) PVC cable shall not be installed in any situation exposed to direct rays of the sun.

b. **Fixing.** The method of fixing shall be by means of clips and plastic Rawel plug.

c. **Battens.**

(1) The battens shall be of well seasoned Teak wood, smooth finished, free from knots, sap and any other defects and shall be of standard commercial sizes not less than 12 mm thickness.

(2) It shall be given two coat of first quality shellac varnish, before erection, on all faces and ends. The second coat shall not be applied less than 24 hours after the first.

d. **Erections.**

(1) The clips shall be secured to battens with brass coated tacks for teak battening of suitable sizes, spaced not more than 100mm for horizontal wiring and 120 mm for vertical wiring.

(2) The battens shall be secured to walls etc., by means of counter sunk brass screws spaced not more than 750 mm apart. Where there is a change of direction the cables shall be brought over a rounded support of adequate radius to avoid sharp bends. Cables passing through wall etc. shall be protected by solid drawn conduit suitably bushed or porcelain tube.

e. **Plugs.** Only Rawel plugs of appropriate sizes shall be used to secure batten and conduit spacer, etc. to the wall. In places where the use of Rawel plug is not possible, well seasoned hard wood plug of appropriate size and shape shall be used with the prior approval of the Engineer-in-Charge. These shall be embedded in cement plaster and repair shall be carried out with cement mortar (1:1)

f. **Screws and Fastenings.** All screws used shall be of brass of suitable shape. Clips shall be of tinned brass buckle/link type with counter sunk holes .

g. **Wooden Board and Blocks.** All boards and blocks shall be recessed/closed and of well seasoned Teak wood having smooth finish free from knots, sap and any other defects and shall be of standard sizes.

11. **Point Wiring.**

a. The wiring for a point shall be necessary for every room, passage , staircase, verandah, out – building, irrespective of the circuit.

b. The wiring shall be connected to any point on the existing wiring or to the distribution board as ordered by the Engineer-in-Charge.

12. **External Wiring.** Where it is essential to take wiring under the ground, it will be done by means of PVC cables of proper sizes laid underground and carried through appropriate size of GI /PVC pipes or conduit laid in a cement lined duct having sufficient gradient to draw off the water which may accumulate due to rains or other causes. The depth of the duct shall be decided by the Engineer-in-Charge. In cases where the wiring be taken to be a building situated over 1.83 meter from the main building , the cable shall be PVC and attached to a galvanized steel suspension of suitable gauge to carry the weight of the cable and in any case shall not be less than No. 8 SWG. The attachment of the suspension wire shall be by means of brass tinned clips of appropriate size approved by the Engineer-in-charge.

13. **Main Control.** When the voltage of supply exceeds 230 volts, and the supply is given to different pairs of terminal, the terminals shall be arranged in such a manner that there shall be no dangers of shock , and the wiring from those terminals shall be kept distinct and apart. The siting of all controls shall be decided by the Engineer-in -Charge.

14. **Earthed (Neutral) Conductor.**

- a. In all cases where the supply conductors included an earth neutral an indication of a permanent nature shall be provided to enable such neutral conductor to be distinguished from any live conductor at that point.
- b. The contractor shall similarly indicate the outgoing conductors. No fuse should be fixed in an earthed neutral.

15. **Precaution Vis-A-Vis Gas Water Supply, etc Fittings.** In bath rooms , lavatories, sculleries, kitchens, or any places where gas or water taps or fittings or masses of metal connected to earth are handled, special precautions shall be taken so that it is impossible to touch the electrical apparatus fittings or accessories and the gas or water system etc., simultaneously.

16. **Portable Appliances.** All portable fittings or appliances where the metal case may become 'alive' shall have the body earthed by means of a third conductor in the flexible cord. The armoring of any flexible cord shall also be efficiently connected to earth.

17. **Earthing.**

a. All metal parts other than conductors, of electrical apparatus shall be efficiently earthed. These specifications will not apply to lightning conductors.

b. Where switches with earthed dollies are used contractor shall ensure that earthing links are in sound condition after fixing. The path to earth from any portion of a conduit system or other metal intended to be earthed shall be as direct as possible. The number of earthing connections for all equipment/ appliances/fittings of medium and high voltage shall be as decided by the Engineer-in-Charge, but generally shall be not less than two earthing conductors shall be of hard drawn bare copper or phosphor bronze as specified by the Engineer-in-Charge of not less than 12.97mm^2 or its equivalent and the connections shall be clearly visible and where necessary shall be protected from mechanical injury. No earth connections shall be made to hot water, steam or gas pipes. All connections to cold water pipes shall only be made if they have metal to metal joints throughout and water supply is in continual use and in direct contact with the general mass of earth.

c. Earth continuity conductor shall be taken to a common earthing point outside the building . In cases where earth continuity conductors are connected together, they shall be connected through lugs and tinned and outgoing conductors to the common earth point shall be at least twice the nominal area of the largest single earth continuity conductor installed.

d. The maximum continuity resistance from any point in the installation including the earth continuity conductor and earth lead to the earth pipe, shall not exceed 1 (one) ohm .

e. **The Earth shall be Laid as below :**

- (1) The excavation for the earth pipe , shall be sunk to a depth of not less than 2 metre for ordinary earth and 2.50 metre for lightning conductors and shall not be less than 1800mm from the nearest foundation .
- (2) The pipes shall be perforated having 18 holes of 3mm dia and shall not be less than 25mm dia and 2 metre in length in any case. The perforated holes shall be equally spaced as far practicable.
- (3) The pipes shall be erected vertically and shall be surrounded with 50Kg. Coke breeze at the bottom and 50Kg of rock salt over the coke breeze to cover all sides. Resistance of the earth pipe with respect to the mass of earth shall NOT exceed 5 (five) ohms (10 ohms for lightning conductors).
- (4) The earth wire from main earthing point to earth pipe shall be of hard drawn bare copper or phosphor bronze wire not less than 12.97mm^2 or its equivalent and shall be burned not less than 50mm below floor level of verandahs when crossing same. All channeling necessary shall be made good in all respects with the appropriate materials.
- (5) The shortest route to earth pipe shall be adopted but sharp bends and joints shall in all cases be avoided.
- (6) The wire shall be connected through thimble placed in between two brass nuts and two brass washers on the top of 25mm pipe.
- (7) A cap shall also be provided on the top of the pipe.

18. **Meters.** Where meters are erected they shall be mounted on meter boards or as otherwise directed, in such a manner that the spindles of the revolving elements are vertical, and the planes through the armatures and disc horizontal. They shall be connected in the phase wire in all " Earthed" systems. Normally the height of the dial of meter shall be 1600mm from floor.

19. **Switch Connections.** All single pole switches shall be installed in the un-earthed conductor, that is, in the phase wire.

20. **Conductors.** The entire work shall be carried out in accordance with the specifications given in the British Standard Code of practice CP 326-101(1965) with amendments there to read in conjunction with TI No . 47 of 1967 as amended from time to time. All materials shall conform to the latest and relevant British Standard specifications and as described in TI No. 47 of 1967. All metallic finials on or above the surface of the roof of the structure should be bonded to and form part of the air termination net work.

21. **Termination/Conductors.**

a. **Air Termination.** An air termination should be of copper and hard or medium hard drawn 12 mm dia 1500mm long fixed with Copper/Gun metal base by means of brass bolts, nut and washer etc. fixed screwed properly.

An air termination shall be interconnected by means of roof/ring conductors. Subsequently the entire air termination (net work shall be finally connected to earth termination) through down conductors.

b. **Roof Conductors.** All roof conductors shall be of copper strip soft annealed 25mmx3mm and shall be secured to roof by means of copper hold fasts (to be measured) and brass screws etc. and should be interconnected to air termination.

c. **Down Conductors.** Down conductors should follow the nearest possible direct route between the air termination and the earth termination. There should be no upturn in any down conductor and the radius of any bends should be as great as possible.

Each down conductor shall have to be provided with test joint at 300mm height from the ground level in such a position that the testing is carried out conveniently.

d. **Ring Conductor.** Copper strip soft annealed 25mm x 3mm shall be used and secured properly with copper hold fasts and brass screws etc. The ring conductors shall be fixed 300mm above ground level and bounded to magazine doors, windows frames and electric conduits.

e. **Earth Terminations.** The earth termination of copper strip soft annealed 25mm x 9mm shall be fixed to earth electrode either of:

- (1) GI pipe 250mm perforated by means of bolts and nuts and washers etc. and soldering properly ensuring that no leakage to earth resistance is possible.
- (2) 12mm dia copper rod by means of brass nuts and washers as shown in drawing .

The other end of the copper strip shall be connected to test joint.

f. **Earth Electrodes.** Shall be of:

- (1) 12mm dia copper rod not less than 2.50 metre length and shall be dived in the ground vertically .
- (2) GI pipe 25mm having 24 holes of 3mm dia and not less than 2.50 metre length shall be erected vertically and shall be surrounded with 50kg coke breeze at the bottom and 50kg of rock salt on the coke breeze to cover all sides. Resistance of the earth pipe with respect to the mass of earth shall NOT exceed 10 ohms (including air termination etc.). Length of earth electrode shall be increased to suitable soil conditions, where it is necessary to bring the resistance within the limits.

g. **Joints and Bonds.** The joints and bonds should be kept to minimum as far as possible and all joints, joints for strips should be tinned, soldered .

h. **Test Joints.** Testing joints shall be provided on down conductors in such a position that the testing is carried out without any inconvenience.

j. **Testing.** On completion of the work testing shall be carried out in dry season as far as possible. The testing instruments shall be arranged by the contractor at site and testing should be carried out by the contractor in the presence of Engineer-in-Charge without any extra payment. Details shown in the drawing shall be followed as guidance.

22. **Electrical Test.** Test for insulation resistance and earth continuity resistance as required by IEE, regulations, shall be carried out by the licentiate supervisor of the contractor in the presence of the Engineer- in – Charge and test reports prepared and handed over to the later.

23. **Samples.** Two sets of sample of all normal fittings and accessories, conduit fittings, cables and wires, which are to be supplied and fixed by the contractor shall be produced by the contractor for inspection/approval of the Engineer-in-Charge. These samples shall be approved by the Engineer-in- Charge according to authorized specifications. One set of approved sample shall be retained by the GE/PE/ME. No installation work shall proceed until such samples have been approved.

24. **Method of Measurements.**

a. Electrical wiring work shall be measured “per point” and shall include any length of circuit for one room , passage, staircase, etc. as required with all accessories and fittings (except those specifically mentioned below) and connections to SDB/DB. including final sub circuit.

b. Extensions to existing circuits when ordered separately from lighting points will be measured linear under appropriate item.

Clarification of Rates.

25. **The rates inter alia, include particularly:**

a. “Per point “ including final sub circuit & with all accessories except socket outlets, pendants, brackets, lamp fittings, shades, lamps switches and switch box cover.

b. All subsidiary materials such as nails, screws, wall hooks, plugs, etc.

- c. Cutting holes in or through walls, taking up and re-fixing flooring board, notching or drilling holes through joints and making good all work disturbed to match existing works.
- d. Earthing of third pin point of socket outlet as described upto main control common earthing point.
- e. For fittings supplied by MOD, removal from store together with all subsidiary materials including those of other trades, necessary for fixing such fittings.
- f. In repairs, taking down any existing fittings and removal to store together with the making good of wall and ceiling surfaces etc in repair for single points, no payment will be made for steel box. Except steel box payment will be made for plastic/ebonite sheet only.
- g. Testing the complete installation as may be required.

26. **Notes for Lightning Conductor.**

- a. Major metal work inside the building should be bonded to the lightning protection system.
- b. If rails are to be provided they should be properly earthed.
- c. If copper rod is to be used as earth electrode the process will be adopted as under:-
 - (i) Excavate a pit 300mm x 300mm x 300mm deep.
 - (ii) Drive copper rod 12mm dia direct into the ground.
 - (iii) Clean the surface of copper strip to be jointed with drive copper rod.
 - (iv) Clean the rod to be soldered with copper strip.
 - (v) Solder copper strip rod .
 - (vi) Screw up the strip with bolts and nuts.
- d. It is the discretion of the Engineer at site to select the type of earth according to resistivity of soil.

RESTRICTED

SECTION-22

INTERNAL ELECTRIFICATION RATES

Item	Description	Rate in Taka			
		Materials & Labour		Fixing only	Add to fixed in r/r
Per point		Teak with brass coats consumable using cable Eastern	Teak with brass coated other than Eastern		
22-1	One light, fan, bell controlled by one switch with pvc sheathed single core cable 1.3/1.5 rm (3/.029) including switch board final sub ckt, wooden batten and necessary consumables	930.00	937.00	230.00	115.20
22-2	- Ditto - but without cables	534.00	534.00	149.80	74.90
22-3	- Ditto - but without cables & batten	370.00	370.00	80.60	40.30
22-4	- Ditto - but but without switch board	826.00	832.00	207.00	103.50
22-5	Add to each additional ckt controlled by more than one switch/push	310.00	312.00	76.60	38.40
22-6	- Ditto -but without cables	178.00	178.00	49.90	24.90
22-7	- Ditto - but without cables & batten	123.20	123.20	26.80	13.40
22-8	One light, fan, bell controlled by two way switch complete with all consumable switch board, final sub ckt etc using pvc sheathed single core cable 1.3/1.5 rm (3/.029)	1488.00	1499.00	368.00	184.00
22-9	- Ditto - but without cables	854.00	854.00	240.00	119.80
22-10	- Ditto - but without cables & batten	592.00	592.00	129.00	64.50
22-11	- Ditto - but without switch board	1322.00	1331.00	331.00	166.00
22-12	Add to each additional ckt controlled by more than one switch	496.00	499.00	122.50	61.30
22-13	- Ditto - but without cables	284.00	284.00	79.90	39.90
22-14	- Ditto - but without cables & batten	197.00	197.00	43.00	21.50
22-15	One three pin socket out let 5 amps controlled by one switch with all consumable i.e. link clips screws, nails etc using pvc sheathed 1.3/1.5 rm (3/.029) single core cable (from switch board & light circuit).	443.00	445.00	115.20	57.60
22-16	- Ditto - without cable	305.00	305.00	74.90	37.40
22-17	- Ditto - but without cables & batten & earth conductor	134.30	134.30	40.30	20.20
22-18	- Ditto - but direct from DB / SDB.	1108.00	1113.00	202.00	100.80
22-19	- Ditto - without cable	762.50	762.50	131.10	65.50
22-20	- Ditto - without cable batten & earth conductor.	336.00	336.00	100.80	50.50
22-21	One three pin socket out let 15 amps controlled by one switch with all consumable i.e. link clips screws, nails etc using pvc sheathed 2.5 rm (7/.029) single core cable (direct from SDB/DB).	1355.00	1386.00	230.00	115.20
22-22	- Ditto - without cable	621.00	621.00	150.00	74.90
22-23	- Ditto - without cables batten & earth conductor	268.00	268.00	80.60	40.30

RESTRICTED

SECTION-22

INTERNAL ELECTRIFICATION RATES

Item	Description	Rate in Taka					
		Materials & labour				Fixing only	Add to fixed in r/r
Wiring (Concealed conduit)	Per point	Steel conduit with consumable using cable Eastern	Steel conduit with consumable using cable other than Eastern	PVC conduit with consumable using cable Eastern	PVC conduit with consumable using cable other than Eastern		
22-24	One light, fan, bell controlled one switch with pvc non-sheathed single core cable 1.3/1.5 rm (3/.029) including switch board final sub ckt, conduit heavy gauze and necessary consumables	2271.00	2247.00	890.00	866.00	342.00	171.00
22-25	- Ditto - with out cables	1914.00	1914.00	533.00	533.00	222.00	111.10
22-26	- Ditto - without cable & conduit	233.00	233.00	233.00	233.00	119.60	59.80
22-27	- Ditto - but cables only	374.00	351.00	374.00	351.00	136.71	68.40
22-28	Add to each additional ckt controlled by more than one switch / push	749.00	742.00	294.00	286.00	112.86	56.40
22-29	- Ditto - without cable	632.00	632.00	176.00	176.00	73.30	36.70
22-30	-Ditto- without cable & conduit	76.89	76.89	76.89	76.89	39.50	19.70
22-31	-Ditto- but cables only	123.00	116.00	123.00	116.00	45.10	22.60
22-32	One light, fan, bell controlled by two, two way switch complete with all consumables switch board final sub ckt etc using pvc non-sheathed 1.3/1.5 rm (3/.029) single core cable	3634.00	3595.00	1424.00	1386.00	547.00	274.00
22-33	-Ditto - but without cables.	3062.00	3062.00	853.00	853.00	355.00	178.00
22-34	- Ditto - without cables & conduit.	372.80	372.80	372.80	372.80	191.00	95.70
22-35	- Ditto - but cables only	598.00	562.00	598.00	562.00	219.00	109.40
22-36	Add to each additional ckt controlled by more than one switch/push	1199.00	1186.00	470.00	457.00	181.00	90.40
22-37	-Ditto - but without cables.	1010.00	1010.00	281.00	281.00	117.20	58.70
22-38	- Ditto - but without cables & conduit.	123.00	123.00	123.00	123.00	63.00	31.60
22-39	- Ditto - but cables only	199.00	187.00	199.00	187.00	72.27	36.10

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SECTION-22

INTERNAL ELECTRIFICATION RATES

Item	Description	Materials & labour				Fixing only	Add to fixed in r/r
		Steel conduit with consumable using cable Eastern	Steel conduit with consumable using cable other than Eastern	PVC conduit gde "D" with consumable using cable Eastern	PVC conduit ("D") with consumable using cable other than Eastern		
	Wiring (Concealed conduit)						
	Per point						
22-40	One three pin socket out let 5 Amps controlled by one switch with all consumables using pvc non-sheathed 1.3/1.5 mm (3/.029) single core cable (from switch board & light circuit)	880.00	872.00	420.00	412.00	128.20	64.10
22-41	- Ditto - without cables.	756.00	756.00	296.00	296.00	83.30	41.70
22-42	- Ditto - without conduit cables & earth conductor.	83.00	83.00	83.00	83.00	45.00	22.00
22-43	- Ditto - but cables only	131.00	123.00	131.00	123.00	51.30	25.60
22-44	- Ditto - but direct from DB / SDB	2498.00	2472.00	979.00	953.00	376.00	188.00
22-45	- Ditto - but without cables.	2105.00	2105.00	586.00	586.00	244.00	122.20
22-46	- Ditto - without conduit cables & earth conductor.	256.30	256.30	256.30	256.30	131.60	65.80
22-47	- Ditto - but cables only	411.00	386.00	411.00	386.00	150.00	75.20
22-48	One three pin socket out let 15 Amps controlled by one switch with all consumables using pvc non-sheathed 2.5 mm (7/.029) single core cable (direct from SDB/DB)	2799.00	2754.00	1397.00	1352.00	376.00	188.00
22-49	- Ditto - without cables.	2091.00	2091.00	689.00	689.00	244.00	122.00
22-50	- Ditto - without conduit cables & earth conductor.	207.00	207.00	207.00	207.00	132.00	66.00
22-51	- Ditto - but cables only	727.00	682.00	727.00	682.00	150.00	75.00

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SECTION-22

INTERNAL ELECTRIFICATION RATES

Item	Description	Rate in Taka					
		Materials & labour					Add to fixed in r/r
Per point		Steel conduit with consumable using cable Eastern	Steel conduit with consumable using cable other than Eastern	PVC conduit (gde D) with consumable using cable Eastern	PVC conduit (D) with consumable using cable other than Eastern	Fixing only	
22-52	One light, fan, bell controlled by one switch complete with pvc non-sheathed single core cable 1.3/1.5 rm (3/.029) including switch board final sub ckt conduit heavy gauze & nec. consumables	2172.00	2148.00	791.00	767.00	205.00	103.00
22-53	- Ditto - without cables.	1862.00	1862.00	481.00	481.00	133.00	67.00
22-54	- Ditto - without conduit and cables	209.00	209.00	209.00	209.00	72.00	36.00
22-55	Add to each additional ckt controlled more than one switch/push	717.00	715.00	263.00	255.00	68.30	34.30
22-56	- Ditto - but without cables.	614.00	620.00	160.00	160.00	44.30	22.30
22-57	- Ditto - but without conduit & cables.	69.00	69.60	69.60	69.60	24.00	12.00
22-58	One light, fan, bell controlled by two, two way switch complete with all consumables, switch board final sub ckt etc using pvc non-sheathed 1.3/1.5 rm (3/.029) single core cables	3475.00	3436.80	1266.00	1227.00	328.00	164.80
22-59	- Ditto - but without cables.	2979.00	2979.00	770.00	770.00	213.00	107.20
22-60	- Ditto - but without cables & conduit.	334.00	334.00	334.00	334.00	115.20	57.60
22-61	Add to each additional ckt controlled by more than one switch / push	1147.00	1134.00	418.00	405.00	108.20	54.40
22-62	- Ditto - but without cables.	983.00	983.00	254.00	254.00	70.30	35.40
22-63	- Ditto - but without conduit & cables.	110.20	110.20	110.20	110.20	38.00	19.00

SECTION-22

INTERNAL ELECTRIFICATION RATES

Item	Description	Materials & labour				Fixing only	Add to fixed in r/r
		Steel conduit with consumable using cable Eastern	Steel conduit with consumable using cable other than Eastern	PVC conduit (gde "D") with consumable using cable Eastern	PVC conduit (D) with consumable using cable other than Eastern		
	Wiring (Surface conduit)						
	Per point						
22-64	One three pin socket outlet 5 Amps controlled by one switch with all consumables using pvc non-sheathed 1.3/ 1.5 rm (3/.029) single core cable (from switch board & light circuit)	863.00	863.00	406.00	406.00	103.00	51.50
22-65	- Ditto - but without cables.	748.00	748.00	291.00	291.00	67.00	33.00
22-66	- Ditto - but without conduit, cables & earth conductor.	82.00	82.00	82.00	82.00	36.00	18.00
22-67	- Ditto - but direct from DB/SDB	2243.80	2243.80	1056.00	1056.00	268.00	133.90
22-68	- Ditto - but without cables.	1945.00	1945.00	757.00	757.00	174.00	85.80
22-69	- Ditto - but without conduit cables & earth conductor.	213.00	213.00	213.00	213.00	93.60	46.80
22-70	One three pin socket outlet 15 Amps controlled by one switch with all consumables using pvc non-sheathed 2.5rm(7/.029) single core cable (direct from SDB/DB)	2551.00	2506.00	1147.00	1101.00	103.00	52.00
22-71	- Ditto - without cable	1938.00	1938.00	534.00	534.00	67.00	34.00
22-72	- Ditto - without conduit cable & earth conductor.	127.00	127.00	127.00	127.00	36.00	18.00

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SECTION-22

INTERNAL ELECTRIFICATION RATES

Item	Description	Rate in Taka		
		Materials & labour	Fixing only	Add if fixed in r/r
	Wiring (Surface conduit) flame proof			
	Per point	Steel conduit solid drawn with necessary consumables using cable Eastern	Steel conduit solid drawn with necessary consumables using approved other cables	
22-73	One light, fan, bell controlled by one switch with non-sheathed single core cable 1.3/1.5 rm (3/.029) including switch board final sub ckt conduit heavy gauze & nec. consumables	2532.00	2507.00	205.00
22-74	- Ditto - without cables.	2203.00	2203.00	133.00
22-75	- Ditto - without cables & conduit.	209.00	209.00	72.00
22-76	Add to each additional ckt controlled by more than one switch / push	836.00	827.00	67.70
22-77	- Ditto - without cables.	727.00	727.00	43.90
22-78	- Ditto - without conduit & cables.	69.00	69.00	23.80
22-79	One three pin socket out let 5 Amps controlled by one switch with all consumables using pvc non-sheathed 1.3/1.5 rm (3/.029) single core cable (direct from SDB/DB)	2785.00	2758.00	226.00
22-80	- Ditto - without cables.	2423.30	2423.30	146.30
22-81	- Ditto - conduit cables & earth conductor.	229.90	229.90	79.20
	EARTH CONDUCTOR			
	Per Point			
22-82	Earth conductor for socket point with 14 SWG copper conductor for direct from DB / SDB	225.80	22.20	11.10
22-83	- Ditto - but 16 SWG copper conductor	145.60	22.20	11.10
22-84	- Ditto - but insulated earthing cables BYA / FR 1x 1.5 re (1-w) for Socket point direct from DB / SDB	196.00	22.20	11.10
	Per Metre			
22-85	Supply and fixing of insulated earthing cable BYA / FR 1x 1.5 rm (7-W)	18.40	2.20	1.10
22-86	- Ditto - but 1x 2.5 re (1-W)	28.00	2.40	1.20
22-87	- Ditto - but 1x 2.5 rm (7-W)	28.60	2.50	1.30

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SECTION-22

INTERNAL ELECTRIFICATION RATES

Item	Description	Rate in Taka			
		Materials & Labour	Fixing only	Add if fixed in r/r	
BATTENING (WOOD)					
Per Metre					
22-88	Wooden battening (Teak) complete with necessary specified consumable i.e link clips/tacks, screw nails etc for 12mm x 12 mm	32.00	11.00	6.00	
22-89	- Ditto - 20 mm x 12 mm	40.00	11.10	5.60	
22-90	- Ditto - 25mm x 12mm	54.00	14.80	7.40	
Rate in Taka					
CONDUIT LAYING (Surface)					
Per Metre					
		Materials & Labour		Fixing only	Add if fixed in r/r
		Steel	PVC (gde-D)		
22-91	Conduit laying placing with necessary fittings & consumables i.e. saddle fish wire etc having diameter of 16 mm	-	44.50	22.80	11.40
22-92	- Ditto - but 20 mm	253.00	51.00	22.80	11.40
22-93	- Ditto - but 25 mm	343.00	62.50	22.80	11.40
22-94	- Ditto - but 30 mm	-	134.00	22.80	11.40
22-95	- Ditto - but 40 mm	-	155.00	28.60	14.30
22-96	- Ditto - but 50 mm	-	215.00	47.60	23.80
CONDUIT LAYING (Concealed)					
Per Metre					
22-97	Conduit laying placing with necessary fittings & consumables i.e. saddle fish wire etc having diameter of 16 mm	-	61.40	39.60	19.80
22-98	- Ditto - but 20 mm	270.00	67.80	39.60	19.80
22-99	- Ditto - but 25 mm	353.00	71.60	31.70	15.90
22-100	- Ditto - but 30 mm	-	134.00	39.60	19.80
22-101	- Ditto - but 40 mm	-	174.00	47.50	23.80
22-102	- Ditto - but 50 mm	-	227.00	59.40	29.70

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SECTION-22

INTERNAL ELECTRIFICATION RATES

Item	Description	Rate in Taka					
		Materials & Labour	Fixing only	Add if fixed in r/r			
	CONDUIT LAYING (Flame proof) SOLID DRAWN						
	Per Metre						
22-103	Conduit laying placing with necessary fittings & consumables i.e. saddle fish wire etc having diameter of 20 mm	334.00	39.60	19.80			
22-104	- Ditto - but 25 mm	398.00	39.60	19.80			
	Each.	Materials & Labour		Fixing only	Add if fixed in r/r		
		Steel	PVC				
22-105	Conduit elbow / bend / Tee / coupler Adopter etc up to 20 mm dia.	18.30	8.20	1.70	0.80		
22-106	- Ditto - but over 20 mm dia Each	23.00	9.30	2.10	1.10		
	Each						
22-107	Junction box steel sheet 75 mm deep rectangular with plastic/Ebonite cover of 100x100 mm.	48.50	-	14.80	7.40		
22-108	- Ditto - but 150x100mm	63.10	-	16.20	8.10		
22-109	- Ditto - but 200x150 mm	90.20	-	17.80	8.90		
22-110	- Ditto - but 250x200 mm	106.90	-	19.80	9.90		
		Materials & Labour					
	CABLE / WIRE DRAWING	Sheathed Eastern Cables	Non-sheathed Eastern Cables	Sheathed other using approved cables	Non-sheathed other using approved cables	Fixing Only	Add to fixed in r/r
	Per Metre						
22-111	Drawing PVC cable in prelaid / fixed / conduit / batten of single core 1.5rm (3/.029)	28.60	25.10	29.00	23.40	8.90	4.40
22-112	- Ditto - but 1.5 rm (3/.036)	30.50	26.30	30.90	25.20	8.90	4.40
22-113	- Ditto - but 2.50 rm (7/.029)	41.20	37.50	42.70	35.30	8.90	4.40
22-114	- Ditto - but 4 rm (7/.036)	60.80	53.90	58.80	50.50	8.90	4.40
22-115	- Ditto - but 6 rm (7/.044)	102.00	75.80	98.00	70.10	8.90	4.40
22-116	- Ditto - but 16 rm (7/.064)	219.00	167.00	174.00	155.00	11.10	5.60

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INTERNAL ELECTRIFICATION RATES

Item	Description	Materials & Labour				Fixing Only	Add to fixed in r/r
		Sheathed Eastern Cables	Non-sheathed Eastern Cables	Sheathed other using approved cables	Non-sheathed other using approved cables		
	ADDITIONAL CORE						
	Per Metre						
22-117	Additional single core cable in pre-laid batten / conduit with main cable of 1.5rm (3/.029)	23.50	20.10	24.00	18.40	4.40	2.20
22-118	- Ditto - but 1.5 rm (3/.036)	25.60	21.40	25.90	20.30	4.40	2.20
22-119	- Ditto - 2.5rm (7/.029)	35.80	32.10	37.30	30.00	4.40	2.20
22-120	- Ditto - 4rm (7/.036)	55.00	48.10	53.10	44.70	4.40	2.20
22-121	- Ditto - 6rm (7/.044)	96.00	69.40	92.00	63.70	4.40	2.20
22-122	- Ditto - 16rm (7/.064)	212.00	159.60	165.00	146.00	5.60	2.80
	Cable other than above sizes-Rate is to be taken from section 21 & section 29						
	RUNNING EARTH CONDUCTOR						
	Per Metre						
					Rate in Taka		
					Materials & Labour	Fixing only	Add if fixed in r/r
22-123	Copper earth conductor 16 SWG./1.610mm				16.50	3.00	1.50
22-124	- Ditto - but 14 SWG / 2.012 mm				25.90	3.00	1.50
22-125	- Ditto - but 12 SWG / 2.610 mm				34.60	3.00	1.50
	LAMP HOLDER / PENDENT						
	Each						
22-126	Pendent ordinary comprising ceiling rose, lamp holder bakelite BC, CG with shade carrier ring 23/.0076 flexible cord (Twin plastic) up to 1.5m in length.				99.00	18.10	9.00
22-127	- Ditto - but without lamp holder				71.60	11.80	5.90
22-128	Pendent stiff comprising galvanised back plate 20 mm heavy gauze steel conduit upto 9m in length with brass adopter & bakelite lamp holder complete with accessories				272.00	34.30	17.20
22-129	Pendent rise & fall comprising ceiling rose, lamp holder bakelite BC, CG with shade carrier ring counter weight complete with pulley cord guide lead shot, ceiling rose 23/.0076 flexible cord upto 3m				176.00	28.80	14.40
22-130	Lamp holder batten BC with shade carrier ring 16mm all insulated.				32.80	9.20	4.60
22-131	- Ditto - but 45 ⁰ degree angle				37.50	9.20	4.60
22-132	- Ditto - BC, CG (pendent holder)				31.20	9.90	4.90

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SECTION-22

INTERNAL ELECTRIFICATION RATES

Item	Description	Rate in Taka		
		Materials & Labour	Fixing only	Add if fixed in r/r
	LAMP HOLDER/PENDENT			
	Each			
22-133	- Ditto - threaded (brass)	36.00	9.90	4.90
22-134	- Ditto - for brass bracket	36.00	9.90	4.90
	WALL BRACKET			
	Each			
22-135	Brass Bracket plain 300 mm swan neck with brass / bakelite lamp holder with shade carrier ring complete in all respect (with out bulb)	119.00	29.90	15.00
		Rate in Taka		
		Materials & Labour	Fixing only	Add to fixed in r/r
		Crescent	Gloria	
22-136	Fancy type wall bracket wall Crescent cat no. CB-373-NS (without bulb) GWB-1201-1884 CH	300.00	293.00	36.10 18.00
22-137	- Ditto - Crescent cat no. CB-931-684	845.00	-	36.10 18.00
22-138	- Ditto - but Crescent cat no. CB-373-HR-CH / Gloria cat No. GWB 1201-1821-CR.B-130 H-170	569.00	270.00	36.60 18.30
22-139	- Ditto - Crescent / Gloria cat no. CB-565-970 / GWB-1501-2297-FR	883.00	957.00	42.30 21.10
22-140	- Ditto - Crescent / Gloria cat no. CB-651-666 / GWB-2683-1888	950.00	769.00	42.30 21.10
22-141	- Ditto - Crescent cat no. CB-604-540-BF(4B), Gloria cat no GWB-2684-1888	1057.00	1305.00	45.50 22.70
22-142	- Ditto - Crescent cat no. CB-221-678-3B	650.00	-	45.50 22.70
22-143	- Ditto - Crescent cat no. CB-952-CPG-02 / Gloria cat no-GWB-2690-651-NC	973.00	1030.00	45.50 22.70
22-144	- Ditto - Crescent cat no. CB-929-CPG-2 / Gloria cat no. GWB-2689-651-NC.	653.00	699.00	45.50 22.70
22-145	- Ditto - Crescent cat no. CB-911-977 / Gloria cat no GWB-1793-2147-FR	1438.00	1321.00	45.50 22.70
22-146	- Ditto - Crescent cat no. CB-518 crystal / Gloria cat no GWB-1521-Crystal	4990.00	8509.00	45.50 22.70
22-147	- Ditto - Crescent cat no. CB-331-684 / Gloria cat No. GWB-1478-2298-pata.	640.00	2363.00	45.30 22.70
22-148	- Ditto - Crescent cat no. CB-897-694 / Gloria cat no GWB-2731-1839	2339.00	600.00	45.30 22.70
22-149	- Ditto - Crescent cat no. CB-986 crystal / Gloria cat no GWB-1776-Crystal	5501.00	6226.00	52.40 26.20
22-150	- Ditto - Crescent cat no. CB: 431-592 (frosted)/Gloria cat no GWB 1501-2105 Tinted	840.00	904.00	45.33 22.70
22-151	- Ditto - Crescent cat no. CB-895 (1) - 996-C/F	1614.00	-	47.30 23.60

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SECTION-22

INTERNAL ELECTRIFICATION RATES

Item	Description	Rate in Taka			
		Materials & Labour		Fixing only	Add to fixed in r/r
		Crescent	Gloria		
	WALL BRACKET				
	Each				
22-152	- Ditto - Crescent cat no. CB: 332-684 / Gloria cat no. GWB 1502-2101 frosted	857.00	1203.00	47.30	23.60
22-153	- Ditto - Crescent cat no. CB-892 (1) - 972 - D / Gloria cat no. GBB-979-2401T	1612.00	1338.00	45.40	22.70
22-154	- Ditto - Crescent cat no. CB: 447 Gold-644 Amber F (bath room) / Gloria cat no. GBB 958-1205 T	871.00	637.00	45.40	22.70
22-155	- Ditto - Crescent cat no. CB-981-CG-crystal	3086.00	-	46.00	23.00
22-156	- Ditto - Crescent cat no. CB-412-BL-T 12"D / Gloria model no GBB-970-2127-FR.	632.00	1567.00	46.00	23.00
22-157	- Ditto - Crescent cat no. CB-652-666	1,715.00	-	46.00	23.00
22-158	- Ditto - Crescent cat no. CB-792 (1) 92 DF	1,813.00	-	46.00	23.00
22-159	- Ditto - but Crescent cat no. CB-899-977 F/C	1,820.00	-	46.00	23.00
22-160	- Ditto - Crescent cat no. CBB-4/12-BL T-12"DD	792.00	-	44.50	22.20
22-161	- Ditto - Crescent cat no. CB: 602-909 FF./ Gloria Model no. GWB-1595-2407-FR	974.00	838.00	45.40	22.70
22-162	- Ditto - Crescent cat no. CB-740 / Gloria Model no. GWB-1787	629.00	827.00	45.40	22.70
22-163	- Ditto - Gloria Model no GWB-2628-1809	-	619.00	44.50	22.20
22-164	- Ditto - Crescent cat no. CB-577-662	638.00	-	44.50	22.20
22-165	- Ditto - Crescent cat no. CB-577 (ii) - 662	1307.00	-	46.00	23.00
22-166	- Ditto - Crescent cat no. CB-498-540-4B	766.00	-	46.00	23.00
22-167	- Ditto - Crescent cat no. CB-337-551/Gloria cat no. GWB-1215-1816	965.00	630.00	45.40	22.70
22-168	- Ditto - Gloria cat no. GWB-1589-2151 T.	-	938.00	45.40	22.70
22-169	- Ditto - Crescent cat no. CB-675-642-A2 / Gloria Model no GWB-1741-2291 SR	1672.00	1761.00	46.10	23.00
22-170	- Ditto - Crescent cat no. CB-894-977 / Gloria model no GWB-1754-2294 BND	1920.00	1831.00	46.10	23.00
22-171	- Ditto - Crescent cat no. CB-591-681-542	2098.00	-	46.10	23.00
22-172	- Ditto - Crescent cat no. CB-560-681-547	980.00	-	45.90	22.90
22-173	- Ditto - Crescent cat no. CB-331-678-4B/ Gloria cat no. GWB 1217-1807-BR.	688.00	492.00	45.90	22.90
22-174	- Ditto - Crescent cat no. CB-751 (1) 676	720.00	-	45.90	22.90
22-175	- Ditto - Crescent cat no CB-610-668 CHGloria model no GWB-2592-1892	1138.00	1028.00	45.50	23.00
22-176	- Ditto - Gloria model no GWB-2672-1897	-	976.00	45.50	23.00

RESTRICTED

SECTION-22

INTERNAL ELECTRIFICATION RATES

Item	Description	Rate in Taka			
		Materials & Labour		Fixing only	Add to fixed in r/r
		Gloria	Swash		
	WALL BRACKET				
	Each				
22-177	- Ditto - but fancy type wall bracket Gloria cat no. GWB-1667-2256 BND	1261.00	-	45.50	22.70
22-178	- Ditto - Gloria cat no. GWB 1347-658	1031.00	-	45.50	23.00
22-179	- Ditto - Gloria cat no. GWB 1348-1843	1715.00	-	45.50	22.70
22-180	- Ditto - Gloria cat no. GWB 1207-1809-DS.	582.00	-	45.50	22.70
22-181	- Ditto - Gloria cat no. GWB 1501-2286-FR.	835.00	-	45.50	22.70
22-182	- Ditto - Gloria cat no. GWB 1334-1817	1086.00	-	45.50	22.70
22-183	- Ditto - Gloria model no GWB-1333-1817	678.00	-	45.50	22.70
22-184	- Ditto - Gloria model no GWB-1511-2114/1828	995.00	-	45.50	22.70
22-185	- Ditto - Gloria cat no. GWB 1201-1821 CR/Swash cat no. SCS -76 HRBR	268.00	327.00	45.50	22.70
22-186	- Ditto - Gloria cat no. GWB 2543-1823	990.00	-	45.50	22.70
22-187	- Ditto - Gloria cat no. GWB 1671-2255	717.00	-	45.50	22.70
22-188	- Ditto - Gloria cat no. GWB 1663-2255 .	933.00	-	45.50	22.70
22-189	- Ditto - Gloria cat no. GWB-1203-1804	378.00	-	45.50	22.70
22-190	- Ditto - Gloria cat no. GWB-1475-2129 FR	2589.00	-	45.50	22.70
22-191	- Ditto - Gloria cat no. GWB-1662-2250 BND	1866.00	-	45.50	22.70

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SECTION-22

INTERNAL ELECTRIFICATION RATES

Item	Description	Rate in Taka			
		Materials & Labour		Fixing only	Add to fixed in r/r
		Gloria	Swash		
	WALL BRACKET				
	Each				
22-192	- Ditto - Swash cat no. SCDB-161 DT 732	-	1540.00	45.50	22.70
22-193	- Ditto - Swash cat no. SCSB-220-DT-743	-	700.00	45.50	22.70
22-194	- Ditto - Gloria cat no. GCF-380 (B) DIA 178	684.00	-	45.50	22.70
22-195	- Ditto - Gloria cat no. GWB-1299-1839	582.00	-	45.50	22.70
22-196	- Ditto - Gloria model no GWB-1501- TV Glass	888.00	-	45.50	22.70
22-197	- Ditto - but Gloria model no GWB-1218-1807 DS FR	722.00	-	45.50	22.70
22-198	- Ditto - Gloria cat no. GWB-1665-2251 BND	1404.00	-	45.50	22.70
22-199	- Ditto - Gloria cat no. GWB-1476-2129	1321.00	-	45.50	22.70
22-200	- Ditto - Gloria cat no. GWB-1203-3604 B-130 H-210 P-140	682.00	-	45.50	22.70
22-201	- Ditto - Gloria cat no. GWB-1588-2148 crystal 1	5454.00	-	45.50	22.70
22-202	- Ditto - Gloria cat no. GWB-1587-2148 crystal	3008.00	-	45.50	22.70
22-203	- Ditto - Gloria cat no. GWB-1661-2250 BND	985.00	-	45.50	22.70
22-204	- Ditto - Gloria model no GBB-961-2127 FR L-305 B-105 P-750 / Swash cat no. SCB 33 (12") PL B-72 L-368 P-110.	1005.00	585.00	45.50	22.70
22-205	- Ditto - Gloria model no GBB-953-1803 D Cut	826.00	-	45.50	22.70
22-206	- Ditto - Gloria cat no. GBB-959-2105 T / Swash cat no. SCB-35 TTG 12" B-115 L-410 P-112	820.00	1049.00	45.50	22.70
22-207	- Ditto - Gloria cat no. GWB- 1261-1807 DS BR / Swash cat no. SCB-37 TTG B-120 L-318 P-91	483.00	1415.00	45.50	22.70
22-208	- Ditto - Gloria model no GWB-1753-2293 BND	1561.00	-	45.50	22.70
22-209	- Ditto - Gloria model no GWB-1607-2105	1056.00	-	45.50	22.70
22-210	- Ditto - Swash cat no. SCS -112 (B) G 8" NC.	-	510.00	45.50	22.70

RESTRICTED

SECTION-22

INTERNAL ELECTRIFICATION RATES

Item	Description	Materials & Labour		Fixing only	Add to fixed in r/r
		Gloria	Swash		
	WALL BRACKET				
	Each				
22-211	- Ditto - Swash cat no. SCB -35 TTG 6" L-255 B-105 P-92	-	682.00	45.50	22.70
22-212	- Ditto - Gloria cat no. GEPL-714./ Swash cat no. BFWT-6 SMAL D-230 L-281	3438.00	802.00	45.50	22.70
22-213	- Ditto - Gloria GWT-708 / Swash cat no. BFWT-6 BIG B-308 L-385	1186.00	1307.00	45.50	22.70
22-214	- Ditto - Gloria cat no. GWT-706	1064.00	-	45.50	22.70
22-215	- Ditto - Gloria model no , GWB-2628-1809	971.00	-	45.50	22.70
22-216	- Ditto - Gloria model no GWB-2543-1814	631.00	-	45.50	22.70
22-217	- Ditto - Gloria cat no. GWB-1205-1809.	387.00	-	45.50	22.70
22-218	- Ditto - Gloria model no GWT-711 (Brass net)	1313.00	-	45.50	22.70
22-219	- Ditto - Swash cat no. BFWT-1 B-170 H-108	-	1239.00	45.50	22.70
22-220	- Ditto - Gloria model no GWT-701Alu cast body L-166 B-125 H-105	378.00	-	45.50	22.70
22-221	- Ditto - Swash cat no. BFWT-4 PARSPEX B-119, H-235, P-110	-	666.00	45.50	22.70
22-222	Shade Enamelled / Aluminium Conical 250 mm dia 80 mm deep 25 to 28 mm holes complete with spd painting		50.40	8.90	4.40
22-223	- Ditto - 300 mm dia 100 mm deep		51.60	8.90	4.40
22-224	Shade decorative white glass bowl / opal type 45 mm hole with brass chain upto 50mm length complete with gallery as required		326.00	29.70	14.80
22-225	- Ditto - without chain & gly		281.00	19.80	9.90
22-226	Glass for water tight bracket		45.00	9.90	4.90
22-227	Glove white glass opal type 150mm		75.00	9.90	4.90

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SECTION-22

INTERNAL ELECTRIFICATION RATES

Item	Description	Materials & Labour		Fixing only	Add to fixed in r/r
		Crescent	Gloria		
	Saucer light				
	Each				
22-228	Ceiling light fitting complete as per Gloria model no. GCF-602	-	335.00	45.50	22.70
22-229	- Ditto - but Crescent cat no. CP-8-F / Gloria GCF-624 DIA-215 H-70	620.00	362.00	45.50	22.70
22-230	- Ditto - but Crescent cat no. CP-8-R	647.00	-	45.50	22.70
22-231	- Ditto - but Crescent cat no. CP-25 / Gloria GCF-640	744.00	1117.00	45.50	22.70
22-232	- Ditto - but Crescent cat no. CP-22 / Gloria GCF-661	571.00	1081.00	45.50	22.70
22-233	- Ditto - but Crescent cat no. CP-17 DD-Ring	2490.00	-	45.50	22.70
22-234	- Ditto - but Crescent cat no. CP-17 design with ring / Gloria Model no GCF-630-DIA-313 H-126	1192.00	996.00	45.50	22.70
22-235	- Ditto - but Crescent cat no. CP-19 / Gloria GCF-707 AB	767.00	1075.00	45.50	22.70
22-236	- Ditto - but Crescent cat no. CMP-45 D-425 H-230 (with Tube)	3974.00	-	45.50	22.70
		Rate in Taka			
	Saucer light				
	Each				
22-237	Saucer light fittings as per Gloria cat no. GCF-463 D 130 L-120 H-70 / Swash cat no. SCPF-7 (without bulb)	557.00	679.00	45.50	22.70
22-238	- Ditto - Gloria cat no. GCF-378(B) / Swash cat no. SCCSL-6(B) Brass DIA -150 H-153	820.00	968.00	45.50	22.70
22-239	- Ditto - Gloria cat no. GCF-611 DIA-223 H-92 / Swash cat no. SCCF-22 DIA-222 H-91	437.00	487.00	45.50	22.70
22-240	- Ditto - Gloria cat no. GCF-610 DIA-223 H-92/ Swash cat no. SCCF-28 DESIGN GLASS DIA -222 H-97	406.00	487.00	45.50	22.70
22-241	- Ditto - Swash cat no. SCCSL-2	-	816.00	45.50	22.70
22-242	- Ditto - Gloria cat no. GCF-609(B) / Swash cat no. SCCF-30	386.00	635.00	45.50	22.70
22-243	- Ditto - Gloria cat no. GCF-410-658 / Swash cat no. SCCF-35 DIA-157 H-173	599.00	464.00	45.50	22.70
22-244	- Ditto - Gloria cat no. GCF-623-DS / BR DIA P-218 H-70 Swash cat no. SCCF-8-Side cut Dia-255 H-82	411.00	407.00	45.50	22.70
22-245	- Ditto - Gloria cat no. GWT-713	735.00	-	45.50	22.70
22-246	- Ditto - Gloria cat no GCF-605 DIA-201 H-207 / Swash cat no. SCPF-4/84	833.00	693.00	45.50	22.70

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SECTION-22

INTERNAL ELECTRIFICATION RATES

Item	Description	Materials & Labour		Fixing only	Add to fixed in r/r
		Crescent	Gloria		
	SPOT LIGHT				
	Each				
22-247	Spot-Light fittings as per Crescent cat no. CML-369 with CFL 23-25 watt lamp.	807.00	-	45.50	22.70
22-248	- Ditto - Crescent cat no. CML-386	657.00	-	45.50	22.70
22-249	- Ditto - Crescent cat no. CML-190 B--95 L-130 P-115 T	655.00	-	45.50	22.70
22-250	- Ditto - Crescent cat no. CML-159(2)	1020.00	-	45.50	22.70
22-251	- Ditto - Crescent cat no. CML-135 with PAR-38 bulb	1443.00	-	45.50	22.70
22-252	- Ditto - Crescent cat no. CML-58, D-150, H-110	1178.00	-	45.50	22.70
22-253	- Ditto - Crescent cat no. CP-10 DS / Gloria cat no. GSL-384	712.00	467.00	45.50	22.70
22-253A	- Ditto - Crescent cat no. CML-26	1683.00	-	45.50	22.70
22-253B	- Ditto - Crescent cat no. CML-339 (Explosive proof)	6395.00	-	45.50	22.70
	SPOT LIGHT				
	Each				
		Swash	Gloria	Fixing only	Add to fixed in r/r
22-254	Spot light fittings as per swash cat no. SCSL-21 / Gloria model no GSL-364	625.00	533.00	45.50	22.70
22-255	- Ditto - Swash cat no. SCSL-9 / Gloria model no GCF-627	888.00	442.00	45.50	22.70
22-256	- Ditto - swash cat no. SCSL-20 (B) / Gloria cat no. GSL-396.	553.00	958.00	45.50	22.70
22-257	- Ditto - swash cat no. SCSL-29(2) / Gloria cat no. GSL-397(2)	1089.00	957.00	45.50	22.70

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SECTION-22

INTERNAL ELECTRIFICATION RATES

Item	Description	Materials & Labour		Fixing only	Add to fixed in r/r
		Gloria	Crescent		
	CHANDELIER LIGHT				
	Each				
22-258	Chandelier light fitting Complete with all fittings as per Crescent cat no. CR - 367 (4) CY (except bulb)	0.00	21078.00	70.40	35.20
22-259	- Ditto - Crescent cat no. CR-310 (i) Dgn. CY / Gloria model no GCF-3108 (3)-2151 T	7721.00	12881.00	70.40	35.20
22-260	- Ditto Gloria model no GCF-3110 (9) - 2260 / Crescent cat no. CR-244 (9)-022/CY	16646.00	25787.00	70.40	35.20
22-261	- Ditto - Crescent cat no. CR-386 (1)	-	6397.00	70.40	35.20
22-262	- Ditto - Crescent cat no. CB-170(21) crystal	-	242481.00	225.00	112.70
22-263	- Ditto - Crescent cat no. CR-170(8) crystal.	-	33133.00	70.40	35.20
22-264	- Ditto - Crescent cat no. CB-239 (7) 925 clear design	-	13841.00	70.40	35.20
22-265	- Ditto - Gloria model no GCF-3109 (3) - 2415 Crescent cat no. CR-230-919-AMBER	8359.00	8741.00	70.40	35.20
	Chandelier Light				
	Each				
22-266	Chandelier light fittings as per Gloria cat no. GCF/-1086 (16) crystal (except bulb)	-	95856.00	225.00	112.70
22-267	- Ditto - Swash cat no. SCDB-156 crystall.	12138.00	-	70.40	35.20
22-268	- Ditto - Gloria cat no. GCF-1197 (18) - 2404	-	30315.00	70.40	35.20
22-269	- Ditto - Swash cat no. SCDB-155 crystall.	4940.00	-	70.40	35.20
22-270	- Ditto - Swash cat no. SCH-183 (8) crystal / Gloria cat no. GCF/-1084 (8) crystal.	33625.00	30189.00	225.00	112.70
22-271	-Ditto - Gloria cat no. GCF-1196 (11) -2278 Crystal.	-	24184.00	225.00	112.70
22-272	- Ditto - Swash cat no. SCDB-388 crystall.	6966.00	-	70.40	35.20
22-273	- Ditto - Swash cat no. SCDB-447 (F) pata.	1385.00	-	70.40	35.20
	TUBE LIGHT FIXTURES / FITTINGS				
	Each				
		Materials & Labour		Fixing only	Add to fixed in r/r
		1220 mm	610 mm		
22-274	Tube light fixture (Double) complete with fluorescent tube, choke, starter, holder, flexible cord etc CATA brand (China / Taiwan) 2x40 watt.	978.00	-	70.40	70.40
22-275	- Ditto - but single fixture 1x40 watt	577.00	-	52.80	26.40
22-276	- Ditto - but single tube electronics fixture fixed on PVC batten local made, brand MEP , model no B-231.1x40 watt.	357.00	-	52.80	26.40
22-277	Reflector trough type with open top stove enamelled ordinary type, white colour complete with all fittings i.e. choke, starter, holder, flexible cord / wire etc suitable for 1220 mm 40 watt & 610 mm with tube (Eastern)	660.00	571.00	37.50	18.80
22-278	Fluorescent tube local made (Eastern)	125.00	107.00	17.80	8.90

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INTERNAL ELECTRIFICATION RATES

Item	Description	Materials & Labour		Fixing only	Add to fixed in r/r
		Crescent	Gloria		
	TUBE LIGHT FIXTURES / FITTINGS				
	Each				
22-279	Tube light fixture complete with fluorescent tube choke starter holder flexible cord etc as per Crescent cat no. CTLS 94x1x40 watt Gloria model no GTF-863x1x40 watt..	1997.00	1922.00	152.00	76.00
22-280	- Ditto - Crescent cat no. CTLS- 96x4x20 watt / Gloria model no GTF-815x4x20 watt.	5021.00	1624.00	228.00	113.90
22-281	- Ditto - Crescent cat no. CTLS-11x1x40 watt (design)/ Gloria cat no. GTF-755x1x40 watt design	1756.00	1655.00	152.00	76.00
22-282	- Ditto - Crescent cat no. CTLS 4x2x40 watt/Gloria cat no. GTF-812x2x40 watt	3588.00	3768.00	186.00	93.00
22-283	- Ditto - Crescent cat no. CTLS 11x1x20 watt/(design) Gloria cat no. GTF-753x1x20 watt	1458.00	1134.00	152.00	76.00
22-284	- Ditto - Crescent cat no. CTLS-160x1x40 watt	2964.00	-	152.00	76.00
22-285	- Ditto - Crescent cat no. CTLS-11x1x10 watt (design)	1312.00	-	152.00	76.00
22-286	- Ditto - Crescent cat no. CTLS-1x1x40 watt Gloria cat no. 753x4x40 watt	1593.00	1470.00	152.00	76.00
22-287	- Ditto - Crescent cat no. CTLS 68x2x40 watt / Gloria cat no. GTF-756x2x40 watt.	2672.00	2640.00	152.00	76.00
22-288	- Ditto - Crescent cat no. CTLS-31x4x20 watt/Gloria cat no. GTF-793x4x20 watt.	5021.00	4511.00	228.00	113.90
22-289	- Ditto - Crescent cat no. CTLS-22x4x20 watt/Gloria cat no. GTF-771x4x20 watt.	4995.00	4511.00	228.00	113.90
	TUBE LIGHT FIXTURES / FITTINGS				
	Each				
22-290	- Ditto - but as per Swash cat no. SCTF74/79 x1x20 watt / Gloria model no. GTF-815x1x20 watt.	1170.00	1548.00	228.00	113.90
22-291	- Ditto - Swash cat no. SCTF 11/78x1x20 watt.	1111.00	-	152.00	76.00
22-292	- Ditto - Swash cat no. SCTF 34x1x20 watt.	1512.00	-	152.00	76.00
22-293	- Ditto - Swash cat no. SCTF 34x1x40 watt.	1432.00	-	152.00	76.00
22-294	- Ditto - Swash cat no. SCTF 24/85x2x40 watt / Gloria cat no. GTF 764x2x40 watt	4593.00	3807.00	152.00	76.00
22-295	- Ditto - Swash cat no. SCTF 8/78x2x40 watt/Gloria cat no. 789x2x40 watt.	2326.00	1780.00	152.00	76.00
22-296	- Ditto - Swash cat no. SCTF 33x4x20 watt	3824.00	-	228.00	113.90
22-297	- Ditto - Swash cat no. SCTF 11x178x1x40 watt.	1385.00	-	152.00	76.00
22-298	- Ditto - Swash cat no. SCTF 37x2x40 watt.	2794.00	-	186.00	93.00
22-299	- Ditto - Swash cat no. SCRL 2x2x40 watt.Alu	2376.00	-	186.00	93.00

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SECTION-22

INTERNAL ELECTRIFICATION RATES

Item	Description	Materials & Labour		Fixing only	Add to fixed in r/r		
		40 Watt	20 Watt				
TUBE LIGHT FITTINGS							
Each							
22-300	Choke coil (approved quality)	196.00	208.00	23.80	11.90		
22-301	Starter for fluorescent tube	16.60	16.60	4.80	2.40		
Per Pair							
22-302	Tube light holder / spring type (Local)	54.60	54.60	19.00	9.50		
22-303	- Ditto - but foreign made	54.60	54.60	19.00	9.50		
CONTROL SWITCHES							
Each							
22-304	Switch sp bakelite surface type all insulated 5 Amps one way approved quality.		36.80	14.30	7.10		
22-305	- Ditto - but 15 Amps		92.60	19.00	9.50		
22-306	- Ditto - but 5 Amps 2 way		54.60	23.80	11.90		
22-307	- Ditto - but push action suspension type approved quality.		34.40	14.30	7.10		
22-308	Switch / Bell push sp bakelite piano type all insulated 5 Amps one way (Concealed)		34.40	14.30	7.10		
22-309	- Ditto - but 15 Amps		87.80	14.30	7.10		
22-310	- Ditto - but 5 Amps 2 way		87.80	14.30	7.10		
22-311	Switch sp bakelite surface type flame proof all insulated 5 Amps one way mounted in malleable cast iron		451.00	23.80	11.90		
22-312	- Ditto - but 5 Amps 2 way		516.00	23.80	11.90		
22-313	- Ditto - but water tight one way		214.00	23.80	11.90		
22-314	- Ditto - but water tight 2 way		380.00	23.80	11.90		
CONTROL SWITCHES							
Each							
22-315	Switch Gang type 5 Amps, one way, mounted in bakelite square / rectangular plate foreign made fixed on proper size concealed steel board as required. (1x Gang)	Materials & Labour			Fixing only	Add to fixed in r/r	
		MK / MEM (England)	Legrand brand	ABB (Singapore)			MK (Singapore) / MEM (Malaysia)
		-	341.00	205.00	361.00	28.60	14.30
22-316	- Ditto - but 2xgang.	314.00	304.00	408.00	361.00	35.70	17.90
22-317	- Ditto - but 3xgang	456.00	416.00	458.00	436.00	39.70	19.80
22-318	- Ditto - but 4xgang	532.00	584.00	655.00	606.00	47.60	23.80
22-319	Bell push foreign made	-	355.00	385.00	428.00	35.70	17.90

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SECTION-22

INTERNAL ELECTRIFICATION RATES

Item	Description	Materials & Labour			Fixing only	Add to fixed in r/r
		MK (Singapore) / MEM (Malaysia)	Legrand / ABB	Local Best quality		
	SWITCH SOCKET / PLUGS					
	Each					
22-320	Switch sp socket combined 3 pin (round / flat) out let 5 Amps shuttered pattern surface type without plug	-	-	127.00	31.70	15.90
22-321	- Ditto - but concealed type	338.00	338.00	119.00	47.60	23.80
22-322	Switch sp socket combined 3 (round / flat) pin 13 / 15 Amps shuttered pattern surface type without plug	-	-	242.00	38.00	19.00
22-323	- Ditto - but concealed type	591.00	507.00	167.00	47.60	23.80
22-324	Socket 3 pin 5 Amps surface type	-	-	49.90	19.00	9.50
22-325	- Ditto - concealed type	-	0.00	49.90	19.00	9.50
22-326	- Ditto -15 Amps surface type	-	-	100.60	19.00	9.50
22-327	- Ditto - 15 Amps concealed type	-	-	81.80	9.90	4.90
22-328	Socket 2 pin 5 Amps surface type	322.00	329.00	26.50	9.90	4.90
22-329	- Ditto - concealed type	294.00	298.00	22.70	4.90	2.50
22-330	Plug 3 pin 5 Amps best quality	-	-	29.10	4.90	2.50
22-331	Plug 3 pin 15 Amps best quality	-	-	42.70	15.90	7.90
22-332	Plug 2 pin 5 Amps best quality	-	-	18.80	4.90	2.50
	BELL ELECTRIC CALLING					
	Each					
22-333	Bell electric bakelite AC			92.90	9.90	4.90
22-334	Bazaar electric bakelite AC			87.00	9.90	4.90
22-335	Door bell electric (Ding Dong)			205.00	21.10	10.60
22-336	Door bell electric (Musical)			258.00	21.10	10.60
22-337	Mechanical replacement indicator highly polished hard wood case combined together with hinged front movement of the improved grip device of rotary type 2 way / Electronic call system 3 way.			6619.00	95.10	47.60
22-338	Add for additional way either mechanical replacement or electronic call system channel.			1040.00	31.70	15.90

SECTION-22

INTERNAL ELECTRIFICATION RATES

Item	Description	Materials & Labour		Fixing only	Add to fixed in r/r	
		Without regulator	With electronics regulator			
	FAN ELECTRICS					
	Each					
22-339	Ceiling fan AC 230 / 220 volts single phase 50 HZ complete with capacitor, blade down rod canopy electronics regulator etc 1400 mm sweep brand GEC Deluxe	3601.00	3755.00	95.10	47.60	
22-340	- Ditto - but 1200 mm sweep brand GEC Deluxe	3473.00	3625.00	95.10	47.60	
22-341	Ceiling fan AC 230 / 220 volts single phase 50 HZ complete with capacitor, blade down rod canopy electronics regulator etc 1400 mm sweep brand Jamuna	Super Deluxe	Luxury	Super luxury	Fixing only	Add to fixed in r/r
		2422.00	2677.00	3155.00	95.10	47.60
22-342	- Ditto - but 1200 mm sweep brand Jamuna	2326.00	-	-	95.10	47.60
22-343	Ceiling fan AC 230 / 220 volts single phase 50 HZ complete with capacitor, blade down rod canopy electronics regulator etc 1400 mm sweep brand Habib	Deluxe	Popular	Econo	Fixing only	Add to fixed in r/r
		3155.00	2835.00	2709.00	95.10	47.60
22-344	- Ditto - but 1200 mm sweep brand Habib	2773.00	-	-	95.10	47.60
22-345	- Ditto - but 900 mm sweep brand Habib	2614.00	-	-	95.10	47.60
22-346	- Ditto - but Millat (1400/1200 mm sweep)	-	-	-	95.10	47.60
22-347	Ceiling fan AC 230 / 220 volts single phase 50 HZ complete with capacitor, blade down rod canopy electronics regulator etc 1400 mm sweep brand National Tongi	Super Deluxe	Deluxe		Fixing only	Add to fixed in r/r
		-	2325.00	-	95.10	47.60
22-347A	- Ditto - but 1200 mm sweep brand National Tongi	-	2199.00	-	95.10	47.60
22-347B	- Ditto - but 900 mm sweep brand National Tongi	-	2071.00	-	95.10	47.60
22-348	Ceiling fan AC 230 / 220 volts single phase 50 HZ complete with capacitor, blade down rod canopy electronics regulator etc 1400 mm sweep brand SINGER	Deluxe	Super Deluxe		Fixing only	Add to fixed in r/r
		3665.00	3665.00	95.10	47.60	

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SECTION-22

INTERNAL ELECTRIFICATION RATES

Item	Description			
		Materials & Labour	Fixing only	Add to fixed in r/r
22-349	Exhaust fan AC 230/220 volts single phase 50 HZ complete with capacitor, blade, louver, rain guard etc 300 mm sweep. Brand GEC	5274.00	356.00	178.00
22-349A	- Ditto - but other than GEC (Like Millat / National or other E in C's approved brand)	2881.00	356.00	178.00
22-350	Exhaust fan AC 230/220 volts single phase 50 HZ complete with capacitor, blade, louver, rain guard etc 400 mm sweep. Brand GEC	6050.00	356.00	178.00
22-351	- Ditto - but other than GEC (Like Millat / National or other E in C's approved brand)	3034.00	356.00	178.00
22-352	Take down fan externally clean bearings dust from field coils and clean armature/ commutator provide with fresh lubricant (oil/grease as required) fix blades, adjust blades for sweet running, refixed & testing any sweep.	99.00	63.40	31.70
22-353	Complete rewinding of fan/armatures coil with the appropriate super enamelled winding wire duly disassembling & reassembling taken out burnt coils completely including 24hrs continuous running of different brand & type of 1400mm sweep ceiling fan.	1533.00	356.00	178.00
22-354	- Ditto - 1200mm ceiling fan	1311.00	285.00	142.00
22-355	- Ditto - 900mm ceiling fan	1129.00	267.00	133.40
22-356	- Ditto - 400mm exhaust fan	1309.00	267.00	133.40
22-357	- Ditto - 300mm exhaust fan	1157.00	215.00	107.50
22-358	- Ditto - off size table fan	976.00	215.00	107.50

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SECTION-22

INTERNAL ELECTRIFICATION RATES

Item	Description	Materials & Labour	Fixing only	Add to fixed in r/r
	Per coil			
22-359	Partly rewinding of armatures coil with the appropriate super enamelled winding wire duly disassembling & reassembling taken out burnt coils including burnishing heating testing for 24 hrs continuous running of different brand & type of ceiling/Table/Exhaust fan not exceeding 50% of total fan coils	97.70	30.20	15.10
	Each			
22-360	Ceiling fan blades for different brand type and sweep.	191.00	12.70	6.30
22-361	- Ditto - table / Exhaust fan	228.00	38.00	19.00
22-362	Ball bearing for ceiling/Table & Exhaust fan of different sizes	127.00	31.70	15.90
22-363	Rubber insulator for down rod	26.10	19.00	9.50
22-364	Nut bolts off sizes	22.60	9.50	4.80
22-365	Split pin for ceiling fan	22.60	19.00	9.50
22-366	Capacitor 2.5mfd for fan	59.30	9.50	4.80
22-367	Regulator for ceiling fan electronics	219.40	65.20	32.60
22-368	- Ditto - but Inductive	248.00	19.00	9.50
22-369	Clamp hook for ceiling fan as req.	391.00	35.60	17.80
	Fan hook for RCC roof slab : Rate is to be taken from SECTION 8			
	Painting of complete fan off sizes brand & type incl rod and blade as done by :			
22-370	Manually with spd paint & brush	76.40	35.60	17.80
22-371	Done by spray machine with spd paint..	76.40	35.60	17.80
	Per figure / Letter			
22-372	Number stamping / embossing on fan body size not less than 9 mm	5.40	4.90	-
22-373	Writing fan number with paint & toly on fan body as per direction size of letter 1 fig not less than 12mm	5.00	4.20	-
	Each sticker			
22-374	Supply of printed sticker and writing fan number with marker pen and paste on fan body as per direction of Engineer in charge (size not less than 9 mm)	5.70	2.40	-
22-375	Blank			
	Each			
22-376	Switch flame proof sp 5 Amps one way terminal chamber drilled and tapped on both sides a solid brass threaded plug for fitting the hole not required. The switch and cover completely inter locked. The unit should comply with BSS-229, 542 & 889	520.00	92.50	46.26
22-377	Switch fuse flame proof sp 230 volts 15 Amps terminal chamber drilled and tapped 25mm ET on both sides a solid brass threaded plug for sealing hole not required. The switch and cover completely inter locked. The unit should comply with BSS-229, 542 & 889	546.00	154.00	77.10

RESTRICTED

SECTION-22

INTERNAL ELECTRIFICATION RATES

Item	Description	Materials & Labour	Fixing only	Add to fixed in r/r
	Each			
22-378	Flame proof gland and armour clamp screwed 25mm ET for cable . The cable sealing gland with the armour clamps should be patent design to provide means for attachment detachment of the cable and gland from the switch case without interference compound filling BS-229 & 542.	9526.00	37.00	18.50
22-379	Flame proof fitting 20mm ET tapped entry cast iron body grey painted with heavy glass cemented to fix ring strong wire guard and lamp holder with terminal chamber. The internal connections of solid metal passing through insulating sleeves despersive or angle type vitreous enamelled reflector over all diameter 175mm suitable for 60 w lamp.	2067.00	154.00	77.10
22-380	- Ditto - over all height 325mm & dia 250mm for 100 watt.	524.00	154.00	77.10
22-381	Flame proof fitting bulk head 20mm ET tapped entry cast body armour platform glass and fittings straps suitable to take upto 100 w lamp or local made similar to Crescent model, Explosion proof B-125mm, H-220mm.	273.00	154.00	77.10
22-382	Spare glass and ring above	115.00	77.10	38.50
	WOODEN BOARD			
	Each			
22-383	Block hard wood round/rectangular 75mm diameter 75x 75mm	40.00	16.30	8.20
22-384	Block hard wood rectangular recessed 35mm deep 100x 100mm.	44.70	18.60	9.30
22-385	- Ditto - 100x150 mm	56.60	18.60	9.30
22-386	- Ditto - 150x 200 mm	75.60	18.60	9.30
22-387	- Ditto - 200x250 mm	103.20	26.10	13.00
22-388	- Ditto - 250x300 mm	116.00	26.10	13.00
22-389	- Ditto - but 50 mm deep 300x400 mm	228.00	26.10	13.00
22-390	- Ditto - 50 mm deep 400x500 mm	305.00	26.10	13.00
	WIRING TELEPHONE CABLE			
	Per Metre			
22-391	House / internal wiring with pvc sheathed telephone cable on or in prelaid wooden batten / pvc conduit exclusive (battening / laying conduit is to be paid seperately) for 1x pair.	17.60	6.50	3.30
22-392	- Ditto - for 2 x pair	24.80	6.50	3.30
22-393	- Ditto - for 3 x pair	33.30	6.50	3.30
22-394	- Ditto - for 4 x pair	45.50	6.50	3.30
22-395	- Ditto - for 8 x pair	75.20	6.50	3.30
22-396	- Ditto - for 10 x pair	92.20	6.50	3.30

RESTRICTED

SECTION-22

INTERNAL ELECTRIFICATION RATES

Item	Description	Rate in Taka					
		Materials & Labour			Add to for N/L	Fixing only	Add to fixed in r/r
		SP	DP	TP			
	MAIN SWITCH (FUSE) IC						
	Each						
22-397	Switch fuse i/c 230/220 volt 400 / 380 volts local made capacity 15 Amps	280.00	-	254.00	573.00	63.40	31.70
22-398	- Ditto - but but 30 Amps	490.00	-	254.00	828.00	63.40	31.70
22-399	- Ditto - but but 60 Amps	-	-	1370.00	1434.00	95.10	47.56
22-400	- Ditto - but but 100 Amps	-	-	2709.00	2836.00	159.00	79.30
22-401	- Ditto - but but 200 Amps	-	-	4397.00	4601.00	317.00	159.00
	NO FUSE BREAKER (MCB / MCCB)						
	Each						
22-402	Miniature circuit breaker 230/220 volts 50 HZ SP Foreign made upto 5 / 6 Amps.	284.00	558.00	558.00	813.00	47.60	23.80
22-403	- Ditto - but 10 Amps	-	-	-	813.00	47.60	23.80
22-404	- Ditto - but 10 - 16 Amps	284.00	558.00	558.00	813.00	47.60	23.80
22-405	- Ditto - but 20 - 32 Amps	284.00	558.00	558.00	813.00	47.60	23.80
22-406	- Ditto - but 40 - 50 Amps	284.00	749.00	749.00	813.00	47.60	23.80
22-407	Metal clade circuit breaker 400 / 440 volt 50 Hz, 32 Amps TP (Triple pole)	1782.00	8989.00	8989.00	12814.00	63.40	31.70
22-408	- Ditto - but 40 Amps	1782.00	8989.00	8989.00	14089.00	63.40	31.70
22-409	- Ditto - but 50 Amps	1782.00	8989.00	8989.00	14089.00	63.40	31.70
22-410	- Ditto - but 63 Amps	1782.00	8989.00	8989.00	15395.00	95.10	47.60
22-411	- Ditto - but 100 -125 Amps	3123.00	9020.00	9020.00	17946.00	95.10	47.60
22-412	- Ditto - but 200 Amps	5975.00	16813.00	16813.00	30839.00	238.00	118.90
22-413	- Ditto - but 250 Amps	5975.00	16813.00	16813.00	30839.00	238.00	118.90
22-414	- Ditto - but 300 Amps	13863.00	43827.00	43827.00	51477.00	476.00	238.00
22-415	- Ditto - but 400 Amps	29801.00	48927.00	48927.00	51477.00	476.00	238.00
22-416	- Ditto - but 500 Amps	28526.00	55302.00	55302.00	61677.00	476.00	238.00
22-417	- Ditto - but 800 Amps	54122.00	106398.00	106398.00	83448.00	571.00	285.00

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SECTION-22

INTERNAL ELECTRIFICATION RATES

Item	Description	Materials & Labour		Fixing only	Add to fixed in r/r
	CUT OUT (PORCELAIN)				
	Each				
22-418	Porcelain fuse cut out 230/220 volts best quality upto 15 Amps	83.10		47.60	23.80
22-419	- Ditto - but 30 Amps	83.10		47.60	23.80
22-420	- Ditto - but 60 Amps	119.00		47.60	23.80
22-421	- Ditto - but 100 Amps	178.00		47.60	23.80
22-422	- Ditto - but 200 Amps	303.00		47.60	23.80
	Bus bar type distribution board				
	Each	Materials & Labour		Fixing only	Add to fixed in r/r
		3 bar	4 bar		
22-423	Main distribution busbar made of 600 mm long steel sheet & FI bar with hinged cover & proper sized copper bar 6 mm thick with hammer paints suitable for 400 volts 60 Amps	1231.00	1586.00	163.00	81.50
22-424	- Ditto - but 100 Amps	1646.00	2120.00	222.00	111.20
22-425	- Ditto - but 200 Amps	0.00	0.00	0.00	0.00
22-426	- Ditto - but 300 Amps	2120.00	2713.00	341.00	170.00
22-427	- Ditto - but 500 Amps	2120.00	2713.00	341.00	170.00
	Distribution board with fused cut out				
	Each	Materials & Labour		Fixing only	Add to fixed in r/r
		15 amp	30amp		
22-428	Distribution board i/c 230/220 volts sp fused with N/L 2 way.	540.00	623.00	89.00	44.50
22-429	Add to for additional way	29.70	47.40		
22-430	Supply and fixing of foreign made DB / SDB cabinet having arrangement for fixing MCB's Brand MEM / MK / TCL / ABB / Legrand	1746.00	1746.00	407.00	204.00
22-431	- Ditto - but having arrangement 30 - 40 MCB's	2779.00	2779.00	611.00	305.00
	Steel box (for DB/SDB)				
	Each	Materials & Labour		Fixing only	Add to fixed in r/r
		Complete as description with 4x busbar	Complete as description without busbar but depth 200 mm		
22-432	Steel box made with 18 BG, MS sheet complete with hinged type door (single / double shutter) built-in type locking system with necessary arrangement for fixing of MCB / MCCBs by keeping it's knob out on the top cover i.e shutter of the board, including stove enamelled grey hammer spray painting to the satisfaction of engineer in charge .size 900x750x110 mm.	5201.00	4725.00	380.00	190.00
22-433	- Ditto – but 700x600x110 mm	3563.00	3392.00	136.90	68.40
22-434	- Ditto – but 450x330x110 mm	2811.00	2662.00	118.90	59.50

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SECTION-22

INTERNAL ELECTRIFICATION RATES

Item	Description	Materials & Labour		Fixing only	Add to fixed in r/r
		Plastic	Ebonite		
	EBONITE / PLASTIC BOARD COVER (sheet)				
	Per sq.m				
22-435	Switch board/Joint board top cover with plastic/ebonite sheet incl cutting sizing making holes, screws etc thickness of 4mm	1163.00	1756.00	95.10	47.60
22-436	- Ditto – but 3mm	985.00	1180.00	95.10	47.60
	Metre Energy				
	Each Set				
22-437	Energy meter electric AC 210/220 volts complete in all respect upto 20 Amps sp.		1306.00	95.10	47.60
22-438	- Ditto – but 50 Amps T/P		4557.00	95.10	47.60
22-439	- Ditto – but over 50 Amps T/P		8398.00	95.10	47.60
22-440	CT suitable for Energy Meter : Rate to be taken from sec:21		-	-	-
	EARTHING				
	Each set				
22-441	Earth complete as per specification as described for electrification.		5374.00	1188.00	594.00
22-442	- Ditto - for lightning		4758.00	1102.00	551.00
	LIGHTNING CONDUCTOR				
	Per Metre				
22-443	Down / roof conductor (strips) 25 x 3 mm thick as per approved designed and drawing and direction of Engineer in Charge.		546.00	23.80	11.90
22-444	Down / roof conductor Round copper conductor for which rate is to be taken from sec 21 if used as per approved designed and drawing of concerned authority and direction of Engineer in Charge.				Rate is applicable from sec-21
22-445	Air termination for lightning conductor with 12mm diameter of copper rod 1500mm long with gun metal/copper base 75x38x3mm fixed with brass nut & bolts.		925.00	95.10	47.60
22-446	Inspection joint as spd.		116.30	11.90	5.90
	VOLTAGE STABILIZER & ELECTRONICS APPLIANCE				
	Each				
22-447	Automatic voltage stabilizer having in put voltage 160-260v AC, out put 220v +/- 5% AC 50Hz, capacity 500VA		5338.00	238.00	118.90

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SECTION-22

INTERNAL ELECTRIFICATION RATES

Item	Description	Rate in Taka		
		Materials & Labour	Fixing only	Add to fixed in r/r
	Each			
22-448	Micro Automatic voltage stabilizer having in put voltage 280-450v AC, out put voltage 380v+/- 50% AC 50HZ capacity 3KVA	19,601.00	476.00	238.00
22-449	Micro uninterruptable power supply (UPS) with automatic battery charging system single phase 50 HZ having capacity 650VA	38489.00	238.00	118.90
22-450	Automatic emergency light (portable) lantern type complete with 2x6 watt . Flowers cut tube and special circuit protection.	1910.63	-	-
22-451	Electronic cord less fan regulator cum light switch suitable operation upto 150 watt for light & fan having two socket points.	949.00	238.00	118.90
22-452	Electronic fan regulator for surface & concealed type with fixing consumable.	219.00	65.20	32.60
22-453	Electronic light dimmer complete with consumable for surface & concealed type	447.00	65.20	32.60
22-454	Electronic call system bell complete with bell push & LED indicator having a musical alarm capacity 6 points	9613.00	65.20	32.60
22-455	Electronic light dimmer with panel board for lighting control capacity 10KW	51952.00	951.00	476.00
22-456	Micro electronic digital clock, size 12.5"x4"x3.5"	3737.00	179.00	89.30
22-457	Supply and fixing of Bath bracket fixtures complete without bulb 230 volts Crescent cat no. CBB-4/12-T 12-P	690.00	59.00	29.70
22-458	Supply and fixing of fancy type round tube light fixtures complete without tube, choke, starter, holder as req. Crescent cat no. CML 42	2320.00	89.00	44.50
22-459	Supply and fixing of Gang switch single (one way)	240.00	89.00	44.50
22-460	Supply and fixing of Ceiling light shade fancy Crescent cat no. CPC-34	682.00	89.00	44.50
22-461	Supply and fixing of ceiling light shade fancy without Crescent cat no. CML 430-Plan	1990.00	89.00	44.50
22-462	Supply and fixing of Switch SP Socket outlet 3 pin 15 Amps Shuttered pattern concealed type MEM / MK / DORMAN (England)	729.00	44.50	22.20
22-463	Supply and fixing of Switch SP Socket outlet 3 pin 5 Amps Shuttered pattern concealed type MEM / MK / DORMAN (England)	537.00	44.50	22.20
22-464	Supply and fixing of Socket for TV/Dish Antenna to be fixed at cable terminal MEM / MK (Singapore / Malaysia)	474.00	44.50	22.20
22-465	Supply and fixing of Socket for Telephone to be fixed at cable terminal MEM / MK (Singapore / Malaysia)	732.00	44.50	22.20

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SECTION-22

INTERNAL ELECTRIFICATION RATES

Item	Description	Rate in Taka					
		Materials & Labour				Fixing only	Add to fixed in r/r
Each / Per point		with switch board	without switch board	without channel	without cables		
22-466	Wiring one light/fan/bell point controlled by one switch with PVC non-sheathed single core 1.5 mm eastern cable in PVC plastic channel including switch board and final sub-ckt.	742.00	677.00	619.00	510.00	215.00	109.70
22-467	Wiring one socket point with normal final sub ckt PVC non-sheathed single core 1.5 mm eastern cable in PVC plastic channel including switch board and final sub-ckt. 3 pin 5 Amps	356.00	334.00	323.00	279.00	109.80	54.90
22-468	Wiring one socket point outlet 3 pin 15 Amps with PVC non-sheathed single core 2.5 mm in PVC channel as spd.	2,631.00	2,575.00	2,483.00	1,974.60	109.80	54.90
22-469	Per Metre Supply and Laying / Wiring of TV / Dish line Co-axial 2x.09 mm RJ-6 cable foreign made as direction of Engineer in Charge.	-	-	50.30	-	8.90	4.50
	LAMPS (CFL) Each	Materials (brand wise) & Labour					Fixing only
		Energypac	Osram economy	Osram (Germany)	Philips	Plasma	
22-470	Energy saving lamps thread / pin type 15 watt	270.00	270.00	-	276.00	258.00	8.90
22-471	Energy saving lamps thread or pin type 20 watt	282.00	288.00	-	294.00	270.00	8.90
22-472	Energy saving lamps thread or pin type 23 / 25 watt	290.00	302.00	-	308.00	284.00	11.10
	LAMPS Electric	Materials (watt wise) & Labour					Fixing only
		25 watt	40 watt	60 watt	75/100 watt	Anti insect (Argenta)	
22-473	Lamp electric Sainik / Philips	26.00	26.00	26.00	30.50	42.40	4.40
	LAMPS	Materials (brand wise) & Labour					Fixing only
		Mercury 125/160 watt	Halogen 500 watt (Philips)	Halogen 1000 watt (Philips)	Bulb 300 / 500 watt	Bulb 1000 watt	
22-474	Lamps as spd thread or pin type	381.00	225.00	508.00	130.00	189.00	11.10
	LAMPS	Materials (brand wise) & Labour					Fixing only
		Fluorescent tube Philips TLD 40 watt 4' ft	Fluorescent tube philips TLD 36 watt 4' ft	Fluorescent tube Philips TLD 18 watt 2' ft	Bulb 200 watt	Panel type indicating lamp (Taiwan)	
22-475	Lamps as spd thread or pin type	88.00	82.00	80.00	82.20	63.30	11.10

SECTION-23

GAS SUPPLY

Specification

General

1. All gas supply works shall be executed in accordance with the specifications of the gas supply agency and their standard specifications shall be followed for both low pressure and domestic gas supply works. The works shall be executed by the enlisted/authorized firms/contractors of the respective gas transmission and distribution authority.

2. **Pipe and Fittings (Low pressure).**

- a. API grade pipes shall invariably be used for all types of low pressures gas lines.
- b. All types of low pressure gas line fittings must confirm to the standard and approved design & specification of respective gas transmission and distribution authority.
- c. Butt welded joints shall be cleaned and approved by the Engineer-in-Charge.
- d. A test shall be carried out as per method and specification of respective gas transmission and distribution company ltd.

3. **Pipe and Fittings (Domestic).**

GI tubing and fittings shall be used in all types of commercial and domestic gas line works as per approval of Engineer-in-Charge. Rate of payment shall be applicable for the works as per respective section of schedule of rates.

Method Of Measurements

4. The pipe works generally shall be measured as under:

- a. Net over all length of pipes and fittings as fixed except where otherwise indicated.
- b. Fittings shall be enumerated and described as extra over “ pipes and fittings” except where otherwise indicated.
- c. Fittings of unequal bores shall be classified according to the larger bore.

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SECTION-23

GAS / OIL LINE (SUPPLY) RATES

ITEM	DESCRIPTION	
	Trench Excavation/Embankment	
	Trench excavation in soil, rock and embankments.	Rate is to be taken from similar item of works of section -1 (earth works)

ROAD BORING

Per Metre

Rate in Taka

	DESCRIPTION	Rate in Taka		
		Materials & Labour	Fixing only	Add if fixed in r/r
23-1	Thrust boring of road and other back filing/make good the same after placing GI/MS/Casing/Gas tubing of 150 mm dia.	647.00	252.00	126.00
23-2	- Ditto - but 100 mm dia	555.00	216.00	108.00
23-3	- Ditto - but 75 mm dia	486.00	189.00	94.50
23-4	- Ditto - but 50 mm dia	388.00	151.00	75.60
23-5	- Ditto - but 40 mm dia	353.00	137.00	68.70
23-6	- Ditto - but 25 mm dia	324.00	126.00	63.00
23-7	- Ditto - but 20 mm dia	299.00	116.30	58.20

CASING PIPE

Per Metre

Casing Pipe of various size and type either MS/GI	Rate is to be taken from similar item of works of section -17 (Water Supply)
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RESTRICTED

SECTION-23

GAS / OIL LINE (SUPPLY) RATES

LOW PRESSURE GAS & OIL LINE

Per Metre

Rate in Taka

	Materials & Labour	Installation Only	Except Consumable	Add if fixed in r/r	
		With consumable			
23-8	14.60 kg / sq.cm API grade gas quality MS Tubing as approved by respective Gas Co duly commissioned with installation including cleaning coaltering, wrapping, laying (exclusive trench excavation sand spreading back filling) of 100 mm dia meter.	3,045.00	326.00	172.00	86.00
23-9	- Ditto - but 75 mm	2,019.00	263.00	143.00	71.70
23-10	- Ditto - but 50 mm	1,352.00	218.00	133.40	66.70
23-11	- Ditto - but 40 mm	1,017.00	186.00	118.60	59.30
23-12	- Ditto - but 25 mm	693.00	166.00	118.60	59.30
23-13	- Ditto - but 20 mm	499.00	144.00	106.70	53.40

BUTT WELDING JOINTS

Rate in Taka

Each

	Materials & Labour	Installation Only (Except consumables)	Add if fixed in r/r	
23-14	Butt welded joints made above or in trench or below ground level complete in all respect as approved by respective Gas Co. for pipe and fittings of 100 mm dia meter	406.00	178.00	89.00
23-15	- Ditto - but 75 mm	320.00	118.60	59.30
23-16	- Ditto - but 50 mm	231.00	89.00	44.50
23-17	- Ditto - but 40 mm	219.00	89.00	44.50
23-18	- Ditto - but 25 mm	172.00	71.20	35.60
23-19	- Ditto - but 20 mm	158.00	63.50	31.80

RESTRICTED

SECTION-23

GAS / OIL LINE (SUPPLY) RATES

		Rate in Taka		
		Purging / Testing	Labour Only	
23-20	Purging / Testing of installed gas line with necessary tools / equipments and ready for commissioning of 100 mm diameter.	20.90	8.60	
23-21	- Ditto - but 75 mm diameter	16.10	6.60	
23-22	- Ditto - but 50 mm diameter	15.00	6.10	
23-23	- Ditto - but 40 mm diameter	14.40	5.90	
23-24	- Ditto - but 25 mm diameter	14.00	5.70	
23-25	- Ditto - but 20 mm diameter	13.50	5.50	
<u>BEND/ELBOW</u>		Rate in Taka		
Each		Materials & Labour	Fixing only	Add if fixed in r/r
23-26	Bend/Elbow (except welding) of 100 mm diameter	865.00	172.00	86.00
23-27	- Ditto - but 75 mm diameter	462.00	107.50	53.70
23-28	- Ditto - but 50 mm diameter	231.00	86.00	43.00
23-29	- Ditto - but 40 mm diameter	214.00	71.70	35.80
23-30	- Ditto - but 25 mm diameter	119.00	66.10	33.10
23-31	- Ditto - but 20 mm diameter	93.00	57.30	28.70
<u>MS REDUCER</u>				
Each				
23-32	MS Reducer (except welding) 100x down to 20 mm dia	483.00	86.00	43.00
23-33	- Ditto - but 75 x down to 20 mm dia	462.00	71.70	35.80
23-34	- Ditto - but 50 x down to 20 mm dia	172.00	61.40	30.70
23-35	- Ditto - but 40 x down to 20 mm dia	164.00	53.70	26.90

RESTRICTED

SECTION-23

GAS / OIL LINE (SUPPLY) RATES

TEE EQUAL / UNEQUAL

Rate in Taka

Each	Materials & Labour		Fixing only	Add if fixed in r/r
	Equal	Unequal		
23-36 Tee equal / unequal (MS) API grade (except welding) of 100 mm dia	1,150.00	1,243.00	215.00	107.50
23-37 - Ditto - but 75 mm dia	850.00	852.00	172.00	86.00
23-38 - Ditto - but 50 mm dia	538.00	424.00	122.80	61.40
23-39 - Ditto - but 40 mm dia	411.00	385.00	107.50	53.70
23-40 - Ditto - but 25 mm dia	259.00	460.00	95.50	47.80
23-41 - Ditto - but 20 mm dia	452.00	-	86.00	43.00

FLANGE W/N 150 R/R

Rate in Taka

Each	Materials & Labour	Fixing only	Add if fixed in r/r
23-42 Flange w/n 150 r/r as per approved design and specification of respective Gas Co. Ltd for 100 dia meter.	1454.00	86.00	43.00
23-43 - Ditto - but 75 mm diameter	1370.00	71.70	35.80
23-44 - Ditto - but 50 mm diameter	742.00	66.10	33.10
23-45 - Ditto - but 40 mm diameter	692.00	61.40	30.70
23-46 - Ditto - but 25 mm diameter	312.00	61.40	30.70

GASKET ASBESTOS

Each	Materials & Labour	Fixing only	Add if fixed in r/r
23-47 Gasket asbestos as required and approved specification Gas Co. Ltd for 100 mm diameter	144.00	21.50	10.70
23-48 - Ditto - but 75 mm diameter	122.00	17.20	8.60
23-49 - Ditto - but 50 mm diameter	90.00	14.30	7.20
23-50 - Ditto - but 25 mm diameter	73.00	14.30	7.20

RESTRICTED

SECTION-23

GAS / OIL LINE (SUPPLY) RATES

<u>FLANGE / VALVE / SERVICE TEE</u>		Rate in Taka		
Each		Materials & Labour	Fixing only	Add if fixed in r/r
23-51	Flange / Valve / Service Tee as per approved design and specification of respective Gas Co Ltd for 100 x 75 x down to 20 mm diameter	112,000.00	172.00	86.00
23-52	- Ditto - but 75 x 50x down to 20 mm diameter	87,284.00	143.00	71.70
23-53	- Ditto - but 50 x 40x down to 20 mm diameter	16,718.00	122.80	61.40
23-54	- Ditto - but 40 x 25x down to 20 mm diameter	16,703.00	107.50	53.70
23-55	- Ditto - but 25x down to 20 mm diameter	1,877.00	86.00	43.00

SADDLE WELDING

Each		Rate in Taka	
		Welding/ Test Drilling/ Commission	Labour Only
23-56	Saddle welding and drilling of existing serviceable line for commissioning of new line 100x75 mm dia	1,402.00	860.00
23-57	- Ditto - but 75x50 mm diameter	908.00	430.00
23-58	- Ditto - but 50x40 mm diameter	587.00	287.00
23-59	- Ditto - but 37.5x25 mm diameter	577.00	287.00
23-60	- Ditto - but 25x20 mm diameter	502.00	215.00

RESTRICTED

SECTION-23

GAS / OIL LINE (SUPPLY) RATES

VALVE PLUG

Rate in Taka

Each	Materials & Labour	Fixing only	Add if fixed in r/r
23-61 Valve plug S/P class 150 S/P as per approved and specification of respective Gas Co. Ltd for 100 mm dia.	23,783.00	1,067.00	534.00
23-62 - Ditto - but 75 mm diameter	14,250.00	1,067.00	534.00
23-63 - Ditto - but 50 mm diameter	7,313.00	860.00	430.00
23-64 - Ditto - but 40 mm diameter	6,583.00	860.00	430.00
23-65 - Ditto - but 25 mm diameter	3,725.00	430.00	215.00
23-66 - Ditto - but 20 mm diameter	2,063.00	215.00	107.50

FIANGE / VALVE / SERVICE TEE

Rate in Taka

Each	Materials & Labour	Fixing only	Add if fixed in r/r
23-67 Valve Tee as per approved design and specification of respective Gas Co. Ltd for 100x75 down to 20 mm dia.	112,000.00	172.00	86.00
23-68 - Ditto - but 75 x50x down to 20 mm diameter	87,284.00	143.00	71.70
23-69 - Ditto - but 50 x40x down to 20 mm diameter	16,718.00	122.80	61.40
23-70 - Ditto - but 40 x25x down to 20 mm diameter	16,703.00	107.50	53.70
23-71 - Ditto - but 25x down to 20 mm diameter	1,877.00	86.00	43.00

RESTRICTED

SECTION-23

GAS / OIL LINE (SUPPLY) RATES

STUD BOLT

Rate in Taka

Each		Rate in Taka		
		Materials & Labour	Fixing only	Add if fixed in r/r
23-72	Stud bolts as per approved design and specification of respective Gas Co. Ltd for 20x30 down to 20 mm long	122.00	17.20	8.60
23-73	- Ditto - but 25x50 down to 20 mm long	119.00	17.20	8.60

GAS REGULATOR

Each		Materials & Labour	Fixing only	Add if fixed in r/r
23-74	Gas Regulator as per approved design and specification of respective Gas Co. Ltd for 25 down to 20 mm dia (Domestic use)	1,228.00	86.20	43.10
23-75	- Ditto - but (Commercial use)	3,089.00	123.90	61.90

GAS VALVE PIT CMS

Gas valve pit masonry works central metering station works.

Rate is to be taken from similar item of B/R works section (1-20)

DOMESTIC/COMMERCIAL GAS TUBING

Per Metre

Tubes of various size as required for domestic / commercial Gas line

Rate is to be taken from Section -17 (Water Supply)

RESTRICTED

SECTION-23

GAS / OIL LINE (SUPPLY) RATES

GAS VALVE

Each		Rate in Taka		
		Materials & Labour	Fixing only	Add if fixed in r/r
23-76	Gas valve complete with all accessories as per approved specification of Gas Co. Ltd for 25 mm dia.	629.00	87.70	43.80
23-77	- Ditto - but 20 mm dia	526.00	87.40	43.70
23-78	- Ditto - but 13 mm dia	455.00	72.80	36.40
23-79	- Ditto - but 6.5mm dia	250.00	72.30	36.10

DOMESTIC BURNER

Each		Rate in Taka			
		Materials & Labour	Fixing only	Add if fixed in r/r	Add to for servicing
23-80	22 BG steel sheet gas stove/burner complete with all accessories as per approved design and specification of respective Gas Co. Ltd size 350x350 mm (single)	696.00	72.80	36.40	109.30
23-81	- Ditto - but 300x300 mm (single)	583.00	72.70	36.40	109.10
23-82	20 BG steel sheet gas stove/burner complete with all accessories as per approved design and specification of respective Gas Co. Ltd size 750x300-350 mm (double)	1,534.00	110.60	55.30	166.00
23-83	22 BG steel sheet gas stove/burner complete with all accessories as per approved design and specification of respective Gas Co. Ltd size 650x300-350 mm (double)	999.00	109.60	54.80	164.00
23-84	- Ditto - but Auto fire ignition system size 650 x 350 mm (double) local made	3,635.00	154.00	77.00	231.00
23-85	- Ditto - but Auto fire ignition system size 650 x 350 mm (double) foreign made	4,426.00	157.00	78.30	235.00

GAS BURNER KNOB

Each					
23-86	Knob for Gas stove / burner	45.30	21.60	10.80	0.00

RESTRICTED

SECTION-23

GAS / OIL LINE (SUPPLY) RATES

<u>COMMERCIAL BURNER INJECTOR NOZZLE</u>		Rate in Taka			
Each		Materials & Labour	Fixing only	Add if fixed in r/r	Add to for servicing
23-87	Injector Nozzle complete set for C/Burner tondoor 4.25 cu.m	746.00	43.40	21.70	0.00
23-88	- Ditto - but 3.50 cu.m	719.00	43.40	21.70	0.00
23-89	- Ditto - but 2.75 cu.m	696.00	43.40	22.00	0.00
23-90	- Ditto - but 2.00 cu.m	675.00	34.70	17.30	0.00
23-91	- Ditto - but 1.50 cu.m	663.00	34.70	17.40	0.00
23-92	Injector Nozzle only	122.00	24.80	12.40	0.00
<u>COMMERCIAL STAR BURNER</u>					
Each					
23-93	Commercial star burner complete set for C/burner tondoor 4.25 cu.m	737.00	34.80	17.40	52.20
23-94	- Ditto - but 3.50 cu.m	675.00	34.80	17.40	52.20
23-95	- Ditto - but 2.75 cu.m	592.00	29.00	14.50	43.50
23-96	- Ditto - but 2.00 cu.m	569.00	29.10	14.50	43.60
23-97	- Ditto - but 1.50 cu.m	539.00	29.10	14.50	43.60
<u>TONDOOR</u>					
Each					
23-98	Earthen tondoor large size	2,197.00	774.00	387.00	193.00
23-99	- Ditto - but medium size	1,854.00	668.00	334.00	167.00
23-100	- Ditto - but small size	1,610.00	566.00	283.00	142.00
23-101	Steel tondoor locally made with best quality steel sheet / plate as required (weight near about 60 kg).	5,442.00	763.00	382.00	191.00

RESTRICTED

SECTION-23

GAS / OIL LINE (SUPPLY) RATES

MS TOP PLATE

Rate in Taka

Per Sq. m		Materials & Labour	Fixing only	Add if fixed in r/r	Add to for servicing
23-102	MS top plate for tondoor made by steel plate of 20mm thick	5,193.00	1,314.00	657.00	0.00
23-103	- Ditto - but 13 mm thick	3,835.00	1,312.00	656.00	0.00
23-104	- Ditto - but 9 mm thick	3,205.00	1,319.00	660.00	0.00

VALVE PIT COVER

Rate in Taka

Per Sq. m		Materials & Labour	Fixing only	Add if fixed in r/r
23-105	MS Valve pit cover as specified by respective gas co.	16,035.00	1,631.00	816.00

LP GAS REGULATOR

Each

23-106	LP Gas regulator standard size foreign made and approved quality	999.00	180.00	90.10
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LP GAS HOSE PIPE

Each

23-107	LP Gas hose pipe 12 mm dia approved quality 1.5 m long.	149.00	65.80	32.90
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LP GAS BURNER

Each

23-108	LP Gas burner (single) size 350x350 mm	858.00	86.90	43.50
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LP GAS NIPPLE

Each

23-109	LP Gas nipple made of brass	107.60	24.60	12.30
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SECTION-24

AIR CONDITION DUCTING, PERIODICAL MAINTENANCE AND SERVICING

SPECIFICATION

General

1. Air conditioning is the process of treating air so as to control simultaneously the temperature, humidity cleanliness and distribution to meet the requirement of the conditioned space.
2. The Air conditioning load is the amount of heat is instantaneous gained in to or lost from the space. To maintain inside condition of space to required level, equipment of proper capacity to be installed.
3. The capacity is determined by actual instantaneous peak load requirement and type of control to be determined by the conditions be maintained inside the space during peak and partial load.
4. The ducting is to be designed considering the following factors :
 - a. Obstruction to duct run
 - b. Number of Air distribution to be employed.
 - c. Space availability and Aesthetic aspects.
 - c. Economic factor.
 - d. Volume of Air required.
 - e. Velocity of Air.
 - f. Requirement of ventilation air.
 - g. Friction rate.
5. All the ducting shall be done as per design / drawing of the qualified engineer. During ducting the layout the special attention to be paid to run the duct through clear and free space avoiding any obstruction on duct route such as service pipe, electrical conduits, structural members or any other items.
6. **Sound & Vibration.**
 - a. The noise level of air cooler and air ducts should be minimum so that sound transmitted does not hamper the other functions.
 - b. To minimize the sound / vibration of Air ducts the following measures to be taken if required. The addition of sound traps duct liner, vibration isolators and duct stiffeners might be required in certain critical areas.

7. Galvanized steel sheets is to be used for making ducts. The sheet thoroughly and evenly coated with Zinc and to be free from stains, bare spots and other defects.

Method of Measurements.

8. **Measurements.** The net area of sheeting as fixed is to be measured without any extra allowance for lapping or wastage.

9. **Cutting.** Sheets cut to shape (as in stepped flashing) shall be measured overall the least dimensions out of which the sheets can be cut.

Clarification of Rates.

10. The rates, inter alia, include particularly labour in reducing to size, shape, figure etc. and all straight, raking and circular cutting and materials in rolls welts seams etc.

RESTRICTED

SECTION-24

AIR CONDITION DUCTING AND PERIODICAL MAINTENANCE / SERVICING RATES

Item no	Description of works	M/Unit	Rate in Taka		
			Materials and labour	Fixing only	Add if fixed in R/R
24-001	Supply & installation of Air Condition ducting work including bends, tees, reducers, branch takeoffs, air chamber etc. comprising with 26 BG GP sheet, MS angle, FI bar & 25/30 mm thick glass wool cover, hanging rod, clamps, rawl bolts and nuts complete with reinforced aluminium foil vapour barrier adhesive tape, pin, washer, as per drg & direction of Engineer in charge having cross sectional area upto 0.04 sq.m as per specification.	sq.m	1060.00	219.00	109.70
24-002	\ - Ditto - but with 24 BG for over 0.04 sq.m upto 0.18 sq.m cross sectional area.	sq.m	1224.00	219.00	109.70
24-003	- Ditto - but with 22 BG with 40 / 50 mm thick glass wool cover for over 0.18 sq.m upto 0.31 sq.m cross sectional area.	sq.m	1596.00	240.00	120.10
24-004	- Ditto - but with 20 BG for over 0.31 sq.m upto 0.60 sq.m cross sectional area.	sq.m	1774.00	264.00	132.00
24-005	- Ditto - but with 18 BG for over 0.60 sq.m cross sectional area.	sq.m	2069.00	305.00	153.00
24-006	Supply & installation of adjustable type ceiling mounted Air supply diffuser having neck velocity not more than 3 metre / sec at a pressure drop of 2 mm Wg made with 18 BG sheet and other accessories as required including epoxy painting as per direction of Engineer in charge size 200x200 mm.	Each	2184.00	67.00	33.40
24-007	- Ditto - but size 250x250 mm.	Each	2607.00	67.00	33.40
24-008	- Ditto - but size 300x300 mm.	Each	2992.00	89.00	44.50
24-009	- Ditto - but size 350x350 mm.	Each	3234.00	89.00	44.50
24-010	- Ditto - but size 400x400 mm.	Each	4,005.00	133.00	66.70
24-011	- Ditto - but size 450x450 mm.	Each	11,022.00	133.00	66.70
24-012	Supply & installation of adjustable type Air receiving return grill having neck velocity not more than 3 metre / sec at a pressure drop of 2 mm Wg made with 18 BG sheet and other accessories as required including epoxy painting as per direction of Engineer in charge size 200x200 mm.	Each	3052.00	148.00	74.10
24-013	- Ditto - but size 250x250 mm.	Each	3294.00	148.00	74.10
24-014	- Ditto - but size 300x300 mm.	Each	3615.00	167.00	83.40
24-015	- Ditto - but size 350x350 mm.	Each	3796.00	167.00	83.40
24-016	- Ditto - but size 400x400 mm.	Each	4,425.00	191.00	95.30
24-017	- Ditto - but size 450x450 mm.	Each	675.00	191.00	95.30

RESTRICTED

SECTION-24

AIR CONDITION DUCTING AND PERIODICAL MAINTENANCE / SERVICING RATES

Item no	Description of works	M/Unit	Rate in Taka		
			Materials and labour	Fixing only	Add if fixed in R/R
24-018	Supply & installation of volume control / splitter damper made with 18 BG sheet and other accessories with locking arrangement as required including 2 coats painting with synthetic paint complete all as per direction of Engineer in charge.	sq.m	1,473.00	240.00	120.10
24-019	Supply and installation of pre-filter having an efficiency of 65% and shall be complete with steel framing and fixing materials as required. Filter depth shall be 50mm and initial pressure drop shall not be more than 6mm Wg. The filter shall be consist with modular holding frame made by 16 SWG sheet steel corners with reinforced angle, neoprene seal integral spring, suitable for servicing from duty end and size shall be 600x300x50 mm.	Each	25,100.00	667.00	334.00
24-020	Supply and installation of intermediate filter constructed with ultra fine glass fiber media formed into thin mat with water resistant binder, packing and galvanized metal cell side. The filter shall have dust stop efficiency of 85% as per ASH RAE 52-76, test initial pressure drop shall not be more than 125mm Wg. The filter shall be supplied along with modular holding frame constructed with 16 BG sheet steel. Filter shall be complete with neoprene seal, integral spring type latches shall be serviceable from side. Intermediate filter shall be installed in combination with pre-filter. Filter size shall be 600 x 300 x 50 mm.	Each	44,092.00	1,334.00	667.00
24-021	Supply and installation of Hepa-filter of 99.97% DOP with waterproof and fire retardant glass fiber media, all side aluminium. Filter shall be complete with craft paper separator (Max 85% Relative Humidity) neoprene rubber band and gasket. Initial air pressure drop across the filter shall not be more than 25 mm Wg. Filter shall also be complete with holding frame constructed with 16 BG sheet steel. Each filter shall be complete with four spring latch assemblies for sealing pre-gasket filter. Holding frame shall be suitable to service filter from side. Filter shall be installed on discharge side of air handling unit. Required duct and installation of filters shall be done as per direction. Filter size shall be 600x300x150mm.	Each	1,823.00	1,334.00	667.00

RESTRICTED

SECTION-24

AIR CONDITION DUCTING AND PERIODICAL MAINTENANCE / SERVICING RATES

Item no	Description of works	M/Unit	Rate in Taka		
			Materials and labour	Fixing only	Add if fixed in R/R
24-022	Periodical inspection / Trouble shooting and preparation of inspection report highlighting the present and future trouble / problem and remedy by a Engineer / licenciate expert for maintenance of central air conditioning plant having capacity upto 30 TR as per direction of Engineer in charge.	Each	1,653.00	-	-
24-023	- Ditto - but over 30 TR upto 60 TR capacity.	Each	2,479.00	-	-
24-024	- Ditto - but over 60 TR capacity.	Each	3,896.00	-	-
24-025	- Ditto - but split / package / almirah type Air conditioner upto 3 ton capacity.	Each	826.00	-	-
24-026	- Ditto - but split / package / almirah type Air conditioner over 3 ton capacity.	Each	1,239.00	-	-
24-027	Periodical servicing / cleaning / routine maintenance of installed split type Air condition condensing and fan coil unit including testing, continuous trial run for a period of 6 hrs as per satisfaction of engineer in charge having capacity upto 3 ton.	Each	1,047.00	-	-
24-028	- Ditto - but capacity over 3 ton	Each	1,340.00	-	-
24-029	- Ditto - but all window type Air conditioner	Each	698.00	-	-
24-030	Servicing / cleaning / routine maintenance of installed Central Air condition Plant (Chiller, Air handling unit, water circulating pump etc.) including testing, continuous trial run for a period of 6 hrs as per satisfaction of Engineer in charge having capacity upto 30 TR.	Each	5,942.00	-	-
24-031	- Ditto - but over 30 TR upto 60 TR capacity.	Each	7,306.00	-	-
24-032	- Ditto - but over 60 TR capacity.	Each	9,625.00	-	-
24-033	Gas charging as required for split type Air conditioner having capacity upto 3 ton including testing and trial run for 6 hrs.	Each	7,562.00	386.00	-
24-034	- Ditto - but capacity over 3 ton	Each	9,597.00	464.00	-
24-035	- Ditto - but for window type AC 18,000 - 22,000 BTU	Each	4,692.00	386.00	-
24-036	- Ditto - but for window type AC 24,000 - 28,000 BTU	Each	6,335.00	464.00	-

RESTRICTED

SECTION-24

AIR CONDITION DUCTING AND PERIODICAL MAINTENANCE / SERVICING RATES

Item no	Description of works	M/Unit	Rate in Taka		
			Materials and labour	Fixing only	Add if fixed in R/R
24-037	Installation / Reinstallation of split type Air conditioner with all required consumables like holdfast, rawl bolt, MS clamps etc. as required having capacity upto 3 ton including testing / commissioning with the satisfaction of Engineer in charge including making holes in brick wall and make good the same in all respect.	Each	1,478.00	773.00	-
24-038	- Ditto - but capacity over 3 ton	Each	2,159.00	1,159.00	-
24-039	- Ditto - but all types of window type Air conditioner.	Each	1,285.00	580.00	-
24-040	Supply and fixing of selector switch assembly for window type Air conditioner all complete as spd.	Each	548.00	69.70	34.80

SECTION-25

**FIRE FIGHTING, CHLORINATION PLANT AND PRESSURISED WATER SUPPLY
SYSTEM & EQUIPMENTS**

SPECIFICATION

General

1. The method of works and workmanship should be in accordance with current recognised engineering practice and principles.
2. The work shall be executed according to the instruction and specification of manufacturer Catalogue.
3. All MS Tubing is to be capable of withstanding 40 kg per sq.cm hydraulic pressure.
4. All connection to be made by welded joint of flange joint.
5. The whole of the pipes and fittings are to be fully tested and left drop dry on completion and put into commission.
6. All fire pump / fighting equipments and fittings / fixtures shall be brand new foreign origin like USA / UK / Germany / France / Australia / Italy confirm to the standard, design and specifications of the local fire brigade authority.

Method of Measurement.

7. **All pipe works generally shall be measured:**
 - a. Net over all length of pipes and fittings as fixed except where otherwise indicated.
 - b. Fittings of unequal bores shall be classified according to the larger bore.

Clarification of Rates

8. **The rates, inter alia, include particularly:**
- a. Fixing complete in long or short lengths including running joints in the length.
 - b. **Fixing of water tubing:**
 - (1) Fixing to walls complete with clips, wall hooks and wooden / plastic rowel plugs either surface or concealed.
 - (2) Making good surfaces disturbed.
 - (3) Forming all necessary holes and making good.
 - (4) The supply and fixing of all bedding, jointing and pointing materials and reinforcement as required.
 - c. Cut in new water mains.
 - d. **For plumbing generally:**
 - (1) Jointing and fixing with and including supporting materials specified or necessary. Rates excepts pipes include for plugging walls where required, making good, provision and fixing of wall hooks, hold-fast, clips etc.
 - (2) Turning water on or off as necessary.
 - (3) Taps, valves and other plumbers brass work with suitable washer complete.
 - (4) Jointing as specified or required.
 - (5) Taking off and re-fixing for inspections, measuring etc.
9. The contractor shall provide lead, gasket, tape and necessary consumables as required.

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SECTION-25

FIRE FIGHTING, CHLORINE PLANT AND PRESSURISED WATER SUPPLY SYSTEM
& EQUIPMENTS RATES

Item no	Description of works	Measuring Unit	Rate in Taka			
			Materials and labour	Fixing / Installation only	Testing / Commissioning / Trial run	Add to if removal / repair
25-001	Supply and Installation of end suction vertical discharge direct coupled centrifugal pumping set having capacity 150 GPM against water head 60 metre at efficiency not less than 60% complete with Motor electric AC 400 volt, 50 Hz, 3 phase, HP 25, as specified brand and model including base plate, coupling guard, control panel with starter and switches, connecting cables and testing / commissioning / trial run to the satisfaction of the Engineer in charge.	Per set	223,174.00	3,001.00	8,006.00	1,334.00
25-002	Supply and Installation of multistage Jokey pumping set having capacity 12 GPM against water head 60 metre at efficiency not less than 70% complete with Motor electric AC 230 volt, 50 Hz, 1 phase, 1.5 KW, as specified brand and model with base plate, coupling guard, provision for connection to main control panel with starter and switches as required all connecting cables including testing / commissioning / trial run to the satisfaction of the Engineer in charge.	Per set	139,844.00	1,500.00	3,736.00	667.00
25-003	Supply and fixing of fire hydrant box with 37.5 mm dia brass hydrant valve fitted with 100 mm dia vertical riser pipe, for connection with 37.5 mm dia hose.	Per set	8,154.00	445.00	-	222.00

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SECTION-25

FIRE FIGHTING, CHLORINE PLANT AND PRESSURISED WATER SUPPLY SYSTEM
& EQUIPMENTS RATES

Item no	Description of works	Measuring Unit	Rate in Taka			
			Materials and labour	Fixing / Installation only	Testing / Commissioning / Trial run	Add to if removal / repair
25-004	Supply and fixing of fire hydrant hose pipe 37.5 mm dia (Canvas) 30 metre in length capable to work against 200 PSIG pressure with all fittings i.e. 18.7 mm dia brass nozzle having capacity 30 GPM throw 15 metre, hose cradle oblique type, landing valve suitable to withstand water pressure 300 PSIG. as spd.	Per set	24,018.00	297.00	-	148.00
25-005	Pressure reducing valve	Rate exit in section 17				
25-006	Supply and fixing of MS pipe with all fittings i.e.. Tee, Bend, Elbow, etc. to withstand water pressure 300 PSIG. as spd including red oxide painting and testing / commissioning 100 mm dia	Metre	2,172.00	129.30	-	64.60
25-007	- Ditto - but 75 mm dia	Metre	1,471.00	114.80	-	57.40
25-008	- Ditto - but 50 mm dia	Metre	1,023.00	97.00	-	48.50
25-009	- Ditto - but 37.5 mm dia	Metre	748.00	70.60	-	35.30
25-010	- Ditto - but 25 mm dia	Metre	523.00	59.50	-	29.70
25-011	Supply and fixing of ball valve heavy duty to withstand water pressure 300 PSIG. Foreign made (UK) as spd 50 mm dia	Each	4,262.00	111.00	-	55.60
25-012	- Ditto - but 37.5/40 mm dia	Each	2,698.00	89.00	-	44.50
25-013	- Ditto - but 25 mm dia	Each	2,031.00	74.00	-	37.10
25-014	Supply and fixing of ball valve to withstand water pressure 220 PSIG. Foreign made (UK) as spd 50 mm dia	Each	853.00	111.00	-	55.60
25-015	- Ditto - but 37.5/40 mm dia	Each	707.00	89.00	-	44.50
25-016	- Ditto - but 25 mm dia	Each	552.00	74.00	-	37.10
25-017	- Ditto - but 20 mm dia	Each	460.00	59.00	-	29.70
25-018	- Ditto - but 12.5 mm dia	Each	358.00	59.00	-	29.70

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SECTION-25

FIRE FIGHTING, CHLORINE PLANT AND PRESSURISED WATER SUPPLY SYSTEM
& EQUIPMENTS RATES

Item no	Description of works	Measuring Unit	Rate in Taka			
			Materials and labour	Fixing / Installation only	Testing / Commissioning / Trial run	Add to if removal / repair
25-019	Supply and fixing of gate valve flanged end type to withstand water pressure 300 PSIG. Foreign made UK / Italy as spd 100 mm dia	Each	11,094.00	282.00	-	140.80
25-020	- Ditto - but 75 mm dia	Each	8,096.00	225.00	-	112.70
25-021	- Ditto - but 50 mm dia	Each	5,275.00	188.00	-	93.90
25-022	- Ditto - but 37.5 / 40 mm dia	Each	4,606.00	188.00	-	93.90
25-023	- Ditto - but 25 mm dia	Each	4,295.00	161.00	-	80.50
25-024	Supply and fixing of globe valve flanged end type to withstand water pressure 300 PSIG. Foreign made UK / Italy as spd 100 mm dia	Each	10,669.00	282.00	-	140.80
25-025	- Ditto - but 75 mm dia	Each	9,249.00	225.00	-	112.70
25-026	- Ditto - but 50 mm dia	Each	7,825.00	188.00	-	93.90
25-027	- Ditto - but 37.5 / 40 mm dia	Each	6,338.00	188.00	-	93.90
25-028	Supply and fixing of Auto Air Vent valve floating type to withstand water pressure 300 PSIG. Foreign made UK / Japan as spd 25 mm dia	Each	4,264.00	113.00	-	56.30
25-029	- Ditto - but 20 mm dia	Each	3,949.00	93.90	-	46.90
25-030	- Ditto - but 12.5 mm dia	Each	3,474.00	93.90	-	46.90
25-031	Supply and fixing of pressure auto relief valve to withstand water pressure 300 PSIG. Foreign made UK / Italy as spd 50 mm dia	Each	10,578.00	140.80	-	70.40
25-032	- Ditto - but 37.5 / 40 mm dia	Each	9,127.00	112.70	-	56.30
25-033	- Ditto - but 25 mm dia	Each	5,075.00	93.90	-	46.90

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SECTION-25

FIRE FIGHTING, CHLORINE PLANT AND PRESSURISED WATER SUPPLY SYSTEM
& EQUIPMENTS RATES

Item no	Description of works	Measuring Unit	Rate in Taka			
			Materials and labour	Fixing / Installation only	Testing / Commissioning / Trial run	Add to if removal / repair
25-034	Supply and fixing of pressure switch suitable to cut out and cut in its preset pressure as spd foreign origin (China) to be fitted in 25 mm dia water line	Each	7,443.00	563.00	-	282.00
25-035	Supply and fixing of pressure gauge range 0 - 500 PSIG as spd foreign origin (USA)	Each	3,341.00	376.00	-	188.00
25-036	Supply and fixing of Y-Strainer brass suitable to withstand a pressure 300 PSIG as spd foreign origin (Italy) 100 mm dia	Each	10,840.00	563.00	-	282.00
25-037	- Ditto - but 75 mm dia	Each	5,265.00	376.00	-	188.00
25-038	- Ditto - but 50 mm dia	Each	2,577.00	282.00	-	141.00
25-039	- Ditto - but 37.5 / 40 mm dia	Each	1,748.00	282.00	-	141.00
25-040	- Ditto - but 25 mm dia	Each	945.00	225.00	-	112.70
25-041	Supply and fixing of flexible joints suitable to withstand a pressure 300 PSIG as spd foreign origin (Italy/Germany) 100 mm dia x 300 mm long	Each	6,711.00	188.00	-	93.90
25-042	- Ditto - but 75 mm dia x 300 mm long	Each	4,905.00	161.00	-	80.50
25-043	- Ditto - but 50 mm dia x 300 mm long	Each	4,648.00	141.00	-	70.40
25-044	- Ditto - but 40/37.5 mm dia x 300 mm long	Each	4,174.00	141.00	-	70.40
25-045	- Ditto - but 25 mm dia x 300 mm long	Each	2,485.00	112.70	-	56.30
25-046	- Ditto - but 20 mm dia x 300 mm long	Each	1,892.00	112.70	-	56.30
25-047	- Ditto - but 12.5 mm dia x 300 mm long	Each	1,394.00	89.00	-	44.50

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SECTION-25

FIRE FIGHTING, CHLORINE PLANT AND PRESSURISED WATER SUPPLY SYSTEM
& EQUIPMENTS RATES

Item no	Description of works	Measuring Unit	Rate in Taka			
			Materials and labour	Fixing / Installation only	Testing / Commissioning / Trial run	Add to if removal / repair
25-048	Supply and fixing of fire brigade connection 65 mm dia 2 way suitable to withstand a pressure 300 PSIG as spd foreign origin (Malaysia)	Each	19,570.00	1,779.00	-	890.00
25-049	Supply and fixing of landing valve suitable to withstand a pressure 300 PSIG as spd foreign origin (UK) 50 mm dia	Each	7,265.00	148.00	-	74.10
25-050	- Ditto - but 37.5 / 40 mm dia	Each	7,027.00	148.00	-	74.10
25-051	- Ditto - but 25 mm dia	Each	5,330.00	111.20	-	55.60
25-052	Supply and fixing of Fire alarm bell, DC 24 volt of 150 mm dia gong red colour capable to produce 90 db sound at a distance of 1 metre foreign origin (UK)	Each	4,300.00	148.00	-	74.10
25-053	Supply and fixing of break glass switch or pull station complete with all accessories as required foreign origin (UK/Malaysia)	Each	3,113.00	148.00		74.10
25-054	Supply and fixing of central control fire alarm panel surface type made with 20 gauged steel sheet complete with red enameled paint. All indicating lamp & display LCD shall be on front side cover / shutter. The panel consists at least fire indication lamp to indicate the location of break glass switch elegised, Master alarm bell off 4x light for remote sensor, 24 volt DC nickel cadmium re-chargeable battery etc. as required for satisfactory functioning foreign origin (UK/Malaysia)	Each	143,752.00	2,609.00	10,675.00	1,305.00

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SECTION-25

FIRE FIGHTING, CHLORINE PLANT AND PRESSURISED WATER SUPPLY SYSTEM
& EQUIPMENTS RATES

Item no	Description of works	Measuring Unit	Rate in Taka			
			Materials and labour	Fixing / Installation only	Testing / Commissioning / Trial run	Add to if removal / repair
25-055	Supply and Installation of Fully automatic pressure boosting package unit with 4 nos vertical multistage inline pump having capacity 25-15M3/hr, at working pressure 3-4kg, 1.1 kw, size 50x50 mm spd brand, model complete with flanges, volute casing, impeller equipped with replaceable casing wear rings, 2xcheck valve, 4x shut off valves, membrane tank, analogue pressure sensor for suction. Complete unit mounted on an epoxy covered base plate. foreign origin (Germany / France) to be controlled by an auto pressurised water supply panel (rate is to be estimated / paid separately) for high rise multistoried building including 6 month trial run / operation	Each unit	535,737.00	12,264.00	96,072.00	5,634.00
25-056	Add or Deduct to / from the above item for 1xpump motor having capacity as stated above incl one month trial run	Each set	113,919.00	3,066.00	4,003.00	1,409.00
25-057	- Ditto - item no 25-055 but 4 nos pump having capacity 45-25M3/hr, at working pressure 3-4kg, 1.5 kw, size 75x75 mm and all other specification same as above item.	Per unit	670,399.00	12,264.00	96,072.00	5,634.00
25-058	Add to or Deduct from the above item for 1xpump motor having similar capacity as stated above incl one month trial run	Each set	147,585.00	3,066.00	4,003.00	1,409.00
25-059	- Ditto -item no 25-055 but 4 nos pump having capacity 80-36M3/hr, at working pressure 3-4kg, 3 kw, size 100x100 mm and all other specification same as above item.	Per unit	1,062,972.00	16,771.00	96,072.00	7,887.00

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SECTION-25

FIRE FIGHTING, CHLORINE PLANT AND PRESSURISED WATER SUPPLY SYSTEM
& EQUIPMENTS RATES

Item no	Description of works	Measuring Unit	Rate in Taka			
			Materials and labour	Fixing / Installation only	Testing / Commissioning / Trial run	Add to if removal / repair
25-060	Add to or Deduct from the above item for 1xpump motor having similar capacity as stated above incl one month trial run	Each set	245,728.00	4,193.00	4,003.00	1,972.00
25-061	- Ditto - item no 25-055 but 4 nos pump having capacity 80-36M3/hr, at working pressure 3.5-5kg, 5.5 kw, size 150x150 mm and all other specification same as above item.	Per unit	1,199,639.00	16,771.00	96,072.00	7,887.00
25-062	Add to or Deduct from the above item for 1xpump motor having similar capacity as stated above incl one month trial run	Each set	279,895.00	4,193.00	4,003.00	1,972.00
25-063	Supply and Installation of auto pressurised water supply system boosting package unit control panel equipped with pressure tank and pressure transmitter, butterfly valves, motor starter-panel and all other fittings, connecting cables as required for satisfactory operation of the system consists 4x1.1 / 4x1.5 kw pumping package unit powered by 3 ph AC 380-415 volt, 50 Hz including testing / commissioning.	Per unit	388,227.00	5,177.00	-	2,090.00
25-064	Add to or Deduct from the above item for 1xpump motor (Except pressure Tank) having similar capacity as stated above.	Each set	70,484.31	1,294.00	-	523.00
25-065	- Ditto - item no 25-063 but 4x 3 / 4x 5.5 kw pumping package unit powered by 3 ph AC 380-415 volt, 50 Hz including testing / commissioning.	Each set	410,358.00	5,177.00	-	2,090.00

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SECTION-25

FIRE FIGHTING, CHLORINE PLANT AND PRESSURISED WATER SUPPLY SYSTEM
& EQUIPMENTS RATES

Item no	Description of works	Measuring Unit	Rate in Taka			
			Materials and labour	Fixing / Installation only	Testing / Commissioning / Trial run	Add to if removal / repair
25-066	Add to or Deduct from the above item for 1xpump motor (Except pressure Tank) having similar capacity as stated above.	Each set	74,688.00	1,294.00	-	523.00
25-067	Supply and Installation of fire pump control panel equipped with starter/magnetic switch and all other fittings volt meter ammeter indicating lamp etc., connecting cables as required for satisfactory operation of the system powered by 3 ph AC 380-415 volt, 50 Hz including testing / commissioning.	Each set	90,114.00	3,659.00	-	1,497.00
25-068	Supply and installation of Chlorine gas cylinder (50 kg) filled with gas and cylinder mounted Gas control unit (vacuum feed type regulator) having capacity 10 - 50 PPD, complete with all accessories including Testing and commissioning (Brand : Regal, Model : 210, Country of origin : USA).	Each	242,213.00	922.00	4,270.00	378.00
25-069	Supply and installation of Chlorine gas Ejector unit complete with all accessories, including testing commissioning (Brand : Regal, Model : A-920, Country of origin : USA).	Each	65,706.00	420.00	-	189.00

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SECTION-25

**FIRE FIGHTING, CHLORINE PLANT AND PRESSURISED WATER SUPPLY SYSTEM
& EQUIPMENTS RATES**

Item no	Description of works	Measuring Unit	Rate in Taka			
			Materials and labour	Fixing / Installation only	Testing / Commissioning / Trial run	Add to if removal / repair
25-070	Supply and installation of vertical high pressure centrifugal / Boosting pumping set complete with induction motor AC 400/220 volt (Three / Single phase), 50 Hz, 2/3 HP country of origin : USA/ Italy complete with push button starter, MCCB, connecting cable, check valve, suction pipe etc as required including testing commissioning.	Each set	105,612.00	2,004.00	23,425.00	1,002.00
25-071	Supply and fixing of chlorine gas leakage detector with electronic sensor alarm complete as spd. Brand : Regal, Model : 3000, country of origin : USA. including testing commissioning.	Each	149,109.00	798.00	-	378.00
25-072	Supply and fixing of chlorine gas cylinder weighing scale (kg) capacity 150 kg minimum complete as spd. Country of origin : China.	Each	30,124.00	420.00	-	189.00
	Electric wiring Fire extinguisher		Rate exist in section 21 & 22			
	Elbow Flange (Local made) Check valve		Rate exist in section 17			
	Chlorine Test Kit Chlorine gas plant spare Chlorine gas cylinder Chlorine gas		Rate exist in section 29			

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MILITARY ENGINEER SERVICES

BANGLADESH ARMED FORCES



CHAPTER – III

FURNITURE AND MISC

RESTRICTED

SECTION – 26

SCOPE OF WORK

Expanded Soils Investigation Program

Soil Investigation

1. Investigation into the general geological character of the site.
2. To make exploratory bore holes for specific information regarding the character and thickness of individual soils.
3. To determine physical properties of the soil by laboratory tests.

Boring at Each Location

4. Collection of soil samples by 100 mm minimum inside diameter sand boring.
5. Number of boring (as per field requirement).
6. Depth of boring (as per requirement).
7. Location of borings: Boring to be located on transverse center line approximate 3 m from edge of building or specified by the Engineer-in-Charge.
8. The log of these borings are to be analyzed immediately to ascertain whether additional depth and number of borings are required to adequately describe the soil condition at the site.

Sampling

9. **Undisturbed Sample.**
 - a. Undisturbed samples shall be collected from cohesive soil layers at a maximum interval of 3m (or from each strata change if in less than 3m) upto the bottom of the bore hole.
 - b. After recovery, undisturbed samples shall be carefully sealed and marked for laboratory tests. Before sealing a small quantity of soil from the bottom part of the samples shall be put in a glass jar for identification purpose.
10. **Disturbed Smples.** Disturbs soil samples shall be collected from every 1m interval irrespective of whether the soil is cohesive or cohesion less.
11. **Standard Penetration Test.** Blow count (N) per 0.3 m of penetration shall be recorded for every disturbed sampling interval. At a depth where on disturbed samples cannot be extracted because of the availability of only cohesion less soil layers, record of N-Blows may be considered sufficient for the determination of bearing capacity of soil.

12. Execution of Dynamic Cone (60⁰) Penetration tests or static cone penetration tested at four locations in each building, upto a depth required or upto refusal (N+of 50 counted as refusal).

Scope of Work

13. Scope of work is as under:

- a. Expanded Soils Investigation Programme
- b. Soil Investigation
- c. Laboratory Tests.

14. **Undisturbed soil samples:**

a. Laboratory Test shall be conducted for the following:

- (1) Unconfined compression test on all representative undisturbed cohesive soil samples.
- (2) Consolidation test on representative undisturbed cohesive soil samples when stratum is considered substantially compressible by the Engineer (average one in four borings).
- (3) Dry density and Natural Moisture Content test.
- (4) Tri-axial compression test (consolidated untrained) on representative undisturbed soil samples from potential shear zones below the assumed elevation of base of footing (average of one in four borings).

15. **Disturbed Samples.**

a. Laboratory test to be performed on representative disturbed samples.

- (1) Atterberg limit test.
- (3) Grain size analysis.
- (4) Visual identification of the soil.

16. **Other Laboratory Tests.** Tri-axial compression test shall be performed on selected samples of cohesion less soils encountered below the proposed footing (approximately one for every four borings).

Report

17. The report should contain standard charts, graphs, bore-logs etc. and to include allowable bearing capacity of the soil at different depths including F.S. and skin friction values at different level with F.S.

18. The recommendation on the sub-structure for the proposed structures should be clearly stated without any ambiguity.

19. The report should have the Notice Inviting Tender, any corrigendum & the schedule as its enclosure.

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SECTION-26

SUB-SOIL INVESTIGATION WORKS (SOIL TEST) RATES

Item	Description	Unit	Rate in Tk
26-1	Mobilization and De-mobilization of boring equipment such as drilling pipes drop hammer, Tripod, pulley, chain, wrench, sample collection devices of tools & plants, tripod for temporary camp, other accessories and manpower at work site as per direction of Engineer-in-Charge.	Per site	8,362.00
26-2	Installation of boring equipment at site on dry ground / and a surface up to a maximum 750 mm under water and as per direction of the Engineer-in-Charge.	Per point	563.00
26-3	Installation of boring equipment at site for depth water above 750 mm to 3000 mm as per direction of the Engineer-in-Charge.	Per point	1,325.00
26-4	Installation of boring equipment at site for depth of water above 3000 mm (stagnant water) as per direction of the Engineer-in-Charge.	Per point	2,754.00
26-5	Drilling 100 mm dia bore hole by wash boring method 0 to 9 meter including the depth for SPT operation as per direction of the Engineer-in-Charge.	Per meter	208.00
26-6	Drilling 100 mm dia bore hole by wash boring method exceeding 9 meter to 18 meter including the depth for SPT operation as per direction of the Engineer-in-Charge.	Per meter	208.00
26-7	Drilling 100 mm dia bore hole by wash boring method exceeding 18 meter to 27 meter including the depth for SPT operation as per direction of the Engineer-in-Charge.	Per meter	187.00

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SECTION-26

SUB-SOIL INVESTIGATION WORKS (SOIL TEST) RATES

Item	Description	Unit	Rate in Tk
26-8	Drilling 100 mm dia bore hole by wash boring method exceeding 27 meter to 36 meter including the depth for SPT operation as per direction of the Engineer-in-Charge.	Per meter	199.00
26-9	Drilling 100 mm dia bore hole by wash boring method exceeding 36 meter to 45 meter including the depth for SPT operation as per direction of the Engineer-in-Charge.	Per meter	208.00
26-10	Execution of SPT (ASTM D-1586-84, hammer : (140 + 2 Lbs)/ 63.5 + 1 Kg), height of fall : (760 mm + 25 mm) including withdrawn of drilling pipe from the bore-hole and fixing the steel cap with drilling pipe and replacing the drilling pipe with cap into the bore hole upto the layer of interest and as per direction of Engineer-in-Charge. For 0 to 9 meter boring.	Per point	68.00
26-11	- Ditto - exceeding 9 meter to 18 meter boring.	Per point	53.00
26-12	- Ditto - exceeding 18 meter to 27 meter boring.	Per point	32.00
26-13	- Ditto - exceeding 27 meter to 36 meter boring.	Per point	43.00
26-14	- Ditto - exceeding 36 meter to 45 meter boring.	Per point	47.00
26-15	Collection of undisturbed soil samples in 75 mm tubes from cohesive layer incl preservation, and transportation and as per direction of Engineer-in-Charge.	Per sample	45.00
26-16	Collection of disturbed soil samples in 75 mm tubes from cohesive layer incl preservation, and transportation and as per direction of Engineer-in-Charge.	Per sample	22.00

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SECTION-26

SUB-SOIL INVESTIGATION WORKS (SOIL TEST) RATES

Item	Description	Unit	Rate in Tk
	Carrying out different test on soil samples collected from the subsoil investigation site. (Laboratory charges for testing of samples vary widely among BRTC (BUET), BIT's (now KUET, RUET, DUET & CUET) HBRI and privately owned laboratories as under.		
26-17	Specific gravity	Per test	113.00
26-18	Grain size Analysis of soil by sieve and Hydrometer analysis & Specific gravity test	Per test	562.00
26-19	Classification of soil for engineering purposes.	Per test	225.00
26-20	Linear shrinkage for cohesive soil.	Per test	457.00
26-21	Shrinkage limit for cohesive soil.	Per test	457.00
26-22	Atterberg limit test	Per test	225.00
26-23	Liquid limit for cohesive soil.	Per test	225.00
26-24	Plastic limit for cohesive soil.	Per test	225.00
26-25	Unit weight of soil.	Per test	168.00
26-26	Void ratio	Per test	562.00
26-27	Natural moisture contents tests.	Per test	55.70
26-28	Organic mater contents.	Per test	914.00
26-29	Direct Shear test.	Per test	914.00
26-30	Consolidated drain test.	Per test	844.00
26-31	Triaxial shear test.	Per test	914.00
26-32	Un-Confined compression test for cohesive soil.	Per test	591.00
26-33	Standard proctor test.	Per test	1,181.00
26-34	Modified proctor test.	Per test	1,266.00
26-35	Preparation writing and submission of report on sub-soil investigation containing all parameters, bearing capacities, sections through all bore holes along different axis, on eight sets of data given siting references etc. and all complete as per satisfaction and direction of Engineer-in-Charge.	Per site	4,211.00

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SECTION-27

SCHEDULE OF RATES FOR CONVEYANCE OF MATERIALS

Item	Description of works / Equipments rent / Engineering test charge	Unit	Rate in Taka
27-1	Unload of stores of any description from Trucks, barge, Rly. Wagons & stack the same for counting or measurement as directed.	Per M ton	105.30
27-2	Carrying of stores of any description by any means from inside or out side bldg for a distance at 1/4 km or part there of at the destination.	Per M ton	198.00
27-3	- Ditto - but for distance exceeding 1/4 km but not exceeding 1/2 km	Per M ton	184.70
27-4	- Ditto - but for distance exceeding 1/2 km but not exceeding 1 km	Per M ton	225.60
27-5	- Ditto - but add to item 27-4 only each additional 1 km for distance accounted up to 40 km	Per M ton	23.40
27-6	- Ditto - but add to item 27-4 only each additional 1 km for distance accounted above 40 km	Per M ton	22.00
27-7	Loading of stores of any description from godown, barge, Rly. Wagons etc into truck for stacking, counting and measuring and for carrying the same as directed.	Per M ton	126.30
27-8	Re-filling of cement or similar stores in jute bags if found loose in wagon, barge, godown etc needed at the time of loading, unloading, carrying & stacking, duly weighing and sewing, providing new jute bag and sutly etc by contractor.	Per bag	25.90
27-9	Loading/unloading of stores of any description from/into coaster, vessel, boat, barge etc and carrying the same on head load within a distance of 250 metre and stacking at the Jetty or coaster etc at river port.	Per M ton	246.60
27-10	Weighing, counting and measuring of Engineer Stores of any description during the course of taking delivery from Rly. Authority, private or Govt. organization, firm, corporation etc. wherever necessity arises.	Per M ton	63.00

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SECTION-27

T&P RENTS / TEST FEES FOR ANALYSIS

Following rates are applicable only for Analysis B/R & E/M items of different section

Item	Description of works / Equipments rent / Engineering test charge	Unit	Rate in Taka
27-11	Truck fare 5 to 10 ton capacity for carrying any types of materials up to distance up to 0-5 km	Truck	850.00
27-12	Truck fare 5 to 10 ton capacity for carrying any types of materials above 5 km up to distance 10 km	Per km	140.00
27-13	Truck fare 5 to 10 ton capacity for carrying any types of materials above 10 km to 100 km	Per km	95.00
27-14	Truck fare 5 to 10 ton capacity for carrying any types of materials distance over 100 km	Per km	85.00
27-15	Rent / Hire charges for Mixer machine 0.15/0.20 cu.m capacity	Per hour	165.00
27-16	Rent / Hire charges for Mixer machine 0.20 / .030 cu.m capacity	Per hour	185.00
27-17	Rent / Hire charges for Road roller 4 ton capacity	Per hour	262.00
27-18	Rent / Hire charges for Road roller 6 ton capacity	Per hour	315.00
27-19	Rent / Hire charges for Road roller 8 ton capacity with fuel	Per hour	330.00
27-20	Rent / Hire charges for Road roller 10/12 ton capacity with fuel	Per hour	375.00
27-21	Rent / Hire charges for power operated tile cutter with cutting tools	Per hour	8.00
27-22	Rent / Hire charges for drilling Rigs / Crane and other equipments for deep tube well including fuel cost.	Per hour	1850.00
27-23	Rent / Hire charges for road boring equipments with consumables / fuels	Per hour	250.00
27-24	Rent / Hire charges for welding generator / equipments with fuels	Per hour	130.00
27-25	Rent / Hire charges for purging testing equipments	Per hour	130.00
27-26	Rent / Hire charges for shuttering etc	Per sq.m	80.00
27-27	Rent / Hire charges of scaffolding for painting / glazing works.	Per sq.m	4.00
27-28	Rent / Hire charges of MS pipe prop for Rib beam	Each	55.00
27-29	Rent / Hire charges of MS pipe prop Rib slab	Each	65.00

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SECTION-27

T&P RENTS / TEST FEES FOR ANALYSIS

Following rates are applicable only for Analysis B/R & E/M items of different section

Item	Description of works / Equipments rent / Engineering test charge	Unit	Rate in Taka
27-30	Rent / Hire charges of MS Pipe (prop) for fair face and other works	Each	50.00
27-31	Rent / Hire charges for fair face steel shuttering for Rib slab. (Note Per cu.m work shuttering will be required 9.30 sq.m)	Per sq.m	966.00
27-32	Rent / Hire charges for fair face steel shuttering for Rib beam. (Note Per cu.m work shuttering will be required 15.60 sq.m)	Per sq.m	1090.00
27-33	Rent / Hire charges for fair face steel shuttering (Note Per cu.m work shuttering will be required 6.67 sq.m)	Per sq.m	876.00
27-34	Rent / Hire charges for the small tools with cutter used by tradesman	Per hour	35.00
27-35	Rent / Hire charges for hand tools used by labour	Per hour	6.50
27-36	Carrying of demolished materials incl loading / unloading 1 km	cu.m	277.92
27-37	Rent / Hire charges for Vibrator Machine Electric)	Per hour	10.00
27-38	Rent / Hire charges for Pumping set 1-2 Cusec capacity including fuel cost.	Per day	750.00
27-39	Rent / Hire charges for compactor	Per hour	325.00
27-40	Rent / Hire charges for piling rig with consumables / fuels	Per hour	688.00
27-41	Rent / Hire charges for the load testing equipments for pile	Per day	5000.00
27-42	Preparation of test result / insection reort in a standard form (3 copy) for load / soil test	Each	1000.00
27-43	Specific gravity	Per test	95.00
27-44	Grain size Analysis of soil by sieve and Hydrometer analysis & Specific gravity test	Per test	474.00
27-45	Classification of soil for engineering purposes.	Per test	190.00
27-46	Linear shrinkage for cohesive soil.	Per test	385.00
27-47	Shrinkage limit for cohesive soil.	Per test	385.00
27-48	Atterberg limit test	Per test	190.00
27-49	Liquid limit for cohesive soil.	Per test	190.00
27-50	Plastic limit for cohesive soil.	Per test	190.00

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SECTION-27

T&P RENTS / TEST FEES FOR ANALYSIS

Following rates are applicable only for Analysis B/R & E/M items of different section

Item	Description of works / Equipments rent / Engineering test charge	Unit	Rate in Taka
27-51	Unit weight of soil.	Per test	142.00
27-52	Void ratio	Per test	474.00
27-53	Natural moisture contents tests.	Per test	47.00
27-54	Organic matter contents.	Per test	771.00
27-55	Direct Shear test.	Per test	771.00
27-56	Consolidated drain test.	Per test	712.00
27-57	Triaxial shear test.	Per test	771.00
27-58	Un-Confined compression test for cohesive soil.	Per test	498.00
27-59	Standard proctor test.	Per test	996.00
27-60	Modified proctor test.	Per test	1067.00
27-60A	Integrity test done by EinC's Lab	Per test	1450.00
27-61	Transformer Oil test	Per sample	1850.00
27-62	Transformer fitness test 100 - 200 KVA, 3 Ph	Each	1000.00
27-63	Transformer fitness test 250 - 500 KVA, 3 Ph	Each	1200.00
27-64	Transformer / Switchgear fitness test over 500 KVA, 3Ph	Each	1500.00
27-65	Transformer fitness test 10 - 75 KVA, Single phase	Each	750.00

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SECTION-27

LIST OF T & P SHOWING RENTS / HIRE CHARGES IF ISSUED
DEPARTMENTALLY TO CONTRACTOR UNDER SCHEDULE "D" OF CONTRACT

Ser no	linking sch item	Description of T & P / Equipments	Unit	Rent for working hour		Rent for non-working hour
				with fuel and lubricants	without fuel and lubricants	
D-1	27-15	Mixer machine 0.15/0.20 cu.m capacity	Per hour	165.00	33.00	16.50
D-2	27-16	Mixer machine 0.20/0.30 cu.m capacity	Per hour	185.00	37.00	18.50
D-3	27-17	Road roller 4 ton capacity	Per hour	262.00	52.00	26.20
D-4	27-18	Road roller 6 ton capacity	Per hour	315.00	63.00	31.50
D-5	27-19	Road roller 8 ton capacity	Per hour	330.00	66.00	33.00
D-6	27-20	Road roller 10/12 ton capacity	Per hour	375.00	75.00	37.50
D-7	27-22	Drilling Rigs / Crane and other equipments	Per hour	1,650.00	330.00	165.00
D-8	27-23	Road boring equipments	Per hour	220.00	44.00	22.00
D-9	27-24	Welding generator	Per hour	110.00	22.00	11.00
D-10	27-25	Purging testing equipments	Per hour	110.00	22.00	11.00
D-11	27-38	Pumping set 1-2 Cusec capacity	Per day	750.00	130.00	75.00
D-12	27-40	Piling rig	Per hour	688.00	138.00	68.80
D-13	-	Generating set up to 20 KW AC / DC (Engine driven)	Per hour	88.00	18.00	8.80
D-14	-	Generating set up to 25 KW AC / DC (Engine driven)	Per hour	142.00	28.00	14.20
D-15	-	Pumping set any type capacity 9000 - 15000 litre per hour against working head up to 30 metre (Engine driven)	Per hour	75.50	15.00	7.50
D-16	-	Pumping set any type capacity 16000 - 20000 litre per hour against working head up to 30 metre (Engine driven)	Per hour	83.00	16.00	8.30
D-17	-	Pumping set any type capacity 16000 - 20000 litre per hour against working head over 30 metre (Engine driven)	Per hour	90.00	18.00	9.00
D-18	-	Vibrator Machine (Engine driven)	Per hour	10.00	2.00	1.00
D-19	27-37	Vibrator Machine (Electric)	Per hour	10.00	-	1.00

SECTION – 28
FURNITURE & STORES
SPECIFICATION

General

1. **Wood Works.**

a. **Quality of timber.**

(1) Timber is to be well seasoned, free from sap, dry roots, bores, cracks or loose knots. All noticeable knots are to be tested for looseness by means of striking them with a small hammer. On economical grounds, the following limits will be followed in accepting knots:

(a) Dead knots 12.5mm in diameter and under may be neglected provided they do not exceed two per 0.093sq.m of any of the surface and those upto 19 mm diameter provided they do not exceed one per 0.093sq.m

(b) Knots should not occur in clusters.

(2) Timber shall be straight in the grain, but for curved members the timber should be so selected that the grains conform to the shape of the member as far as possible.

(3) Moisture content of the timber should be 12% with tolerance of plus/minus 2%.

(4) Hard or soft wood will be used as specified on the drawing. Timber specified in the particular specification will supersede the one specified in the drawing.

b. **Classification of Timber.** The following are the classes of the common timber.

(1) Hard wood: Chittagong teak, Jessore teak, Chittagong Shilkorai and Shisham.

(2) Soft wood: Chamble, Tit Chamble, Garjon, Khathal, Gamar and Jarul.

- c. **Joints.** All joints are to fit fully and truly without wedging or fitting. Planks will be joined by secret screws as under:

(1) Drive number of screws into the edge of one plank with the heads to project a little above the surface. Holes are bored at a distance of about 6mm in front of their actual final position in the plank to be jointed to take the heads of the screws. Narrow channel of about 6mm in length is to be cut in the second plank just wide enough to take the smooth shanks of the screws. After gluing this, plank are so placed that the screw heads enter the holds in the other piece and are then driven on from the end until it assumes its correct position. The heads of the screws tend to work upwards as they cut channels for themselves and thus tighten the joints.

(2) All joints and grooves of panels will be glued with best glue. Application of dewless when specified is to be made from good quality bamboo. Screws used are to be of superior quality. Nails will not be used unless specified.

2. **Polishing/Painting/Finishing.**

- a. **Finish.** All wood works are to be well smoothed and finished with No. '0' sand paper. All sharp outer edges are to be very slightly rounded. After sand papering all wood works will be polished, varnished or painted as specified in the plank or in the particular specification.

b. **Polish.**

(1) Primary coat of mixture of plaster of paris, water and adjusting colour to match wood will be applied on hard wood and then sand papered to remove the materials not absorbed in the grains of wood.

(2) Primary coat of mixture of glue, water and burnt senna will be applied on soft wood and then sand papered to remove the excess materials.

(3) After preparation of the surface as stated above repeated application with molmol cloth and cotton of polish of composition as under will be made on the outside (visible) surface of the wood and finished of glossy surface. Sand papering will be done by sand papers No. '0' after 1st application to make the surface even. Polish can thinned with the addition of sprit as necessary for final coat:

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|----|----------------------|---|-------------|
| a. | Methylated sprit | - | 4.546 litre |
| | Shellac best quality | - | 0.454 kg |
| | Sindur | - | .06 kg |
| | Rumi Mustaqi | - | .06 kg |
| | Loban | - | .03 kg |
- c. **Varnishing.** After preparing the surface as explained above for polish two coats of good quality varnish will be applied.
- d. **Painting.**
- (1) One primary and two subsequent coats will be applied before priming coat is applied, wood is to be thoroughly cleaned, sand papered, smoothed and dusted.
- (2) Painting with proper paint brushes, which will carefully, be maintained throughout the work. It should be pliable and free from loose bristles when applied evenly over the surface.
- (3) The surface of the priming and under coat paint is to be rubbed down with sand paper No. '0' before the application of the next coat. Great care is to be taken with the final coat to ensure that no brush marks are visible on the completion.
3. **Glazing.** All glazing work is to be of sheet glass of not less than 0.454 kg per 0.093sq.m, free from spots, rubbles or other defects and if not otherwise specified will be fixed nailing wooden fillets to the frame on the inner side of the glass sheet.
4. **Cane Work.**
- a. Cane is to be of the best quality free from sap and discoloration and of uniform width (not less than 2.35 mm). The outside of the cane will be used only.
- b. Cane work will be done of double horizontal and verticals and single diagonals. All are to be inter woven, horizontal and verticals will be 12.5mm center to center. Holes will be bored in frame accordingly.
- c. Before caning all edges of seat frames etc. will be rounded and holes slightly countersunk to prevent under wear of the cane.
5. **Iron Work.**
- a. All sheets are to conform to BS and to be as per specification in the plans or in particular specifications.
- b. Bolts and nuts are to be of standard quality both as regards threads and sizes.

c. Rivets must fit fully and truly to the holes made for them. They must be tight and closely driven and all ragged edges removed after shaping coat iron to be uniform in thickness, clean, sound and free from air bubble or defects of any kind.

d. **Finish.** All rust to be removed and sharp edges to be filed/smoothed. Then to be dusted and painted as specified. Painting to be done as already specified. In tarring the tar to be heated to near boiling, paint, thinned by the addition of one part of kerosene oil four parts of tar by volume and applied while still hot. 0.91 kg of unslaked lime to be mixed with 4.546 liter of tar when nearing boiling point too prevent running off.

6. **Powder Coating (Painting) of CR Steel Furniture.**

a. **Standard of CR Steel Products.** CR steel products are the befitting the spirit of the age which are now using in the MES for manufacture & supply of certain steel furniture. CR (cold rolled pipe/Box type) produced with in a modern technology for which mother coils / sheets, that is nothing but the imported from abroad of different sizes and thickness.

b. **Procedure.** Procedure of powder coating (Painting) of CR steel furniture are given as under :-

(i) **Pre-Treatment.** All surfaces of CR steel furniture / products are to be cleaned to be removed rust, sharp edges to be smoothed and then to be dusted.

(ii) Oil grease to be removed from surfaces by using Gardo clean 619 Sulphuric Acid / applying kemlix 1m 202 (which is a chemical acid chemicals 3 in 1) or similar chemicals.

(iii) All surfaces to be washed with clean water.

(iv) Then, all surfaces to be Zinc phosphating (a chemical solvent) and to be dried at best by Air.

c. **Powder Spray.**

(i) All surfaces to be spray powder coated with best quality powder (Berger / powder from abroad).

(ii) Spray powder to be produced with a spray gun or pistol compressed by air on the surface.

d. **Heat applications.**

(i) All products / surfaces to be produced in a heat chamber applying consecutively up to 200^oc plus if necessary for 15-20 minutes.

(ii) Then all products to be cool separately as an individual item.

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SECTION-28

FURNITURE RATES

Schedule Item no	Description	Rate in Taka			
		Ctg. Teak	Shisham	Ctg. Shilkorai	Jessore Teak
	Each				
28-001	M & S "Almirah wardrobe (single)" Plan No. (F-1/92) / (FQ-70/68)	9,294.00	5,724.00	5,724.00	8,289.00
28-002	M & S "Almirah Glazed shutter for crockery and linen" Plan No. (F-2/92) / (F-116/56)	13,421.00	8,911.00	8,911.00	12,151.00
28-003	M & S "Almirah Library" Plan No. (F-3/92) / (FQ-11-62)	16,104.00	10,578.00	10,561.00	14,543.00
28-004	M & S "Almirah large with shelves" Plan No. (F-4/92) / (F-21/51)	38,988.00	22,761.00	22,761.00	34,417.00
28-005	M & S "Almirah Medium W/shelves" Plan No. (F-5/92) / (F-115/51)	22,324.00	13,175.00	13,175.00	19,747.00
28-006	M & S "Almirah Food" Plan No. (F-6/92)/(F-116/51)	18,991.00	11,286.00	11,286.00	16,820.00
28-007	M & S "Almirah wardrobe. 1/2hx1/2sh for officer" Plan No. (F-7/92)/(FQ-49/68)	31,990.00	22,235.00	22,235.00	29,242.00
28-008	M & S "Almirah Mess Utensils" Plan No. (F-8/92)/(F-25/25)	29,927.00	16,209.00	16,209.00	26,063.00
28-009	M & S "Almirah Wardrobe Hanging" Plan No. (F-9/92)/(F-110/50)	29,107.00	18,865.00	18,865.00	26,222.00
28-010	M & S "Box ice" Plan No. (F-10/92)/(F-24/25)	42,977.00	28,695.00	28,695.00	38,954.00
28-011	M & S "Book shelf open large" Plan No. (F-11/92)/(F-13/25)	17,236.00	12,538.00	12,538.00	15,913.00
28-012	M & S "Box soiled Linen" Plan No. (F-12/92)/(FQ-68/68)	4,666.00	2,855.00	2,855.00	4,156.00
28-013	M & S "Box Tally Cards" Plan No. (F-13/92)/(F-101/29)	-	2,590.00	2,590.00	-
28-014	M & S "Bed wooden double with frame MN set of 8" Plan No. (F-14/92) / (F-17/80)	17,273.00	13,087.00	13,087.00	16,094.00

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FURNITURE RATES

Schedule Item no	Description	Rate in Taka			
		Ctg. Teak	Shisham	Ctg. Shilkorai	Jessore Teak
	Each				
28-015	M & S "Bed wooden single with frame MN set of 8." Plan No. (F-15/92)/(F-16/80)	11,906.00	9,343.00	9,343.00	11,184.00
28-016	M & S "Bed wooden Newar with frame MN set of 8." Plan No. (F-16/92)/(AF-1/74)	12,810.00	8,445.00	8,445.00	11,580.00
28-017	M & S "Bed Newar" Plan No. (F-17/92)/(FQ-50/68)	24,681.00	13,312.00	13,312.00	21,479.00
28-018	M & S "Book case library pattern " Plan No. (F-18/92)/(F-8/25)	67,037.00	33,869.00	33,869.00	57,694.00
28-019	M & S "Book shelf with G/S door " Plan No. (F-19/92)/(FQ-72/68)(M)	7,684.00	5,523.00	5,523.00	7,075.00
28-020	M & S "Book case G/S door " Plan No. (F-20/92)/(FQ-36/64)	12,859.00	8,075.00	8,075.00	11,511.00
28-021	M & S "Book Shelf small with glazed single door " Plan No. (F-21/92)/(F-122/56)	21,016.00	11,619.00	11,619.00	18,369.00
28-022	M & S "Black Board & Easel " Plan No. (F-22/92)/(FQ-73/68)	5,817.00	4,348.00	4,348.00	5,403.00
28-023	M & S "Board notice " Plan No. (F-23/92)/(AF-5/74M)	4,801.00	2,777.00	2,777.00	4,231.00
28-024	M & S "Bench workshop" Type 'A' Plan No. (F-24/92)/(FQ-18/63)	-	19,288.00	19,288.00	-
28-025	M & S "Bench workshop" Type 'B' Plan No. (F-25/92)/(FQ-19/63)	-	28,778.00	28,778.00	-
28-026	M & S "Bench workshop" Type 'C' Plan No. (F-26/92)/(FQ-20/63)	-	39,733.00	39,733.00	-
28-027	M & S "Chair Universal" Plan No. (F-27/92)/(FQ-54/68)(M)	-	2,449.00	2,449.00	-
28-028	M & S "Chair dining offrs w/o Arms." Plan No. (F-28/92)/(FQ-55/68)(M)	3,220.00	2,024.00	2,024.00	2,883.00

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FURNITURE RATES

Schedule Item no	Description	Rate in Taka			
		Ctg. Teak	Shisham	Ctg. Shilkorai	Jessore Teak
	Each				
28-029	M & S "Chair Barrack." Plan No. (F-29/92)/(F-26/25)	-	1,958.00	1,958.00	-
28-030	M & S "Chair officer w/ Arms." Plan No. (F-30/92)/ (F-10/80)	4,855.00	2,612.00	2,612.00	4,308.00
28-031	M & S "Chair Cushioned w/ Arms." Plan No. (F-31/92)/(AF-6/74)	4,119.00	2,658.00	2,658.00	3,708.00
28-032	M & S "Chair School" Plan No. (F-32/92)/(F-20/33)	-	1,906.00	1,906.00	2,827.00
28-033	M & S "Couch foam cushioned" Plan No. (F-33/92)/(FQ-57/68)	14,128.00	9,973.00	10,694.00	13,161.00
28-034	M & S "Chair Easy" Plan No. (F-34/92)/(FQ-52/68)(M)	5,114.00	2,953.00	2,953.00	4,505.00
28-035	M & S "Chair Cane bottom W/Arms" Plan No. (F-35/92)/(F-30/49)	3,696.00	2,192.00	2,192.00	3,272.00
28-036	M & S "Chair with Arms (offrs) " Plan No. (F-36/92)/(FQ-53/68)(M)	3,787.00	2,284.00	2,284.00	3,363.00
28-037	M & S "Chair foam cushioned " Plan No. (F-37/ 92)/(FQ-56/68)	9,246.00	7,366.00	7,366.00	8,716.00
28-038	M & S "Chest of drawers with Mirror " Plan No. (F-38/92)/(FQ-69/68)	11,224.00	8,491.00	8,491.00	10,454.00
28-039	M & S "Cup board Barrack " Plan No. (F-39/92)/(FQ-10/62)	-	6,195.00	6,195.00	-
28-040	M & S "Commode wooden " Plan No. (F-40/92) / (FQ-7/62)	4,268.00	2,577.00	2,577.00	3,792.00
28-041	M & S "Desk School " Plan No. (F-41/92)/(F-20/33)	5,387.00	3,397.00	3,397.00	4,826.00
28-042	M & S "Desk writing officer "Plan No.(F-42/92)/(F-12/80)	12,748.00	9,588.00	9,588.00	11,858.00

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FURNITURE RATES

Schedule Item no	Description	Rate in Taka			
		Ctg. Teak	Shisham	Ctg. Shilkorai	Jessore Teak
	Each				
28-043	M & S "Desk Instructor " Plan No. (F-43/92)/(FQ-14/62)	12,600.00	7,287.00	7,287.00	11,104.00
28-044	M & S "Dresser with shelves " Plan No. (F-44/92) /(HF/232/25)	53,539.00	28,169.00	28,169.00	46,393.00
28-045	M & S "Form w/o back" Plan No. (F-45/92)/(F-4/80)	-	4,196.00	4,196.00	-
28-046	M & S "Form w/o back" Plan No. (F-46/92)/(FQ-58/68)	-	3,316.00	3,316.00	4,899.00
28-047	M & S "Form w/o back" Plan No. (F-47/92)/(FQ-4/62)	-	3,096.00	3,096.00	-
28-048	M & S "Foot Board" Plan No. (F-48/92)/(F-32/49)	-	1,053.00	1,053.00	-
28-049	M & S "Hot Case Large " Plan No. (F-49/92)/(F- 44/25)	25,676.00	15,853.00	15,853.00	22,909.00
28-050	M & S "Hot case Small " Plan No. (F-50/92) / (F-44/25)	22,769.00	15,252.00	15,252.00	20,651.00
28-051	M & S "Ladder step (3.66 Mtr) Plan No. (F-51/92)/(F-27/37)	-	7,041.00	7,041.00	-
28-052	M & S "Cot semi double " Plan No. (F-52/92)	14,469.00	10,771.00	10,771.00	13,428.00
28-053	M & S "Peg set of 3 " Plan No. (F-53/92)/(F-111/56)	611.00	483.00	483.00	575.00
28-054	M & S "Peg set of 6 " Plan No. (F-54/92)/(F-111/56)	1,085.00	803.00	803.00	1,006.00
28-055	M & S "Peg set with Mirror " Plan No. (F-55/92)/(F-14/80)	2,005.00	1,697.00	1,697.00	1,858.00
28-056	M & S "Peg Table" Plan No. (F-56/92)/(FQ-62/68)	1,376.00	906.00	906.00	1,244.00
28-057	M & S "Rack side (office)" Plan No. (F-57/92)/(FQ-25/ 64)	8,715.00	5,119.00	5,119.00	7,702.00

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FURNITURE RATES

Schedule Item no	Description	Rate in Taka			
		Ctg. Teak	Shisham	Ctg. Shilkorai	Jessore Teak
	Each				
28-058	M & S "Rack Towel" Plan No. (F-58/92) / (F-52/60)	3,801.00	2,230.00	2,230.00	3,359.00
28-059	M & S "Rack pegion hole" Plan No. (F-59/92)/(F-41/28)	44,241.00	23,057.00	23,057.00	38,274.00
28-060	M & S "Rack Map" Plan No. (F-60/92)/(F-36/27)	7,272.00	4,700.00	4,700.00	6,547.00
28-061	M & S "Safe meat & Milk" Plan No. (F-61/92)/(AF-4/74)	-	9,195.00	9,195.00	-
28-062	M & S "Side Board" Plan No. (F-62/92)/(FQ-62/68)	1,881.00	1,412.00	1,412.00	1,804.00
28-063	M & S "Side Board" Plan No. (F-63/92)/(FQ-59/68(M))	23,592.00	13,598.00	13,598.00	20,777.00
28-064	Sofa (Foam cushioned) set, (consist of one couch-3 seater, two chair, two side table & one centre table" Plan No. (F-64/92) (F-20/80)	40,215.00	29,068.00	29,068.00	37,075.00
28-064 (a)	M & S " Chair Sofa (Foam cushioned) " Plan No. (F-64/92) / (F-20/80).	7,309.00	5,429.00	5,429.00	6,779.00
28-064 (b)	M & S " 1x couch sofa 3 seater(Foam cushioned)" Plan No. (F-64/92) / (F-20/80)	15,752.00	12,105.00	12,105.00	14,725.00
28-064 (c)	M & S "Side table" Plan No. (F-64/92) / (F-20/80)	2,351.00	1,506.00	1,506.00	2,113.00
28-064 (d)	M & S "1x Table Centre" Plan No. (F-64/92) / (F-20/80)	5,143.00	3,093.00	3,093.00	4,566.00
28-065	M & S "Stool 1'-6" high " Plan No. (F-65/92) / (FQ-23/63)	-	1,493.00	1,490.00	-
28-066	M & S "Stool Typist" Plan No. (F-66/92) / (F-104/40) (M)	2,449.00	1,586.00	1,586.00	2,206.00

RESTRICTED

SECTION-28

FURNITURE RATES

Schedule Item no	Description	Rate in Taka			
		Ctg. Teak	Shisham	Ctg. Shilkorai	Jessore Teak
	Each				
28-067	M & S "Couch upholstered" Plan No. (F-67/92)/(F-90/56)	22,232.00	17,448.00	17,448.00	20,885.00
28-068	M & S "Chair upholstered" Plan No. (F-68/92)/(F-108/56)	11,749.00	9,528.00	9,528.00	11,123.00
28-069	M & S "Stool 2'-0" high" Plan No. (F-69/92)/(F-2/25)	2,453.00	1,607.00	1,607.00	2,215.00
28-070	M & S "Stand Hall" Plan No. (F-70/92)/(F-77/25)	10,255.00	5,984.00	5,984.00	10,255.00
28-071	M & S "Table Offrs (Medium)" Plan No. (F-71/ 92) / (FQ- 66/68)	10,465.00	8,073.00	8,073.00	9,791.00
28-072	M & S "Table Bed side Officer" Plan No. (F-72/92)/ (FQ-51/68)(M)	4,143.00	2,734.00	2,734.00	3,746.00
28-073	M & S "Table Pedestal writing " Plan No. (F-73/92) / (F-12/56)	14,651.00	9,483.00	9,483.00	13,195.00
28-074	M & S "Table Pedestal writing " Plan No. (F-74/92)/ (FQ- 6/62)(M)	14,167.00	9,913.00	9,913.00	12,969.00
28-075	M & S "Table Writing small " Plan No. (F-75/92)/(F-67/ 25)	7,856.00	5,439.00	5,439.00	7,175.00
28-076	M & S "Table Writing officer small " Plan No. (F- 76/92)/(FQ-71/68)	7,920.00	5,511.00	5,511.00	7,242.00
28-077	M & S "Table Clerical " Plan No. (F-77/92)/(FQ-65/68)(M)	-	5,437.00	5,437.00	-
28-078	M & S "Table Typist " Plan No. (F-78/92)/(FQ-104/40) (M)	-	4,059.00	3,621.00	-
28-079	M & S "Table Draftsman " Plan No. (F-79/92)/(F-65/28)	55,994.00	29,685.00	29,685.00	48,583.00
28-080	M & S "Table Centre " Plan No. (F-80/92)/(FQ-61/68)(M)	4,838.00	2,788.00	2,788.00	4,260.00
28-081	M & S "Table Bed side " Plan No. (F-81/92)/(F-66/56)	4,485.00	2,700.00	2,700.00	3,983.00

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SECTION-28

FURNITURE RATES

Schedule Item no	Description	Rate in Taka			
		Ctg. Teak	Shisham	Ctg. Shilkorai	Jessore Teak
	Each				
28-082	M & S "Table 6'-0"x3'-6"Plan No. (F-82/92)/(F-37/25)	20,007.00	10,611.00	10,611.00	17,360.00
28-083	M & S "Table dining "Plan No. (F-83/92)/(F-99/56)	25,583.00	13,795.00	13,795.00	22,262.00
28-084	M & S "Table dining JCO's /OR's "Plan No. (F-84/92)/ FQ -63/68)(M)	6,309.00	4,429.00	4,429.00	4,952.00
28-085	M & S "Table (5'-0"x2'-10") "Plan No. (F-85/92)/(F1/56)	13,491.00	7,478.00	7,478.00	11,797.00
28-086	M & S "Table dressing Ladies W/M & Stool "Plan No. (F-86/92)/(FQ-67/68)	11,410.00	7,370.00	7,370.00	10,272.00
28-087	M & S "Table dressing Ladies W/M & Stool "Plan No. (F-87/92)/(FQ-23/80)	9,200.00	6,809.00	6,809.00	8,527.00
28-088	M & S Table dressing W/Mirror 'A' Plan No. (F-88/92)/(FQ-33/64)	9,680.00	5,554.00	5,554.00	8,429.00
28-089	M & S "Table 3'x3' " Plan No. (F-89/92)/(AF-3/74)(M)	7,258.00	4,157.00	4,157.00	6,385.00
28-090	M & S "Table Tea low round " Plan No. (F-90/92)/(F-106/99)	3,201.00	2,073.00	2,073.00	2,883.00
28-091	M & S "Table Card " Plan No. (F-91/92)/(F-79/24)	7,026.00	4,113.00	4,113.00	6,205.00
28-092	M & S "Table Dining Officer " Plan No. (F-92/92)/ (FQ-64/68)(M)	10,531.00	7,618.00	7,618.00	9,710.00
28-093	M & S "Table Cook house large " Plan No. (F-93/92)/ (F-3/39)	-	5,388.00	5,388.00	-
28-094	M & S "Table Cook house small " Plan No. (F-94/92)/ (F-3/39)	-	3,971.00	3,971.00	-
28-095	M & S "Teapoy " Plan No. (F-95/92)/ (FQ-60/68)	3,270.00	2,109.00	2,109.00	2,943.00
28-096	M & S "Table hall " Plan No. (F-96/92)/ (AF-86/24)	7,183.00	4,271.00	4,271.00	6,363.00
28-097	M & S "Trestle store room " (Wooden) Plan No. (F-97/92)/ (F-9/62)	-	7,788.00	7,788.00	-

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SECTION-28
FURNITURE RATES

Schedule Item no	Description	Rate in Taka			
		Ctg. Teak	Shisham	Ctg. Shilkorai	Jessore Teak
Each					
28-098	M & S "Almirah Map" Plan No. (F-98/92)/ (F-22/26)	44,781.00	24,451.00	24,451.00	39,054.00
28-099	M & S "Wall Board 2400x 1200mm (8'x4)" Plan No. (F-99/92)/ (F-13/80)	6,927.00	4,535.00	4,535.00	6,253.00
28-100	M&S "Wall Board 1200x 1200mm " Plan No. (F-100/92)/ (F-13/80)	3,044.00	2,249.00	2,249.00	2,820.00
Rate in Tk					
28-101	M&S "Almirah Steel large with shelves" Plan No. (F-101/92)/ (F-9/80)	-	9,863.00	-	-
28-102	M&S "Almirah Steel with shelves (Medium)" Plan No. (F-102/92)/ (F-6/80)	-	8,800.00	-	-
28-103	M & S "Almirah wardrobe Steel ½h x ½sh" Plan No. (F-103/92)/ (F-15/80)	-	12,140.00	-	-
28-104	M & S "Chowki sleeping single" Plan No. (F-104/92) / (F-1/80)(R)	-	6,924.00	-	with poles MN set
28-105	M & S "Charpoy I/P 38 mm (1.5") dia " Plan No. (F-105/92) / (F-27/83)	-	7,703.00	-	with poles MN set
28-106	M & S "Charpoy I/P double Decker with , newar & MNS of 4 " Plan No. (F-106/92) / (F-1/90)	-	18,625.00	-	-
28-107	M & S "Double Tier steel kit locker . ½h x ½sh" Plan No. (F-107/92)/ (F-3/80)	-	9,120.00	-	-
28-108	M & S "Receptacle large" Plan No. (F-108/92)/ (F-47/35)	-	3,030.00	-	-
28-109	M & S "Receptacle small" Plan No. (F-109/92)/ (F-47/35)	-	1,789.00	-	-
28-110	M & S "Mattress coir single (2.133 mx1.066mx.101m)" Plan No. (F-110/92)	-	2,599.00	-	-
28-111	M & S "Mattress coir double (2.133 mx1.52mx.101m)" Plan No. (F-111/92)	-	3,325.00	-	-
28-112	File Cabinet steel (F-1/2002)	-	9,573.00	-	-

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SECTION-28

FURNITURE RATES

Schedule Item no	Description	Rate in Taka			
		Ctg. Teak	Shisham	Ctg. Shilkorai	Jessore Teak
	Each				
28-113	Rack steel with Wooden Shelves (Shisham) (F-2/2002)	-	16,005.00	-	-
28-114	Rack steel with Wooden Shelves (Silkorai-Ctg.) (F-2/2002)	-	-	15,961.00	-
28-115	Rack Wooden three Shelves (Shisham) 2400mm x 500mm x 1500 mm (F-3/2002)	-	21,324.00	-	-
28-116	Rack Wooden three Shelves (Shilkorai-ctg.) 2400mm x 500mm x 1500 mm (F-3/2002)	-	-	21,324.00	-
28-117	Rack Wooden three Shelves (Shisham) 2400mm x 600mm x 1800 mm (F-4/2002)	-	25,351.00	-	-
28-118	Rack Wooden three Shelves (Shilkorai-ctg.) 2400mm x 600mm x 1800 mm (F-4/2002)	-	-	25,341.00	-
28-119	Rack Rifle (Shisham) 2100mm x 400mm (F-5/2002)	-	12,590.00	-	-
28-120	Rack Rifle (Shilkorai-ctg.) 2100mm x 400mm (F-5/2002)	-	-	12,590.00	-
28-121	Rack Rifle (Shisham) 2100mm x 700mm (F-6/2002)	-	18,549.00	-	-
28-122	Rack Rifle (Shilkorai - ctg.) 2100mm x 700mm (F-6/2002)	-	-	18,541.00	-
28-123	Stand Hall Plan No- B-01/99	13,970.00	-	-	12,647.00
28-124	Chair Sofa single seater Plan No-B-02/99	16,820.00	-	-	15,352.00
28-125	Chair Sofa Two seater Plan No-B-03/99	23,391.00	-	-	21,418.00
28-126	Chair Sofa Three seater Plan No-B-04/99	29,875.00	-	-	27,348.00
28-127	Table Center Plan No- B-05/99	6,467.00	-	-	5,889.00
28-128	Table Side Plan No- B-06/99	3,782.00	-	-	3,493.00

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SECTION-28

FURNITURE RATES

Schedule Item no	Description	Rate in Taka			
		Ctg. Teak	Shisham	Ctg. Shilkorai	Jessore Teak
	Each				
28-129	Table Corner Plan No- B-07/99	11,579.00	-	-	10,569.00
28-130	Book Shelf Large GSD Plan No- B-08/99	55,554.00	-	-	49,972.00
28-131	Chair Dining Plan No- B-09/99	6,724.00	-	-	6,363.00
28-132	Table Dining Plan No- B-10/99	19,640.00	-	-	17,884.00
28-133	Dinner Wagon Plan No- B-11/99	55,490.00	-	-	49,715.00
28-134	Serving Trolley Plan No- B-12/99	11,195.00	-	-	10,160.00
28-135	Box Type Bed Double Plan No- B-13/99	66,090.00	-	-	60,988.00
28-136	Box Type Bed Semi Double Plan No- B-14/99	53,662.00	-	-	49,860.00
28-137	Chair Officers with arms Plan No- B-15/99	8,615.00	-	-	8,206.00
28-138	Table Writing Plan No- B-16/99	16,895.00	-	-	15,380.00
28-139	Table For TV Plan No- B-17/99	14,447.00	-	-	13,148.00
28-140	Table Telephone Plan No- B-18/99	7,818.00	-	-	7,144.00
28-141	Peg Set of Three Plan No- B-19/99	1,760.00	-	-	1,639.00
28-142	Table Dressing W/Stool Plan No- BCDE-20/99	20,562.00	-	-	19,022.00
28-143	Chest of Drawer Cum Wardrobe Plan No- BCDE-21/99	28,783.00	-	-	26,184.00
28-144	Chair Easy Plan No- BCDE-22/99	7,056.00	-	-	6,430.00
28-145	Rack Towel Plan No- BCDE-23/99	8,334.00	-	-	7,324.00

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SECTION-28

FURNITURE RATES

Schedule Item no	Description	Rate in Taka			
		Ctg. Teak	Shisham	Ctg. Shilkorai	Jessore Teak
	Each				
28-146	Box Soiled Linen Plan No- BCDE-24/99	7,598.00	-	-	6,876.00
28-147	Rack Boot Plan No- BCDE-25/99	10,399.00	-	-	9,389.00
28-148	Poles M N set of 4	-	326.00	-	See Analysis item 28-105
28-149	Stand hall Plan No- C-27/99	8,886.00	-	-	8,236.00
28-150	Almirah Steel Plan No- C-28/99 (See Sl. No. 103)	-	-	-	-
28-151	Almirah Food Plan No- C-29/99	18,732.00	-	-	17,096.00
28-152	Side Board Plan No- CD-30/99	23,209.00	-	-	21,524.00
28-153	Tea poy Plan No- CD-31/99	4,380.00	-	-	3,923.00
28-154	Chair Sofa Three Seater Plan No- CDE-32/99	30,150.00	-	-	28,201.00
28-155	Chair Dining Plan No- CDE-33/99	4,766.00	-	-	4,285.00
28-156	Table Dining Plan No- CDE-34/99	14,854.00	-	-	13,675.00
28-157	Chair Universal Plan No- CDE-35/99	5,057.00	-	-	4,504.00
28-158	Bed Wooden Double Plan No- CDE-36/99	34,442.00	-	-	31,218.00
28-159	Bed Wooden Single Plan No- CDE-37/99	24,136.00	-	-	21,802.00
28-160	Table Bed Side Officer Plan No- CDE-38/99	5,069.00	-	-	4,636.00
28-161	Chair Sofa Single Seater Plan No- CDES-39/99	13,695.00	-	-	12,636.00
28-162	Table Centre Plan No- CDES-40/99	6,343.00	-	-	5,790.00

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SECTION-28

FURNITURE RATES

Schedule Item no	Description	Rate in Taka			
		Ctg. Teak	Shisham	Ctg. Shilkorai	Jessore Teak
	Each				
28-163	Table Side Plan No- CDES-41/99	3,229.00	-	-	2,940.00
28-164	Book Shelf GSD Plan No- CDES-42/99	23,109.00	-	-	21,232.00
28-165	Chair Officer W/Arms Plan No- CDES-43/99	5,917.00	-	-	5,268.00
28-166	Table Writing Plan No- CDES-44/99	12,766.00	-	-	11,467.00
28-167	Peg Set of Three Plan No- CDES-45/99	995.00	-	-	923.00

OTOBI / NAVANA / PARTEX / SIMILAR IN KIND

Schedule Item no	Description of item	Unit	Rate in Tk	Remarks
28-168	M & S Bed steel single (CR pipe) with poles MN set of 4 plan No F-104/92 (M) Supersedes plan No. 104/92	Each	9,774.00	
28-169	M & S Charpoy CR (Cold Rolled) Pipe single with Jute Newar & Poles MN set of 4 plan No F-105/92(M) (Supersedes plan No. 105/92)	Each	5,702.00	
28-170	M & S Chair Sofa single seater plan No. B-02/99 (M) (Supersedes plan No. B-02/99)	Each	15,920.00	
28-171	M & S Chair Sofa two seater plan No. B-03/99 (M) (Supersedes plan No. B-03/99)	Each	26,266.00	
28-172	M & S Chair Sofa three seater plan No. B-04/99 (M) (Supersedes plan No. B-04/99)	Each	34,955.00	
28-173	M & S Table corner plan No. B-07/99 (M) (Supersedes plan No. B-07/99)	Each	5,150.00	

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OTOBI / NAVANA / PARTEX / SIMILAR IN KIND

Schedule Item no	Description of item	Unit	Rate in Tk	Remarks
28-174	Manufacture of supply of Book Shelf large (2 Part), plan No. B-08/99 (M) (Supersedes plan No. B-08/99)	Each	17,435.00	
28-175	Manufacture & supply of Chair Dining plan No. B-09/99 (M) (Supersedes plan No. B-09/99)	Each	10,184.00	
28-176	M & S Table Dining plan NO. B-10/99 (M) (Supersedes plan No. B-10/99)	Each	18,786.00	
28-177	M & S Dinner Wagon plan No. CD--11/99 (M) (Supersedes plan No. B-11/99)	Each	24,284.00	
28-178	M & S Serving Trolley plan No. B-12/99 (M) (Supersedes plan No. B-12/99)	Each	7,579.00	
28-179	M & S Box type Bed Double with Spring Mattress, plan No. BC-13/99 (M) (Supersedes plan No. 13/99)	Each	37,974.00	
28-180	M & S Box type Bed semi Double with Spring Mattress, plan No. BC-14/99 (M) (Supersedes plan No. 14/99)	Each	35,117.00	
28-181	M & S Chair offrs with Arms plan No. B-15/99 (M) (Supersedes plan No. B-15/99)	Each	6,728.00	
28-182	M & S Table writing, plan No. B-16/99 (M-1) (Supersedes plan No. B-16/99 (M))	Each	9,348.00	

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OTOBI / NAVANA / PARTEX / SIMILAR IN KIND

Schedule Item no	Description of item	Unit	Rate in Tk	Remarks
28-183	M & S Table for TV plan No. B-17/99 (M) (Supersedes plan No. B-17/99)	Each	5,199.00	
28-184	M & S Table Telephone with stool plan No. B-18/99 (M) (Supersedes plan No. B-18/99)	Each	7,077.00	
28-185	M & S Table Dressing with mirror plan No. BCDE-20/99 (M) (Supersedes plan No. BCDE-20/99)	Each	8,054.00	
28-186	M & S Stool for Table dressing plan No. BCDE-20/99 (M)a (Supersedes plan No. BCDE-20/99)	Each	5,683.00	
28-187	M & S Chest of drawer cum wardrobe plan No. BCDE-21/99 (M) (Supersedes plan No. BCDE-21/99)	Each	16,407.00	
28-188	M & S Chair Easy with Foam Cushion (Fabric cover) plan No. B-22/99 (M) (Supersedes plan No. B-22/99)	Each	8,946.00	
28-189	M & S Chair Sofa Three seater plan No. CDE-32/99 (M) (Supersedes plan No. CDE-32/99)	Each	26,976.00	
28-190	M & S Chair Dining plan No. CDE-33/00 (M) (Supersedes plan No. CDE-33/99)	Each	11,007.00	
28-191	M & S Table Dining plan No. CDE-34/99 (M) (Supersedes plan No. CDE-34/99)	Each	15,854.00	

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OTOBI / NAVANA / PARTEX / SIMILAR IN KIND

Schedule Item no	Description of item	Unit	Rate in Tk	Remarks
28-192	M & S Box type Bed Double with Foam Mattress plan No. DE-36/99 (M) (Supersedes plan No. CDE-36/99)	Each	23,207.00	
28-193	M & S Bed Single W/out Mattress plan No. CDES-37/99 (M) (Supersedes plan No. CDES-37/99)	Each	9,420.00	
28-194	M & S Chair Sofa single seater plan No. CDES-39/99 (M) (Supersedes plan No. CDES-39/99)	Each	11,536.00	
28-195	M & S Book Shelf small plan No. CDES-42/99 (M) (Supersedes plan No. CDES-42/99)	Each	8,829.00	
28-196	M & S Chair Offrs with Arms plan No. CDES-43/99 (M) (Supersedes plan No. CDES-43/99)	Each	5,613.00	
28-197	M & S Table writing, plan No. CDES-44/99 (M) (Supersedes plan No. CDES-44/99)	Each	7,983.00	
28-198	M & S Bed steel Double (CR pipe) with poles MN set of 4 plan No. F-1/2004	Each	12,887.00	
28-199	M & S Chair Plastic W/out Arms, plan No. F-2/2004 (Supersedes plan No. F-45/92, F46/92 & F-47/92)	Each	640.00	
28-200	M & S Chair Easy with Foam Cushion (Rexin cover) plan No. CDE-03/2004	Each	5,899.00	
28-201	M & S Table Bed Side Officer Plan No. CDES-38/99 (M) (Supersedes plan No. CDE-38/99)	Each	3,424.00	

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OTOBI / NAVANA / PARTEX / SIMILAR IN KIND

Schedule Item no	Description of item	Unit	Rate in Tk	Remarks
28-202	M & S Rack, Boot, Plan No. BCDE-25/99 (M) (Supersedes BCDE-25/99)	Each	5,084.00	
28-203	M & S Table Writing, Plan No. B-16/99 (M) (Supersedes plan No. B-16/99)	Each	9,464.00	
28-204	M & S Table Side, Plan No. B-06/99 (M) (Supersedes pna No. B-06/99)	Each	2,077.00	
28-205	M & S Table Centre, Plan No. B-05/99 (M) (Supersedes plan No. B-05/99)	Each	3,201.00	
28-206	M & S Stand Hall, Plan No. BC-01/99 (M) (Supersedes plan No. B-01/99)	Each	7,491.00	
28-207	M & S Receptacle small (Plastic) Plan No. F-109/92 (M) (Supersedes plan No. F-109/92 (F-47/35)	Each	647.00	
28-208	M & S Receptacle large (Plastic) Plan No. F-108/92 (M) (Supersedes plan No. F-108/92 (F-47/35)	Each	970.00	
28-209	M & S Chair Easy (Plastic) Plan No. F-34/92 (M) (Supersedes plan No. F-34/92) FQ-52/68 (M)	Each	1,099.00	
28-210	M & S Chair Computer, Plan No. BCDE-05/2004	Each	4,527.00	
28-211	M & S Table Writing with shelves, Plan No. BCDE-06/2004.	Each	5,692.00	
28-212	M & S Table Computer, Plan No. BCDE-04/2004.	Each	5,653.00	

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OTOBI / NAVANA / PARTEX / SIMILAR IN KIND

Schedule Item no	Description of item	Unit	Rate in Tk	Remarks
28-213	M & S curtain for door / window for B type Quarter .	Per Part / Each	1,042.00	
28-214	M & S curtain for door / window for offrs mess	Per Part / Each	1,204.00	
28-215	Each Almirah clothing linen plan No. 1/2005		38,400.00	
28-216	Box letter plan No. 2/2005		2,160.00	
28-217	Book shelf display (with all) plan No. 03/2005		14,460.00	
28-218	Bed examination Plan No. 04/2005		11,088.00	
28-219	Chair easy Plan No. 05/2005		3,600.00	
28-220	Chair dining Plan No. 06/2005		4,200.00	
28-221	Chair wheel Plan No. 07/2005		6,300.00	
28-222	Chair auditorium Plan No. 08/2005		4,860.00	
28-223	Chair reading for student officer Plan No. 09/2005		4,020.00	
28-224	Chair Technical Plan No. 10/2005		7,236.00	
28-225	Chair Conference with arms Plan No. 11/2005		5,400.00	
28-226	Chair revolving with arms Plan No. 12/2005		8,244.00	
28-227	Chair counter Plan No. 13/2005		8,400.00	
28-228	Chair fibre glass Plan No. 14/2005		4,872.00	
28-229	Chair fabric with arms Plan No. 15/2005		6,480.00	

RESTRICTED

SECTION-28

OTOBI / NAVANA / PARTEX / SIMILAR IN KIND

Schedule Item no	Description of item	Unit	Rate in Tk	Remarks
28-230	Chair visitors Plan No. 16/2005		7,200.00	
28-231	Chair reading / syndicate with arms Plan No. 17/2005		4,788.00	
28-232	Chair cabinet catalogue Plan No. 18/2005		12,600.00	
28-233	Chair dais Plan No. 19/2005		13,195.20	
28-234	Chair foot step Plan No. 20/2005		4,404.00	
28-235	Chair foot trolley Plan No. 21/2005		3,960.00	
28-236	Honour board Plan No. 22/2005		3,156.00	
28-237	Key board Plan No. 23/2005		2,442.00	
28-238	Rack library Plan No. 24/2005		8,160.00	
28-239	Rack magazine Plan No. 25/2005		15,679.20	
28-240	Rostrum Plan No. 26/2005		9,552.00	
28-241	Stool for laboratory Plan No. 27/2005		4,560.00	
28-242	Stool for technician Plan No. 28/2005		3,000.00	
	Per Set			
28-243	Sofa set for VIP Plan No. 29/2005		100,800.00	
	Each			
28-244	Table conference Plan No. 30/2005		99,120.00	
28-245	Table bed side cup board Plan No. 31/2005		3,960.00	
28-246	Table counter Plan No. 32/2005		34,560.00	
28-247	Table technician Plan No. 33/2005		11,940.00	

RESTRICTED

SECTION-28

OTOBI / NAVANA / PARTEX / SIMILAR IN KIND

Schedule Item no	Description of item	Unit	Rate in Tk	Remarks
28-248	Table full secretariat with side rack glass top Plan No. 34/2005		39,600.00	
28-249	Table secretariat with side rack Plan No. 35/2005		26,400.00	
28-250	Table for D.S Plan No. 36/2005		5,880.00	
28-251	Table magazine Plan No. 37/2005		9,600.00	
28-252	Table laboratory Plan No. 38/2005		12,960.00	
28-253	Table for flower base Plan No. 39/2005		1,200.00	
28-254	Table dispensary Plan No. 40/2005		10,020.00	
28-255	Table demonstrator Plan No. 41/2005		24,300.00	
26-256	Table laboratory with rack Plan No. 42/2005		10,200.00	
28-257	Table executive with attached side table Plan No. 43/2005		21,600.00	
28-258	Table reading Plan No. 44/2005		7,200.00	
28-259	Table visitor Plan No. 45/2005		9,600.00	
28-260	Table syndicate Plan No. 46/2005		7,200.00	
28-261	Table computer Plan No. 47/2005		6,900.00	

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SECTION-29

RATES OF MATERIALS (with carrying) for basis and consideration
BUILDING, ROAD, LANDING GROUND, FURNITURE ETC

PART-I

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1001	Aica Aibon (Local)	kg	100.00	
29-1002	- Ditto - but (Japan)	kg	200.00	
29-1003	Aluminium Sliding lock key part Reliance Japan Made	each	260.00	
29-1004	- Ditto - but rubber gasket Japan Made	metre	10.80	
29-1005	- Ditto - but lock Reliance Japan Made	each	225.00	
29-1006	- Ditto - but show lock Japan Made	each	180.00	
29-1007	Aluminium Netting rubber round Japan Made	metre	6.00	
29-1008	- Ditto - but rubber flat Japan Made	metre	25.00	
29-1009	- Ditto - but angle metal Japan Made	metre	75.00	
29-1010	- Ditto - but wheel Japan Made	each	45.00	
29-1011	Aluminium Fixed rubber gasket (single) Japan Made	metre	7.00	
29-1012	- Ditto - but double	metre	8.00	
29-1013	Aluminium Door mohair (single) Japan Made	metre	7.00	
29-1014	- Ditto - but Wheel (Get on) Japan Made	each	75.00	
29-1015	- Ditto - but Door mohair (Double) Japan Made	metre	15.00	
29-1016	- Ditto - but Wheel (Matex) Japan Made	each	50.00	
29-1017	Aluminium 38 mm counter sunk screw Japan Made	each	1.10	
29-1018	- Ditto - but 25 mm	each	1.20	
29-1019	Aluminium Flush bolt Japan Made	set	325.00	
29-1020	Aluminium Nylex cover	sq. m	275.00	
29-1021	- Ditto - but Paste for Nylex cover	sq. m	140.00	
29-1022	Aluminium 25x25mm size Aluminium Tee	metre	75.00	
29-1023	- Ditto - but 32x25mm size Aluminium Tee	metre	85.00	
29-1024	- Ditto - but 25x25x2 mm size Aluminium Angle	metre	75.00	
29-1025	- Ditto - but 32x25x3 mm size Aluminium Angle	metre	175.00	
29-1026	Aluminium grove cover 115mm (foreign made) any colour	metre	250.00	
29-1027	Aluminium curtain rail (foreign made) any colour	metre	60.00	
29-1028	- Ditto - but (Local made) any colour	metre	55.00	
29-1029	Aluminium sheet 1 mm thick	sq. m	450.00	
29-1030	Aluminium sheet 3 mm thick	sq. m	2,350.00	
29-1031	Aluminium standard spandrel anodized natural colour	sq. m	1,300.00	
29-1032	- Ditto - (Bronze)	sq. m	1,300.00	

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SECTION-29

BUILDING, ROAD, LANDING GROUND, FURNITURE ETC

PART-I

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1033	Aluminium sliding frame BTA 75 mm die no 2121N sliding outer top (Silver)	metre	247.00	
29-1034	- Ditto - (Bronze)	metre	255.00	
29-1035	- Ditto - (Black)	metre	270.00	
29-1036	- Ditto - (P/C)	metre	278.00	
29-1037	- Ditto - die no 2120A sliding outer bottom (Silver) (L)	metre	180.00	
29-1038	- Ditto - (Bronze) (L)	metre	185.00	
29-1039	- Ditto - (Black) (L)	metre	190.00	
29-1040	- Ditto - (P/C) (L)	metre	200.00	
29-1041	- Ditto - die no 2120 sliding outer bottom (Silver) (H)	metre	227.00	
29-1042	- Ditto - (Bronze) (H)	metre	234.00	
29-1043	- Ditto - (Black) (H)	metre	241.00	
29-1044	- Ditto - (P/C) (H)	metre	243.00	
29-1045	- Ditto - die no 2122 N sliding outer side (Silver)	metre	203.00	
29-1046	- Ditto - (Bronze)	metre	210.00	
29-1047	- Ditto - (Black)	metre	207.00	
29-1048	- Ditto - (P/C)	metre	218.00	
29-1049	- Ditto - die no 1440 sliding shutter top (Silver)	metre	16.00	
29-1050	- Ditto - (Bronze)	metre	172.00	
29-1051	- Ditto - (Black)	metre	176.00	
29-1052	- Ditto - (P/C)	metre	185.00	
29-1053	- Ditto - die no 1441 sliding shutter bottom (Silver)	metre	237.00	
29-1054	- Ditto - (Bronze)	metre	245.00	
29-1055	- Ditto - (Black)	metre	252.00	
29-1056	- Ditto - (P/C)	metre	264.00	
29-1057	- Ditto - die no 1443 sliding shutter lock (Silver)	metre	219.00	
29-1058	- Ditto - (Bronze)	metre	225.00	
29-1059	- Ditto - (Black)	metre	233.00	
29-1060	- Ditto - (P/C)	metre	242.00	
29-1061	- Ditto - die no 2124 sliding shutter inter lock (Silver)	metre	231.00	
29-1062	- Ditto - (Bronze)	metre	238.00	
29-1063	- Ditto - (Black)	metre	245.00	
29-1064	- Ditto - (P/C)	metre	257.00	

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SECTION-29

BUILDING, ROAD, LANDING GROUND, FURNITURE ETC

PART-I

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1065	- Ditto - die no -9823 fixed top & side 75 mm (silver)	metre	293.00	
29-1066	- Ditto - (Bronze)	metre	302.00	
29-1067	- Ditto - (Black)	metre	284.00	
29-1068	- Ditto - (P/C)	metre	316.00	
29-1069	- Ditto - die no -9821 fixed bottom75 mm (Silver)	metre	242.00	
29-1070	- Ditto - (Bronze)	metre	250.00	
29-1071	- Ditto - (Black)	metre	257.00	
29-1072	- Ditto - (P/C)	metre	261.00	
29-1073	- Ditto - die no -9820 fixed bottom cover 75 mm (Silver)	metre	96.00	
29-1074	- Ditto - (Bronze)	metre	99.00	
29-1075	- Ditto - (Black)	metre	102.00	
29-1076	- Ditto - (P/C)	metre	103.00	
29-1077	- Ditto - die no -9819 plane cover (Silver)	metre	82.00	
29-1078	- Ditto - (Bronze)	metre	86.00	
29-1079	- Ditto - (Black)	metre	88.00	
29-1080	- Ditto - (P/C)	metre	91.00	
29-1081	- Ditto - die no -9818 wall frame (Silver)	metre	218.00	
29-1082	- Ditto - (Bronze)	metre	224.00	
29-1083	- Ditto - (Black)	metre	230.00	
29-1084	- Ditto - (P/C)	metre	234.00	
29-1085	- Ditto - die no -9822 Grove cover (Silver)	metre	142.00	
29-1086	- Ditto - (Bronze)	metre	146.00	
29-1087	- Ditto - (Black)	metre	150.00	
29-1088	- Ditto - (P/C)	metre	172.00	
29-1089	Aluminium sliding frame BTA 90-95 mm die no -1437 outer top (Silver)	metre	290.00	
29-1090	- Ditto - (Bronze)	metre	315.00	
29-1091	- Ditto - (Black)	metre	325.00	
29-1092	- Ditto - (P/C)	metre	340.00	
29-1093	- Ditto - die no -1438A outer frame (Silver) L	metre	238.00	
29-1094	- Ditto - (Bronze) L	metre	247.00	
29-1095	- Ditto - (Black) L	metre	255.00	
29-1096	- Ditto - (P/C) L	metre	267.00	

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SECTION-29

BUILDING, ROAD, LANDING GROUND, FURNITURE ETC**PART-I**

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1097	- Ditto - die no -1438 outer frame (Silver) H	metre	296.00	
29-1098	- Ditto - (Bronze) H	metre	305.00	
29-1099	- Ditto - (Black) H	metre	314.00	
29-1100	- Ditto - (P/C) H	metre	328.00	
29-1101	- Ditto -die no - 1439 outer side (Silver)	metre	233.00	
29-1102	- Ditto - (Bronze)	metre	240.00	
29-1103	- Ditto - (Black)	metre	248.00	
29-1104	- Ditto - (P/C)	metre	260.00	
29-1105	- Ditto - die no -1444 Net section (Silver)	metre	150.00	
29-1106	- Ditto - (Bronze)	metre	155.00	
29-1107	- Ditto - (Black)	metre	160.00	
29-1108	- Ditto -(P/C)	metre	168.00	
29-1109	- Ditto - die no -1447 Net handle (Silver)	metre	117.00	
29-1110	- Ditto - (Bronze)	metre	121.00	
29-1111	- Ditto - (Black)	metre	125.00	
29-1112	- Ditto - (P/C)	metre	131.00	
29-1113	- Ditto - die no -6005 fixed side & top 90-95 mm (Silver)	metre	430.00	
29-1114	- Ditto - (Bronze)	metre	443.00	
29-1115	- Ditto - (Black)	metre	455.00	
29-1116	- Ditto - (P/C)	metre	478.00	
29-1117	- Ditto - die no -9987 fixed bottom 90-95 mm (Silver)	metre	318.00	
29-1118	- Ditto - (Bronze)	metre	328.00	
29-1119	- Ditto - (Black)	metre	338.00	
29-1120	- Ditto - (P/C)	metre	355.00	
29-1121	- Ditto - die no -9991 fixed bottom cover 90-95 mm (Silver)	metre	120.00	
29-1122	- Ditto - (Bronze)	metre	123.00	
29-1123	- Ditto - (Black)	metre	127.00	
29-1124	- Ditto - (P/C)	metre	133.00	
29-1125	- Ditto - die no -9988 grove cover 90-95 mm (Silver)	metre	187.00	
29-1126	- Ditto - (Bronze)	metre	193.00	
29-1127	- Ditto - (Black)	metre	197.00	
29-1128	- Ditto - (P/C)	metre	207.00	

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SECTION-29

BUILDING, ROAD, LANDING GROUND, FURNITURE ETC**PART-I**

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1129	- Ditto - die no -9989 plane cover (Silver)	metre	122.00	
29-1130	- Ditto - (Bronze)	metre	125.00	
29-1131	- Ditto - (Black)	metre	129.00	
29-1132	- Ditto - (P/C)	metre	135.00	
29-1133	- Ditto - die no -9998 wall frame (Silver)	metre	341.00	
29-1134	- Ditto - (Bronze)	metre	352.00	
29-1135	- Ditto - (Black)	metre	363.00	
29-1136	- Ditto - (P/C)	metre	380.00	
29-1137	Aluminium swing door section BTA die no -9500 door shutter side (Silver)	metre	375.00	
29-1138	- Ditto - (Bronze)	metre	387.00	
29-1139	- Ditto - (Black)	metre	398.00	
29-1140	- Ditto - (P/C)	metre	417.00	
29-1141	- Ditto - die no -9498 door shutter top (Silver)	metre	374.00	
29-1142	- Ditto - (Bronze)	metre	385.00	
29-1143	- Ditto - (Black)	metre	397.00	
29-1144	- Ditto - (P/C)	metre	416.00	
29-1145	- Ditto - die no -9499 door shutter bottom (Silver)	metre	456.00	
29-1146	- Ditto - (Bronze)	metre	470.00	
29-1147	- Ditto - (Black)	metre	485.00	
29-1148	- Ditto - (P/C)	metre	508.00	
29-1149	- Ditto - die no -9985A door closure section (Silver)	metre	357.00	
29-1150	- Ditto - (Bronze)	metre	368.00	
29-1151	- Ditto - (Black)	metre	345.00	
29-1152	- Ditto - (P/C)	metre	398.00	
29-1153	- Ditto - die no -9984 door closure cover (Silver)	metre	137.00	
29-1154	- Ditto - (Bronze)	metre	141.00	
29-1155	- Ditto - (Black)	metre	145.00	
29-1156	- Ditto - (P/C)	metre	152.00	
29-1157	- Ditto - die no -9497 door floor bottom (Silver)	metre	316.00	
29-1158	- Ditto - (Bronze)	metre	394.00	
29-1159	- Ditto - (Black)	metre	406.00	
29-1160	- Ditto - (P/C)	metre	426.00	
29-1161	- Ditto - die no -9999A door glass bit (Silver)	metre	45.00	

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SECTION-29

BUILDING, ROAD, LANDING GROUND, FURNITURE ETC

PART-I

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1162	- Ditto - (Bronze)	metre	47.00	
29-1163	- Ditto - (Black)	metre	48.00	
29-1164	- Ditto - (P/C)	metre	51.00	
29-1165	- Ditto - die no -9456 door handle (Silver)	metre	493.00	
29-1166	- Ditto - (Bronze)	metre	509.00	
29-1167	- Ditto - (Black)	metre	523.83	
29-1168	- Ditto - (P/C)	metre	549.00	
29-1169	- Ditto - die no -9975 fixed glass protector bit (Silver) S	metre	50.00	
29-1170	- Ditto - (Bronze) S	metre	52.00	
29-1171	- Ditto - (Black) S	metre	54.00	
29-1172	- Ditto - (P/C) S	metre	57.00	
29-1173	- Ditto - die no -9976A fixed glass protector bit (Silver) D	metre	74.00	
29-1174	- Ditto - (Bronze) D	metre	76.00	
29-1175	- Ditto - (Black) D	metre	79.00	
29-1176	- Ditto - (P/C) D	metre	83.00	
29-1177	- Ditto - die no -4646 door divider (Silver)	metre	186.00	
29-1178	- Ditto - (Bronze)	metre	207.00	
29-1179	- Ditto - (Black)	metre	234.98	
29-1180	- Ditto - (P/C)	metre	240.00	
29-1181	- Ditto - die no -4646 door wall side (Silver)	metre	358.00	
29-1182	- Ditto - (Bronze)	metre	362.00	
29-1183	- Ditto - (Black)	metre	376.00	
29-1184	- Ditto - (P/C)	metre	395.00	
29-1185	Thai aluminum double type curtain rail foreign made	metre	935.00	
29-1186	Tarssle stand for curtain foreign made	each	940.00	
29-1187	Aluminium angle size 38 x 25 x 5 mm	metre	303.00	
29-1188	Asbestos 3.60 m	Pair	250.00	
29-1189	Ballies 75 to 100 mm dia	metre	200.00	
29-1190	Sal Ballies 100 to 150 mm dia	metre	390.00	
29-1191	Bamboo borak 200mm girth, 9 M long	each	160.00	
29-1192	- Ditto - but 225mm girth, 12 M long	each	200.00	
29-1193	- Ditto - but 250mm girth, 12 M long	each	220.00	
29-1194	- Ditto - but 300mm girth, 12 M long	each	250.00	
29-1195	Bamboo Pin	each	0.80	
29-1196	Chatai matting single	sq. m	32.00	
29-1197	- Ditto - but double	sq. m	45.00	
29-1198	Bamboo prop using 6 times	each	60.00	
29-1199	Bamboo props 3 M long	each	55.00	

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SECTION-29**BUILDING, ROAD, LANDING GROUND, FURNITURE ETC****PART-I**

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1200	Bamboo Single Mooli (150 mm to 200 mm girth)	metre	15.00	
29-1201	Barbed wire 12 SWG	kg	72.00	
29-1202	- Ditto - but 14 SWG	kg	77.00	
29-1203	C I bend 150 mm bore (MAANCO / NISSAN / SNG / NANAKHI)	each	925.00	
29-1204	C I door bend 150 mm bore	each	960.00	
29-1205	Bitumen straight run 80/100	kg	55.00	
29-1206	-Ditto-but 60/70	kg	58.00	
29-1207	PB-4	kg	70.00	
29-1208	Tar	litre	70.00	
29-1209	Blue	kg	150.00	
29-1210	Boulders upto 100mm (packed measure)	cu. m	3,150.00	
29-1211	- Ditto - but exc 100mm (packed measure)	cu. m	3,350.00	
29-1212	Bricks 1st Class / Over burnt	M.N	6,000.00	
		os		
29-1213	Bricks Ceramic (Mirpur) 10 hole	M.N	13,000.00	
		os		
29-1214	- Ditto - but 3 hole size 240x162x113	M.N	18,400.00	
		os		
29-1215	Hollow clay block (brick)	M.N	19,000.00	
		os		
29-1216	Concord tiles special 400x400x25 mm double layer	sq. m	910.00	
29-1217	- Ditto - but 250x250x22 mm double layer	sq. m	795.00	
29-1218	Solid high load bearing and facing bricks (size 237.5 x 112.5 x 68.75)	M Nos	13,500.00	
29-1219	M. CW wall block design-A (size 237.5 x 162.5 x 1125)	M.N	18,250.00	
		os		
29-1220	- Ditto - but design-B (size 237.5 x 162.5 x 1125)	M.N	18,500.00	
		os		
29-1221	- Ditto - but cut into two piecis (size 118.75 x 162.5 x 1125)	M.N	12,000.00	
		os		
29-1222	Facing bricks (Mirpur) size 200x100x50 mm	M	15,500.00	
		Nos		
29-1223	- Ditto - but 200x50x50 mm	M.N	10,700.00	
		os		
29-1224	- Ditto - but 200x62x25 mm Klinker Red	each	15,500.00	

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29-1225	- Ditto - but 200x62x25 mm Black Jet	each	16,500.00
29-1226	- Ditto - but 200x62x25 mm Beige & Pearl white	each	17,500.00
29-1227	- Ditto - but 200x62x25 mm Apricot	each	24,000.00
29-1228	Ceramic zali bricks (Mirpur) size 150x100x150 mm	M.N	27,500.00
		os	
29-1229	Hexagonal Ceramics Tiles (Mirpur) CT-10, size 230 x 150 x 80 x 25 mm Klinker red	each	16.50
29-1230	- Ditto - but Black Jet	each	21.00

SECTION-29

BUILDING, ROAD, LANDING GROUND, FURNITURE ETC

PART-I

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1231	- Ditto - but Beige	each	21.00	
29-1232	- Ditto - but Apricot	each	26.50	
29-1233	Hexagonal Ceramics Tiles (Mirpur) CT-12, size 300x90x210x25 mm Klinker red	each	39.00	
29-1234	- Ditto - but Black Jet	each	45.00	
29-1235	- Ditto - but Pearl White	each	48.00	
29-1236	- Ditto - but Apricot	each	50.00	
29-1237	Fire bricks SK-34	each	92.00	
29-1238	- Ditto - but SK-32	each	63.00	
29-1239	Fire clay for SK-34 bricks	each	25.00	
29-1240	- Ditto - but SK-32 bricks	each	17.00	
29-1241	Over burnt Bricks aggregate 19 mm graded	cu. m	2,300.00	
29-1242	Over burnt Bricks aggregate 38 / 50 mm graded	cu. m	2,225.00	
29-1243	Brick screening	cu. m	1,500.00	
29-1244	Surki (Machine Made)	cu. m	1,650.00	
29-1245	Brass angle 38x38x6 mm	metre	1,450.00	
29-1246	- Ditto - but 50x38x6 mm	metre	1,875.00	
29-1247	- Ditto - but 50x25x6 mm	metre	1,675.00	
29-1248	Brass sheet 3 mm thick	kg	900.00	
29-1249	Cane natural	kg	550.00	
29-1250	Cane plastic 2.35 mm thick	kg	172.00	
29-1251	Catechu	kg	200.00	
29-1252	Cement ordinary Portland (OPC)	kg	8.50	
29-1253	Cement Portland composite (PCC)	kg	7.50	
29-1254	Cement White	kg	25.00	

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29-1255	Corrugated colour sheet 26 BG (Jalalabad)	sq. m	400.00
29-1256	CGI Sheet 26 BG	kg	125.00
29-1257	- Ditto - but 28 BG	kg	115.00
29-1258	Asbestos cement two pieces ridge	Pair	260.00
29-1259	Corrugated Transparent fiber sheet (Coloured)	sq. m	800.00
29-1260	Security chain	each	250.00
29-1261	Chain for sofa cover (Jipper)	metre	60.00

SECTION-29

BUILDING, ROAD, LANDING GROUND, FURNITURE ETC

PART-I

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1262	Chalk Powder	kg	25.00	
29-1263	Chock	each	15.00	
29-1264	Brass coated clips No 150	Pkt	35.00	
29-1265	- Ditto - but No 200	Pkt	40.00	
29-1266	Clips for MN stand	doz	65.00	
29-1267	Cleat (wrought iron)	doz	175.00	
29-1268	- Ditto - but (Brass)	doz	350.00	
29-1269	- Ditto - but (Steel)	each	50.00	
29-1270	Belaying Cleat iron	each	35.00	
29-1271	Belaying Cleat Brass	each	70.00	
29-1272	Combi closet Foreign made (China, Malaysia, Thailand)	each	28,000.00	
29-1273	Fabric width not less than 1.35 M	metre	450.00	
29-1274	Cloth Markin	sq. m	15.00	
29-1275	Cloth Emery	doz	300.00	
29-1276	Cloth Curtain standard width (Best)	metre	710.00	
29-1277	Cloth Curtain standard width (Normal)	metre	275.00	
29-1278	Cloth Curtain standard width (Neting)	metre	770.00	
29-1279	Cloth for foam cover width 1.35 M	metre	550.00	
29-1280	- Ditto - but Mattress width not less than 1 M	metre	100.00	
29-1281	Cloth Rexin	sq. m	250.00	
29-1282	Cloth Black	sq. m	40.00	
29-1283	Cloth Poplin	metre	90.00	
29-1284	- Ditto - but Hessian 1.5 metre width	metre	45.00	
29-1285	- Ditto - but Molmol 1 metre width	metre	30.00	

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29-1286	- Ditto - but Velvet 1.35 metre width	metre	660.00
29-1287	Coal steam	kg	10.00
29-1288	Coir coconut / Jute rope / sutly	kg	50.00
29-1289	Cotton rope	kg	160.00
29-1290	Cork sheet 25mm thick	sq. m	100.00
29-1291	Cork sheet 19mm thick	sq. m	85.00
29-1292	Glass wool 25/30 mm thick	sq. m	250.00

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BUILDING, ROAD, LANDING GROUND, FURNITURE ETC

PART-I

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1293	Glass wool 40/50 mm thick	sq. m	350.00	
29-1294	Copper sheet 24 gauze	kg	900.00	
29-1295	Cotton for mattress	kg	70.00	
29-1296	Drum Sheet	sq. m	350.00	
29-1297	Dursban 20 EC	litre	580.00	
29-1298	Earth brought from private land (Out side Cantt) lead upto 100 M	Truc k	400.00	
29-1299	Expanded metal 14 SWG	kg	80.00	
29-1300	Eye Viewer	each	45.00	
29-1301	Felt for 1 ply	sq. m	350.00	
29-1302	- Ditto - but 2 ply	sq. m	450.00	
29-1303	CI floor trap 100 mm bore	each	850.00	
29-1304	C I floor trap 150 mm bore	each	1,250.00	
29-1305	Foam cover cloth (cord) width not less than 1 M	metre	198.00	
29-1306	Foam cover cord (1.52x2.13 M)	each	1,980.00	
29-1307	- Ditto - but (1.22x2.13 M)	each	1,584.00	
29-1308	Foam cover normal (1.52x2.13 M)	each	770.00	
29-1309	- Ditto - but (1.22x2.13 M)	each	616.00	
29-1310	Foam Arco 280, 100 mm thick (1.52x2.13 M)	each	8,800.00	
29-1311	- Ditto - but 1.22x2.13 M	each	7,040.00	
29-1312	Foam 100 mm thick	sq. m	2,420.00	
29-1313	Foam any thickness	cu. m	10,500.00	
29-1314	Foam any thickness (Jacket / Poly)	cu. m	11,000.00	
29-1315	Foam Amar 280 size 550x450x75 mm	each	661.00	
29-1316	- Ditto - but 550x550x100 mm	each	751.00	

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29-1317	Foam Apex 550x550x100 mm	each	751.00
29-1318	- Ditto - but 550x450x75 mm	each	461.00
29-1319	Foam Arco-280 / Karmo-2001 (550x450x75 mm)	each	461.00
29-1320	- Ditto - but (550x550x100 mm)	each	751.00
29-1321	Foam Swan 280 size 550x450x75 mm	each	461.00
29-1322	- Ditto - but 550x550x100 mm	each	751.00

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BUILDING, ROAD, LANDING GROUND, FURNITURE ETC

PART-I

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1323	Foam Mattress with cover 100 mm thick (Size 1.52 x 2.13 M)	each	8,250.00	
29-1324	Foam Mattress Spring with cover 200 mm thick (Size 1.52 x 2.13 M)	each	15,400.00	
29-1325	Formica	sq. m	306.00	
29-1326	Collapsible gate made of standard MS channel & 19mx5mm thick FI bar	sq. m	2,600.00	
29-1327	Rolling shutter made of 24 BG galvanized plain sheet	sq. m	2,150.00	
29-1328	Galvanized Plain Sheet 18 BG	sq. m	980.00	
29-1329	- Ditto - but 20 BG	sq. m	775.00	
29-1330	- Ditto - but 22 BG	sq. m	650.00	
29-1331	- Ditto - but 24 BG	sq. m	475.00	
29-1332	- Ditto - but 26 BG	sq. m	370.00	
29-1333	MS / Mat plain sheet any thickness	kg	70.00	
29-1334	Glass sheet 3mm (Local)	sq. m	350.00	
29-1335	- Ditto but 3mm Frosted (India)	sq. m	475.00	
29-1336	- Ditto but 5mm (Local)	sq. m	570.00	
29-1337	- Ditto but 5mm (China/Taiwan)	sq. m	655.00	
29-1338	- Ditto but 5mm Frosted (India)	sq. m	950.00	
29-1339	- Ditto but 5mm Frosted China/Taiwan)	sq. m	950.00	
29-1340	- Ditto but 5mm Tinted (Foreign made)	sq. m	710.00	
29-1341	- Ditto but 6mm Frosted (India)	sq. m	850.00	
29-1342	- Ditto but 6 mm thick Tinted frosted foreign	sq. m	1,050.00	
29-1343	Glass strip 5mm thick and 19 mm wide	metre	15.00	
29-1344	- Ditto - but 3mm thick and 19 mm wide	metre	12.00	
29-1345	Glass 6 mm thick decorative foreign made	sq. m	1,300.00	

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29-1346	Grinding disc / cutter 100 mm	each	90.00
29-1347	Gum Arabic	kg	400.00
29-1348	Gum silicon (foreign)	kg	450.00
29-1349	Glue (Master Gum)	kg	175.00
29-1350	Hooks and Eyes 15 cm (Iron)	doz	116.00
29-1351	- Ditto - but 20 cm (Iron)	doz	150.00
29-1352	Hooks and Eyes 15 cm (Brass)	doz	500.00

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BUILDING, ROAD, LANDING GROUND, FURNITURE ETC
PART-I

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1353	- Ditto - but 20 cm (Brass)	doz	615.00	
29-1354	Hooks and Eyes 10 cm (Iron)	each	6.50	
29-1355	- Ditto - but 25 cm (Brass)	each	80.00	
29-1356	- Ditto - but 30 cm (Brass)	each	105.00	
29-1357	- Ditto - but 45 cm (Brass)	each	165.00	
29-1358	- Ditto - but 60cm (Brass)	each	225.00	
29-1359	Heptachlor 40 WP	Gram	1.50	
29-1360	Iron Strip 225x40x50 mm	kg	60.00	
29-1361	MS Angle 19x19x3mm	kg	52.00	
29-1362	- Ditto - but 25x25x3mm	kg	52.00	
29-1363	- Ditto - but 38x38x3/6mm	kg	52.00	
29-1364	- Ditto - but 50x50x6mm	kg	52.00	
29-1365	MS rolled section such as Channel 'Z' bar any size	kg	57.00	
29-1366	- Ditto - but "Tee" bar any size	kg	57.00	
29-1367	MS Structure 50x25x2200 mm	each	1,300.00	
29-1368	- Ditto - but 50x25x1850 mm	each	1,140.00	
29-1369	- Ditto - but 38x38 mm	metre	375.00	
29-1370	- Ditto - but 18x18 mm	metre	240.00	
29-1371	MS Base plate 75 mm dia 5 mm thick	each	30.00	
29-1372	MS Flat bar any size	kg	50.00	
29-1373	MS sheet 18-24 BG	kg	65.00	
29-1374	MS sheet square box 25x25mm with 18 BG sheet	metre	85.00	
29-1375	MS sheet square box 19x19mm with 18 BG sheet	metre	70.00	
29-1376	MS Clamp 50 mm	each	75.00	
29-1377	MS Plate any thickness	kg	60.00	

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29-1378	MS Hold Fast	kg	65.00
29-1379	- Ditto - but 37.50 mm x 225 mm	each	70.00
29-1380	- Ditto - but 25 mm x 300 mm	each	70.00
29-1381	Hoop Iron	kg	60.00
29-1382	Iron Wire 28 Gauze 7x7 mesh	sq. m	145.00
29-1383	Iron Wire 24 Gauze 4x4 mesh	sq. m	130.00

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SECTION-29

BUILDING, ROAD, LANDING GROUND, FURNITURE ETC

PART-I

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1384	Plastic wire net 7x7 mesh	sq.m	110.00	
29-1385	MS bar round any dia (BDS grade 275, fy=275 MPA)	kg	46.00	
29-1386	- Ditto - but (BDS grade 350, fy=350 MPA)	kg	52.00	
29-1387	Tor steel (60 grade, fy=60000 psi) any dia	kg	62.00	
29-1388	Deformed bar (40 grade, fy=40000 psi) any dia	kg	45.00	
29-1389	- Ditto - but (60 grade, fy=60000 psi) any dia	kg	55.00	
29-1390	Joint bed 4 mm thick set of 4 (150 mm long)	set	175.00	
29-1391	Lead white	kg	150.00	
29-1392	Lead sheet 5 mm thick	sq. m	7,600.00	
29-1393	- Ditto - but 3 mm thick	sq. m	5,580.00	
29-1394	Lime unslacked best quality	kg	14.00	
29-1395	Linoleum sheet for floor	sq. m	265.00	
29-1396	Lock concealed with one side handle for steel cupboard or Almirah	each	250.00	
29-1397	Lock Yale (Bangladesh)	each	325.00	
29-1398	- Ditto - but (Japan / Italy / England)	each	2,800.00	
29-1399	- Ditto - but (China)	each	1,000.00	
29-1400	Lock Rim (Japan)	each	950.00	
29-1401	- Ditto - but (Bangladesh)	each	450.00	
29-1402	Lock concealed with handle for steel cupboard or Almirah	each	250.00	
29-1403	Lock Alpha door Japan Made	each	950.00	
29-1404	Lock for Cupboard 5 cm (Iron body)	each	37.00	
29-1405	- Ditto - but 6.25 cm	each	40.00	
29-1406	- Ditto - but 7.5 cm	each	90.00	
29-1407	- Ditto - but 5 cm (Brass body)	each	250.00	
29-1408	- Ditto - but 6.25 cm	each	350.00	
29-1409	- Ditto - but 7.5 cm	each	450.00	
29-1410	Lock (Desk, Drawer & Flush Cupboard) 75 mm Iron	each	75.00	
29-1411	- Ditto - but Brass	each	130.00	
29-1412	Lock for Almirah Steel	each	110.00	
29-1413	Lock for drawer Brass	each	86.00	
29-1414	Lock for File Cabinet	each	230.00	

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BUILDING, ROAD, LANDING GROUND, FURNITURE ETC
PART-I

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1415	Lock with handle for Almirah Steel	set	240.00	
29-1416	Lock & Key with handle foreign made	each	520.00	
29-1417	Lock English for steel Almirah	each	270.00	
29-1418	Lowdown cistern Plastic with fitting (foreign origin)	each	1,400.00	
29-1419	Manhole cover CI special type inner dia 550 mm outer dia 800 mm and 100 mm depth with ring (MAANCO / NISSAN / SNG / NANAKHI)	each	5,000.00	
29-1420	Handle bow 150 mm (Iron)	doz	150.00	
29-1421	- Ditto - but 150 mm (Brass)	doz	450.00	
29-1422	- Ditto - but 250 mm (Brass)	doz	750.00	
29-1423	Handle bow (fancy brass) 130 mm	each	150.00	
29-1424	- Ditto - but 100 mm	each	100.00	
29-1425	- Ditto - but 250 mm foreign made	each	1,000.00	
29-1426	Casement Stays quadrant for fan light 175 mm dia Iron	each	30.00	
29-1427	- Ditto - but 250 mm dia Iron	each	35.00	
29-1428	- Ditto - but 300 mm dia Iron	each	45.00	
29-1429	- Ditto - but 175 mm dia Brass	each	90.00	
29-1430	- Ditto - but 250 mm dia Brass	each	110.00	
29-1431	- Ditto - but 300 mm dia Brass	each	125.00	
29-1432	Diamond door closer Japan	each	3,000.00	
29-1433	Handle	each	15.00	
29-1434	Handle drawers 75 mm grip brass	doz	800.00	
29-1435	Handle for drawer 100 mm (Brass)	each	140.00	
29-1436	- Ditto - but 125 mm (Brass)	each	70.00	
29-1437	- Ditto - but 150 mm (Brass)	each	65.00	
29-1438	Handle for Almirah steel	each	85.00	
29-1439	Handle for gate steel	each	150.00	
29-1440	Flush pattern handles 7.5 cm grip brass	doz	1,200.00	
29-1441	19mm wide 1400 mm long brass hinges	sq. m	500.00	
29-1442	Pintol hinges for steel Almirah	each	50.00	
29-1443	Hinges (Iron) 5.00 cm	doz	75.00	
29-1444	- Ditto - but 7.5 cm	doz	95.00	

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BUILDING, ROAD, LANDING GROUND, FURNITURE ETC

PART-I

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1445	- Ditto - but 10.00 cm	doz	180.00	
29-1446	- Ditto - but (Brass) 5.00 cm	doz	550.00	
29-1447	- Ditto - but 7.5 cm	doz	650.00	
29-1448	- Ditto - but 10.00 cm	doz	825.00	
29-1449	- Ditto - but 12.50cm	doz	1,200.00	
29-1450	Hinges steel round 75mm long made of 9.53mm dia bar	each	15.00	
29-1451	Hinges roller round 75 mm long 9.53 mm dia	each	20.00	
29-1452	Hings clamp (Male / Female)	each	20.00	
29-1453	Roller with cleat for cupboard	each	125.00	
29-1454	C-Clamps 62.5x25 mm	each	20.00	
29-1455	Hinges spring iron (Double action) 10 cm long	set	380.00	
29-1456	- Ditto - but 12.50 cm long	set	500.00	
29-1457	- Ditto - but 15 cm long	set	650.00	
29-1458	- Ditto - but 10 cm long (Brass)	set	700.00	
29-1459	- Ditto - but 12.50 cm long (Brass)	set	1,100.00	
29-1460	- Ditto - but 15 cm long (Brass)	set	1,600.00	
29-1461	Hinges spring iron (Single action) 10 cm long	set	300.00	
29-1462	- Ditto - but 12.50 cm long	set	400.00	
29-1463	- Ditto - but 15 cm long	set	500.00	
29-1464	- Ditto - but 10 cm long (Brass)	set	600.00	
29-1465	- Ditto - but 12.50 cm long (Brass)	set	850.00	
29-1466	- Ditto - but 15 cm long (Brass)	set	1,200.00	
29-1467	Knob for cup board 31,5 mm (Iron)	doz	80.00	
29-1468	- Ditto but (Brass)	doz	2,000.00	
29-1469	Knob Brass 3.75 cm	each	160.00	
29-1470	- Ditto - but 5.00 cm	each	175.00	
29-1471	- Ditto - but 6.25 cm	each	200.00	
29-1472	Knob for drawer Brass	each	60.00	
29-1473	- Ditto - but Steel	each	35.00	
29-1474	- Ditto - but Receptacle	each	45.00	

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BUILDING, ROAD, LANDING GROUND, FURNITURE ETC

PART-I

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1475	Pin lid corner for receptacle	each	18.00	
29-1476	Brass handles for steel windows 15.0 cm	doz	700.00	
29-1477	Channel for file cabinet's drawer 30 cm long	each	225.00	
29-1478	Channel for file cabinet's drawer 45 cm long	each	275.00	
29-1479	F.I Bar handles for Steel windows	doz	300.00	
29-1480	Brass handles for steel windows	doz	800.00	
29-1481	Steel window handle	each	35.00	
29-1482	Looking mirror (size 450x1350 mm)	each	1,000.00	
29-1483	Mirror (1.05x0.400) 5mm thick	sq. m	1,100.00	
29-1484	Mirror 5 mm thick foreign	sq. m	1,500.00	
29-1485	Frame glass door 4 mm	each	800.00	
29-1486	Special type mirror cabinet size 600 x 500 x 300 mm foreign made	each	7,500.00	
29-1487	Molasses	kg	36.00	
29-1488	Mosaic top 25 mm thick	sq. m	2,000.00	
29-1489	Sliding bolt Iron 15 mm dia 25 cm long	each	110.00	
29-1490	- Ditto but 30 cm long	each	130.00	
29-1491	- Ditto but 45 cm long	each	250.00	
29-1492	- Ditto but brass 25 cm long	each	250.00	
29-1493	- Ditto but 30 cm long	each	280.00	
29-1494	- Ditto but steel 30cm long made of 15.87mm dia bar	each	100.00	
29-1495	Hasps & staples steel over 15 cm	each	30.00	
29-1496	- Ditto - but 10 cm to 15 cm	each	25.00	
29-1497	- Ditto - but 7.5 cm	each	10.00	
29-1498	- Ditto - but 5 cm	each	8.00	
29-1499	- Ditto - but 3.75 cm	each	5.00	
29-1500	Haps and staple 50 mm	doz	70.00	
29-1501	- Ditto - but 75 mm	doz	125.00	
29-1502	Adjustable stay / stopper for steel window made of 19 mm x 3mm FI bar	doz	200.00	
29-1503	- Ditto but Brass	doz	1,000.00	
29-1504	Hook for Peg set large	each	40.00	

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BUILDING, ROAD, LANDING GROUND, FURNITURE ETC
PART-I

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1505	- Ditto - but small	each	30.00	
29-1506	Head Cap 50 mm	each	12.00	
29-1507	Stay hook brass 30 cm long	doz	450.00	
29-1508	- Ditto - but Iron 30 cm long	doz	100.00	
29-1509	Hooks Brass 17 cm or over	doz	700.00	
29-1510	Tower bolt (iron) 50 mm	doz	80.00	
29-1511	- Ditto - but 75 mm	doz	150.00	
29-1512	- Ditto - but 100 mm	doz	220.00	
29-1513	- Ditto - but 150 mm	doz	250.00	
29-1514	- Ditto - but 200 mm	doz	270.00	
29-1515	Tower bolt steel 200 mm long made of 9.53mm dia bar	doz	200.00	
29-1516	- Ditto - but 150 mm long made of 9.53mm dia bar	doz	150.00	
29-1517	Tower bolt (Brass bright sheet) 375 mm	doz	3,500.00	
29-1518	Tower bolt brass 75 mm	doz	600.00	
29-1519	- Ditto - but 100 mm	doz	725.00	
29-1520	- Ditto - but 150 mm	doz	1,050.00	
29-1521	- Ditto - but 200 mm	doz	1,400.00	
29-1522	- Ditto - but 50 mm	doz	450.00	
29-1523	SS Tower bolts 200mm light	doz	2,110.00	
29-1524	SS Tower bolts 200mm heavy	doz	3,900.00	
29-1525	SS Tower bolts 200mm 150mm light	doz	1,585.00	
29-1526	SS Tower bolts 200mm heavy	doz	2,770.00	
29-1527	Nails iron	kg	80.00	
29-1528	Nails brass	kg	800.00	
29-1529	Net plastic wire gauge mosquito proofing 7x7 mesh	sq. m	110.00	
29-1530	- Ditto - but 9x9 mesh	sq. m	140.00	
29-1531	Net galvanized iron wire 14 SWG 50 mm Mesh	sq. m	130.00	
29-1532	- Ditto - but 38 mm Mesh	sq. m	165.00	
29-1533	- Ditto - but 25 mm Mesh	sq. m	180.00	
29-1534	- Ditto - but 19 mm Mesh	sq. m	195.00	

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Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1535	Net galvanized wire 16 SWG 50 mm mesh	sq. m	110.00	
29-1536	- Ditto - but 37 mm mesh	sq. m	120.00	
29-1537	- Ditto - but 25 mm mesh	sq. m	135.00	
29-1538	- Ditto - but 19 mm mesh	sq. m	140.00	
29-1539	Net galvanized wire 18 SWG, 12.5 mm mesh	sq. m	100.00	
29-1540	- Ditto - but 20 SWG 12.5 mm mesh	sq. m	90.00	
29-1541	- Ditto - but 22 SWG 12.5 mm mesh	sq. m	80.00	
29-1542	Net gauges woven wire mosquito 18x18 mesh	sq. m	220.00	
29-1543	Net aluminium wire mosquito proof	sq. m	290.00	
29-1544	Newar cotton 50 mm wide	metre	12.00	
29-1545	Newar jute 50 mm wide	metre	3.00	
29-1546	Oil Turpentine / foam oil	litre	85.00	
29-1547	Oil Lin seed	litre	175.00	
29-1548	Oil Crude	litre	12.00	
29-1549	Oil Creosote	litre	15.00	
29-1550	Oil Varnish	litre	150.00	
29-1551	Oxalic acid	kg	160.00	
29-1552	Diesel / Kerosene	litre	46.00	
29-1553	Mobil	litre	250.00	
29-1554	Grease	kg	350.00	
29-1555	Chemical for burning paint	kg	650.00	
29-1556	Distemper Berger Robbialac	litre	102.00	
29-1557	- Ditto - but Elite / Aqua	litre	100.00	
29-1558	- Ditto - but Imperial, Navana	litre	95.00	
29-1559	Paint Plastic Berger Robbialac	litre	196.00	
29-1560	- Ditto - but Elite / Aqua	litre	195.00	
29-1561	- Ditto - but Imperial, Navana	litre	195.00	
29-1562	Paint Synthetic Enamel Berger Robbialac	litre	215.00	
29-1563	- Ditto - but Elite / Aqua	litre	210.00	
29-1564	- Ditto - but Imperial, Navana	litre	210.00	
29-1565	Paint Ready Mixed	litre	95.00	

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BUILDING, ROAD, LANDING GROUND, FURNITURE ETC

PART-I

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1566	Paint Red oxide	litre	215.00	
29-1567	Paint blue / yellow / marine yellow oxide	litre	205.00	
29-1568	Paint Aluminium Berger Robbialac	litre	210.00	
29-1569	- Ditto - but Elite / Aqua	litre	205.00	
29-1570	- Ditto - but Imperial, Navana	litre	203.00	
29-1571	Paint Road Marking Berger Robbialac	litre	459.00	
29-1572	- Ditto - but Elite / Aqua	litre	440.00	
29-1573	Snowcem Berger Robbialac	kg	70.00	
29-1574	- Ditto - but Thailand	kg	67.00	
29-1575	- Ditto - but England	kg	75.00	
29-1576	Paint Hammer	litre	225.00	
29-1577	Paint Weather coat / Acrylic paint Berger Robbialac	litre	240.00	
29-1578	- Ditto - Elite / Navana / Aqua	litre	225.00	
29-1579	Textured / Tartaruga paint (Bone tile paint) Berger Robbialac	litre	310.00	
29-1580	Paint Tennis court (Berger Robbialac / Elite / Aqua)	litre	370.00	
29-1581	Paint / Primer for Tennis court	litre	410.00	
29-1582	Brush 25 mm for painting works	each	25.00	
29-1583	- Ditto - but 50 mm	each	40.00	
29-1584	- Ditto - but 75 mm	each	90.00	
29-1585	Coconut subra for pile cap cushion	kg	7.00	
29-1586	M.S Pipe 12 mm (light)	metre	93.00	
29-1587	- Ditto - but 25 mm (light)	metre	197.00	
29-1588	- Ditto - but 36 mm heavy)	metre	322.00	
29-1589	- Ditto - but 38 mm (light)	metre	322.00	
29-1590	- Ditto - but 150 mm (light)	metre	1,825.00	
29-1591	Brass pipe heavy type 25 mm dia	metre	650.00	
29-1592	- Ditto - but 19 mm dia	metre	450.00	
29-1593	Tubing GI Other than NTL (Gold) 12.50 mm dia	metre	117.00	
29-1594	- Ditto - but (Gold) 18.70 mm dia	metre	155.00	
29-1595	- Ditto - but (Gold) 25 mm dia	metre	212.00	

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SECTION-29

BUILDING, ROAD, LANDING GROUND, FURNITURE ETC
PART-I

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1596	- Ditto - but (Gold) 37.50 mm dia	metre	350.00	
29-1597	- Ditto - but (Gold) 50 mm dia	metre	441.00	
29-1598	Ditto-but (Gold) 75 mm dia	metre	758.00	
29-1599	Ditto - but (Gold) 100 mm dia	metre	1,291.00	
29-1600	MS Leg Stoper 25 mm	each	8.00	
29-1601	MS Leg stopper 75 mm dia	each	50.00	
29-1602	C R pipe 16 mm (5/8") dia.	metre	47.00	
29-1603	- Ditto - 19 mm (3/4") dia.	metre	60.00	
29-1604	- Ditto - 22 mm (7/8") dia.	metre	70.00	
29-1605	- Ditto - 25 mm (1") dia.	metre	80.00	
29-1606	- Ditto - 38 mm (1 1/2") dia.	metre	120.00	
29-1607	- Ditto - 50 mm (2") dia.	metre	165.00	
29-1608	MS rectangular box 25x25x25 mm	each	130.00	
29-1609	Rectangular connector 50x25 mm	each	35.00	
29-1610	Metal connector 8 mm	each	15.00	
29-1611	Tubing brass/copper 12 mm dia	metre	450.00	
29-1612	- Ditto - but 15 mm dia	metre	550.00	
29-1613	- Ditto - but 22 mm dia	metre	850.00	
29-1614	- Ditto - but 28 mm dia	metre	1,050.00	
29-1615	PVC Pipe (Non pressure) 38 mm dia x 2 mm thick	metre	53.00	
29-1616	- Ditto - but 50 mm dia x 2.40 mm thick	metre	93.00	
29-1617	- Ditto - but 75 mm dia x 2.50 mm thick	metre	161.00	
29-1618	- Ditto - but 100 mm dia x 3.40 mm thick	metre	227.00	
29-1619	- Ditto - but 150 mm dia x 4.5 mm thick	metre	425.00	
29-1620	- Ditto - but 200 mm dia x 5.5 mm thick	metre	775.00	
29-1621	PVC Bend / Elbow 16 mm dia for conduit	each	5.00	
29-1622	- Ditto - but 19 mm dia for conduit	each	6.00	
29-1623	PVC Tee 16 mm for conduit	each	6.00	
29-1624	- Ditto - but 19 mm conduit	each	7.00	
29-1625	PVC Edge 1x29 mm	metre	45.00	

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SECTION-29

BUILDING, ROAD, LANDING GROUND, FURNITURE ETC

PART-I

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1626	- Ditto - but 1x22 mm	metre	25.00	
29-1627	- Ditto - but 1x19 mm	metre	20.00	
29-1628	- Ditto - but 1x18 mm	metre	20.00	
29-1629	- Ditto - but 1x12 mm	metre	15.00	
29-1630	PVC Edge 2x34 mm	metre	50.00	
29-1631	- Ditto - but 2x19 mm	metre	25.00	
29-1632	PVC Stoper / Base	each	15.00	
29-1633	Asbestos cement pipe 75 mm bore	metre	60.00	
29-1634	- Ditto - but 100 mm bore	metre	80.00	
29-1635	CI pipe 45 mm bore	metre	900.00	
29-1636	Elbow GI 3 way (Lipi / BPF1)	each	175.00	
29-1637	Pipe MS 38 mm dia adjustable with thread	metre	365.00	
29-1638	Pipe aluminium 19 mm dia any colour	metre	65.00	
29-1639	Pipe aluminium 25 mm dia any colour	metre	75.00	
29-1640	Pipe aluminium 25 mm dia any colour foreign made	metre	145.00	
29-1641	Pipe stainless (SS) 12 mm dia 2 mm thick	metre	180.00	
29-1642	Pipe stainless (SS) 19 mm dia 2 mm thick	metre	285.00	
29-1643	Pipe stainless (SS) 25 mm dia 1.5 mm thick	metre	295.00	
29-1644	Pipe stainless (SS) 25 mm dia 2 mm thick	metre	375.00	
29-1645	Pipe stainless (SS) 38 mm dia 1.5 mm thick	metre	450.00	
29-1646	Pipe stainless (SS) 38 mm dia 2 mm thick	metre	591.00	
29-1647	Pipe stainless (SS) 50 mm dia 2 mm thick	metre	750.00	
29-1648	Pipe stainless (SS) 75mm dia 1.2mm thick	metre	736.00	
29-1649	Pipe stainless (SS) 75mm dia 1.5mm thick	metre	950.00	
29-1650	Pipe stainless (SS) 100mm dia 1.3mm thick	metre	1,277.00	
29-1651	Pipe stainless (SS) 100mm dia 1.5mm thick	metre	1,645.00	
29-1652	Stainless steel (SS) Ball / Top cap / U cap / Anchor Plate size 25mm	each	50.00	
29-1653	- Ditto - 38 mm	each	75.00	
29-1654	- Ditto - 50 mm	each	100.00	
29-1655	- Ditto - 75 mm	each	160.00	

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SECTION-29**BUILDING, ROAD, LANDING GROUND, FURNITURE ETC****PART-I**

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1656	Stainless steel (SS) Elbow/bend 19 mm dia	each	100.00	
29-1657	- Ditto - 25 mm dia	each	135.00	
29-1658	- Ditto - 38 mm dia	each	175.00	
29-1659	- Ditto - 50 mm dia	each	250.00	
29-1660	Stainless steel (SS) sheet 20 gauge	sq. m	3,700.00	
29-1661	- Ditto - 22 gauge	sq. m	3,200.00	
29-1662	Stainless steel (SS) chain 3 mm dia	metre	470.00	
29-1663	Stainless steel angle 38x38x3 mm	metre	630.00	
29-1664	- Ditto - 38x38x2 mm	metre	515.00	
29-1665	MS Socket 150 mm	each	375.00	
29-1666	Pivot MS	each	10.00	
29-1667	Pivots & socket (wrought iron)	doz	125.00	
29-1668	- Ditto - but (Brass)	doz	600.00	
29-1669	Pivot and Socket Brass	set	80.00	
29-1670	Pivot & socket 62.5 CM size iron	set	41.00	
29-1671	150 mm dia perforated plate for Air breather	each	350.00	
29-1672	Poles (1st class soft wood)	metre	100.00	
29-1673	Ends (1st class soft wood)	each	30.00	
29-1674	Ends for curtain pipe 19 mm dia	each	20.00	
29-1675	Ends for curtain pipe 25 mm dia	each	25.00	
29-1676	Poles MN	kg	60.00	
29-1677	Mansion Polish for ceramic brick work	litre	102.00	
29-1678	Polythene sheet (1 kg per 6 sq. m)	sq. m	27.00	
29-1679	Black oxide powder	kg	150.00	
29-1680	Brown powder	kg	200.00	
29-1681	Champa colour	kg	269.00	
29-1682	- Ditto - but Mahagony	kg	1,050.00	
29-1683	French powder	kg	30.00	
29-1684	Red Oxide powder	kg	135.00	
29-1685	Zinc Oxide powder (China)	kg	90.00	
29-1686	Pudlo	kg	100.00	
29-1687	Putty	kg	80.00	
29-1688	Sealant for aluminium works	Tube	450.00	

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BUILDING, ROAD, LANDING GROUND, FURNITURE ETC
PART-I

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1689	Rajon	kg	120.00	
29-1690	Rawel plug (Plastic)	gross	43.00	
29-1691	Rowel bolt any size (copper / brass)	each	40.00	
29-1692	RCC Rail Post (750 to 900 mm)	each	150.00	
29-1693	Hire Rent Mixer machine 0.15 / 0.20 cu.m	Hour	165.00	
29-1694	- Ditto - but Tiles cutting machine	Hour	30.00	
29-1695	Mobilization & Transportation charge of Piles / driving equipment	Job	18,000.00	
29-1696	Hire / Rent for Rig & Winch for foundation pilling	Day	2,000.00	
29-1697	Truck fare (5 Ton) upto 24 km incl earth	Truck		
29-1698	- Ditto - but upto 8 km incl earth	Truck		
29-1699	Rivet Pin Japan Made	each	0.70	
29-1700	Rivet	kg	185.00	
29-1701	Rivet / Sheeting bolts	each	0.70	
29-1702	Sand washed FM 1.20	cu. m	525.00	
29-1703	- Ditto - but FM 1.50	cu. m	650.00	
29-1704	- Ditto - but FM 1.80 (Av) (1/3 of 2.5 FM +2/3 of 1.5 FM)	cu. m	767.00	
29-1705	- Ditto - but FM 2.50 (Sylhet / Others)	cu. m	1,000.00	
29-1706	Sand FM 0.80 (Unwashed)	cu. m	458.00	
29-1707	Sand FM 1.50 (Unwashed)	cu. m	550.00	
29-1708	Sand Vitty	cu. m	375.00	
29-1709	Plastic/Synthetic sand bag of capacity 0.035 cum excluding sand	each	20.00	
29-1710	Sand paper 0 - 1 No	each	5.00	
29-1711	- Ditto - but 1.5 - 2.5 no.	each	5.00	
29-1712	Sash cords 1.87 cm girth Cotton	metre	7.50	
29-1713	- Ditto - but Nylon	metre	8.50	
29-1714	Sash cord with eye cotton/nylon	metre	25.00	
29-1715	Shash Cord for Venetian Blind	metre	12.00	
29-1716	Screw 8 mm dia 95 mm long	each	27.00	
29-1717	Screw 6 mm x 55 mm	each	18.00	
29-1718	Screw mudgard 12 mm	doz	7.50	
29-1719	Screw mudgard 20 mm	doz	8.50	
29-1720	Screw mudgard 25 mm	doz	10.00	

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SECTION-29

BUILDING, ROAD, LANDING GROUND, FURNITURE ETC

PART-I

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1721	Screw Bolts 9 mm dia 7.5 cm long	each	8.00	
29-1722	- Ditto - but 15 cm long	each	18.00	
29-1723	- Ditto - but 30 cm long	each	22.00	
29-1724	Screw Bolts 19 mm dia 7.5 cm long	each	10.00	
29-1725	- Ditto - but 15 cm long	each	25.00	
29-1726	- Ditto - but 30 cm long	each	28.00	
29-1727	Screw Bolts 25 mm dia 7.5 cm long	each	15.00	
29-1728	- Ditto - but 15 cm long	each	28.00	
29-1729	- Ditto - but 30 cm long	each	35.00	
29-1730	Screw brass 19 mm	gross	280.00	
29-1731	- Ditto - but 25 mm	gross	400.00	
29-1732	- Ditto - but 31 mm	gross	425.00	
29-1733	Screw eyes (wrought iron)	doz	25.00	
29-1734	- Ditto - but (Brass)	doz	85.00	
29-1735	Screw Roofing	each	3.00	
29-1736	Tin Screw	gross	300.00	
29-1737	Hooks 'J' bolts 9.53 mm dia	each	15.00	
29-1738	J clip for fixing mirror	doz	40.00	
29-1739	J hooks for fixing with angle iron	gross	500.00	
29-1740	Screw wood 12 mm	gross	30.00	
29-1741	- Ditto - but 19 mm	gross	55.00	
29-1742	- Ditto - but 25 mm	gross	65.00	
29-1743	- Ditto - but 31 mm	gross	75.00	
29-1744	- Ditto - but 38 mm	gross	89.00	
29-1745	- Ditto - but 50 mm	gross	145.00	
29-1746	- Ditto - but 62.50 mm	gross	280.00	
29-1747	- Ditto - but 75 mm	gross	320.00	
29-1748	Methi Seeds	kg	165.00	
29-1749	Gala (shellac fine leaf)	kg	750.00	
29-1750	Varnish Shellac	kg	645.00	
29-1751	Carfa	kg	200.00	

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SECTION-29

BUILDING, ROAD, LANDING GROUND, FURNITURE ETC

PART-I

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1752	Shuttering	sq. m	80.00	
29-1753	Sindur	kg	260.00	
29-1754	Yellow ochre	kg	140.00	
29-1755	Soap washing	each	16.00	
29-1756	Catches spring 5 cm	each	20.00	
29-1757	- Ditto - but 6.25 cm	each	25.00	
29-1758	Helical door spring 150 mm Brass	each	450.00	
29-1759	- Ditto - but Iron	each	175.00	
29-1760	- Ditto - but Aluminium	each	170.00	
29-1761	Spring for rolling shutter	metre	80.00	
29-1762	- Ditto -	each	175.00	
29-1763	Spring for sofa upholster 225mm long	doz	575.00	
29-1764	- Ditto - but 150mm	doz	500.00	
29-1765	Hydraulic door closure (Japan)	each	1,800.00	
29-1766	Hydraulic door closure (Japan) for aluminium swing door	each	4,500.00	
29-1767	Spirit Methylated	litre	130.00	
29-1768	Steel window adjustable stay 300 mm long made of 19x3 mm FI bar	each	22.00	
29-1769	Steel board 100mmx100mm	each	25.00	
29-1770	Steel board 250mmx300mm	each	100.00	
29-1771	Saddle / Clip	each	4.00	
29-1772	Stone aggregate 50 mm graded	cu. m	3,400.00	
29-1773	-Ditto-but 19 mm graded	cu. m	3,500.00	
29-1774	Shingle / Gravel 19mm graded	cu. m	2,650.00	
29-1775	Pea gravel	cu. m	1,800.00	
29-1776	Stone screening	cu. m	1,500.00	
29-1777	Stone chips White for mosaic 3mm (Pakistan)	kg	15.00	
29-1778	- Ditto - but (India)	kg	10.00	
29-1779	Stone chips for mosaic 3mm size (Black)	kg	7.00	
29-1780	Stone coloured chips	kg	16.00	
29-1781	Marble stone 12 mm thick (India)	sq. m	3,000.00	
29-1782	- Ditto - but 19 mm thick (India)	sq. m	3,800.00	

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BUILDING, ROAD, LANDING GROUND, FURNITURE ETC
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Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1783	Pumice stone / Carborandum	each	180.00	
29-1784	12 mm thick marble stone other than India	sq. m	4,800.00	
29-1785	10 /12 mm thick granite (foreign) other than India	sq. m	6,000.00	
29-1786	Foot press stopper (Japan/china made)	each	160.00	
29-1787	Foot press stopper (Plastic block Local made)	each	40.00	
29-1788	Tack cut steel any size	kg	160.00	
29-1789	Tape Insulation	roll	14.00	
29-1790	Tarja matting single	sq. m	50.00	
29-1791	RCC Tee 150 mm bore	each	250.00	
29-1792	RCC Tee 100 mm bore	each	200.00	
29-1793	150 x 100 mm C I plain Tee	each	1,500.00	
29-1794	Thinner	litre	196.00	
29-1795	Thinner for tennis court paint (T2)	litre	300.00	
29-1796	Red facing tiles BISF 142 x 142 x 8.5	sq. m	815.00	
29-1797	Red facing tiles BISF 100 x 100 x 8.5	sq. m	400.00	
29-1798	Chalklet facing tiles BISF 142 x 142 x 8.5	sq. m	1,050.00	
29-1799	Chalklet facing tiles BISF 95 x 95 x 8.5	sq. m	550.00	
29-1800	Ceramic glazed tiles wall (coloured / printed) size 250x400 mm (MIR / Madhumati)	sq. m	451.00	
29-1801	Ceramic glazed tiles wall (coloured / printed) size 200x300 mm (MIR / Madhumati)	sq.m	390.00	
29-1802	Ceramic glazed tiles wall size 200x300 mm (RAK)	sq. m	345.00	
29-1803	Ceramic glazed tiles wall size 250x330 mm (RAK)	sq. m	432.00	
29-1804	Ceramic glazed tiles wall size 250x400 mm (RAK /MIR)	sq. m	467.00	
29-1805	Ceramic glazed tiles floor size 300x300 mm (MIR)	sq.m	355.00	
29-1806	Ceramic glazed tiles floor special size 300x300 mm (MIR)	sq. m	402.00	
29-1807	Ceramic glazed tiles floor size 400x400 mm (MIR)	sq.m	592.00	
29-1808	Ceramic glazed tiles wall red body size 305x510 mm (RAK)	sq. m	515.00	
29-1809	Glazed tiles wall design Fu-wang 200x300 mm	sq.m	355.00	
29-1810	Glazed tiles wall special design Fu-wang 200x300 mm	sq. m	379.00	
29-1811	Glazed tiles wall plain Fu-wang 200x300 mm	sq.m	343.00	
29-1812	Glazed tiles wall luxury (Luster colour) Fu-wang 200x300 mm	sq. m	379.00	

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Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1813	Glazed tiles wall luxury (Roto colour) Fu-wang 200x300 mm	sq.m	355.00	
29-1814	Glazed tiles wall luxury special Fu-wang 250x360 mm	sq. m	402.00	
29-1815	Glazed tiles wall luxury Fu-wang 310x450 mm	sq.m	450.00	
29-1816	Glazed tiles wall luxury polished Fu-wang 310x450 mm	sq. m	450.00	
29-1817	Glazed tiles wall Exterior Fu-wang 65x200 mm	sq. m	220.00	
29-1818	Glazed tiles wall white body (squaring) 305x510 mm -RAK	sq. m	687.00	
29-1819	Glazed tiles wall white body (squaring) 300x600 mm-RAK	sq. m	746.00	
29-1820	Glazed tiles wall (Matt) 250x400 mm (RAK)	sq. m	468.00	
29-1821	Glazed tiles floor Homogeneous GP 400x400 mm (RAK)	sq. m	615.00	
29-1822	Glazed tiles floor Homogeneous mettalic 400x400 mm (RAK)	sq. m	660.00	
29-1823	Glazed tiles floor Homogeneous mettalic 305x305 mm (RAK)	sq.m	610.00	
29-1824	Glazed tiles floor Homogeneous GP mirror polish 400x400 mm (RAK)	sq.m	1,000.00	
29-1825	Glazed tiles floor Homogeneous GP mirror polish 595x595 mm (RAK)	sq.m	1,018.00	
29-1826	Glazed tiles Stair bull nose 305x305 mm (RAK)	sq. m	580.00	
29-1827	Glazed tiles Stair group 305x305 mm (RAK)	sq. m	630.00	
29-1828	Glazed tiles floor Homogeneous 400x400 mm (MIR)	sq. m	592.00	
29-1829	Glazed tiles floor Homogeneous 400x400 mm (MIR) G-4400 GL	sq. m	959.00	
29-1830	Glazed tiles floor Homogeneous 400x400 mm (MIR) G-4400, 4402,4403, 4404, 4405, 4406, 4407	sq.m	592.00	
29-1831	Glazed tiles Homogeneous stair 260x300 mm (MIR)	sq. m	568.00	
29-1832	Glaze Tiles floor (Matt) 316x316 mm (RAK)	sq. m	367.00	
29-1833	Glaze Tiles floor (Matt) 400x400 mm (RAK)	sq. m	475.00	
29-1834	Glaze Tiles floor plain 310x310 mm (Fu-wang)	sq. m	343.00	
29-1835	Ceramic glazed tiles floor, coloured / printed (Fu wang) size 310 x 310 mm	sq. m	355.00	
29-1836	Ceramic glazed tiles floor special design (Fu wang) size 310 x 310 mm	sq. m	379.00	
29-1837	Ceramic glazed tiles floor luxury (Fu wang) size 310 x 310 mm	sq.m	355.00	
29-1838	Ceramic glazed tiles floor luxury (Fu wang) size 420 x 420 mm	sq.m	450.00	
29-1839	Glazed tiles wall (China) any size and design	sq.m	540.00	
29-1840	Glazed tiles wall (other than china) any size and design	sq.m	600.00	
29-1841	Ceramic glazed tiles floor (MIR) size 300 x 300 mm	sq. m	343.00	
29-1842	Ceramic glazed tiles floor special (MIR) size 300 x 300 mm	sq. m	402.00	

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BUILDING, ROAD, LANDING GROUND, FURNITURE ETC

PART-I

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1843	Floor tiles non-slide (Foreign made) any Size	sq. m	1,050.00	
29-1844	Floor tiles coloured (Madhumati) 316x316 mm	sq. m	347.00	
29-1845	Floor tiles coloured (Madhumati) 400x400 mm	sq. m	393.00	
29-1846	Floor tiles Homogeneous (MIR code G-3300, 3302, 3303, 3304, 3305, 3306, 3307, 3023, 3026) 300 x 300 mm	sq. m	532.00	
29-1847	- Ditto - (RAK code -GP, 7GP, 173G, 173UP) 400x400 mm	sq. m	639.00	
29-1848	Floor tiles Homogeneous mirror polish (MIR code G-4401) 400 x 400 mm	sq. m	770.00	
29-1849	- Ditto - (MIR code G-4400GL) 400 x 400 mm	sq. m	880.00	
29-1850	- Ditto - (RAK code-GP) 400 x 400 mm	sq. m	1,000.00	
29-1851	Homogeneous floor parquet sheet / wood alder type (foreign)	sq. m	3,550.00	
29-1852	Stair tiles Homogeneous (Fu-wang code-3601, 3611 / MIR code ST-2600, 2602) size 260x 300mm	sq. m	550.00	
29-1853	Sealer for bone tiles	litre	200.00	
29-1854	Floor tiles homogenous 100x400 (Fu-Wang code -B2301, 23260, 215, 219, 23256, 23561)	sq. m	710.00	
29-1855	Floor tiles homogenous (Fu-Wang code -30906, 30910, 4001, 4011)	sq. m	640.00	
29-1856	Timber in Scantling Chamble	cu. m	90,000.00	
29-1857	- Ditto - but Chittagong Teak	cu. m	135,000.00	
29-1858	- Ditto - but Gamar (Ctg.)	cu. m	51,000.00	
29-1859	- Ditto - but Garjon	cu. m	43,000.00	
29-1860	- Ditto - but Jessore Teak	cu. m	115,000.00	
29-1861	- Ditto - but Jarul	cu. m	60,000.00	
29-1862	- Ditto - but Kathal	cu. m	55,000.00	
29-1863	- Ditto - but Mango	cu. m	14,000.00	
29-1864	- Ditto - but Shisham / Mehgoni	cu. m	64,000.00	
29-1865	- Ditto - but Silkorai (Ctg.)	cu. m	64,000.00	
29-1866	- Ditto - but Telshu	cu. m	60,000.00	
29-1867	- Ditto - but Tit Chamble	cu. m	105,000.00	
29-1868	Mango wood 25mm thick for 6 time shuttering	cu. m	12,500.00	
29-1869	Hard wood beads	metre	20.00	
29-1870	Wooden Bead	metre	12.00	
29-1871	Timber plank 9.3 sq. mx38mmx1/2 using 6 times	cu. m	18,500.00	
29-1872	Runner 4.5 Nos x3.0mx75mmx38mm using 6 times (Mango)	cu. m	20,000.00	

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BUILDING, ROAD, LANDING GROUND, FURNITURE ETC

PART-I

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1873	Hard wood cleat n.exc 250 cum wrought and splayed	each	35.00	
29-1874	Hard board sheets 3 mm thick	sq. m	130.00	
29-1875	Gypsum board 10 mm thick	sq. m	290.00	
29-1876	Melamine laminated board 12 mm thick	sq. m	575.00	
29-1877	- Ditto - but 16 mm thick	sq. m	662.00	
29-1878	- Ditto - but 18 / 19mm thick	sq. m	702.00	
29-1879	- Ditto - but 25 mm thick	sq. m	895.00	
29-1880	- Ditto - but 30 mm thick	sq. m	1,300.00	
29-1881	- Ditto - but 3 mm thick	sq. m	300.00	
29-1882	Partex board 12 mm thick 400 density	sq. m	345.00	
29-1883	- Ditto - but 12 mm thick 500 density	sq. m	380.00	
29-1884	- Ditto - but 19 mm thick 400 density	sq. m	455.00	
29-1885	- Ditto - but 19 mm thick 500 density	sq. m	475.00	
29-1886	- Ditto - but 26 mm thick 400 density	sq. m	550.00	
29-1887	- Ditto - but 26mm thick 500 density	sq. m	625.00	
29-1888	Veneered Partex board 8 mm thick 600 density	sq. m	980.00	
29-1889	- Ditto - but 12mm thick 500 density chapalish	sq. m	1,030.00	
29-1890	- Ditto - but 19mm thick 500 density chapalish	sq. m	1,175.00	
29-1891	- Ditto - but 12mm thick 500 density Teak	sq. m	1,485.00	
29-1892	- Ditto - but 19mm thick 500 density Teak	sq. m	1,630.00	
29-1893	- Ditto - but 12mm thick 500 density Garjon	sq. m	820.00	
29-1894	- Ditto - but 19mm thick 500 density Garjon	sq. m	930.00	
29-1895	- Ditto - but 26 mm thick 500 density chapalish	sq. m	1,660.00	
29-1896	Ply wood 3 mm thick	sq. m	216.00	
29-1897	- Ditto - but 5 mm thick	sq. m	367.00	
29-1898	- Ditto - but 6 mm thick	sq. m	375.00	
29-1899	- Ditto - but 12 mm thick	sq. m	495.00	
29-1900	- Ditto - but 19 mm thick	sq. m	700.00	
29-1901	- Ditto - but 25 mm thick	sq. m	910.00	
29-1902	Ply wood one side laminated 3 mm thick	sq. m	532.00	
29-1903	Flush door (Star Particle) 36 mm (Both side veneered) Garjon	sq. m	1,890.00	

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SECTION-29

BUILDING, ROAD, LANDING GROUND, FURNITURE ETC
PART-I

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1904	- Ditto - but Chapalish	sq. m	2,163.00	
29-1905	- Ditto - but Tit Chamble/Champa	sq. m	2,163.00	
29-1906	- Ditto - but Burma Teak	sq. m	3,132.00	
29-1907	Vertical blind 75-125 mm width	sq. m	2,500.00	
29-1908	Vertical blind 125 mm width synthetic fibre cloth foreign	sq. m	1,770.00	
29-1909	Venetian blind 25 mm width	sq. m	2,400.00	
29-1910	Flush door 36 mm (Star Particle) Garjon (Size 2.08mx0.76m to 2.08mx1.06 m)	sq. m	1,890.00	
29-1911	-Ditto- but Chapalish (Size 2.08mx0.76m to 2.08mx1.06 m)	sq. m	2,163.00	
29-1912	- Ditto - but Tit Chamble(2.08mx0.76m to 2.08mx1.06 m)	sq. m	2,163.00	
29-1913	- Ditto - but Champa (Size 2.08mx0.76m to 2.08mx1.06 m)	sq. m	2,163.00	
29-1914	- Ditto - but Burma Teak (Size 2.08mx0.76m to 2.08mx1.06 m)	sq. m	3,132.00	
29-1915	Vinyl Board as on ceiling as spd	sq. m	454.00	
29-1916	Gypsum board (Vinyl pested) as on ceiling as spd	sq. m	700.00	
29-1917	Fibre board (MDF) medium density thick 18 mm	sq. m	990.00	
29-1918	- Ditto - but 12 mm	sq. m	850.00	
29-1919	- Ditto - but 3 mm	sq. m	600.00	
29-1920	Flush door (Star Particle) 36 mm thick one side vinyl laminated (2.08x0.76 M to 2.08 x 1.06 M) Burma teak	sq. m	2,763.00	
29-1921	- Ditto - but Champa	sq. m	1,929.00	
29-1922	- Ditto - but Chapalish	sq. m	1,720.00	
29-1923	Flush door (Star Particle) 36 mm thick one side vinyl laminated (2.08x0.76 M to 2.08 x0.68 M) Burma teak	sq. m	2,658.00	
29-1924	- Ditto - but Champa	sq. m	2,598.00	
29-1925	- Ditto - but Chapalish	sq. m	2,434.00	
29-1926	Flush door (Star Particle) 36 mm thick both side vinyl laminated (2.8x0.76 M to 2.08 x1.06 M) Chaplish	sq. m	2,250.00	
29-1927	- Ditto - but (2.8x0.6 M to 2.08 x.68 M) Chaplish	sq. m	2,147.00	
29-1928	Partex Vinyl board one side laminated 500 density 12 mm thick	sq. m	454.00	
29-1929	- Ditto - but 19 mm thick	sq. m	584.00	
29-1930	- Ditto - but both side laminated 12 mm thick	sq. m	665.00	
29-1931	- Ditto - but 19 mm thick	sq. m	855.00	
29-1932	- Ditto - but 600 density 8 mm thick one side laminated	sq. m	328.00	

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SECTION-29**BUILDING, ROAD, LANDING GROUND, FURNITURE ETC****PART-I**

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1933	- Ditto - but both side laminated	sq. m	625.00	
29-1934	PCC Pre cast ventilator 450x225 mm size of any design	each	75.00	
29-1935	- Ditto - 450x300 mm size of any design	each	90.00	
29-1936	PCC ventilator	each	40.00	
29-1937	Bitumen washer	gross	40.00	
29-1938	Limpet washer	gross	75.00	
29-1939	6 mm thick PVC water stopper 150 mm wide	metre	260.00	
29-1940	6 mm thick PVC water stopper 200 mm wide	metre	320.00	
29-1941	- Ditto - but 250 mm wide	metre	380.00	
29-1942	Water base acrylic sealer	litre	170.00	
29-1943	Water paper	each	35.00	
29-1944	Wax bee	kg	350.00	
29-1945	Gas welding of MS or wrought iron	metre	100.00	
29-1946	Electric welding of cast or wrought iron	metre	65.00	
29-1947	Welding electrode 8 SWG	each	5.50	
29-1948	Wheel 50 mm dia steel	each	460.00	
29-1949	Wheel for Glass	each	35.00	
29-1950	Wheel for Trolley 50 mm dia set of 4	set	300.00	
29-1951	- Ditto - but 40 mm dia set of 4	each	275.00	
29-1952	- Ditto - but 150 mm dia Japan	each	900.00	
29-1953	- Ditto - but 75 mm dia Japan	each	650.00	
29-1954	Steel wheel for Venetian blind	sq. m	75.00	
29-1955	GI wire	kg	95.00	
29-1956	GI wire 14 SWG	metre	9.00	
29-1957	Frame glass door 4 mm for wagon	each	400.00	
29-1958	Glass door 5 mm thick	sq.m	950.00	
29-1959	Heating Fire wood	kg	5.50	
29-1960	Wooden board (Teak) 100x100 mm	each	35.00	
29-1961	Wooden board (Teak) 250x300 mm	each	100.00	
29-1962	Plastic wood 10 mm thick	sq. m	1,110.00	
29-1963	- Ditto - but 5/6 mm thick	sq. m	480.00	
29-1964	- Ditto - but 3 mm thick	sq. m	325.00	
29-1965	Plastic (Hollow) board 10 mm thick	sq.m	330.00	

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SECTION-29

BUILDING, ROAD, LANDING GROUND, FURNITURE ETC
PART-I

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1966	Plastic Sheet 3 mm	sq. m	750.00	
29-1967	Plastic door 25 mm thick including chowkat / frame	sq. m	4,800.00	
29-1968	- Ditto - but 32 mm thick	sq. m	5,600.00	
29-1969	C R pipe 6 mm dia.	metre	27.00	
29-1970	Neocidol - 60	litre	90.00	
29-1971	32 mm thick hollow plastic door shutter with chowkat	sq. m	2,200.00	
29-1972	Foam lub admixture of BARAL CHEMICAL	litre	275.00	
29-1973	Desalt (SO1) equivalent admixture of BARAL CHEMICAL	litre	420.00	
29-1974	Hydro-seal Ef-32 admixture of BARAL CHEMICAL	litre	490.00	
29-1975	Hydro-seal Ef-34 admixture of BARAL CHEMICAL	litre	570.00	
29-1976	Pesterthy powder admixture of BARAL CHEMICAL	kg	1,800.00	
29-1977	Mosasol admixture of BARAL CHEMICAL	litre	740.00	
29-1978	Marbosol admixture of BARAL CHEMICAL	kg	740.00	
29-1979	Gray cementitious alloy /equivalent chemical of BARAL CHEMICAL	litre	400.00	
29-1980	Pestoklea admixture of BARAL CHEMICAL	litre	2,360.00	
29-1981	Pestonol admixture of BARAL CHEMICALt (Termite controlling liquid)	litre	2,360.00	
29-1982	High strength highly liquified constructional epoxy (A&B) admixture of BARAL CHEMICAL	litre	1,850.00	
29-1983	Flexicem AB of BARAL CHEMICAL	litre	1,380.00	
29-1984	Pestocon of BARAL CHEMICAL (200 mm)	litre	350.00	
29-1985	uPVC Pipe bore 38/40 mm, Non-pressure, wall thickness 2.0 mm	metre	53.00	
29-1986	uPVC Pipe bore 50 mm, Non-pressure, wall thickness 2.4 mm	metre	93.00	
29-1987	uPVC Pipe bore 75 mm, Non-pressure, wall thickness 3 mm	metre	161.00	
29-1988	uPVC Pipe bore 100 mm, Non-pressure, wall thickness 3.4 mm	metre	227.00	
29-1989	uPVC Pipe bore 150 mm, Non-pressure, wall thickness 4 mm	metre	425.00	
29-1990	uPVC plain bend 50 mm dia	each	55.00	
29-1991	uPVC plain bend 100 mm dia	each	175.00	
29-1992	uPVC door bend 100 mm dia	each	180.00	
29-1993	uPVC door bend 150 mm dia	each	610.00	
29-1994	uPVC Plain Tee 50 mm dia	each	65.00	
29-1995	uPVC Plain Tee 100 mm dia	each	190.00	
29-1996	uPVC Plain Tee 150 mm dia	each	800.00	

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SECTION-29

BUILDING, ROAD, LANDING GROUND, FURNITURE ETC

PART-I

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-1997	uPVC door Tee 100 mm dia	each	230.00	
29-1998	uPVC double branch 100 mm dia	each	255.00	
29-1999	uPVC floor trap (P or S type) 100 mm dia	each	560.00	
29-2000	uPVC Cowel 50 mm dia	each	95.00	
29-2001	uPVC Cowel 100 mm dia	each	150.00	
29-2002	uPVC Cowel 150 mm dia	each	200.00	
29-2003	uPVC Y / T section 50 mm bore	each	150.00	
29-2004	uPVC Y / T section 100 mm bore	each	260.00	
29-2005	uPVC Y / T section 150 mm bore	each	400.00	
29-2006	Diffuser 200x200 mm	each	1,600.00	
29-2007	Diffuser 250x250 mm	each	1,750.00	
29-2008	Diffuser 300x300 mm	each	2,100.00	
29-2009	Diffuser 350x350 mm	each	2,400.00	
29-2010	Diffuser 400x400 mm	each	2,600.00	
29-2011	Diffuser 450x450 mm	each	3,200.00	
29-2012	Pre-filter for central Air conditioner	each	9,000.00	
29-2013	Intermediate filter for central Air conditioner	each	20,000.00	
29-2014	Hepa filter for central Air conditioner	each	35,000.00	
29-2015	Gas freon 12	kg	400.00	
29-2016	Gas freon 22	kg	450.00	
29-2017	Return grill 200x200 mm	each	2,200.00	
29-2018	Return grill 250x250 mm	each	2,400.00	
29-2019	Return grill 300x300 mm	each	2,600.00	
29-2020	Return grill 350x350 mm	each	2,850.00	
29-2021	Return grill 400x400 mm	each	3,000.00	
29-2022	Return grill 450x450 mm	each	3,500.00	
29-2023	Thermostat switch for air conditioner	each	400.00	
29-2024	Thermostat switch for refrigerator	each	300.00	
29-2025	Selector switch foreign made for Window type Air cooler / conditioner	each	400.00	
29-2026	Facing bricks ATI ceramic any colour size 228.6x63.5x12 mm	M nos	11,000.00	
29-2027	Iron Wire 32 Gauze 7x7 mesh	sq. m	140.00	
29-2028	Iron Wire 24 Gauze 7x7 mesh	sq. m	135.00	
29-2029	Ceramic Glazed tiles ATI any colour size 304x304 mm	sq. m	510.00	
29-2030	Ceramic Glazed tiles ATI any colour size 400x400 mm	sq. m	560.00	

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SECTION-29

BUILDING, ROAD, LANDING GROUND, FURNITURE ETC

PART-I

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-2031	Ceramic Glazed tiles ATI mono colour any size	sq. m	680.00	
29-2032	Homogeneous mirror polish foreign made size 600x600 mm	sq. m	2,150.00	
29-2033	Combi closet RAK product Karla	each	7,600.00	
29-2034	Combi closet RAK product Orient	each	8,600.00	
29-2035	3 hole re-inforcing Bricks size 237.5x112x70 mm (MCW Ltd)	M nos	12,650.00	
29-2036	In / out side wall facing strips CT-5 200x62x16 mm colour Red	M nos	14,850.00	
29-2037	In/out side wall facing strips CT-5 200x62x16 mm colour Black	M nos	15,950.00	
29-2038	In / out side wall facing strips CT-5 200x62x16 mm colour Beige /Grey /Staffordshire mixed stone	M nos	16,775.00	
29-2039	In / out side wall facing strips CT-5 200x62x16 mm colour Apricot	M nos	22,000.00	
29-2040	In / out side wall facing strips CT-5 200x62x16 mm colour peach	M nos	23,000.00	
29-2041	In / out side wall facing strips CT-5 200x62x25 mm colour Red	M nos	15,400.00	
29-2042	In / out side wall facing strips CT-5 200x62x25 mm colour Black/Beige	M nos	16,900.00	
29-2043	In / out side wall facing strips CT-5 200x62x25 mm colour Apricot	M nos	24,000.00	
29-2044	In / out side wall facing strips CT-5 200x75x19 mm colour Red	M nos	19,800.00	
29-2045	In / out side wall facing strips CT-5 200x75x19 mm colour Black/Beige	M nos	24,200.00	
29-2046	In / out side wall facing strips Sand stone effect 225x100 mm colour Beige / Grey	M nos	30,000.00	
29-2047	In / out side wall facing strips Textured tiles 225x37.5 mm colour Red	M nos	12,000.00	
29-2048	In / out side wall facing strips Textured tiles 225x37.5 mm colour Beige	M nos	13,000.00	
29-2049	In / out side wall facing strips Smooth surface 225x37.5 mm colour Red	M nos	12,000.00	
29-2050	In / out side wall facing strips Smooth surface 225x37.5 mm colour Black/Beige	M nos	13,000.00	
29-2051	In / out side wall facing strips Smooth surface 150x25 mm colour Red /Black /Beige/ Grey/ Staffordshire mixed stone	M nos	5,500.00	
29-2052	In / out side wall facing strips Smooth surface 150x25 mm colour Apricot/Peach	M nos	7,000.00	
29-2053	In / out side wall facing strips Paty design 200x100 mm colour Red/Black/Beige	M nos	21,000.00	
29-2054	In / out side wall facing strips Mountain tiles 150x100 mm colour Red/Beige/ Grey/ Staffordshird mixed stone	M nos	13,500.00	
29-2055	In / out side wall facing strips Mountain tiles 150x100 mm colour Peach	M nos	16,500.00	
29-2056	In / out side wall facing strips Ruby design size 112x75 mm colour Red/Black/Beige/Grey/ Staffordsired mixed stone	M nos	9,200.00	
29-2057	In / out side wall facing strips Ruby design size 112x75 mm colour Peach	M nos	12,000.00	
29-2058	In / out side wall facing strips Centered tapered size 100x100 mm colour Red/Beige	M nos	13,000.00	
29-2059	In / out side wall facing strips Embossed design size 100x100 mm colour Red/Black/ Beige/ Grey /Staffordsired mixed stone	M nos	9,200.00	

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SECTION-29

BUILDING, ROAD, LANDING GROUND, FURNITURE ETC**PART-I**

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-2060	In / out side wall facing strips Embossed design size 100x100 mm colour Peach	M nos	12,000.00	
29-2061	In / out side wall facing strips Stone effect tiles size 100x100 mm colour Red	M nos	11,000.00	
29-2062	In / out side wall facing strips Stone effect tiles size 100x100 mm colour Black/Beige/Grey	M nos	13,000.00	
29-2063	In / out side wall facing strips Smooth surface size 100x100 mm colour Red	M nos	11,000.00	
29-2064	In / out side wall facing strips Smooth surface size 100x100 mm colour Black/Beige	M nos	13,000.00	
29-2065	In / out side wall facing strips Smooth surface size 100x100 mm colour Apricot	M nos	15,000.00	
29-2066	In / out side wall facing strips Klinker facing size 200x50x50 mm colour Maroon	M nos	11,800.00	
29-2067	Roofing/Ceiling/Flooring Blocks Roof Tiles-Taylor size 125x171mm colour Red	M nos	22,000.00	
29-2068	Roofing/Ceiling/Flooring Blocks Roof Tiles-Taylor size 125x171mm colour Black	M nos	25,300.00	
29-2069	Roofing/Ceiling/Flooring Blocks Roof Tiles-Taylor size 125x171mm colour Beige	M nos	25,300.00	
29-2070	Roofing/Ceiling/Flooring Blocks Roof Tiles-Flower size 175x175mm colour Red	M nos	17,600.00	
29-2071	Roofing/Ceiling/Flooring Blocks Roof Tiles-Flower size 175x175mm colour Black	M nos	19,800.00	
29-2072	Roofing/Ceiling/Flooring Blocks Roof Tiles-Flower size 175x175mm colour Beige	M nos	19,800.00	
29-2073	Roofing/Ceiling/Flooring Blocks Roof Tiles-Channel C size 200x100mm v Red	M nos	20,000.00	
29-2074	Roofing/Ceiling/Flooring Blocks Roof Tiles-Channel C size 200x100mm colour Black	M nos	24,200.00	
29-2075	Roofing/Ceiling/Flooring Blocks Roof Tiles-Channel C size 200x100mm colour Beige	M nos	24,200.00	
29-2076	Roofing/Ceiling/Flooring Blocks Roof Tiles-Channel B size 200x100mm colour Red	M nos	20,000.00	
29-2077	Roofing/Ceiling/Flooring Blocks Roof Tiles-Channel B size 200x100mm colour Black	M nos	24,200.00	
29-2078	Roofing/Ceiling/Flooring Blocks Roof Tiles-Channel B size 200x100mm colour Beige	M nos	24,200.00	
29-2079	Roofing/Ceiling/Flooring Blocks Roof Tiles-Ridge size 200x100mm colour Red	M nos	20,000.00	
29-2080	Roofing/Ceiling/Flooring Blocks Roof Tiles-Ridge size 200x100mm colour Black	M nos	24,200.00	
29-2081	Roofing/Ceiling/Flooring Blocks Roof Tiles-Ridge size 200x100mm colour Beige	M nos	24,200.00	
29-2082	Roofing/Ceiling/Flooring Blocks Roof Tiles-Round size 200x125mm colour Red	M nos	25,300.00	
29-2083	Roofing/Ceiling/Flooring Blocks Roof Tiles-Ruond size 200x125mm colour Black	M nos	27,500.00	
29-2084	Roofing/Ceiling/Flooring Blocks Roof Tiles-Round size 200x125mm colour Beige	M nos	27,500.00	

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SECTION-29

BUILDING, ROAD, LANDING GROUND, FURNITURE ETC

PART-I

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-2085	Roofing/Ceiling/Flooring Blocks Roof Tiles-Residence size 200x125mm colour Red	M nos	22,000.00	
29-2086	Roofing/Ceiling/Flooring Blocks Roof Tiles-Residence size 200x125mm colour Black	M nos	25,300.00	
29-2087	Roofing/Ceiling/Flooring Blocks Roof Tiles-Residence size 200x125mm colour Beige	M nos	25,300.00	
29-2088	High Load Bearing Pavers size 200x100x50mm colour Red	M nos	15,400.00	
29-2089	High Load Bearing Pavers size 200x100x20mm colour Red	M nos	19,800.00	
29-2090A	High Load Bearing Pavers size 200x100x20mm colour Black	M nos	24,200.00	
29-2090A	High Load Bearing Pavers size 200x100x20mm colour Beige	M nos	24,200.00	
29-2090A	High Load Bearing Pavers size 200x100x20mm colour Apricot	M nos	27,500.00	
29-2090A	High Load Bearing Pavers size 100x100x20mm colour Red	M nos	11,000.00	
29-2090B	High Load Bearing Pavers size 100x100x20mm colour Black	M nos	13,200.00	
29-2090B	High Load Bearing Pavers size 100x100x20mm colour Beige	M nos	13,200.00	
29-2090B	High Load Bearing Pavers size 100x100x20mm colour Apricot	M nos	15,400.00	
29-2090B	High Load Bearing Pavers size 100x100x50mm colour Red	M nos	9,900.00	
29-2091	High Load Bearing Pavers size 100x100x50mm colour Maroon	M nos	11,000.00	
29-2092	High Load Bearing Pavers size 200x50x50mm colour Red	M nos	10,725.00	
29-2093	High Load Bearing Pavers size 200x50x50mm colour Maroon	M nos	11,825.00	
29-2094	High Load Bearing CT-10 size 230/150x80x25mm colour Red	M nos	16,500.00	
29-2095	High Load Bearing CT-10 size 230/150x80x25mm colour Black	M nos	20,900.00	
29-2096	High Load Bearing CT-10 size 230/150x80x25mm colour Beige	M nos	20,900.00	
29-2097	High Load Bearing CT-10 size 230/150x80x25mm colour Apricot	M nos	26,400.00	
29-2098	High Load Bearing CT-3 size 150x150x25mm colour Red	M nos	17,600.00	
29-2099	High Load Bearing CT-3 size 150x150x25mm colour Black	M nos	22,000.00	
29-2100	High Load Bearing CT-3 size 150x150x25mm colour Beige	M nos	22,000.00	
29-2101	High Load Bearing CT-3 size 150x150x25mm colour Apricot	M nos	27,500.00	
29-2102	High Load Bearing Button Tiles size 200x200mm colour Red	M nos	38,500.00	
29-2103	High Load Bearing Button Tiles size 200x200mm colour Black	M nos	43,000.00	
29-2104	High Load Bearing Button Tiles size 200x200mm colour Beige	M nos	47,500.00	
29-2105	Fancy Screens (Ornamental screens) Design No.-1 size 138x138x100mm	Each	24.20	
29-2106	Fancy Screens (Ornamental screens) Design No.-20 size 150x150x100mm	Each	27.50	
29-2107	Fancy Screens (Ornamental screens) Design No.-21 size 150x150x113mm	Each	27.50	
29-2108	Fancy Screens (Ornamental screens) Design No.-3 size 100x100x100mm	Each	22.20	

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SECTION-29

BUILDING, ROAD, LANDING GROUND, FURNITURE ETC
PART-I

Item No	Description of Materials	Unit	Rate in Taka	Remarks
29-2109	Fancy Screens (Ornamental screens) Design No.-24 size 200x200x106mm	Each	33.00	
29-2110	Fancy Screens (Ornamental screens) Design No.-25 size 200x200x113mm	Each	33.00	
29-2111	Fancy Screens (Ornamental screens) Design No.-31 size 200x119x100mm	Each	33.00	
29-2112	Fancy Screens (Ornamental screens) Design No.-27 size 150x150x100mm	Each	27.50	
29-2113	Brick work with Mirpur ceramic having 3 holes size 240x162x100mm	M nos	18,400.00	
29-2114	Brick work with Mirpur ceramic having 3 holes size 120x162x113mm	M nos	11,500.00	
29-2115	Brick work with Mirpur ceramic having 3 holes re-inforcing size 240x113x70mm	M nos	12,600.00	
29-2116 to 29-2200	Blank			

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SECTION-29

RATE TABLE (With Carrying Charges)

ELECTRIFICATION

PART - II

House Wiring & Power Cables

Schedule Item	Description of Cables			Unit	Retail Price in Tk		
	Code	Core	Size		Eastern	Other than Eastern	
						PVC	XLPE

Cable PVC insulated and PVC sheathed BS 6004/6004 : 84, BDS 900 : 79 Rated Voltage 250/440 volts.

29-2201	IYYL / BYM	1 x 1.3	rm	Metre	16.10	16.45	-
29-2202	- Ditto - but	1 x 1.5	rm (3/.036)	Metre	17.82	18.09	-
29-2203	- Ditto - but	1 x 2.5	rm (7/.029)	Metre	26.43	27.67	-
29-2204	- Ditto - but	1 x 4	rm (7/.036)	Metre	42.63	40.99	-
29-2205	- Ditto - but	1 x 6	rm (7/.044)	Metre	60.95	58.62	-
29-2206	- Ditto - but	1 x 9.5	rm (7/.052)	Metre	96.31	90.50	-
29-2207	- Ditto - but	1 x 14.5	rm (7/.064)	Metre	156.85	133.79	-

Cable PVC insulated non-sheathed single core BS 2004 & 6004 : 84, BDS 900 : 79 Rated Voltage 250/440 volts.

29-2208	IYAL/BYA - FR/ FRLS	1 x 1.3	rm (3/.029)	Metre	13.18	12.08	-
29-2209	- Ditto - but	1 x 1.5	rm (3/.036)	Metre	14.99	13.60	-
29-2210	- Ditto - but	1 x 2.5	rm (7/.029)	Metre	23.59	21.99	-
29-2211	- Ditto - but	1 x 4	rm (7/.036)	Metre	37.35	33.95	-
29-2212	- Ditto - but	1 x 6	rm (7/.044)	Metre	55.09	50.59	-
29-2213	- Ditto - but	1 x 14.5	rm (7/.052)	Metre	-	119.63	-
29-2214	- Ditto - but	1 x 16	rm (7/.064)	Metre	129.90	134.38	-

Cable PVC insulated Field limiting semi conducting layers over conductor and core, copper shield over core & PVC overall sheathed 5.8/10 KV VDE-0271/3.69, BDS 901 : 79 Rated permissible service Voltage 7000/12000 volts.

29-2215	NYHSY-HT	1 x 50	rm	Metre	831.92	815.86	-
29-2216	- Ditto - but	1 x 70	rm	Metre	1050.64	1040.86	-
29-2217	- Ditto - but	1 x 95	rm	Metre	1309.05	1343.88	-
29-2218	- Ditto - but	1 x 120	rm	Metre	1562.06	1612.59	-
29-2219	- Ditto - but	1 x 185	rm	Metre	2156.27	2315.18	-
29-2220	- Ditto - but	1 x 240	rm	Metre	2645.27	2972.90	-

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PART - II

House Wiring & Power Cables

Schedule Item	Description of Cables			Unit	Retail Price in Tk		
	Code	Core	Size		Eastern	Other than Eastern	
						PVC	XLPE

Cable PVC insulated and PVC non - sheathed BS 2004 / 6004 : 84, BDS 900 : 79 Rated Voltage 250/440 volts.

29-2221	IYAL / BYA	1	x	1.3	rm	(3/.029)	Metre	13.18	11.76	-
29-2222	- Ditto - but	1	x	1.5	rm	(3/.036)	Metre	14.27	13.35	-
29-2222 A	- Ditto - but	1	x	1.5	rm	(7/.029)	Metre	14.52	13.37	-
29-2223	- Ditto - but	1	x	2.5	rm	(7/.029)	Metre	23.34	21.51	-
29-2224	- Ditto - but	1	x	4	rm	(7/.036)	Metre	36.83	33.39	-
29-2225	- Ditto - but	1	x	6	rm	(7/.044)	Metre	54.73	49.93	-
29-2226	- Ditto - but	1	x	9.5	rm	(7/.052)	Metre	-	78.63	-
29-2227	- Ditto - but	1	x	14.5	rm	(7/.064)	Metre	129.90	118.33	-

Cable PVC insulated and PVC sheathed Flat Twin core BS : 2004 & 6004/84 BDS 900/79 Rated Voltage 250/400 volts.

29-2228	BYFY	2	x	1.3	rm	(3/.029)	Metre	33.83	32.19	-
29-2229	- Ditto - but	2	x	1.5	rm	(3/.036)	Metre	42.67	35.87	-
29-2230	- Ditto - but	2	x	2.5	rm	(7/.029)	Metre	65.73	56.27	-
29-2231	- Ditto - but	2	x	4	rm	(7/.036)	Metre	80.58	83.77	-
29-2232	- Ditto - but	2	x	6	rm	(7/.044)	Metre	119.25	119.57	-
29-2233	- Ditto - but	2	x	10	rm	(7/.052)	Metre	0.00	196.70	-
29-2234	- Ditto - but	2	x	16	rm	(7/.064)	Metre	0.00	297.71	-

Cable PVC insulated and PVC sheathed VDE 0271/3.69, BDS 901 / 79 Rated Voltage 600/1000 volts.

29-2235	NY Y / N2XY	1	x	1.5	re	(7-w)	Metre	30.54	26.32	26.32
29-2236	- Ditto - but	1	x	2.5	re	(7-w)	Metre	37.55	36.45	36.45
29-2237	- Ditto - but	1	x	4	rm	(7-w)	Metre	54.29	53.03	53.03
29-2238	- Ditto - but	1	x	6	rm	(7-w)	Metre	77.17	73.79	73.79
29-2239	- Ditto - but	1	x	10	rm	(7-w)	Metre	115.11	109.61	109.61
29-2240	- Ditto - but	1	x	16	rm	(7-w)	Metre	174.01	163.74	163.74
29-2241	- Ditto - but	1	x	25	rm	(7-w)	Metre	268.62	254.42	254.42
29-2242	- Ditto - but	1	x	25	rm	(19-w)	Metre	0.00	256.18	256.18
29-2243	- Ditto - but	1	x	35	rm	(19-w)	Metre	363.98	341.47	341.47
29-2244	- Ditto - but	1	x	50	rm	(19-w)	Metre	513.42	480.59	480.59
29-2245	- Ditto - but	1	x	70	rm	(19-w)	Metre	708.21	658.99	658.99

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PART - II

House Wiring & Power Cables

Schedule Item	Description of Cables						Unit	Retail Price in Tk		
	Code	Core		Size		Eastern		Other than Eastern		
								PVC	XLPE	
<u>Cable PVC insulated and PVC sheathed VDE 0271/3.69, BDS 901 / 79 Rated Voltage 600/1000 volts.</u>										
29-2246	NYY / N2XY	1	x	95	rm	(19-w)	Metre	950.63	879.01	879.01
29-2247	- Ditto - but	1	x	120	rm	(37-w)	Metre	1192.48	1097.73	1097.73
29-2248	- Ditto - but	1	x	150	rm	(37-w)	Metre	1492.59	1367.51	1367.51
29-2249	- Ditto - but	1	x	185	rm	(37-w)	Metre	1835.75	1685.72	1685.72
29-2250	- Ditto - but	1	x	240	rm	(61-w)	Metre	2404.31	2179.22	2179.22
29-2251	- Ditto - but	1	x	300	rm	(61-w)	Metre	3015.59	2702.85	2702.85
29-2252	- Ditto - but	1	x	400	rm	(61-w)	Metre	3951.36	3593.61	3593.61
29-2253	- Ditto - but	1	x	500	rm	(61-w)	Metre	4920.94	4480.61	4480.61
29-2254	- Ditto - but	1	x	630	rm	(127-w)	Metre	6167.35	5635.90	5635.90
29-2255	- Ditto - but	1	x	800	rm	(127-w)	Metre	0.00	0.00	-
29-2256	- Ditto - but	1	x	1000	rm	(127-w)	Metre	0.00	0.00	-
29-2257	NYY / N2XY	2	x	1.5	re	(1-w)	Metre	67.41	69.82	69.82
29-2258	- Ditto - but	2	x	1.5	rm	(7-w)	Metre	78.13	72.46	72.46
29-2259	- Ditto - but	2	x	2.5	re	(1-w)	Metre	94.92	96.30	96.30
29-2260	- Ditto - but	2	x	2.5	rm	(7-w)	Metre	97.40	98.33	98.33
29-2261	- Ditto - but	2	x	4	rm	(7-w)	Metre	138.97	136.59	136.59
29-2262	- Ditto - but	2	x	6	rm	(7-w)	Metre	186.88	183.60	183.60
29-2263	- Ditto - but	2	x	10	rm	(7-w)	Metre	276.80	271.41	271.41
29-2264	- Ditto - but	2	x	16	rm	(7-w)	Metre	410.55	390.29	390.29
29-2265	- Ditto - but	2	x	25	rm	(7-w)	Metre	633.38	598.44	598.44
29-2266	- Ditto - but	2	x	35	rm	(19-w)	Metre	0.00	794.95	794.95
29-2267	NYY / N2XY	3	x	1.5	re	(1-w)	Metre	85.39	84.80	84.80
29-2268	- Ditto - but	3	x	1.5	rm	(7-w)	Metre	89.38	87.73	87.73
29-2269	- Ditto - but	3	x	2.5	re	(1-w)	Metre	123.63	118.95	118.95
29-2270	- Ditto - but	3	x	2.5	rm	(7-w)	Metre	127.85	123.08	123.08
29-2271	- Ditto - but	3	x	4	rm	(7-w)	Metre	187.06	176.09	176.09
29-2272	- Ditto - but	3	x	6	rm	(7-w)	Metre	253.64	238.94	238.94

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PART - II

House Wiring & Power Cables

Schedule Item	Description of Cables						Unit	Retail Price in Tk		
	Code	Core	Size					Eastern	Other than Eastern	
									PVC	XLPE

Cable PVC insulated and PVC sheathed VDE 0271/3.69, BDS 901 / 79 Rated Voltage 600/1000 volts.

29-2273	NYY / N2XY	3	x	10	rm	(7-w)	Metre	376.94	359.56	359.56
29-2274	- Ditto - but	3	x	16	rm	(7-w)	Metre	584.65	543.77	543.77
29-2275	- Ditto - but	3	x	25	rm	(7-w)	Metre	893.25	828.94	828.94
29-2276	- Ditto - but	3	x	35	sm	(19-w)	Metre	1177.85	1024.69	1024.69
29-2277	- Ditto - but	3	x	50	sm	(19-w)	Metre	1565.54	1448.47	1448.47
29-2278	- Ditto - but	3	x	70	sm	(19-w)	Metre	2171.24	1988.37	1988.37
29-2279	- Ditto - but	3	x	95	sm	(19-w)	Metre	2953.49	2678.27	2678.27
29-2280	- Ditto - but	3	x	120	sm	(37-w)	Metre	3687.72	3337.69	3337.69
29-2281	- Ditto - but	3	x	150	sm	(37-w)	Metre	4578.89	4148.93	4148.93
29-2282	- Ditto - but	3	x	185	sm	(37-w)	Metre	5628.72	5132.32	5132.32
29-2283	- Ditto - but	3	x	240	sm	(61-w)	Metre	7290.01	6629.75	6629.75
29-2284	- Ditto - but	3	x	300	sm	(61-w)	Metre	9217.13	8237.54	8237.54
29-2285	- Ditto - but	3	x	400	rm	(61-w)	Metre	0.00	11002.86	11002.86
29-2286	- Ditto - but	3	x	500	rm	(61-w)	Metre	0.00	0.00	-
29-2287	- Ditto - but	3	x	630	rm	(61-w)	Metre	0.00	0.00	-
29-2288	NYY / N2XY	3 ^{1/2}	x	25/16	rm	(7/7-w)	Metre	1082.12	997.94	997.94
29-2289	- Ditto - but	3 ^{1/2}	x	35/16	sm	(19/7-w)	Metre	1289.11	1217.23	1217.23
29-2290	- Ditto - but	3 ^{1/2}	x	50/25	sm	(19/7-w)	Metre	1830.81	1721.00	1721.00
29-2291	- Ditto - but	3 ^{1/2}	x	70/35	sm	(19/19-w)	Metre	2539.66	2414.87	2414.87
29-2292	- Ditto - but	3 ^{1/2}	x	95/50	sm	(19/19-w)	Metre	3453.98	3274.46	3274.46
29-2293	- Ditto - but	3 ^{1/2}	x	120/70	sm	(37/19-w)	Metre	4402.92	4103.47	4103.47
29-2294	- Ditto - but	3 ^{1/2}	x	150/70	sm	(37/19-w)	Metre	5313.40	4912.67	4912.67
29-2295	- Ditto - but	3 ^{1/2}	x	185/95	sm	(37/19-w)	Metre	6645.56	6109.62	6109.62
29-2296	- Ditto - but	3 ^{1/2}	x	240/120	sm	(37/19-w)	Metre	8707.16	7905.36	7905.36
29-2297	- Ditto - but	3 ^{1/2}	x	300/150	sm	(61/19-w)	Metre	10926.63	9831.55	9831.55

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PART - II

House Wiring & Power Cables

Schedule Item	Description of Cables						Unit	Retail Price in Tk		
	Code	Core		Size		Eastern		Other than Eastern		
								PVC	XLPE	
	<u>Cable PVC insulated and PVC sheathed VDE 0271/3.69, BDS 901 / 79 Rated Voltage 600/1000 volts.</u>									
29-2298	NYN / N2XY	4	x	1.5	re	(1-w)	Metre	103.89	108.70	108.70
29-2299	- Ditto - but	4	x	1.5	rm	(7-w)	Metre	109.90	110.60	110.60
29-2300	- Ditto - but	4	x	2.5	re	(1-w)	Metre	151.10	153.45	153.45
29-2301	- Ditto - but	4	x	2.5	rm	(7-w)	Metre	161.38	161.81	161.81
29-2302	- Ditto - but	4	x	4	rm	(7-w)	Metre	240.04	226.30	226.30
29-2303	- Ditto - but	4	x	6	rm	(7-w)	Metre	320.47	315.29	315.29
29-2304	- Ditto - but	4	x	10	rm	(7-w)	Metre	497.02	475.14	475.14
29-2305	- Ditto - but	4	x	16	rm	(7-w)	Metre	765.49	714.46	714.46
29-2306	- Ditto - but	4	x	16	rm	(19-w)	Metre	0.00	720.39	720.39
29-2307	- Ditto - but	4	x	25	rm	(7-w)	Metre	1178.64	1094.27	1094.27
29-2308	- Ditto - but	4	x	25	rm	(19-w)	Metre	0.00	1098.01	1098.01
29-2309	- Ditto - but	4	x	35	sm	(20-w)	Metre	1507.01	1477.93	1477.93
29-2310	- Ditto - but	4	x	50	sm	(20-w)	Metre	2106.63	2057.54	2057.54
29-2311	- Ditto - but	4	x	70	sm	(20-w)	Metre	2911.55	1603.82	1603.82
29-2312	- Ditto - but	4	x	95	sm	(20-w)	Metre	3886.22	3626.21	3626.21
29-2313	- Ditto - but	4	x	120	sm	(39-w)	Metre	4859.83	4484.66	4484.66
29-2314	- Ditto - but	4	x	150	sm	(39-w)	Metre	6106.70	5599.15	5599.15
29-2315	- Ditto - but	4	x	185	sm	(39-w)	Metre	7541.61	6874.37	6874.37
29-2316	- Ditto - but	4	x	240	sm	(39-w)	Metre	9886.80	8989.35	8989.35
29-2317	- Ditto - but	4	x	300	sm	(39-w)	Metre	12447.53	11126.88	11126.88

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House Wiring & Power Cables

Schedule Item	Description of Cables					Unit	Retail Price in Tk		
	Code	Core	Size				Eastern	Other than Eastern	
								PVC	XLPE

Cable PVC insulated flat steel wire armouring helical steel taping and PVC outer sheathe VDE 0271/3.69, BDS 901 / 85 Rated Voltage 5800/10000 volts.

29-2318	NYSEYFGby /	3	x	16	rm		Metre	2281.27	1793.05	-
29-2319	2XSEYFGbY (HT)	3	x	25	rm		Metre	2742.68	2186.16	2186.16
29-2320	- Ditto - but	3	x	35	sm		Metre	3095.67	2585.65	2585.65
29-2321	- Ditto - but	3	x	50	sm		Metre	3749.76	3074.31	3074.31
29-2322	- Ditto - but	3	x	70	sm		Metre	4471.04	3791.26	3791.26
29-2323	- Ditto - but	3	x	95	sm		Metre	5367.81	4669.12	4669.12
29-2324	- Ditto - but	3	x	120	sm		Metre	6335.99	5486.91	5486.91
29-2325	- Ditto - but	3	x	150	sm		Metre	7397.66	6460.85	6460.85
29-2326	- Ditto - but	3	x	185	sm		Metre	8898.47	7622.74	7622.74
29-2327	- Ditto - but	3	x	240	sm		Metre	0.00	9479.40	9479.40

Cable PVC insulated and PVC Non - sheathed BS : 900 / 79 BDS : 900 / 79 Rated Voltage 450 / 750 volts.

29-2328	BYA	1	x	1	re	(1-w)	Metre	9.49	8.93	-
29-2329	- Ditto - but	1	x	1.5	re	(1-w)	Metre	13.416	12.98	-
29-2330	- Ditto - but	1	x	1.5	rm	(7-w)	Metre	14.52	13.35	-
29-2331	- Ditto - but	1	x	2.5	re	(1-w)	Metre	22.85	21.15	-
29-2332	- Ditto - but	1	x	2.5	rm	(7-w)	Metre	23.34	21.51	-
29-2333	- Ditto - but	1	x	4	rm	(7-w)	Metre	36.83	33.39	-
29-2334	- Ditto - but	1	x	6	rm	(7-w)	Metre	54.73	49.93	-
29-2335	- Ditto - but	1	x	10	rm	(7-w)	Metre	89.73	82.15	-
29-2336	- Ditto - but	1	x	16	rm	(7-w)	Metre	141.81	129.73	-
29-2337	- Ditto - but	1	x	16	rm	(19-w)	Metre	144.61	133.01	-
29-2338	- Ditto - but	1	x	25	rm	(7-w)	Metre	238.70	217.16	-
29-2339	- Ditto - but	1	x	25	rm	(19-w)	Metre	242.32	218.98	-

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House Wiring & Power Cables

Schedule Item	Description of Cables			Unit	Retail Price in Tk		
	Code	Core	Size		Eastern	Other than Eastern	
						PVC	XLPE

Cable PVC insulated and PVC Non - sheathed BS : 900/79 BDS : 900/79 Rated Voltage 450/750 volts.

29-2340	- Ditto - but	1	x	35	rm (19-w)	Metre	328.28	299.62	-
29-2341	- Ditto - but	1	x	50	rm (19-w)	Metre	472.37	427.25	-
29-2342	- Ditto - but	1	x	70	rm (19-w)	Metre	659.86	595.75	-
29-2343	- Ditto - but	1	x	95	rm (19-w)	Metre	891.59	801.79	-
29-2344	- Ditto - but	1	x	120	rm (37-w)	Metre	1122.31	1008.01	-
29-2345	- Ditto - but	1	x	150	rm (37-w)	Metre	1253.27	1260.55	-
29-2346	- Ditto - but	1	x	185	rm (37-w)	Metre	1505.44	1553.82	-
29-2347	- Ditto - but	1	x	240	rm (61-w)	Metre	2243.53	2021.30	-
29-2348	- Ditto - but	1	x	300	rm (61-w)	Metre	2809.87	2514.70	-
29-2349	- Ditto - but	1	x	400	rm (61-w)	Metre	3635.28	3352.53	-
29-2350	- Ditto - but	1	x	500	rm (61-w)	Metre	4062.00	4181.99	-

Cable PVC insulated and PVC sheathed Flat Twin core BS : 6004/84 BDS 900/79 Rated Voltage 300/500 volts.

29-2351	BYFY	2	x	1	re (1-w)	Metre	24.99	25.49	-
29-2352	- Ditto - but	2	x	1.5	re (1-w)	Metre	32.38	35.87	-
29-2353	- Ditto - but	2	x	2.5	re (1-w)	Metre	52.33	56.27	-
29-2354	- Ditto - but	2	x	4	rm (7-w)	Metre	80.58	83.77	-
29-2355	- Ditto - but	2	x	6	rm (7-w)	Metre	119.25	119.57	-
29-2356	- Ditto - but	2	x	10	rm (7-w)	Metre	0.00	196.70	-
29-2357	- Ditto - but	2	x	16	rm (7-w)	Metre	0.00	297.71	-
29-2358	- Ditto - but	3	x	1.5	re (1-w)	Metre	46.57	51.18	-
29-2359	- Ditto - but	3	x	2.5	re (1-w)	Metre	0.00	80.40	-

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House Wiring & Power Cables

Schedule Item	Description of Cables			Unit	Retail Price in Tk		
	Code	Core	Size		Eastern	Other than Eastern	
						PVC	XLPE

Cable PVC insulated and PVC sheathed Flat Twin core with ECC BS : 6004/84 BDS 900/79 Rated Voltage 300/500 volts.

29-2360	BYFYE	2 x 1	re (1-w)	Metre	0.00	26.70	-
29-2361	- Ditto - but	2 x 1.5	re (1-w)	Metre	0.00	33.41	-
29-2362	- Ditto - but	2 x 2.5	re (1-w)	Metre	0.00	51.75	-
29-2363	- Ditto - but	2 x 4	rm (7-w)	Metre	0.00	77.40	-
29-2364	- Ditto - but	2 x 6	rm (7-w)	Metre	0.00	114.41	-

Cable PVC insulated and PVC Non - sheathed BS : 6004 : 1995 & BDS 900/79 Rated Voltage 450/750 volts.

29-2365	BYA / FR / FRLS	1 x 1.5	re (1-w)	Metre	13.89	13.28	-
29-2366	- Ditto - but	1 x 1.5	rm (7-w)	Metre	14.99	13.60	-
29-2367	- Ditto - but	1 x 2.5	re (1-w)	Metre	23.59	21.59	-
29-2368	- Ditto - but	1 x 2.5	rm (7-w)	Metre	23.63	21.99	-
29-2369	- Ditto - but	1 x 4	rm (7-w)	Metre	37.35	33.95	-
29-2370	- Ditto - but	1 x 6	rm (7-w)	Metre	55.10	50.59	-
29-2371	- Ditto - but	1 x 10	rm (7-w)	Metre	89.16	83.21	-
29-2372	- Ditto - but	1 x 16	rm (7-w)	Metre	142.77	131.07	-
29-2373	- Ditto - but	1 x 25	rm (7-w)	Metre	0.00	219.30	-
29-2374	- Ditto - but	1 x 35	rm (19-w)	Metre	0.00	302.12	-
29-2375	- Ditto - but	1 x 70	rm (19-w)	Metre	0.00	599.79	-

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PART - II

House Wiring & Power Cables

Schedule Item	Description of Cables			Unit	Retail Price in Tk		
	Code	Core	Size		Eastern	Other than Eastern	
						PVC	XLPE

Cable PVC insulated and PVC sheathed Single / Multi cores (Circular) BS : 6004 / 84, BDS 900 / 79 Rated Voltage 300/500 volts.

29-2376	BYM	1 x	1 re	(1-w)	Metre	0.00	12.45	-
29-2377	- Ditto - but	1 x	1.5 re	(1-w)	Metre	16.10	17.61	-
29-2378	- Ditto - but	1 x	1.5 rm	(7-w)	Metre	17.82	18.09	-
29-2379	- Ditto - but	1 x	2.5 re	(1-w)	Metre	26.43	26.67	-
29-2380	- Ditto - but	1 x	2.5 rm	(7-w)	Metre	27.90	27.67	-
29-2381	- Ditto - but	1 x	4 rm	(7-w)	Metre	42.63	40.99	-
29-2382	- Ditto - but	1 x	6 rm	(7-w)	Metre	60.95	58.62	-
29-2383	- Ditto - but	1 x	10 rm	(7-w)	Metre	96.31	94.33	-
29-2384	- Ditto - but	1 x	16 rm	(7-w)	Metre	156.85	147.06	-
29-2385	- Ditto - but	1 x	16 rm	(19-w)	Metre	0.00	148.72	-
29-2386	- Ditto - but	1 x	25 rm	(7-w)	Metre	0.00	241.17	-
29-2387	- Ditto - but	1 x	25 rm	(19-w)	Metre	0.00	242.36	-
29-2388	- Ditto - but	1 x	35 rm	(19-w)	Metre	350.88	329.75	-
29-2389	- Ditto - but	1 x	50 rm	(19-w)	Metre	0.00	468.11	-
29-2390	- Ditto - but	1 x	70 rm	(19-w)	Metre	0.00	645.16	-
29-2391	- Ditto - but	1 x	95 rm	(19-w)	Metre	0.00	859.26	-
29-2392	BYM	2 x	1 re	(1-w)	Metre	39.07	39.88	-
29-2393	- Ditto - but	2 x	1.5 re	(1-w)	Metre	53.42	51.73	-
29-2394	- Ditto - but	2 x	1.5 rm	(7-w)	Metre	0.00	54.14	-
29-2395	- Ditto - but	2 x	2.5 re	(1-w)	Metre	78.52	77.67	-
29-2396	- Ditto - but	2 x	2.5 rm	(7-w)	Metre	0.00	79.99	-
29-2397	- Ditto - but	2 x	4 rm	(7-w)	Metre	115.43	112.05	-

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PART - II
House Wiring & Power Cables

Schedule Item	Description of Cables			Unit	Retail Price in Tk		
	Code	Core	Size		Eastern	Other than Eastern	
						PVC	XLPE

Cable PVC insulated and PVC sheathed Single / Multi cores (Circular) BS : 6004 / 84, BDS 900 / 79 Rated Voltage 300/500 volts.

29-2398	BYM	2 x 6	rm (7-w)	Metre	161.82	154.11	-
29-2399	- Ditto - but	2 x 10	rm (7-w)	Metre	268.99	251.45	-
29-2400	- Ditto - but	2 x 16	rm (7-w)	Metre	398.01	374.28	-
29-2401	- Ditto - but	2 x 25	rm (7-w)	Metre	610.47	572.62	-
29-2402	- Ditto - but	2 x 35	rm (19-w)	Metre	837.43	780.32	-
29-2403	BYM	3 x 1	re (1-w)	Metre	49.82	48.25	-
29-2404	- Ditto - but	3 x 1.5	re (1-w)	Metre	68.33	66.55	-
29-2405	- Ditto - but	3 x 1.5	rm (7-w)	Metre	0.00	70.32	-
29-2406	- Ditto - but	3 x 2.5	re (1-w)	Metre	104.47	100.21	-
29-2407	- Ditto - but	3 x 2.5	rm (7-w)	Metre	108.77	107.15	-
29-2408	- Ditto - but	3 x 4	rm (7-w)	Metre	152.16	151.27	-
29-2409	- Ditto - but	3 x 6	rm (7-w)	Metre	228.87	216.31	-
29-2410	- Ditto - but	3 x 10	rm (7-w)	Metre	364.54	343.18	-
29-2411	- Ditto - but	3 x 16	rm (7-w)	Metre	557.63	521.85	-
29-2412	- Ditto - but	3 x 25	rm (7-w)	Metre	861.33	803.79	-
29-2413	- Ditto - but	3 x 35	rm 20-w)	Metre	1172.18	1015.23	-
29-2414	BYM	4 x 1	re (1-w)	Metre	66.48	61.79	-
29-2415	- Ditto - but	4 x 1.5	re (1-w)	Metre	88.63	83.68	-
29-2416	- Ditto - but	4 x 1.5	rm (7-w)	Metre	0.00	87.38	-
29-2417	- Ditto - but	4 x 2.5	re (1-w)	Metre	127.22	125.47	-
29-2418	- Ditto - but	4 x 2.5	rm (7-w)	Metre	0.00	130.35	-
29-2419	- Ditto - but	4 x 4	rm (7-w)	Metre	205.40	192.39	-
29-2420	- Ditto - but	4 x 6	rm (7-w)	Metre	288.05	275.71	-
29-2421	- Ditto - but	4 x 10	rm (7-w)	Metre	463.62	437.74	-
29-2422	- Ditto - but	4 x 16	rm (7-w)	Metre	721.29	673.61	-
29-2423	- Ditto - but	4 x 25	rm (7-w)	Metre	1127.09	1046.49	-
29-2424	- Ditto - but	4 x 25	rm (19-w)	Metre	0.00	1051.14	-
29-2425	- Ditto - but	4 x 35	sm 20-w)	Metre	1521.96	1410.39	-

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PART - II

House Wiring & Power Cables

Schedule Item	Description of Cables			Unit	Retail Price in Tk		
	Code	Core	Size		Eastern	Other than Eastern	
						PVC	XLPE

Cable PVC insulated Flexible single / multi core (Circular) BS : 6004 / 1961, BDS 809 / 79
Rated Voltage 250/440 volts.

29-2426	F/T	2x14	x	0.19	mm	(14/.0076)	Metre	-	13.77	-
29-2427	- Ditto – but	2x23	x	0.19	mm	(23/.0076)	Metre	-	18.94	-
29-2428	T/T	2x14	x	0.19	mm	(14/.0076)	Metre	-	9.19	-
29-2428A	- Ditto – but	2x23	x	0.19	mm	(23/.0076)	Metre	-	13.87	-
29-2429	Single Core	14	x	0.193	mm	(14/.0076)	Metre	-	4.40	-
29-2430	- Ditto – but	23	x	0.193	mm	(23/.0076)	Metre	-	6.54	-
29-2431	- Ditto – but	40	x	0.193	mm	(40/.0076)	Metre	-	10.77	-
29-2432	- Ditto – but	70	x	0.193	mm	(70/.0076)	Metre	-	18.20	-
29-2433	- Ditto – but	110	x	0.193	mm	(110/.0076)	Metre	-	28.42	-

PVC insulated Flexible Cable round (Circular) BDS 899/79 BS : 6500/89 Rated Voltage 300/500
volts.

29-2434	Two Core	14	x	0.193	mm	(14/.0076)	Metre	-	16.87	-
29-2435	- Ditto – but	23	x	0.193	mm	(23/.0076)	Metre	-	23.25	-
29-2436	- Ditto – but	40	x	0.193	mm	(40/.0076)	Metre	-	34.85	-
29-2437	- Ditto – but	70	x	0.193	mm	(70/.0076)	Metre	-	55.01	-
29-2438	- Ditto – but	110	x	0.193	mm	(110/.0076)	Metre	-	79.58	-
29-2439	Three Core	14	x	0.193	mm	(14/.0076)	Metre	-	21.64	-
29-2440	- Ditto – but	23	x	0.193	mm	(23/.0076)	Metre	-	29.52	-
29-2441	- Ditto – but	40	x	0.193	mm	(40/.0076)	Metre	-	45.66	-
29-2442	- Ditto – but	70	x	0.193	mm	(70/.0076)	Metre	-	74.71	-
29-2443	- Ditto – but	110	x	0.193	mm	(110/.0076)	Metre	-	110.18	-
29-2444	Four Core	14	x	0.193	mm	(14/.0076)	Metre	-	26.63	-
29-2445	- Ditto – but	23	x	0.193	mm	(23/.0076)	Metre	-	37.36	-
29-2446	- Ditto – but	40	x	0.193	mm	(40/.0076)	Metre	-	59.26	-
29-2447	- Ditto – but	70	x	0.193	mm	(70/.0076)	Metre	-	96.90	-
29-2448	- Ditto – but	110	x	0.193	mm	(110/.0076)	Metre	-	142.46	-

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PART - II

House Wiring & Power Cables

Schedule Item	Description of Cables			Unit	Retail Price in Tk		
	Code	Core	Size		Eastern	Other than Eastern	
						PVC	XLPE

Plain annealed copper conductor PVC insulated and twisted (600/1000 volts)

29-2449	Druplex	2.5	re	/	2.5	rm	Metre	-	51.51	-
29-2450	- Ditto - but	4	rm	/	4	re	Metre	-	77.61	-
29-2451	- Ditto - but	4	rm	/	6	re	Metre	-	0.00	-
29-2452	- Ditto - but	6	rm	/	6	re	Metre	-	112.92	-
29-2453	- Ditto - but	10	rm	/	10	re	Metre	-	178.08	-
29-2454	- Ditto - but	16	rm	/	16	re	Metre	-	277.74	-
29-2455	- Ditto - but	25	rm	/	25	re	Metre	-	429.42	-
29-2456	Quadruplex	3	x	4	rm/	4 re	Metre	-	157.25	-
29-2457	- Ditto - but	3	x	6	rm/	6 re	Metre	-	226.10	-
29-2458	- Ditto - but	3	x	10	rm/	10 re	Metre	-	358.32	-
29-2459	- Ditto - but	3	x	16	rm/	16 re	Metre	-	558.62	-
29-2460	- Ditto - but	3	x	25	rm/	25 re	Metre	-	863.94	-

Aluminium conductor XLPE insulated PVC sheathed, 600/1000 volts as per BS 5467: 1989, IEC: 60502-1-1998, IS: 7098 (P-1)-1988, BDS: 1521 (P-1) Code A2xY

29-2461	AL/XLPE (1-C)	1	x	1.5	re	(1-W)	Metre	-	-	10.92
29-2462	- Ditto - but	1	x	1.5	rm	(7-W)	Metre	-	-	12.73
29-2463	- Ditto - but	1	x	2.5	re	(1-W)	Metre	-	-	14.47
29-2464	- Ditto - but	1	x	2.5	rm	(7-W)	Metre	-	-	15.44
29-2465	- Ditto - but	1	x	4	rm	(7-W)	Metre	-	-	21.89
29-2466	- Ditto - but	1	x	6	rm	(7-W)	Metre	-	-	33.11
29-2467	- Ditto - but	1	x	10	rm	(7-W)	Metre	-	-	50.40
29-2468	- Ditto - but	1	x	16	rm	(7-W)	Metre	-	-	74.96
29-2469	- Ditto - but	1	x	16	rm	(19-W)	Metre	-	-	79.77
29-2470	- Ditto - but	1	x	25	rm	(7-W)	Metre	-	-	114.38
29-2471	- Ditto - but	1	x	25	rm	(19-W)	Metre	-	-	140.18
29-2472	- Ditto - but	1	x	35	rm	(19-W)	Metre	-	-	160.61
29-2473	- Ditto - but	1	x	50	rm	(19-W)	Metre	-	-	173.51

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PART - II
House Wiring & Power Cables

Schedule Item	Description of Cables						Unit	Retail Price in Tk		
	Code	Core	Size	Eastern	Other than Eastern					
					PVC	XLPE				
29-2474	AL/XLPE (1-C)	1	x	70	rm	(19-W)	Metre	-	-	232.63
29-2475	- Ditto - but	1	x	95	rm	(19-W)	Metre	-	-	303.58
29-2476	- Ditto - but	1	x	120	rm	(37-W)	Metre	-	-	374.53
29-2477	- Ditto - but	1	x	150	rm	(37-W)	Metre	-	-	469.13
29-2478	- Ditto - but	1	x	185	rm	(37-W)	Metre	-	-	573.45
29-2479	- Ditto - but	1	x	240	rm	(61-W)	Metre	-	-	735.73
29-2480	- Ditto - but	1	x	300	rm	(61-W)	Metre	-	-	913.11
29-2481	- Ditto - but	1	x	400	rm	(61-W)	Metre	-	-	1199.06
29-2482	- Ditto - but	1	x	500	rm	(61-W)	Metre	-	-	1478.56
29-2483	- Ditto - but	1	x	630	rm	(61-W)	Metre	-	-	1872.01
29-2484	- Ditto - but	1	x	800	rm	(61-W)	Metre	-	-	2367.58
29-2485	- Ditto - but	1	x	1000	rm	(61-W)	Metre	-	-	2938.41
29-2486	AL/XLPE (2-C)	2	x	1.5	re	(1-W)	Metre	-	-	0.00
29-2487	- Ditto - but	2	x	1.5	rm	(7-W)	Metre	-	-	0.00
29-2488	- Ditto - but	2	x	2.5	re	(1-W)	Metre	-	-	49.88
29-2489	- Ditto - but	2	x	2.5	rm	(7-W)	Metre	-	-	0.00
29-2490	- Ditto - but	2	x	4	rm	(7-W)	Metre	-	-	67.08
29-2491	- Ditto - but	2	x	6	rm	(7-W)	Metre	-	-	95.03
29-2492	- Ditto - but	2	x	10	rm	(7-W)	Metre	-	-	131.58
29-2493	- Ditto - but	2	x	16	rm	(7-W)	Metre	-	-	188.56
29-2494	- Ditto - but	2	x	16	rm	(19-W)	Metre	-	-	197.16
29-2495	- Ditto - but	2	x	25	rm	(7-W)	Metre	-	-	288.53
29-2496	- Ditto - but	2	x	25	rm	(19-W)	Metre	-	-	299.28
29-2497	- Ditto - but	2	x	35	rm	(19-W)	Metre	-	-	449.78
29-2498	- Ditto - but	2	x	50	rm	(19-W)	Metre	-	-	594.91

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**PART - II
House Wiring & Power Cables**

Schedule Item	Description of Cables						Unit	Retail Price in Tk		
	Code	Core		Size		Eastern		Other than Eastern		
								PVC	XLPE	
29-2499	AL/XLPE (3-C)	3	x	4	rm	(7-W)	Metre	-	-	84.28
29-2500	- Ditto - but	3	x	6	rm	(7-W)	Metre	-	-	120.83
29-2501	- Ditto - but	3	x	10	rm	(7-W)	Metre	-	-	168.13
29-2502	- Ditto - but	3	x	16	rm	(7-W)	Metre	-	-	250.91
29-2503	- Ditto - but	3	x	25	rm	(7-W)	Metre	-	-	368.08
29-2504	- Ditto - but	3	x	35	sm	(20-W)	Metre	-	-	637.91
29-2505	- Ditto - but	3	x	50	sm	(20-W)	Metre	-	-	754.11
29-2506	- Ditto - but	3	x	70	sm	(20-W)	Metre	-	-	948.58
29-2507	- Ditto - but	3	x	95	sm	(20-W)	Metre	-	-	1057.16
29-2508	- Ditto - but	3	x	120	sm	(39-W)	Metre	-	-	1907.05
29-2509	- Ditto - but	3	x	150	sm	(39-W)	Metre	-	-	2025.73
29-2510	- Ditto - but	3	x	185	sm	(39-W)	Metre	-	-	2524.53
29-2511	- Ditto - but	3	x	240	sm	(39-W)	Metre	-	-	3041.61
29-2512	- Ditto - but	3	x	300	sm	(61-W)	Metre	-	-	3758.20
29-2513	- Ditto - but	3	x	400	sm	(61-W)	Metre	-	-	4851.91
29-2514	- Ditto - but	3	x	500	sm	(61-W)	Metre	-	-	6140.83
29-2515	- Ditto - but	3	x	630	sm	(61-W)	Metre	-	-	7684.53
29-2516	AL/XLPE (3 ¹ / ₂ C)	3 ¹ / ₂	x	16	/10	rm/rm	Metre	-	-	0.00
29-2517	- Ditto - but	3 ¹ / ₂	x	25	/16	rm/rm	Metre	-	-	729.28
29-2518	- Ditto - but	3 ¹ / ₂	x	35	/16	sm/rm	Metre	-	-	778.73
29-2519	- Ditto - but	3 ¹ / ₂	x	50	/25	sm/rm	Metre	-	-	944.28
29-2520	- Ditto - but	3 ¹ / ₂	x	70	/35	sm/rm	Metre	-	-	1293.66
29-2521	- Ditto - but	3 ¹ / ₂	x	95	/50	sm/rm	Metre	-	-	1803.21
29-2522	- Ditto - but	3 ¹ / ₂	x	120	/70	sm/rm	Metre	-	-	2494.43
29-2523	- Ditto - but	3 ¹ / ₂	x	150	/70	sm/rm	Metre	-	-	2926.58
29-2524	- Ditto - but	3 ¹ / ₂	x	185	/95	sm/rm	Metre	-	-	3026.56
29-2525	- Ditto - but	3 ¹ / ₂	x	240	/120	sm/rm	Metre	-	-	3653.28
29-2526	- Ditto - but	3 ¹ / ₂	x	300	/150	sm/rm	Metre	-	-	4414.38
29-2527	- Ditto - but	3 ¹ / ₂	x	400	/185	sm/rm	Metre	-	-	5768.88
29-2528	- Ditto - but	3 ¹ / ₂	x	500	/240	sm/rm	Metre	-	-	6671.88

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PART - II
House Wiring & Power Cables

Schedule Item	Description of Cables					Unit	Retail Price in Tk		
	Code	Core	Size				Eastern	Other than Eastern	
								PVC	XLPE
29-2529	AL/XLPE (4-C)	4	x	16	rm (7-W)	Metre	-	-	336.91
29-2530	- Ditto - but	4	x	25	rm (7-W)	Metre	-	-	525.03
29-2531	- Ditto - but	4	x	35	sm (20-W)	Metre	-	-	856.13
29-2532	- Ditto - but	4	x	50	sm (20-W)	Metre	-	-	1059.31
29-2533	- Ditto - but	4	x	70	sm (20-W)	Metre	-	-	1495.76
29-2534	- Ditto - but	4	x	95	sm (20-W)	Metre	-	-	1913.93
29-2535	- Ditto - but	4	x	120	sm (39-W)	Metre	-	-	2321.36
29-2536	- Ditto - but	4	x	150	sm (39-W)	Metre	-	-	2802.96
29-2537	- Ditto - but	4	x	185	sm (39-W)	Metre	-	-	3346.91
29-2538	- Ditto - but	4	x	240	sm (39-W)	Metre	-	-	4191.86
29-2539	- Ditto - but	4	x	300	sm (61-W)	Metre	-	-	5178.71
29-2540	- Ditto - but	4	x	400	sm (61-W)	Metre	-	-	6538.58
29-2541	- Ditto - but	4	x	500	sm (61-W)	Metre	-	-	7702.81

Telephone house wiring Cables PVC / PE Insulated and PVC sheathed

29-2542	Tele cable	1	x	Pair	(Conductor 0.6mm)	Metre	-	9.31	-
29-2543	- Ditto - but	2	x	Pair		Metre	-	15.43	-
29-2544	- Ditto - but	3	x	Pair		Metre	-	22.59	-
29-2545	- Ditto - but	4	x	Pair		Metre	-	32.84	-
29-2546	- Ditto - but	5	x	Pair		Metre	-	37.85	-
29-2547	- Ditto - but	6	x	Pair		Metre	-	45.62	-
29-2548	- Ditto - but	7	x	Pair		Metre	-	51.79	-
29-2549	- Ditto - but	8	x	Pair		Metre	-	57.89	-
29-2550	- Ditto - but	10	x	Pair		Metre	-	72.20	-
29-2551	- Ditto - but	15	x	Pair		Metre	-	103.59	-
29-2552	- Ditto - but	20	x	Pair		Metre	-	136.78	-
29-2553	- Ditto - but	25	x	Pair		Metre	-	167.13	-
29-2554	- Ditto - but	30	x	Pair		Metre	-	197.99	-
29-2555	- Ditto - but	40	x	Pair		Metre	-	256.69	-
29-2556	- Ditto - but	50	x	Pair		Metre	-	314.64	-
29-2557	- Ditto - but	100	x	Pair		Metre	-	601.83	-

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PART - II
House Wiring & Power Cables

Schedule Item	Description of Cables			Unit	Retail Price in Tk		
	Code	Core	Size		Eastern	Other than Eastern	
						PVC	XLPE

PVC insulated flat twin core Telephone DROP WIRE

29-2558	- Ditto - but	2 x 0.6 mm	Metre	7.57	-	-
29-2559	- Ditto - but	2 x 0.9 mm	Metre	14.46	-	-
29-2560	Dish Antena cable RG-6/6u. Co-axial foreign made 2x0.9 mm		Metre	33.98	-	-
29-2561 to 29-2600	Blank					

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SECTION-29

ELECTRIFICATION

PART-II

Item no	Description of Materials	Unit	Rate in Taka	Remarks
CONTROL SWITCHES				
29-2601	Auto Change Over / Power Transfer Switch 500 Volts TP & N with magnetic contactor and other accessories 100 Amps Foreign made	Each	107,500.00	
29-2602	- Ditto - but for 125 to 200 Amps	Each	175,000.00	
29-2603	-Ditto - but for 250 to 400 Amps	Each	190,000.00	
29-2604	Automatic Water level Control Switch for 230 volts SP, Pump Motor up to 3 HP	Each	3,800.00	
29-2605	-Ditto - but for 400 volt 3 Ph, Pump Motor 10 HP	Each	28,500.00	
29-2606	-Ditto - but for 15 to 30 HP	Each	42,500.00	
29-2607	Change Over switch 500 Volts TP & N 60 Amps local made	Each	2,688.00	
29-2608	-Ditto-but for 100 Amps	Each	4,055.00	
29-2609	-Ditto-but for 200 Amps	Each	8,062.00	
29-2610	-Ditto-but for 400 Amps	Each	10,750.00	
29-2611	-Ditto-but for 500 / 600 Amps	Each	16,125.00	
29-2612	-Ditto-but for 1000 Amps	Each	34,250.00	
29-2613	MCB 230 Volt SP (MEM / DORMAN) ENGLAND / (AEG / SIEMENS) GARMANY capacity up to 6 Amps	Each	645.00	
29-2614	-Ditto - but for 10 to 16 Amps	Each	645.00	
29-2615	-Ditto - but for 20 to 32 Amps	Each	645.00	
29-2616	-Ditto - but for 40 to 50 Amps	Each	1,290.00	
29-2617	MCB 230 volts SP (Marlin Gerin) FRANCE / (Legrand / ABB) ITALY, up to 6 Amps	Each	430.00	
29-2618	-Ditto - but for 10 to 16 Amps	Each	430.00	
29-2619	-Ditto - but for 20 to 40 Amps	Each	430.00	
29-2620	-Ditto - but for 50 Amps	Each	591.00	
29-2621	MCB (LG) KOREA, 230 volts, SP, up to 6 Amps	Each	199.00	
29-2622	-Ditto - but for 10 to 16 Amps	Each	199.00	
29-2623	-Ditto - but for 20 to 32 Amps	Each	199.00	
29-2624	-Ditto - but for 40 to 50 Amps	Each	199.00	

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Item no	Description of Materials	Unit	Rate in Taka	Remarks
29-2625	MCCB (MEM / DORMAN) England / (AEG / SIEMENS) Germany, 400 volts, TP, 15 to 32 Amps	Each	10,750.00	
29-2626	-Ditto - but for 40 Amps	Each	11,825.00	
29-2627	-Ditto - but for 60 Amps	Each	12,900.00	
29-2628	-Ditto - but for 100 Amps (Adjustable)	Each	15,050.00	
29-2629	-Ditto - but for 125 Amps (Adjustable)	Each	17,200.00	
29-2630	-Ditto - but for 150 Amps (Adjustable)	Each	23,650.00	
29-2631	-Ditto - but for 200 Amps (Adjustable)	Each	25,800.00	
29-2632	-Ditto - but for 300/320 Amps (Adjustable)	Each	43,000.00	
29-2633	-Ditto - but for 400 Amps (Adjustable)	Each	43,000.00	
29-2634	-Ditto - but for 500 Amps (Adjustable)	Each	51,600.00	
29-2635	-Ditto - but for 600/630 Amps (Adjustable)	Each	51,600.00	
29-2636	-Ditto - but for 800 Amps (Adjustable)	Each	69,875.00	
29-2637	-Ditto - but for 1000 Amps (Adjustable)	Each	135,450.00	
29-2638	MCCB (Marlin Gerin) FRANCE / (ABB / Legrand) ITALY, 400 volts, TP, 15 to 40 Amps (Adjustable)	Each	7,525.00	
29-2639	-Ditto - but for 50 to 63 Amps (Adjustable)	Each	7,525.00	
29-2640	-Ditto - but for 100 Amps (Adjustable)	Each	7,525.00	
29-2641	-Ditto - but for 160 Amps (Adjustable)	Each	13,975.00	
29-2642	-Ditto - but for 320 Amps (Adjustable)	Each	36,550.00	
29-2643	-Ditto - but for 400 Amps (Adjustable)	Each	40,850.00	
29-2644	-Ditto - but for 500 Amps (Adjustable)	Each	46,225.00	
29-2645	-Ditto - but for 630 Amps (Adjustable)	Each	49,450.00	
29-2646	-Ditto - but for 800 Amps (Adjustable)	Each	89,225.00	
29-2647	-Ditto - but for 1000 Amps (Adjustable)	Each	107,500.00	
29-2648	MCCB (LG) Korea , 400 volts TP, 15 to 32 Amps	Each	1,449.00	
29-2649	-Ditto - but for 40 to 63 Amps	Each	2,257.00	
29-2650	-Ditto - but for 100 to 125 Amps	Each	2,553.00	

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Item no	Description of Materials	Unit	Rate in Taka	Remarks
29-2651	-Ditto - but for 150 to 200 Amps	Each	4,837.00	
29-2652	-Ditto - but for 300 Amps (Adjustable)	Each	11,287.00	
29-2653	-Ditto - but for 400 Amps (Adjustable)	Each	24,725.00	
29-2654	-Ditto - but for 500 Amps	Each	23,650.00	
29-2655	-Ditto - but for 600 Amps	Each	25,263.00	
29-2656	-Ditto - but for 800 Amps (Adjustable)	Each	45,150.00	
29-2657	-Ditto - but for 1000 Amps (Adjustable)	Each	49,450.00	
29-2658	DB Cabinet (Dorman / MEM / Legrand brand) for 10-25 MCBs	Each	1,129.00	
29-2659	- Ditto but for 30-40 MCBs	Each	1,828.00	
29-2660	Main switch IC, SP 15 Amps Local	Each	183.00	
29-2661	- Ditto but DP 15 Amps Local	Each	161.00	
29-2662	- Ditto but TP 15 Amps Local	Each	430.00	
29-2663	- Ditto but SP 30 Amps Local	Each	360.00	
29-2664	- Ditto but DP 30 Amps Local	Each	161.00	
29-2665	- Ditto but TP 30 Amps Local	Each	645.00	
29-2666	- Ditto but DP 60 Amps Local	Each	978.00	
29-2667	- Ditto but TP 60 Amps Local	Each	1,075.00	
29-2668	- Ditto but TP & N 100 Amps China / Taiwan	Each	2,365.00	
29-2669	- Ditto but TP with N 100 Amps Local	Each	2,150.00	
29-2670	- Ditto but TP with N 200 Amps China / Taiwan	Each	3,440.00	
29-2671	Plug outlet 2 pin 5 Amps local	Each	11.70	
29-2672	Plug outlet 3 pin 5 Amps local	Each	20.40	
29-2673	Legrand Brand 13 A 3 Pin Plug with fuse (Flat)	Each	645.00	
29-2674	Plug outlet 3 pin 15 Amps local	Each	22.60	
29-2675	MK Brand 15 A 3 Pin flat / round Plug	Each	182.00	

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Item no	Description of Materials	Unit	Rate in Taka	Remarks
29-2676	Socket 2 pin bakelite concealed type 5 Amps	Each	15.00	
29-2677	Socket 2 pin bakelite surface type 5 Amps	Each	14.00	
29-2678	Socket 2 pin 5 Amps MK (Singapore) / MEM (Malaysia)	Each	244.00	
29-2679	Socket Telephone / Dish MK (Singapore) / MEM (Malaysia)	Each	580.00	
29-2680	Socket TV MK (Singapore) / MEM (Malaysia)	Each	362.00	
29-2681	Legrand Brand 2 Pin Socket with switch concealed	Each	483.00	
29-2682	Legrand Brand 2 Pin Socket without switch concealed	Each	247.00	
29-2683	Switch SP socket outlet 3 pin combined concealed type 5 Amps local	Each	60.00	
29-2684	Switch SP socket outlet 3 pin combined surface type 5 Amps local	Each	80.00	
29-2685	Switch SP socket shutter pattern outlet 3 pin Combined concealed type 5 Amps MK England	Each	526.00	
29-2686	Switch SP socket outlet 3 pin Combined concealed type 15 Amps local	Each	101.00	
29-2687	Switch SP socket outlet 3 pin combined surface type 15 Amps local	Each	172.00	
29-2688	Switch SP Socket 3 pin 13/15 Amps shuttered pattern MK (Singapore) / MEM (Malaysia)	Each	189.00	
29-2689	Switch SP socket outlet 3 (flat / round) Pin Combined surface / concealed type 13 / 15 Amps MK/MEM (Singapore / Malaysia) / Switch flame proof 5 amps 2 way	Each	415.00	
29-2690	Switch SP Socket 3 pin 5 Amps shuttered pattern MK (Singapore) / MEM (Malaysia)	Each	220.00	
29-2691	- Ditto but stainless steel body 15A, MK / MEM England	Each	577.00	
29-2692	Legrand Brand 15 A 3 Pin Socket (Round)	Each	301.00	
29-2693	- Ditto but 15 A 3 Pin Socket with Switch (Round)	Each	365.00	
29-2694	- Ditto but 15 A 3 Pin Socket with Switch and Neon (Flat)	Each	456.00	

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Item no	Description of Materials	Unit	Rate in Taka	Remarks
29-2695	- Ditto but 13 A 3 Pin Socket (Flat)	Each	194.00	
29-2696	- Ditto but 13 A 3 Pin Socket with Switch (Flat)	Each	236.00	
29-2697	- Ditto but 13 A 3 Pin Socket with Switch and Neon (Flat)	Each	301.00	
29-2698	Bell push SP surface / piano / suspension type 5 Amps	Each	14.50	
29-2699	Legrand Brand bell push	Each	247.25	
29-2700	Bell push MK (Singapore) / MEM (Malaysia) 5 Amps	Each	331.00	
29-2701	Switch SP bakelite surface type 5 Amps one way	Each	19.00	
29-2702	Switch SP bakelite surface type 5 Amps two way	Each	26.00	
29-2703	Switch SP bakelite surface type 15 Amps one way	Each	62.00	
29-2704	Switch SP bakelite surface type 15 Amps two way	Each	65.00	
29-2705	Switch SP bakelite concealed piano type 5 Amps one way	Each	17.00	
29-2706	- Ditto - but 2 Way	Each	27.00	
29-2707	Switch SP bakelite concealed piano type 15 Amps one way	Each	55.00	
29-2708	- Ditto - but 2 Way	Each	62.00	
29-2709	Switch bakelite suspension type 5 Amps one way	Each	17.00	
29-2710	- Ditto - but 2 Way	Each	27.00	
29-2711	Legrand Brand Switch 1 Gang 1 Way	Each	118.25	
29-2712	- Ditto - but for 1 Gang 2 Way	Each	161.25	
29-2713	- Ditto - for 2 Gang 1 Way	Each	204.25	
29-2714	- Ditto - but for 2 Gang 2 Way	Each	279.50	
29-2715	- Ditto - but for 3 Gang 1 Way	Each	295.60	
29-2716	- Ditto - but for 4 Gang 1 Way	Each	430.00	

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Item no	Description of Materials	Unit	Rate in Taka	Remarks
29-2717	MK (Singapore) / MEM (Malaysia) Switch 5 Amps 1 way 1 gang	Each	127.00	
29-2718	-Ditto - but 2 gang	Each	252.00	
29-2719	-Ditto - but 3 gang	Each	312.00	
29-2720	-Ditto - but 4 gang	Each	471.00	
29-2721	Selector switch for Volt Metre (Japan / England / French)	Each	645.00	
29-2722	Selector switch for CT AmMetre (Japan / England / French)	Each	645.00	
29-2723	Switch SP flame proof surface/concealed type one way 5 amps mounted in malleable cast iron box	Each	360.00	
29-2724	Switch water tight 1 way	Each	160.00	
29-2725	Switch water tight 2 way	Each	300.00	
29-2726	Flame Proof Switch 15 Amps 1 way foreign made	Each	330.00	
29-2727	ABB (Singapore) switch 5 amps 1 Gang 1 way	Each	127.00	
29-2728	- Ditto - but 1 gang 2 way	Each	233.00	
29-2729	- Ditto - but 2 gang 1 way	Each	275.00	
29-2730	- Ditto - but 2 gang 2 way	Each	275.00	
29-2731	- Ditto - but 3 gang 1 way	Each	312.00	
29-2732	- Ditto - but 4 gang 1 way	Each	471.00	
29-2733	- Ditto - but 5 gang 1 way	Each	537.00	
29-2734	- Ditto - but intermediate switch	Each	345.00	
29-2735	- Ditto - but bell push	Each	254.00	
29-2736	- Ditto - but Rotary dimmer 600w (Fan controller)	Each	1,075.00	
29-2737				
To 29-2800	Blank			

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Item no	Description of Materials	Unit	Rate in Taka	Remarks
MISCELLANIES				
29-2801	Steel Tubular pole as per drawing type 'A' 9 metre height, weight not less than 150 Kg	Each	10,802.00	
29-2802	-Ditto-but type 'AA' 9 metre height made with other than NTL tube,'	Each	17,421.00	
29-2803	-Ditto-but type 'B' 11 metre height, weight not less than 185 Kg	Each	13,544.00	
29-2804	-Ditto-but type 'C' 12 metre height, weight not less than 210 Kg	Each	15,176.00	
29-2805	-Ditto-but type 'D' 9 metre height made with other than NTL tube.	Each	10,115.00	
29-2806	Pole Steel tubular type "DD" 9 M height made with other than NTL tube	Each	10,348.00	
29-2807	Pole Steel Street/Garden type "E", weight not less than 105 Kg	Each	6,969.00	
29-2808	P C Pole (RCC) PDB / REB type 9/10 metre height	Each	15,500.00	
29-2809	P C Pole (RCC) PDB / REB type 11 metre height	Each	17,600.00	
29-2810	P C Pole (RCC) PDB / REB type 12 metre height	Each	20,000.00	
29-2811	Insulator Pin type Glazed porcelain vitreous of glass caps for LT	Each	86.00	
29-2812	- Ditto - but for HT 11 KV	Each	310.00	
29-2813	- Ditto - but for Disk type	Each	600.00	
29-2814	Insulator Shackle for LT 100 x 112 mm	Each	55.00	
29-2815	- Ditto - but for LT 75 x 87 mm	Each	45.00	
29-2816	Insulator Strain / EGG type	Each	45.00	
29-2817	- Ditto - but for STAR type	Each	50.00	
29-2818	Guy Insulator	Each	65.00	
29-2819	Stay / Guy assembly	Each	350.00	
29-2820	Stay / Guy wire GI Stranded	Kg	160.00	
29-2821	Tension / Straining Clamps for 11 KV disk insulator	Each	260.00	
29-2822	Tension / Straining Clamps for Stay	Each	240.00	
29-2823	Aluminium conductor standard (AAC)	Kg	350.00	
29-2824	- Ditto - but (ACSR)	Kg	370.00	

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Item no	Description of Materials	Unit	Rate in Taka	Remarks
29-2825	Aluminium conductor steel reinforced (ACSR) BS: 215 Part-2 : 1970 & BDS 1037: 1983 & ASTM B-232/74)	Kg	400.00	
29-2826	All Aluminium Alloy conductor (AAAC) stranded ASTM B 399: 86	Kg	380.00	
29-2827	Insulated Aluminium stranded Conductor (Type -8) BS 6485 & BS 215, Part-1 MIDGE (22 mm ²)	Metre	40.00	
29-2828	-Ditto- but GNAT (25 mm ²)	Metre	43.00	
29-2829	-Ditto- but ANT (50 mm ²)	Metre	75.00	
29-2830	-Ditto- but EARWIG (75 mm ²)	Metre	94.00	
29-2831	-Ditto- but WASP (100 mm ²)	Metre	115.00	
29-2832	Insulated Aluminium Conductor steel reinforced (ACSR) SQUIRAL (20.97 mm ²)	Metre	43.00	
29-2833	-Ditto- but (ACSR) GOPHER (26.23 mm ²)	Metre	50.00	
29-2834	-Ditto- but (ACSR) WEASEL (31.61 mm ²)	Metre	56.00	
29-2835	-Ditto- but (ACSR) FERRET (42.39 mm ²)	Metre	75.00	
29-2836	-Ditto- but (ACSR) RABBIT (52.85 mm)	Metre	105.00	
29-2837	-Ditto- but (ACSR) DOG (104.93 mm ²)	Metre	150.00	
29-2838	Insulated (XLPE) Aluminium Conductor steel reinforced (ACSR) SQUIRAL (20.97 mm ²)	Metre	50.00	
29-2839	-Ditto- but (ACSR) GOPHER (26.23 mm ²)	Metre	55.00	
29-2840	-Ditto- but (ACSR) WEASEL (31.61 mm ²)	Metre	62.00	
29-2841	-Ditto- but (ACSR) FERRET (42.39 mm ²)	Metre	82.00	
29-2842	-Ditto- but (ACSR) RABBIT (52.85 mm)	Metre	115.00	
29-2843	-Ditto- but (ACSR) DOG (104.93 mm ²)	Metre	165.00	
29-2844	Copper Conductor Hard drawn bare/stranded (GAZI)	Kg	780.00	
29-2845	Copper conductor bare solid/stranded	Kg	520.00	
29-2846	Copper Strip 25 x 3 mm	Kg	550.00	

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Item no	Description of Materials	Unit	Rate in Taka	Remarks
29-2847	Copper Bar	Kg	680.00	
29-2848	Dry Powder fire extinguisher (China/Local) 2 kg	Each	1,612.00	
29-2849	- Ditto - but for 3 kg	Each	1,989.00	
29-2850	- Ditto - but for 5 kg	Each	2,687.00	
29-2851	Foam type fire extinguisher (China/Local) 10 Litre	Each	860.00	
29-2852	-Ditto-but for 8 Litre	Each	800.00	
29-2853	Soda water type fire extinguisher (China/Local) 10 Litre	Each	860.00	
29-2854	-Ditto-but for 8 ltr	Each	800.00	
29-2855	Steel conduit heavy gauge welded class 'B' BS-31 dia 19 mm	Metre	180.00	
29-2856	-Ditto-but for 25 mm	Metre	250.00	
29-2857	Steel conduit solid drawn for flame proof wiring dia 19 mm	Metre	230.00	
29-2858	- Ditto - but for 25 mm	Metre	280.00	
29-2859	PVC conduit gde "D" Aziz / BRB / Rina / Lira / RFL or any other approved brand dia 16 mm	Metre	17.00	
29-2860	-Ditto-but 20 mm gde "D"	Metre	22.00	
29-2861	-Ditto-but 25 mm gde "D"	Metre	31.00	
29-2862	Plastic Channel (Brand NPI / Aziz / BRB) width 10 mm	Metre	12.00	
29-2863	- Ditto - but 16 mm	Metre	16.00	
29-2864	- Ditto - but 20 mm	Metre	20.00	
29-2865	- Ditto - but 25 mm	Metre	25.00	
29-2866	- Ditto - but 30 mm	Metre	30.00	
29-2867	- Ditto - but 40 mm	Metre	34.00	
29-2868	PVC Circular box 1 way	Each	8.00	
29-2869	- Ditto - but 2 way	Each	8.50	
29-2870	- Ditto - but 3 way	Each	11.50	
29-2871	- Ditto - but 4 way	Each	13.50	

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Item no	Description of Materials	Unit	Rate in Taka	Remarks
29-2872	PVC Conduit fittings (Tee, Bend, Elbow, Coupler, Adopter etc) up to 20 mm dia	Each	5.50	
29-2873	- Ditto - but over 20 mm dia	Each	6.00	
29-2874	Steel Conduit fittings (Tee, Bend, Elbow, Coupler, Adopter etc.) up to 20 mm dia	Each	14.00	
29-2875	- Ditto - but over 20 mm dia	Each	18.00	
29-2876	Circular Box (Steel)	Each	20.00	
29-2877	Ceramics tiles 300x50x75 mm (Cable Cover)	M Nos	13,500.00	
29-2878	Ceramics tiles 300x78x125 mm (Cable Cover)	M Nos	17,500.00	
29-2879	Ceramics tiles 300x100x150 mm (Cable Cover)	M Nos	20,000.00	
29-2880	Fuse aerial 5 amps	Each	16.00	
29-2881	Fuse aerial 10 amps	Each	16.00	
29-2882	Fuse aerial 15 amps	Each	22.00	
29-2883	Fuse aerial 30 amps	Each	32.00	
29-2884	Fuse aerial 60 amps	Each	86.00	
29-2885	Fuse aerial 100 amps	Each	108.00	
29-2886	Porcelain Fuse cut out 5 Amps China/Taiwan	Each	13.00	
29-2887	Porcelain Fuse cut out 15 Amps China/Taiwan	Each	30.00	
29-2888	Porcelain Fuse cut out 30 Amps China/Taiwan	Each	30.00	
29-2889	Porcelain Fuse cut out 60 Amps China /Taiwan	Each	60.00	
29-2890	Porcelain Fuse cut out 100 Amps China/Taiwan	Each	110.00	
29-2891	Porcelain Fuse cut out 200 Amps China/Taiwan	Each	215.00	
29-2892	Aluminium link clips off sizes	Gross	35.00	
29-2893	Brass link clips off sizes	Gross	80.00	

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Item no	Description of Materials	Unit	Rate in Taka	Remarks
29-2894	Brass / copper screw 12- 20 mm	Doz	32.00	
29-2895	Brass/copper screw 25-30 mm	Doz	32.00	
29-2896	Brass / copper nails 12- 20 mm	Kg	800.00	
29-2897	Copper nut bolts 25 x 10 mm	Each	22.00	
29-2898	Connecting / Soldering Lugs /Socket (Brass)	Kg	800.00	
29-2899	Under ground cable joint box with kit (straight through) for PVC LT 1x16-50 mm ²	Each	2,000.00	
29-2900	- Ditto - but for LT 2x16-50 mm ²	Each	3,000.00	
29-2901	- Ditto - but LT 3x16-50 mm ²	Each	4,000.00	
29-2902	- Ditto - but LT 31/2 or 4 x 16-50 mm ²	Each	5,000.00	
29-2903	- Ditto - but LT 1x70-150 mm ²	Each	2,500.00	
29-2904	- Ditto - but LT 2x70-150 mm ²	Each	3,500.00	
29-2905	- Ditto - but LT 3x70-150 mm ²	Each	4,500.00	
29-2906	- Ditto - but LT 3.5 or 4x70-150 mm ²	Each	5,300.00	
29-2907	- Ditto - but LT above 1x150 mm ²	Each	4,200.00	
29-2908	- Ditto - but LT above 2x150 mm ²	Each	4,500.00	
29-2909	- Ditto - but LT above 3x150 mm ²	Each	5,200.00	
29-2910	- Ditto - but LT above 3.5 or 4x150 mm ²	Each	5,500.00	
29-2911	Cable joint straight through for HT Armoured 1x16-50 mm ²	Each	3,500.00	
29-2912	- Ditto - but HT Armoured 3x16-50 mm ²	Each	6,500.00	
29-2913	Cable joint straight through HT Armoured over 1x50 mm ²	Each	4,500.00	
29-2914	- Ditto - but HT Armoured over 3x50 mm ²	Each	7,000.00	
29-2915	Cable rout and Joint sign plate	Each	800.00	
29-2916	Compound foreign made	kg	300.00	
29-2917	Heat and shrinks kit for 11KV single core cable	Each	2,200.00	
29-2918	Heat and shrinks kit for 11KV three core cable	Each	5,000.00	

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Item no	Description of Materials	Unit	Rate in Taka	Remarks
29-2919	Nut bolt off size Brass / Galvanized	Each	32.00	
29-2920	Nut bolt off Size local	Kg	130.00	
29-2921	Washer for Nut Bolts	Each	2.50	
29-2922	Nuts Bolts 50 mm x 16 mm dia	Each	15.00	
29-2923	Nuts Bolts 120 mm x 20 mm dia	Each	25.00	
29-2924	PVC/ Plastic Rowel Plug	Gross	43.00	
29-2925	Wood Pin Teak	Gross	244.00	
29-2926	Salt coarse	Kg	16.00	
29-2927	Charcoal local	Kg	30.00	
29-2928	Tape Insulation	Roll	15.00	
29-2929	Tape Ampere foreign	Roll	215.00	
29-2930	Tape PIB foreign (England / Germany)	Roll	236.00	
29-2931	Varnish Insulation Nitto Japan	Litre	767.00	
29-2932	-Ditto - but local	Litre	268.00	
29-2933	Varnish shellac local	Litre	235.00	
29-2934	Lock with Handle for MDB / SDB box	Each	322.00	
29-2935	Pulley with steel rope for Pendant light	Each	88.00	
29-2936	Panel type Ammeter 0-50 A range (China/ Korea/ Taiwan)	Each	380.00	
29-2937	-Ditto-but made in (Japan/Germany/ England)	Each	752.50	
29-2938	Panel type CT Ammeter 0-200 A range (China / Korea / Taiwan)	Each	510.00	
29-2939	Panel type CT Ammeter 500 / over 500 A range (China / Korea / Taiwan)	Each	725.00	
29-2940	Panel type CT Ammeter Over 0-100 A range (China / Korea / Taiwan)	Each	510.00	
29-2941	Panel type Indicating lamps (Taiwan) complete	Each	118.25	

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Item no	Description of Materials	Unit	Rate in Taka	Remarks
29-2942	Panel type volt Metre 0- 500 V range (China / Korea / Taiwan)	Each	376.00	
29-2943	-Ditto -but made in (Japan / Germany / England)	Each	860.00	
29-2944	CT 100 - 500 / 5 for LT	Each	650.00	
29-2945	CT over 500 / 5 for LT	Each	750.00	
29-2946	Bell electric bakelite AC	Each	70.00	
29-2947	Buzzer electric bakelite AC	Each	65.00	
29-2948	Door bell electric AC (Ding Dong)	Each	155.00	
29-2949	Door bell electric AC (Musical)	Each	195.00	
29-2950	Door bell electric DC (Musical)	Each	200.00	
29-2951	Electrical/ Electronic call system from 3 Channel	Each	5,500.00	
29-2952	Electrical/ Electronic call system additional Channel	Each	850.00	
29-2953	Ebonite sheet 2.5 mm thick	Sqm	623.00	
29-2954	Ebonite sheet 3mm thick	Sqm	915.00	
29-2955	Ebonite sheet 4mm thick	Sqm	1,400.00	
29-2956	Energy Metre electric AC 230 volts SP up to 40 Amps	Each	1,021.00	
29-2957	Energy Meter electric TP up to 50 Amps	Each	3,762.00	
29-2958	Energy Metre electric TP 60-200 Amps with CT / PT	Each	7,000.00	
29-2959	Wooden batten (ctg teak) 12 x 12 mm	Metre	12.00	
29-2960	- Ditto - but 12 x 19	Metre	16.00	
29-2961	- Ditto - but 12 x 25	Metre	22.00	
29-2962	- Ditto - but 12 x 30	Metre	30.00	
29-2963	- Ditto - but 12 x 40	Metre	40.00	
29-2964	- Ditto - but 25 x 40	Metre	45.00	

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PART-II

Item no	Description of Materials	Unit	Rate in Taka	Remarks
29-2965	Wooden switch board 100x 100 x 35 mm	Each	22.00	
29-2966	-Ditto - but 150x100x35 mm	Each	32.00	
29-2967	-Ditto - but 200x150x35 mm	Each	48.00	
29-2968	-Ditto - but 250x200x35 mm	Each	65.00	
29-2969	-Ditto - but 300x250x35 mm	Each	76.00	
29-2970	-Ditto - but 400x300x50 mm	Each	170.00	
29-2971	-Ditto - but 500x400x50 mm	Each	235.00	
29-2972	Wooden block 75x75x35 mm round	Each	20.00	
29-2973	Plastic switch board 100x100x35 mm	Each	32.00	
29-2974	-Ditto - but 150x100x35 mm	Each	40.00	
29-2975	-Ditto - but 200x150x35 mm	Each	48.00	
29-2976	-Ditto - but 250x200x35 mm	Each	74.00	
29-2977	Electronic digital clock size 12.5"x4"x3.5"	Each	3,000.00	
29-2978	UPS 1000 VA with 30 min backup	Each	43,000.00	
29-2979	Electronic Light Dimmer	Each	322.00	
29-2980	Voltage Stabilizer 500 VA SP	Each	4,300.00	
29-2981	Voltage Stabilizer 1000 VA SP	Each	6,450.00	
29-2982	Voltage Stabilizer 1500 VA SP	Each	10,750.00	
29-2983	18 BG Switch box /board size 250 x 150 x 100 mm	Each	70.00	
29-2984	-Ditto - but 300 x 250 x 100 mm	Each	100.00	
29-2985	20 BG Switch box/ board size 100x75 x 75 mm	Each	25.00	
29-2986	-Ditto - but 75 x 75 x 75 mm	Each	22.00	
29-2987	-Ditto - but 150 x 100 x 75 mm	Each	35.00	
29-2988	-Ditto - but 200 x 150 x 75 mm	Each	54.00	
29-2989	-Ditto - but 250 x 200 x 75 mm	Each	65.00	

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ELECTRIFICATION

PART-II

Item no	Description of Materials	Unit	Rate in Taka	Remarks
29-2990	Fibre Glass / DB Cabinet having 12-15 nos x MCB fixing arrangement (DORMAN / MEM)	Each	2,200.00	
29-2991	Steel Almirah type cubical panel box as spd in sch	Cu.m	16,000.00	
29-2992	DB / MDB / SDB Steel Box 450x330x110 mm 18/20 BG GI sheet	Each	1,800.00	
29-2993	- Ditto - but size 700x600x110 mm	Each	2,250.00	
29-2994	- Ditto - size 900x750x110 mm	Each	2,850.00	
29-2995	PG Clamp (Bimetallic) / U Clamps / Line Taps	Each	85.00	
29-2996	Anti Climbable devices made with MS/FI round bars	Each	280.00	
29-2997	Air termination rod with brass/bronze base 100x100x6 mm	Each	700.00	
29-2998	M S / F I Bar Clamps for Pole band	Pair	200.00	
29-2999	Service Bale PDB type	Each	60.00	
29-3000	Service drawing distribution box	Each	340.00	
29-3001	Distribution Board 2 Way 15 Amps	Each	380.00	
29-3002	Distribution Board 2 Way 30 Amps	Each	450.00	
29-3003	Distribution Board Additional Way 15 Amps	Each	25.00	
29-3004	Distribution Board Additional Way 30 Amps	Each	40.00	
29-3005	Distribution Bus bar 60 A 3 Bar	Each	1,200.00	
29-3006	Distribution Bus bar 100 A 3 Bar	Each	1,600.00	
29-3007	Distribution Bus bar 500 A 3 Bar	Each	7,000.00	
29-3008	Distribution Bus bar 60 A 4 Bar	Each	1,200.00	
29-3009	Distribution Busbar 100 A 4 Bar	Each	1,600.00	
29-3010	Distribution Bus bar 500 A 4 Bar	Each	1,700.00	

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ELECTRIFICATION

PART-II

Item no	Description of Materials	Unit	Rate in Taka	Remarks
29-3011	Joint / End termination Heats and Shrink Kit for 11 KV Cable set of 3 Nos	Set	7,200.00	
29-3012	Winding wire Supper enamel copper 14 - 20 SWG	Kg	915.00	
29-3013	-Ditto- but 21-28 SWG	Kg	920.00	
29-3014	-Ditto- but 29-36 SWG	Kg	950.00	
29-3015	-Ditto- but 37-46 SWG	Kg	980.00	
29-3016	Blank			
29-3017				
29-3018				
	<u>FAN AND SPARES</u>			
29-3019	Ceiling Fan 1400 mm Deluxe (GEC) without regulator	Each	2,956.00	
29-3020	- Ditto - but Deluxe (GEC) with electronics regulator	Each	3,086.00	
29-3021	Ceiling Fan 1200 mm Deluxe (GEC) without regulator	Each	2,848.00	
29-3022	- Ditto - Deluxe (GEC) with electronic regulator	Each	2,976.00	
29-3023	Ceiling Fan 1400 mm Deluxe (Habib) with reulator	Each	2,580.00	
29-3023A	Ceiling Fan 1400 mm Popular (Habib) with reulator	Each	2,310.00	
29-3024	- Ditto - but 1400 mm Econo (Habib) with reulator	Each	2,204.00	
29-3025	Ceiling Fan 1200 mm Deluxe (Habib) with reulator	Each	2,258.00	
29-3026	- Ditto - but 1200 mm Econo (Habib) with reulator	Each	2,150.00	
29-3027	Ceiling Fan 900 mm sweep Deluxe (Habib) with reulator	Each	2,204.00	
29-3028	Ceiling fan 1400 mm Deluxe (Jamuna) with reulator	Each	1,962.00	
29-3029	- Ditto - but 1400 mm Luxury (Jamuna) with reulator	Each	2,177.00	
29-3030	- Ditto - but 1400 mm Super Luxury (Jamuna) with reulator	Each	2,580.00	
29-3031	- Ditto - but 1200 Super Deluxe (Jamuna) with reulator	Each	1,881.00	
29-3032	Ceiling fan 1400 mm Deluxe (National Tongi) with reulator	Each	1,880.00	
29-3033	Ceiling fan 1200 mm Deluxe (Natinal Tongi) with reulator	Each	1,774.00	
29-3034	Ceiling fan 900 mm Deluxe (Natinal Tongi) with reulator	Each	1,666.00	
29-3035	Ceiling Fan 1400/1300 mm sweep (SINGER) with reulator	Each	3,010.00	

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Item no	Description of Materials	Unit	Rate in Taka	Remarks
29-3036	Wall / Cabin fan Plastic body, 300-400 mm sweep, AC 220 volt, 50 Hz complete with blade, regulator, connecting cord, safety guard etc (China)	Each	1,350.00	
29-3037	Pedestal fan Plastic body steel stand, 300-400 mm sweep, AC 220 volt, 50 Hz complete with blade, regulator, connecting cord, safety guard etc (China)	Each	2,250.00	
29-3038	Pedestal fan steel body standard size, 500-600 mm sweep complete with all accessories (GFC Pakistan)	Each	4,800.00	
29-3039	Ceiling Fan 600 mm 4 blade Hi-speed any brand	Each	1,505.00	
29-3040	Exhaust Fan 300 mm GEC	Each	4,146.00	
29-3041	- Ditto - but 400 mm GEC	Each	4,800.00	
29-3042	Exhaust Fan 300 mm, National, Tongi / other approved brand	Each	1,774.00	
29-3043	- Ditto - but 400 mm	Each	1,881.00	
29-3044	Exhaust Fan 200-300 mm Plastic body (China)	Each	1,290.00	
29-3045	Capacitor up to 3 microfarad	Each	42.00	
29-3046	Ceiling rose bakelite	Each	15.00	
29-3047	Ceiling Fan Blade	Each	150.00	
29-3048	Table / Exhaust Fan Blade	Each	160.00	
29-3049	Ball bearing for fan NTN (Japan)	Each	80.00	
29-3050	Ball bearing for fan (Korea / China)	Each	45.00	
29-3051	Insulator for fan down rod	Each	6.00	
29-3052	Nut & bolts for insulator	Each	11.00	
29-3053	Split Pin for C/fan	Each	3.00	
29-3054	Regulator for fan (Electronics)	Each	130.00	
29-3055	Regulator for fan (Inductive)	Each	193.00	
29-3056	Clamp hock for C/fan	Each	300.00	
29-3057	Number Stamping Set 0 to 9 (10 mm size)	Set	800.00	
29-3058 To 25-3200	Blank			

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**ELECTRIFICATION
PART-II**

LIGHT FITTINGS / FIXTURES

Item no	Description of Materials			Unit	Rate in Taka	Remarks
29-3201	Wall light	Crescent Cat No	CB-221-678 -3B	Each	486.00	
29-3202	Wall light	Crescent Cat No	CB-331-678-4B	Each	541.00	
29-3203	Wall light	Crescent Cat No	CB-331-684	Each	477.00	
29-3204	Wall light	Crescent Cat No	CB-332-684	Each	650.00	
29-3205	Wall light	Crescent Cat No	CB-337-551	Each	752.00	
29-3206	Wall light	Crescent Cat No	CB-373-H R CH	Each	428.00	
29-3207	Wall light	Crescent Cat No	CB-373-NS D	Each	212.00	
29-3208	Wall light	Crescent Cat No	CB-412-BL-T-12" D	Each	480.00	
29-3209	Wall light	Crescent Cat No	CB-431-592 frosted)	Each	657.00	
29-3210	Wall light	Crescent Cat No	CB-447-644	Each	676.00	
29-3211	Wall light	Crescent Cat No	CB-498-540-4B	Each	589.00	
29-3212	Wall light	Crescent Cat No	CB-518 Crystal	Each	4,128.00	
29-3213	Wall light	Crescent Cat No	CB-560-681-547	Each	773.00	
29-3214	Wall light	Crescent Cat No	CB-565- 970	Each	675.00	
29-3215	Wall light	Crescent Cat No	CB-577 (ii) - 662	Each	1,032.00	
29-3216	Wall light	Crescent Cat No	CB-577- 662	Each	485.00	
29-3217	Wall light	Crescent Cat No	CB-591-681-547	Each	1,730.00	
29-3218	Wall light	Crescent Cat No	CB-602-909 FF	Each	760.00	
29-3219	Wall light	Crescent Cat No	CB-604-540-BF (4B)	Each	845.00	
29-3220	Wall light	Crescent Cat No	CB-651-666	Each	754.00	
29-3221	Wall light	Crescent Cat No	CB-652-666	Each	1,366.00	
29-3222	Wall light	Crescent Cat No	CB-675-642-A2	Each	1,344.00	
29-3223	Wall light	Crescent Cat No	CB-740	Each	478.00	

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**ELECTRIFICATION
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LIGHT FITTINGS / FIXTURES

Item no	Description of Materials			Unit	Rate in Taka	Remarks
29-3224	Wall light	Crescent Cat No	CB-792 (1)-972/DF	Each	1,470.00	
29-3225	Wall light	Crescent Cat No	CB-892-(1)-972/D	Each	1,295.00	
29-3226	Wall light	Crescent Cat No	CB-894-977	Each	1,580.00	
29-3227	Wall light	Crescent Cat No	CB-895-(1)-976-C/F	Each	1,295.00	
29-3228	Wall light	Crescent Cat No	CB-897-694	Each	1,896.00	
29-3229	Wall light	Crescent Cat No	CB-899--977 F/C	Each	1,467.00	
29-3230	Wall light	Crescent Cat No	CB-911-977	Each	1,140.00	
29-3231	Wall light	Crescent Cat No	CB-929-CPG-2	Each	502.00	
29-3232	Wall light	Crescent Cat No	CB-931(1)-684	Each	674.00	
29-3233	Wall light	Crescent Cat No	CB-952-CPG-02	Each	769.00	
29-3234	Wall light	Crescent Cat No	CB-981-CG- Crystal	Each	2,538.00	
29-3235	Wall light	Crescent Cat No	CB-986-Crystal	Each	4,549.00	
29-3236	Wall light	Crescent Cat No	CBB-4/12-T-12"DD	Each	612.00	
29-3237	Wall light	Crescent Cat No	CFLD-3	Each	3,392.00	
29-3238	Wall light	Crescent Cat No	CG-22	Each	1,872.00	
29-3239	Wall light	Crescent Cat No	CG-80	Each	1,435.00	
29-3240	Wall light	Crescent Cat No	CG-92	Each	1,570.00	
29-3241	Wall light	Crescent Cat No	CGL-49	Each	2,548.00	
29-3242	Wall light	Crescent Cat No	CGL-52	Each	9,708.00	
29-3243	Wall light	Crescent Cat No	CGL-79	Each	9,421.00	
29-3244	Wall light	Crescent Cat No	CG-Umb-8 / CG-Mush 8	Each	2,468.00	
29-3245	Flood light	Crescent Cat No	CMHLD-02	Each	13,975.00	
29-3246	Ceiling light	Crescent Cat No	CML -133 WITH PAR-38 BULB-B	Each	1,144.00	

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ELECTRIFICATION

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LIGHT FITTINGS / FIXTURES

Item no	Description of Materials			Unit	Rate in Taka	Remarks
29-3247	Ceiling light	Crescent Cat No	CML -190-B-95 L-130 P-115-T	Each	499.00	
29-3248	Ceiling light	Crescent Cat No	CML-159(2)	Each	798.00	
29-3249	Ceiling light	Crescent Cat No	CML-26	Each	1,381.00	
29-3250	Ceiling light	Crescent Cat No	CML-339 (Explosive proof)	Each	5,353.00	
29-3251	Ceiling light	Crescent Cat No	CML-369	Each	394.00	
29-3252	Ceiling light	Crescent Cat No	CML-386	Each	510.00	
29-3253	Ceiling light	Crescent Cat No	CML-42	Each	1,881.00	
29-3254	Ceiling light	Crescent Cat No	CML-58 DIA-145 H- 110	Each	942.00	
29-3255	Ceiling light	Crescent Cat No	CP-10 DS	Each	562.00	
29-3256	Ceiling light	Crescent Cat No	CP-17 DD-Ring No.2	Each	2,041.00	
29-3257	Ceiling light	Crescent Cat No	CP-17 DGN PC WITHOUT LNC	Each	946.00	
29-3258	Ceiling light	Crescent Cat No	CP-19 DIA -215 H-95	Each	591.00	
29-3259	Ceiling light	Crescent Cat No	CP-22 D-155 H-85	Each	430.00	
29-3260	Ceiling light	Crescent Cat No	CP-25 GCF	Each	572.00	
29-3261	Ceiling light	Crescent Cat No	CP-8 (R) D-210 H-85	Each	492.00	
29-3262	Ceiling light	Crescent Cat No	CP-8F-DIA-225 H-85	Each	470.00	
29-3263	Ceiling light	Crescent Cat No	CPC-34	Each	500.00	
29-3264	Chandelier	Crescent Cat No	CR-170 (21) CY DIA 122	Each	204,250.00	
29-3265	Chandelier	Crescent Cat No	CR-170 (8) CY DIA 465	Each	27,876.00	
29-3266	Chandelier	Crescent Cat No	CR-230(3)-919 AMBER	Each	7,310.00	
29-3267	Chandelier	Crescent Cat No	CR-239 (7) -925 CLEAR DGN	Each	11,610.00	
29-3268	Chandelier	Crescent Cat No	CR-244(9)-922/CY	Each	21,682.00	
29-3269	Chandelier	Crescent Cat No	CR-310 (1) DGN CY	Each	10,801.00	

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**ELECTRIFICATION
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LIGHT FITTINGS / FIXTURES

Item no	Description of Materials			Unit	Rate in Taka	Remarks
29-3270	Chandelier	Crescent Cat No	CR-367 (4) CY	Each	16,881.00	
29-3271	Chandelier	Crescent Cat No	CR-386 (1)	Each	5,334.00	
29-3272	Lawn light	Crescent Cat No	CST-1001	Each	1,578.00	
29-3273	Lawn light	Crescent Cat No	CST-1001(N)	Each	1,693.00	
29-3274	Lawn light	Crescent Cat No	CST-1004	Each	1,591.00	
29-3275	Lawn light	Crescent Cat No	CST-1004(N)	Each	1,730.00	
29-3276	Wall Light	Gloria Cat No	GBB-970-2127 FR	Each	1,268.00	
29-3277	Wall Light	Gloria Cat No	GBB-979-2401 T	Each	1,064.00	
29-3278	Wall Light	Crescent Cat No	CGL-10	Each	2,609.00	
29-3279	Wall Light	Gloria Cat No	GGL-154	Each	1,290.00	
29-3280	Wall Light	Crescent Cat No	CGL-48	Each	4,843.00	
29-3281	Wall Light	Crescent Cat No	CGL-49	Each	2,266.00	
29-3282	Flood light	Gloria Cat No	GFL-710	Each	1,360.00	
29-3283	Flood light	Gloria Cat No	GFL-711-705	Each	1,666.00	
29-3284	Halogen light	Gloria Cat No	GFL-(H)715 (500 watt)	Each	3,010.00	
29-3285	Halogen light	Gloria Cat No	GFL-(H)709 (1000 watt)	Each	6,450.00	
29-3286	Lawn light	Gloria Cat No	GGDL-255	Each	1,505.00	
29-3287	Lawn light	Gloria Cat No	GGDL-256	Each	1,505.00	
29-3288	Lawn light	Gloria Cat No	GBL-253	Each	4,945.00	
29-3289	Light fixture	Gloria Cat No	GCF-380 DIA-178 H-203	Each	538.00	
29-3290	Light fixture	Gloria Cat No	GCF-410-658 DIA-170 H-170	Each	457.00	
29-3291	Light fixture	Gloria Cat No	GCF-605 DIA-201H-107	Each	645.00	
29-3292	Light fixture	Gloria Cat No	GCF-609(8) DIA-95 H-160	Each	280.00	

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**ELECTRIFICATION
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LIGHT FITTINGS / FIXTURES

Item no	Description of Materials			Unit	Rate in Taka	Remarks
29-3293	Light fixture	Gloria Cat No	GCF-610 DIA-223 H-92	Each	296.00	
29-3294	Light fixture	Gloria Cat No	GCF-611 DIA-223 H-92	Each	323.00	
29-3295	Light fixture	Gloria Cat No	GCF-3110 (9)-2260	Each	13,975.00	
29-3296	Light fixture	Gloria Cat No	GCF-3108 (3)-2151T	Each	6,450.00	
29-3297	Light fixture	Gloria Cat No	GCF-3109 (3)-2415T	Each	6,988.00	
29-3298	Light fixture	Crescent Cat No	CPM-45 D-425 H-230 (WITH TUBE)	Each	3,301.00	
29-3299	Light fixture	Gloria Cat No	GWB-1201-1884 CH	Each	210.00	
29-3300	Light fixture	Gloria Cat No	GWB-1203-3604 B-130 H-210 P-140	Each	511.00	
29-3301	Light fixture	Gloria Cat No	GWB-1203-1804 B-72 H-180 P-250	Each	269.00	
29-3302	Light fixture	Gloria Cat No	GWB-1207-1809	Each	452.00	
29-3303	Light fixture	Gloria Cat No	GWB-1215-1816	Each	484.00	
29-3304	Light fixture	Gloria Cat No	GWB-1217-1877 BR	Each	376.00	
29-3305	Light fixture	Gloria Cat No	GWB-1218-1807 DS/BR	Each	570.00	
29-3306	Light fixture	Gloria Cat No	GWB-1201-1821-CR B-130 H-170 P-240	Each	188.00	
29-3307	Light fixture	Gloria Cat No	GWB-1333-1817	Each	533.00	
29-3308	Light fixture	Gloria Cat No	GWB-1348-1843 F-1828	Each	1,398.00	
29-3309	Light fixture	Gloria Cat No	GWB-1478-2298-Pata	Each	1,935.00	
29-3310	Light fixture	Gloria Cat No	GWB-1501-2105 T	Each	710.00	
29-3311	Light fixture	Gloria Cat No	GWB-1501-2297 FR	Each	737.00	
29-3312	Light fixture	Gloria Cat No	GWB-1501-TV Glass	Each	710.00	
29-3313	Light fixture	Gloria Cat No	GWB-1502-2101-Frosted	Each	946.00	
29-3314	Light fixture	Gloria Cat No	GWB-1521 Crystal	Each	7,095.00	

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**ELECTRIFICATION
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LIGHT FITTINGS / FIXTURES

Item no	Description of Materials			Unit	Rate in Taka	Remarks
29-3315	Light fixture	Gloria Cat No	GWB-1595-2407 FR	Each	645.00	
29-3316	Light fixture	Gloria Cat No	GWB-1607-2105 T	Each	852.00	
29-3317	Light fixture	Gloria Cat No	GWB-1663-2253 BND	Each	737.00	
29-3318	Light fixture	Gloria Cat No	B-160 H-200 P-100 GWB-1671-2255 T	Each	555.00	
29-3319	Light fixture	Gloria Cat No	GWB-1741-2291 SR	Each	1,419.00	
29-3320	Light fixture	Gloria Cat No	GWB-1753-2293 BND	Each	1,278.00	
29-3321	Light fixture	Gloria Cat No	GWB-1754-2294 BND	Each	1,505.00	
29-3322	Light fixture	Gloria Cat No	GWB-1776 Crystal	Each	5,160.00	
29-3323	Light fixture	Gloria Cat No	GWB-1787	Each	645.00	
29-3324	Light fixture	Gloria Cat No	GWB-1793-2147 FR	Each	1,065.00	
29-3325	Light fixture	Gloria Cat No	GWB-2543-1823	Each	780.00	
29-3326	Light fixture	Gloria Cat No	GWB-2592-1892	Each	828.00	
29-3327	Light fixture	Gloria Cat No	GWB-2628-1809	Each	780.00	
29-3328	Light fixture	Gloria Cat No	GWB-2629-1809	Each	484.00	
29-3329	Light fixture	Gloria Cat No	GWB-2672-1897	Each	769.00	
29-3330	Light fixture	Gloria Cat No	GWB-2683-1888	Each	602.00	
29-3331	Light fixture	Gloria Cat No	GWB-2684-1888	Each	1,054.00	
29-3332	Light fixture	Gloria Cat No	GWB-2689-651 NC	Each	538.00	
29-3333	Light fixture	Gloria Cat No	GWB-2690-651 NC	Each	806.00	
29-3334	Light fixture	Gloria Cat No	GWB-2731-1839	Each	430.00	
29-3335	Light fixture	Gloria Cat No	GBB-959-2105 T	Each	645.00	
29-3336	Light fixture	Gloria Cat No	GWT-706	Each	855.00	
29-3337	Light fixture	Gloria Cat No	GWT-708	Each	946.00	

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LIGHT FITTINGS / FIXTURES

Item no	Description of Materials			Unit	Rate in Taka	Remarks
29-3338	Light fixture	Gloria Cat No	GWT-711-2106 (Brass net)	Each	1,048.00	
29-3339	Light fixture	Gloria Cat No	SCDB-161-DT 732	Each	1,254.00	
29-3340	Light fixture	Gloria Cat No	GCF-463 D-130 L-120 H-70	Each	430.00	
29-3341	Light fixture	Gloria Cat No	GCF-623 SD/BR DIA P-218 H-70	Each	296.00	
29-3342	Light fixture	Gloria Cat No	GCF-630-DIA-313 H-126	Each	780.00	
29-3343	Light fixture	Gloria Cat No	GCF-1084(8)CRYSTAL	Each	25,263.00	
29-3344	Light fixture	Gloria Cat No	GCF-1086(16)CRYSTAL	Each	80,628.00	
29-3345	Light fixture	Gloria Cat No	GCF-378(B) DIA-152 E-114	Each	645.00	
29-3346	Light fixture	Gloria Cat No	GCF-607-DIA-292 H-110	Each	855.00	
29-3347	Light fixture	Gloria Cat No	GCF-609(B) DIA-95 H-160	Each	280.00	
29-3348	Light fixture	Gloria Cat No	GCF-623 DS/BR DIAT-218 H-70	Each	268.00	
29-3349	Light fixture	Gloria Cat No	GCF-624 DIA-215 H-70	Each	253.00	
29-3350	Light fixture	Gloria Cat No	GCF-627	Each	323.00	
29-3351	Light fixture	Gloria Cat No	GEPL-714-DIA-210 H-318 P-305	Each	2,849.00	
29-3352	Light fixture	Gloria Cat No	GSL-364 DIA-110 L-150 P-158	Each	403.00	
29-3353	Light fixture	Gloria Cat No	GSL-396 DIA-95 L-150 P-143	Each	753.00	
29-3354	Light fixture	Gloria Cat No	GSL-397(2) DIA-100 L-155 P-155 BASE L-220 B-165	Each	753.00	
29-3355	Light fixture	Gloria Cat No	GBB 961-2127 FR L-305 B-105 P-750	Each	801.00	
29-3356	Light fixture	Gloria Cat No	GWB-1201-1821-CR	Each	188.00	
29-3357	Light fixture	Gloria Cat No	GWB-1217-1807-DS/BR	Each	366.00	
29-3358	Light fixture	Gloria Cat No	GWB-1298-1839 B-260- H-179 P-125	Each	726.00	
29-3359	Light fixture	Gloria Cat No	GWB-1299-1839 B-106 H-174 P-128	Each	430.00	

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Item no	Description of Materials			Unit	Rate in Taka	Remarks
29-3360	Light fixture	Gloria Cat No	GWB-1334-1817	Each	860.00	
29-3361	Light fixture	Gloria Cat No	GWB-1347-658	Each	807.00	
29-3362	Light fixture	Gloria Cat No	GWB-1475-2129 FR (B) B-258 H-265 P- 212	Each	2,123.00	
29-3363	Light fixture	Gloria Cat No	GWB-1476-2129 B-90 H-265 P-300	Each	1,054.00	
29-3364	Light fixture	Gloria Cat No	GWB-1587- 2148(B)CRYSTAL B - 150 H-220 P-225	Each	2,473.00	
29-3365	Light fixture	Gloria Cat No	GWB-1588-2148 CRYSTAL B-370 H- 225 P-240	Each	4,515.00	
29-3366	Light fixture	Gloria Cat No	GWB-1661-2250 BND B-124 H-205 P-110	Each	780.00	
29-3367	Light fixture	Gloria Cat No	GWB-1662-2250 BND	Each	1,505.00	
29-3368	Light fixture	Gloria Cat No	GWB-1665-2251 BND B-225 H-215 P-150	Each	1,123.00	
29-3369	Light fixture	Gloria Cat No	GWB-1667-2256 BND	Each	1,005.00	
29-3370	Light fixture	Gloria Cat No	GWT-701 Alu cast BODY L-166-B-125 H- 105	Each	264.00	
29-3371	Light fixture	Gloria Cat No	GBB-953-1803 D.cut	Each	645.00	
29-3372	Light fixture	Gloria Cat No	GBB-958-1205T	Each	484.00	
29-3373	Light fixture	Gloria Cat No	GBB-960-2106T L- 405 B-130 P-90	Each	726.00	
29-3374	Light fixture	Swash Cat No	BFWT-6 SMALL D- 230 L-281	Each	636.00	
29-3375	Light fixture	Swash Cat No	BFWT-1 B-170 H-108	Each	950.00	
29-3376	Light fixture	Swash Cat No	BFWT-6(BIG) B-308 L-385	Each	1,048.00	
29-3377	Light fixture	Swash Cat No	BFWT-4 PARSPEX B- 119 H-235 P-110	Each	523.00	
29-3378	Light fixture	Swash Cat No	SCB-33 (12")PL-B-72- L-368 P-110	Each	447.00	
29-3379	Light fixture	Swash Cat No	SCB-35 TTG 12" B- 115 L-410 P-112	Each	836.00	

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Item no	Description of Materials			Unit	Rate in Taka	Remarks
29-3380	Light fixture	Swash Cat No	SCB-35 TTG-6"-L-255 B-105 P-92	Each	527.00	
29-3381	Light fixture	Swash Cat No	SCB-37 TTG B-120 L- 318 P-91	Each	1,145.00	
29-3382	Light fixture	Swash Cat No	SCCF -28 DESIGN GLASS DIA-222 H-97	Each	363.00	
29-3383	Light fixture	Swash Cat No	SCCF-22 DIA-222 H-91	Each	364.00	
29-3384	Light fixture	Swash Cat No	SCCF-30 PLAN STK DIA-145 H-96	Each	485.00	
29-3385	Light fixture	Swash Cat No	SCCF-35 DIA-157 H- 173	Each	345.00	
29-3386	Light fixture	Swash Cat No	SCCF-8 SIDE CUT DIA- 225 H-82	Each	293.00	
29-3387	Light fixture	Swash Cat No	SCCSL-6 (B)BRASS DIA-150 H-153	Each	769.00	
29-3388	Light fixture	Swash Cat No	SCDB-155 CRYSTAL B-287 H-219 P-166	Each	4,106.00	
29-3389	Light fixture	Swash Cat No	SCDB-156 CRYSTAL B -369 H-224- P-238	Each	10,174.00	
29-3390	Light fixture	Swash Cat No	SCD-337 (S) AG B-259 H-173 P-124	Each	872.00	
29-3391	Light fixture	Swash Cat No	SCDB-388 CRYSTAL B-455 H-278 P-165	Each	5,814.00	
29-3392	Light fixture	Swash Cat No	SCDB-447(F) Pata B- 265 H-318 P-173		1,108.00	
29-3393	Light fixture	Swash Cat No	SCH-183 (8) CRYSTAL DIA-460	Each	28,160.00	
29-3394	Light fixture	Swash Cat No	SCCF-4/84 I-BRASS Net/Glass DIA-199 H-77	Each	527.00	
29-3395	Light fixture	Swash Cat No	SCPF-7 B-200 P-79	Each	527.00	
29-3396	Light fixture	Swash Cat No	SCSB-201 TINTED B - 150 H-199 P-98	Each	537.00	
29-3397	Light fixture	Swash Cat No	SCSB-202 BEND GLASS B-160 H-205 P- 101	Each	681.00	
29-3398	Light fixture	Swash Cat No	SCSB-337 (S) AGB - 105 H-172 P-126	Each	443.00	
29-3399	Light fixture	Swash Cat No	SCS-423	Each	656.50	
29-3400	Light fixture	Swash Cat No	SCS-426 STEET B-302 H-320 P-78	Each	999.00	

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Item no	Description of Materials			Unit	Rate in Taka	Remarks
29-3401	Light fixture	Swash Cat No	SCSB-428 BEND GLASS B- 115 H-203 P-98	Each	681.00	
29-3402	Light fixture	Swash Cat No	SCSB-447 F. Pata	Each	511.00	
29-3403	Light fixture	Swash Cat No	SCS-76 HR.BR B-133 H-130 P-213	Each	226.00	
29-3404	Light fixture	Swash Cat No	SCCSL-2 DIA 179 H- 199 (CONCEALED)	Each	642.00	
29-3405	Light fixture	Swash Cat No	SCSL-20(B) B-85 H- 225 P-140	Each	419.00	
29-3406	Light fixture	Swash Cat No	SCSL-21 B-107 H-281 P-165	Each	481.00	
29-3407	Light fixture	Swash Cat No	SCSL-29 (2) B-199 H- 184 P-147	Each	872.00	
29-3408	Light fixture	Swash Cat No	SCSL-9 REFLECTOR B-101 H-170 P-212	Each	699.00	
29-3409	Light fixture	Swash Cat No	SCCF TFR-I/84 DESIGN DIA 350 H- 127	Each	2,180.00	
29-3410	Tube light	Crescent Cat No	CTLS -96x4x20 watt	Each	3,741.00	
29-3411	Tube light	Crescent Cat No	CTLS-11x1x40 watt (design)	Each	1,262.05	
29-3412	Tube light	Crescent Cat No	CTLS-1x1x40 watt	Each	1,125.00	
29-3413	Tube light	Crescent Cat No	CTLS-4x2x40 watt (design)	Each	2,660.00	
29-3414	Tube light	Crescent Cat No	CTLS-68x2x40 watt	Each	1,916.00	
29-3415	Tube light	Crescent Cat No	CTLS-11x1x10 watt (design)	Each	978.00	
29-3416	Tube light	Crescent Cat No	CTLS-11x1x20 watt (DGN)	Each	1,026.00	
29-3417	Tube light	Crescent Cat No	CTLS-22x4x20 watt	Each	3,719.00	
29-3418	Tube light	Crescent Cat No	CTLS-31x4x20 watt	Each	3,741.00	
29-3419	Tube light	Crescent Cat No	CTLS-160x2x40 watt	Each	3,418.50	
29-3420	Tube light	Crescent Cat No	CTLS-160x1x40 watt	Each	2,371.00	
29-3421	Tube light	Crescent Cat No	CTLS-94x1x40 watt	Each	1,451.00	
29-3422	Tube light	Gloria Cat No	GTF-753x1x20 watt	Each	753.00	
29-3423	Tube light	Gloria Cat No	GTF-753x1x40 watt	Each	1,021.00	

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Item no	Description of Materials			Unit	Rate in Taka	Remarks
29-3424	Tube light	Gloria Cat No	GTF-755x1x40 watt design	Each	1,177.00	
29-3425	Tube light	Gloria Cat No	GTF-757x1x40 watt design	Each	1,381.00	
29-3426	Tube light	Gloria Cat No	GTF-771x4x20 watt	Each	3,311.00	
29-3427	Tube light	Gloria Cat No	GTF-789x2x40 watt	Each	1,193.00	
29-3428	Tube light	Gloria Cat No	GTF-756x2x40 WATT	Each	1,918.00	
29-3429	Tube light	Gloria Cat No	GTF-793x4x20 WATT-635 B-635-H-128	Each	3,311.00	
29-3430	Tube light	Gloria Cat No	GTF-764x2x40 watt (W/Base Reflectoe)	Each	2,902.00	
29-3431	Tube light	Gloria Cat No	GTF-783x2x40 watt	Each	2,031.00	
29-3432	Tube light	Gloria Cat No	GTF-812x2x40 watt	Each	2,795.00	
29-3433	Tube light	Gloria Cat No	GTF-815x1x20 watt	Each	1,102.00	
29-3434	Tube light	Gloria Cat No	GTF-815x4x20 watt	Each	4,515.00	
29-3435	Tube light	Gloria Cat No	GTF-863x1x40 watt	Each	1,387.00	
29-3436	Tube light	Gloria Cat No	GCF-801x1x36 wall (with tube)	Each	1,720.00	
29-3437	Tube light	Gloria Cat No	GCF-883x1x32 wall (with tube)	Each	2,010.00	
29-3438	Tube light	Gloria Cat No	GBB-802x1x20 watt (Swinging) Brass	Each	2,365.00	
29-3439	Tube light	Swash Cat No	SCTF-11/78x1x20 watt	Each	734.00	
29-3440	Tube light	Swash Cat No	SCTF-11x178x1x40 watt	Each	950.00	
29-3441	Tube light	Swash Cat No	SCTF-14/79x1x20 watt	Each	783.00	
29-3442	Tube light	Swash Cat No	SCTF-24/85x2x40 watt	Each	3,564.00	
29-3443	Tube light	Swash Cat No	SCTF-33x4x20 watt	Each	2,732.00	
29-3444	Tube light	Swash Cat No	SCTF-34x1x20 watt DESIGN	Each	1,072.00	
29-3445	Tube light	Swash Cat No	SCTF-37x2x40 watt DESIGN	Each	2,019.00	
29-3446	Tube light	Swash Cat No	SCTF-8/78x2x40 watt LOVER	Each	1,653.00	

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Item no	Description of Materials			Unit	Rate in Taka	Remarks
29-3447	Tube light	China / Taiwan	"CATA- Model" 1x40 watt with tube	Each	430.00	
29-3448	Tube light	China / Taiwan	"CATA- Model" 2x40 watt with tube	Each	753.00	
29-3449	Tube light	MEP	"Model B-224 1x40 watt with tube	Each	245.00	
29-3450	Fixture for	Ordinary	Street light (double) 1200 mm without fittings	Each	1,200.00	
29-3451	Fixture for	Ordinary	Street light (single) 1200 mm without fittings	Each	850.00	
29-3452	Fixture for	Crescent Cat No	CTLE 25x2x20 watt	Each	1,554.45	
29-3453	Fixture for	Crescent Cat No	CTLS-28x1x20 watt	Each	1,055.65	
29-3454	Street light	Crescent Cat No	CTLS 25x2x40 watt / GTF 768x2x40	Each	2,199.00	
29-3455	Street light	Crescent Cat No	CTLS 28x1x40 watt GTF-765x1x40 watt	Each	1,580.25	
29-3456	Sodium light	Crescent Cat No	CSL-1001 watt (N)	Each	12,675.00	
29-3457	Street light fixture with sodium lamp 90 watt GSLF-797			Each	11,717.00	
29-3458	Street light fixture with sodium lamp 250 watt HP (Philips)			Each	12,800.00	
29-3459	Metal Halide lamp fixture Complete 400 watt (Italy)			Each	8,063.00	
29-3460	Tube Light reflector (Ordinary) 1220mm 40 Watt			Each	250.00	
29-3461	Tube Light reflector (Ordinary) 610mm 20 Watt			Each	180.00	
29-3462	Bracket exterior watertight complete 12 mm			Each	161.00	
29-3463	Fancy type bath bracket for double lamp			Each	280.00	
29-3464	Fancy type bath bracket for single lamp			Each	220.00	
29-3465	Fancy type brass bracket wall double arm			Each	370.00	
29-3466	Fancy type brass bracket wall single arm			Each	280.00	
29-3467	Flame proof fittings Bulkhead type			Each	700.00	
29-3468	Flame proof fittings for 100 watt lamp			Each	1,500.00	
29-3469	Flame proof fittings for 60 watt lamp			Each	1,200.00	

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Item no	Description of Materials	Unit	Rate in Taka	Remarks
29-3470	Swan neck brass bracket complete	Each	150.00	
29-3471	Swan neck brass bracket complete	Each	75.00	
29-3472	Flame Proof fittings	Each	935.00	
29-3473	Flame Proof Gland	Each	170.00	
29-3474	Flame Proof Fittings 20 mm E T Tapped	Each	1,050.00	
29-3475	Flame Proof Fittings 20 mm Tapped Height 325 mm	Each	1,200.00	
29-3476	Bracket wall plain without holder & shade	Each	66.00	
29-3477	Sodium Light complete fixture High Pressure 250 - 400 watt (without lamp)	Set	11,215.00	
29-3478	Saucer type lamp shade glass local	Each	165.00	
29-3479	Water tight Shade with glass	Each	75.00	
29-3480	Shade conical aluminum / enamel 250 mm	Each	35.00	
29-3481	Shade conical aluminum / enamel 300 mm	Each	36.00	
29-3482	Shade decorative with chain	Each	250.00	
29-3483	Shade decorative without chain	Each	220.00	
29-3484	Ballast Philips (Holland), model BHL 125 for mercury lamp	Each	1290.00	
29-3485	Ballast (Holland) but BHL 250 for mercury lamp	Each	2043.00	
29-3486	Ballast(China) but BHL 250 for mercury lamp	Each	698.00	
29-3487	Ballast (Holland) but BHL 400 for mercury lamp	Each	2258.00	
29-3488	Ballast (China) but BHL 400 for mercury lamp	Each	698.00	
29-3489	Ballast but BSX 90 for low pressure sodium lamp	Each	1828.00	
29-3490	Ballast but BSN 90 for high pressure sodium lamp	Each	1700.00	
29-3491	Ballast but BSN 400 for high pressure sodium lamp	Each	1700.00	
29-3492	Choke for mercury light 250 watt	Each	698.00	

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Item no	Description of Materials	Unit	Rate in Taka	Remarks
29-3493	Choke but for mercury light 400 watt	Each	1,032.00	
29-3494	Choke for sodium lamp high pressure 400 watt	Each	1,700.00	
29-3495	Choke but for low pressure 55-90 watt	Each	1,500.00	
29-3496	Choke for tube light 20 watt	Each	155.00	
29-3497	Choke but for 40 watt	Each	145.00	
29-3498	Choke (Electronics) for tube light 40/20 watt Micro/sepon	Each	160.00	
29-3499	Choke (Electronics) for tube light 40/20 watt CATA	Each	100.00	
29-3500	Capacitor brand Philips 10 mfd	Each	215.00	
29-3501	- Ditto - but 20/40 mfd	Each	376.00	
29-3502	Glove ordinary opal type 150 mm dia	Each	54.00	
29-3503	- Ditto - but for 250 mm dia	Each	138.00	
29-3504	Glass Heat Proof (Foreign) for Flood light	Each	537.00	
29-3505	Glass for water tight bracket	Each	30.00	
29-3506	Globe white 150mm dia (ordinary)	Each	55.00	
29-3507	Holder for tube light flat D/L type	Each	30.00	
29-3508	- Ditto - but for spring type	Each	30.00	
29-3509	Lamp holder Bakelite BC for Brass bracket	Each	20.00	
29-3510	Lamp holder batten BC Bakelite	Each	16.00	
29-3511	- Ditto - but 450 angle	Each	20.00	
29-3512	Lamp holder BC Bakelite pendant /Cord grip	Each	18.00	
29-3513	Lamp holder brass BC Batten	Each	25.00	
29-3514	Lamp holder Brass BC for bracket	Each	22.00	
29-3515	Lamp holder threaded Bakelite	Each	22.00	

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Item no	Description of Materials	Unit	Rate in Taka	Remarks
29-3516	Lamp holder threaded brass/porcelain	Each	22.00	
29-3517	Lamp holder threaded brass / porcelain for bracket	Each	25.00	
29-3518	Lamp holder threaded pendant Bakelite	Each	22.00	
29-3519	Tube Light (Eastern)-40 Watt	Each	90.00	
29-3520	Tube Light (Eastern)-20 Watt	Each	75.00	
29-3521	Indicating Lamp complete (Taiwan)	Each	110.00	
29-3522	Bulb for panel Indicator any colour (Taiwan)	Each	75.00	
29-3523	Sodium lamp (Bulb) 230 Volts, 55 watt	Each	1,400.00	
29-3524	Sodium lamp (Bulb) 230 Volts, 90 watt	Each	1,600.00	
29-3525	Lawn Lamp (Bulb) 200 Watt ordinary	Each	60.00	
29-3526	125 / 160 Watt Mercury Lamp blended	Each	312.00	
29-3527	Flood Lamp (Bulb) 300 / 500 Watt	Each	100.00	
29-3528	Flood Lamp (Bulb) 1000 Watt	Each	150.00	
29-3529	Halogen Lamp (Bulb) double ended 500 Watt Philips Holland / French	Each	180.00	
29-3530	- Ditto - but for 1000 / 1500 Watt Philips Holland / French	Each	419.00	
29-3531	Emergency lantern light set (Micro) portable 2x6 watt tube	Each	1,600.00	
29-3532	Low Pressure sodium street / security lamps fixture complete 55 watt	Set	6,500.00	
29-3533	-Ditto - but for 90 watt	Set	8,000.00	
29-3534	High pressure Mercury lamp brand Philips model HPL-N-400 watt	Each	1,613.00	
29-3535	- Ditto - but 80 / 125 watt	Each	312.00	
29-3536	Blended Mercury lamp brand Philips model ML 125 / 160 watt	Each	312.00	
29-3537	- Ditto - but 250 watt	Each	968.00	
29-3538	Sodium lamp high pressure brand Philips model SON 250 watt	Each	2,043.00	

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Item no	Description of Materials	Unit	Rate in Taka	Remarks
29-3539	- Ditto - but 400 watt	Each	2,365.00	
29-3540	Sodium lamp low pressure brand Philips model SOX 18 watt	Each	2,150.00	
29-3541	- Ditto - but 35 watt	Each	2,150.00	
29-3542	- Ditto - but 55 watt	Each	2,150.00	
29-3543	- Ditto - but 90 watt	Each	2,795.00	
29-3544	Energy saving lamps (CFL) 15 watt, Pin / thread type brand Osram (Economy)	Each	220.00	
29-3545	- Ditto - but Philips	Each	225.00	
29-3546	- Ditto - but Energypac	Each	215.00	
29-3547	- Ditto - but Plazama	Each	210.00	
29-3548	Energy saving lamps (CFL) 20 watt, Pin / thread type brand Osram (Economy)	Each	235.00	
29-3549	- Ditto - but Philips	Each	240.00	
29-3550	- Ditto - but Energypac	Each	230.00	
29-3551	- Ditto - but Plazama	Each	220.00	
29-3552	Energy saving lamps (CFL) 23-25 watt, Pin / thread type brand Osram (Economy)	Each	245.00	
29-3553	- Ditto - but Philips	Each	250.00	
29-3554	- Ditto - but Energypac	Each	240.00	
29-3555	- Ditto - but Plazama	Each	230.00	
29-3556	Energy saving lamps (CFL) 20 watt, Pin / thread type brand Sainik	Each	225.00	
29-3557	- Ditto - but 25 watt	Each	235.00	
29-3558	- Ditto - but 26 watt (spiral)	Each	245.00	
29-3559	Philips Softone Lamps Candle Clear ES type	Each	25.00	
29-3560	- Ditto - but for Luster Milky	Each	28.00	
29-3561	- Ditto - but for Candle Milky	Each	28.00	
29-3562	- Ditto - but for Partytone Luster (4 colour)	Each	28.00	
29-3563	- Ditto - but for Candle (4 colour)	Each	28.00	
29-3564	- Ditto - but for Practitone 100 watt Anti Insect BC type	Each	32.00	

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Item no	Description of Materials	Unit	Rate in Taka	Remarks
29-3565	Philips Tube light TLD 40 watt/54, 4 ft	Each	65.00	
29-3566	- Ditto - but for 36 watt	Each	60.00	
29-3567	- Ditto - but for 18 watt 2 ft	Each	58.00	
29-3568	Starter for tube light (India)	Each	10.00	
29-3569	- Ditto - but (Philips)	Each	15.00	
29-3570	Igniter brand Philips for high pressure sodium lamp SN-58	Each	1,075.00	
29-3571	- Ditto- for low pressure sodium lamp SX 75/76	Each	1,075.00	
29-3572	- Ditto- for metal Halide lamp SI-51	Each	1,075.00	
29-3573	Osram Fluorescent Lamps Cap Size T8, Tube light 36 Watt, Basic plus	Each	81.00	
29-3574	- Ditto - but Tube light 40 Watt, Osram standard T12	Each	81.00	
29-3575	- Ditto - but Tube light 18 W / 765TII	Each	65.00	
29-3576	- Ditto - but Tube light 20 Watt	Each	70.00	
29-3577	Osram double ended Tungsten Halogen Lamp Cap Size R7S, 150 Watt	Each	140.00	
29-3578	- Ditto - but Halogen Lamp 200 Watt	Each	140.00	
29-3579	- Ditto - but Halogen Lamp 300 Watt	Each	236.00	
29-3580	- Ditto - but Halogen Lamp 500 Watt	Each	236.00	
29-3581	- Ditto - but Halogen Lamp 1000 Watt	Each	400.00	
29-3582	- Ditto - but Halogen Lamp 1500 Watt	Each	500.00	
29-3583	- Ditto - but Halogen Lamp 2000 Watt	Each	850.00	
29-3584	Osram Mercury - Tungsten Blended Lamp Cap Size E27/B22, 160 Watt	Each	280.00	
29-3585	- Ditto - but Cap Size E40 Mercury HWL Lamp 250 Watt	Each	376.00	
29-3586	Osram Mercury - Delux HQL Lamp Cap Size E40, 250 Watt	Each	538.00	
29-3587	- Ditto - but 400 Watt	Each	699.00	
29-3588	Osram High Pressure Metal Halide Lamp, Cap Size E40 HQI 250 Watt	Each	1,400.00	
29-3589	- Ditto - but 400 Watt	Each	1,850.00	
29-3590	Philips (Holland) Metal Halide Lamp, 250 Watt	Each	1,290.00	
29-3591	- Ditto - but 400 Watt	Each	1,591.00	
29-3592	Osram High Pressure Sodium Lamp, Cap Size E40 NAV-T 250 Watt	Each	1,569.00	
29-3593	- Ditto - but 400 Watt	Each	1,827.00	

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SECTION-29

ELECTRIFICATION

PART-II

LIGHT FITTINGS / FIXTURES

Item no	Description of Materials	Unit	Rate in Taka	Remarks
29-3594	Philips High Pressure Sodium Lamp, 250 Watt	Each	1,559.00	
29-3595	- Ditto - but 400 Watt	Each	1,720.00	
29-3596	Osram Low Pressure Sodium Lamp, Cap Size B22 SOX 90 Watt	Each	1,666.00	
29-3597	- Ditto - but 55 Watt	Each	1,451.00	
29-3598	- Ditto - but 35 Watt	Each	1,344.00	
29-3599	- Ditto - but 18 Watt	Each	1,344.00	
29-3600	Lamp Electric incandcent 100 watt	Each	22.00	
29-3601	- Ditto - but 60 watt	Each	18.20	
29-3602	- Ditto - but 40 watt	Each	18.20	
29-3603	- Ditto - but 25 watt	Each	18.20	
29-3604	- Ditto - but 5 watt	Each	18.20	
29-3605	Tube light Swash Cat No SCTF-34x1x40 watt	Each	989.00	
29-3606	Tube light Swash Cat No SCRL-2x2x40 watt	Each	1,666.25	
29-3607	Bracket bath Crescent Cat No CBB-4/12-T12-P	Each	532.00	
29-3608	Bracket wall Crescent Cat No CB-751 (1) 676	Each	568.68	
29-3609	Bracket wall Gloria Cat No GWB-1589-2151 T	Each	752.50	
29-3610	Bracket wall Gloria Cat No GWB-1501-2286 FR	Each	645.00	
29-3611	Bracket wall Gloria Cat No GWB-1511-2114/1828	Each	752.50	
29-3612	Bracket wall Gloria Cat No GWB-2543-1814	Each	483.75	
29-3613	Bracket wall Gloria Cat No GWB-1205-1809	Each	284.88	
29-3614	Bracket wall Swash Cat No SCSB-220 DT 743	Each	543.95	
29-3615	Light fixture Gloria Cat No GWT-713	Each	564.38	
29-3616	Bracket wall Swash Cat No SCS-112 (B) G 8" NC	Each	383.78	
29-3617	Ceiling light Crescent Cat No CML-430-Plan	Each	1,602.83	
29-3618	Ceiling light Gloria Cat No GCF-602	Each	241.88	
29-3619	Chandelier Gloria Cat No GCF-1197 (18)-2404	Each	25,500.00	
29-3620	Chandelier Gloria Cat No GCF-1196 (11)-2278	Each	20,200.00	
29-3621	Spot light Gloria Cat No GSL-384	Each	355.00	
29-3622	Ceiling light Gloria Cat No GCF-640	Each	886.00	
29-3623	Ceiling light Gloria Cat No GCF-661	Each	860.00	
29-3624	Ceiling light Gloria Cat No GCF-707 AB	Each	850.00	
29-3625	Ceiling light Crescent Cat No CB-610-668CH	Each	921.00	
29-3626	Blank			
29-3700				

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SECTION-29

ELECTRIFICATION

PART - II

HT / LT EQUIPMENTS

Item no	Description of Equipments	Capacity	Brand	Unit	Rate in Taka	Remarks
29-3701	Distribution Power Transformer 11/.4 KV, 3 Phase, 50 HZ	50	KVA	Energypac	Each	276,165.00
29-3702	- Ditto - but for	50	KVA	GEC	Each	240,000.00
29-3703	- Ditto - but for	50	KVA	GEM	Each	279,500.00
29-3704	- Ditto - but for	50	KVA	Micro	Each	-
29-3705	- Ditto - but for	50	KVA		Each	-
29-3706	- Ditto - but for	100	KVA	Energypac	Each	366,775.00
29-3707	- Ditto - but for	100	KVA	GEC	Each	360,000.00
29-3708	- Ditto - but for	100	KVA	GEM	Each	333,250.00
29-3709	- Ditto - but for	100	KVA	Micro	Each	280,000.00
29-3710	- Ditto - but for	100	KVA	BETELCO	Each	269,288.00
29-3711	- Ditto - but for	200	KVA	Energypac	Each	520,413.00
29-3712	- Ditto - but for	200	KVA	GEC	Each	520,000.00
29-3713	- Ditto - but for	200	KVA	GEM	Each	510,625.00
29-3714	- Ditto - but for	200	KVA	Micro	Each	420,000.00
29-3715	- Ditto - but for	200	KVA	BETELCO	Each	397,750.00
29-3716	- Ditto - but for	250	KVA	Energypac	Each	599,675.00
29-3717	- Ditto - but for	250	KVA	GEC	Each	625,000.00
29-3718	- Ditto - but for	250	KVA	GEM	Each	632,000.00
29-3719	- Ditto - but for	250	KVA	Micro	Each	480,000.00
29-3720	- Ditto - but for	250	KVA	BETELCO	Each	457,413.00
29-3721	- Ditto - but for	300	KVA	Energypac	Each	700,655.00
29-3722	- Ditto - but for	300	KVA	GEC	Each	670,000.00
29-3723	- Ditto - but for	300	KVA	GEM	Each	731,000.00
29-3724	- Ditto - but for	300	KVA	Micro	Each	520,000.00
29-3725	- Ditto - but for	300	KVA	BETELCO	Each	494,500.00

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SECTION-29

ELECTRIFICATION

PART - II

HT / LT EQUIPMENTS

Item no	Description of Equipments	Capacity	Brand	Unit	Rate in Taka	Remarks
29-3726	- Ditto - but for	400	KVA	Energypac	Each	825,775.00
29-3727	- Ditto - but for	400	KVA	GEC	Each	820,000.00
29-3728	- Ditto - but for	400	KVA	GEM	Each	-
29-3729	- Ditto - but for	400	KVA	Micro	Each	559,000.00
29-3730	- Ditto - but for	400	KVA	BETELCO	Each	559,000.00
29-3731	- Ditto - but for	500	KVA	Energypac	Each	945,625.00
29-3732	- Ditto - but for	500	KVA	GEC	Each	950,000.00
29-3733	- Ditto - but for	500	KVA	GEM	Each	1,010,500.00
29-3734	- Ditto - but for	500	KVA	Micro	Each	731,000.00
29-3735	- Ditto - but for	500	KVA	BETELCO	Each	731,000.00
29-3736	- Ditto - but for	630	KVA	Energypac	Each	1,102,875.00
29-3737	- Ditto - but for	630	KVA	GEC	Each	1,250,000.00
29-3738	- Ditto - but for	630	KVA	GEM	Each	-
29-3739	- Ditto - but for	630	KVA	Micro	Each	780,000.00
29-3740	- Ditto - but for	750	KVA	Energypac	Each	1,409,938.00
29-3741	- Ditto - but for	750	KVA	GEC	Each	1,470,000.00
29-3742	- Ditto - but for	750	KVA	GEM	Each	-
29-3743	- Ditto - but for	750	KVA	Micro	Each	967,500.00
29-3744	- Ditto - but for	750	KVA	BETELCO	Each	967,500.00
29-3745	- Ditto - but for	800	KVA	Energypac	Each	1,409,938.00
29-3746	- Ditto - but for	800	KVA	GEC	Each	1,470,000.00
29-3747	- Ditto - but for	800	KVA	BETELCO	Each	1,010,000.00
29-3748	- Ditto - but for	800	KVA	Micro	Each	1,010,000.00
29-3749	- Ditto - but for	1000	KVA	Energypac	Each	1,636,505.00
29-3750	- Ditto - but for	1000	KVA	GEC	Each	1,750,000.00
29-3751	- Ditto - but for	1000	KVA	GEM	Each	1,200,000.00
29-3752	- Ditto - but for	1000	KVA	Micro	Each	1,325,000.00
29-3753	- Ditto - but for	1000	KVA	BETELCO	Each	1,325,000.00

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SECTION-29

**ELECTRIFICATION
PART - II
HT / LT EQUIPMENTS**

Item no	Description of Equipments	Capacity		Brand	Unit	Rate in Taka	Remarks
29-3754	- Ditto - but for	1250	KVA	Energypac	Each	1,862,048.00	
29-3755	- Ditto - but for	1250	KVA	GEC	Each	2,120,000.00	
29-3756	- Ditto - but for	1500	KVA	Energypac	Each	2,170,263.00	
29-3757	- Ditto - but for	1500	KVA	GEC	Each	2,450,000.00	
29-3758	- Ditto - but for	2000	KVA	Energypac	Each	2,861,993.00	
29-3759	- Ditto - but for	2000	KVA	GEC	Each	3,200,000.00	
29-3760	- Ditto - but for	2500	KVA	Energypac	Each	3,270,095.00	
29-3761	- Ditto - but for	2500	KVA	GEC	Each	-	
29-3762	Distribution Power Transformer 6.35/.24 KV, Single Phase, 50 HZ	10	KVA	GEC	Each	-	
29-3763	- Ditto - but for	10	KVA	GEM	Each	100,620.00	
29-3764	- Ditto - but for	15	KVA	GEC	Each	-	
29-3765	- Ditto - but for	15	KVA	GEM	Each	120,400.00	
29-3766	- Ditto - but for	25	KVA	GEC	Each	-	
29-3767	- Ditto - but for	25	KVA	GEM	Each	166,625.00	
29-3768	- Ditto - but for	37.5	KVA	GEC	Each	-	
29-3769	- Ditto - but for	37.5	KVA	GEM	Each	-	
29-3770	- Ditto - but for	50	KVA	GEC	Each	-	
29-3771	- Ditto - but for	50	KVA	GEM	Each	-	
29-3772	Switchgear 11 KV, 3 Phase 50 Hz (HT) complete with all accessories (LBS) without KWH Meter	630	Amps	GEC	Each	400,000.00	
29-3773	- Ditto - but for	630	Amps	GEM	Each	-	
29-3774	- Ditto - but for	630	Amps	Energypac	Each	490,000.00	
29-3775	- Ditto - but for	630	Amps	Micro	Each	372,800.00	

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SECTION-29

ELECTRIFICATION

PART - II

HT / LT EQUIPMENTS

Item no	Description of Equipments	Capacity		Brand	Unit	Rate in Taka	Remarks
29-3776	Switchgear (HT) 11 KV, 3 Phase 50 Hz complete with all accessories VCB (Fixed) without KWH Meter	630	Amps	GEC	Each	750,000.00	
29-3777	- Ditto - but for	630	Amps		Each	-	
29-3778	- Ditto - but for	630	Amps	Energypac	Each	890,000.00	
29-3779	- Ditto - but for	630	Amps	Micro	Each	880,000.00	
29-3780	Switchgear (HT) 11 KV, 3 Phase 50 Hz complete with all accessories (VCB Drawout) without KWH Meter	630	Amps	GEC	Each	850,000.00	
29-3781	- Ditto - but for	630	Amps		Each	-	
29-3782	Switchgear (HT) 11 KV, 3 Phase 50 Hz complete with all accessories (MOCB) without KWH Meter	630	Amps	GEC	Each	-	
29-3783	- Ditto - but for	630	Amps	GEM	Each	-	
29-3784	- Ditto - but for	630	Amps	Energypac	Each	-	
29-3785	- Ditto - but for	630	Amps	Micro	Each	-	
29-3786	Switch gear LT 440 Volt 3 Phase 50 Hz complete with cubical & MCCB	100	Amps	Energypac	Each	146,916.00	
29-3787	- Ditto - but for	200	Amps		Each	-	
29-3788	- Ditto - but for	100	Amps	Micro	Each	95,600.00	
29-3789	- Ditto - but for	200	Amps	Energypac	Each	166,617.00	
29-3790	- Ditto - but for	200	Amps	GEC	Each	240,000.00	
29-3791	- Ditto - but for	200	Amps	Micro	Each	110,000.00	
29-3792	- Ditto - but for	300	Amps	Energypac	Each	196,020.00	
29-3793	- Ditto - but for	300	Amps	GEC	Each	275,000.00	
29-3794	- Ditto - but for	300	Amps	Micro	Each	160,000.00	
29-3795	- Ditto - but for	400	Amps	Energypac	Each	245,025.00	

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SECTION-29

ELECTRIFICATION

PART - II

HT / LT EQUIPMENTS

Item no	Description of Equipments	Capacity	Brand	Unit	Rate in Taka	Remarks
29-3796	- Ditto - but for	400	Amps	GEC	Each	290,000.00
29-3797	- Ditto - but for	400	Amps	Micro	Each	180,000.00
29-3798	- Ditto - but for	500	Amps	Energypac	Each	300,600.00
29-3799	- Ditto - but for	500	Amps	GEC	Each	355,000.00
29-3800	- Ditto - but for	500	Amps	Micro	Each	230,000.00
29-3801	- Ditto - but for	600	Amps	Energypac	Each	336,000.00
29-3802	- Ditto - but for	600	Amps	GEC	Each	355,000.00
29-3803	- Ditto - but for	600	Amps		Each	-
29-3804	- Ditto - but for	600	Amps	Micro	Each	260,000.00
29-3805	- Ditto - but for	800	Amps	Energypac	Each	456,000.00
29-3806	- Ditto - but for	800	Amps	GEC	Each	395,000.00
29-3807	- Ditto - but for	800	Amps		Each	-
29-3808	- Ditto - but for	800	Amps	Micro	Each	290,000.00
29-3809	- Ditto - but for	1000	Amps	Energypac	Each	582,000.00
29-3810	- Ditto - but for	1000	Amps	GEC	Each	490,000.00
29-3811	- Ditto - but for	1000	Amps	Micro	Each	350,000.00
29-3812	- Ditto - but for	1250	Amps	Energypac	Each	612,000.00
29-3813	- Ditto - but for	1250	Amps	GEC	Each	635,000.00
29-3814	- Ditto - but for	1250	Amps	Micro	Each	841,000.00
29-3815	- Ditto - but for	1600	Amps	Energypac	Each	864,000.00
29-3816	- Ditto - but for	1600	Amps	GEC	Each	755,000.00
29-3817	- Ditto - but for	2000	Amps	Energypac	Each	1,110,000.00
29-3818	- Ditto - but for	2000	Amps	GEC	Each	1,125,000.00
29-3819	- Ditto - but for	2500	Amps	Energypac	Each	1,281,000.00
29-3820	- Ditto - but for	2500	Amps	GEC	Each	1,180,000.00

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SECTION-29

**ELECTRIFICATION
PART - II
HT / LT EQUIPMENTS**

Item no	Description of Equipments	Capacity	Brand	Unit	Rate in Taka	Remarks
29-3821	Auto PFI (L T) 440 Volt 3 Phase 50 Hz complete with all accessories & Cubical	20	KVAr	GEC	Each	100,000.00
29-3822	- Ditto - but for	30	KVAr	Energypac	Each	139,141.00
29-3823	- Ditto - but for	40	KVAr	GEC	Each	17,500.00
29-3824	- Ditto - but for	40	KVAr	Energypac	Each	165,000.00
29-3825	- Ditto - but for	60	KVAr	GEC	Each	200,000.00
29-3826	- Ditto - but for	60	KVAr	Energypac	Each	178,200.00
29-3827	- Ditto - but for	80	KVAr	GEC	Each	230,000.00
29-3828	- Ditto - but for	90	KVAr	Energypac	Each	227,000.00
29-3829	- Ditto - but for	100	KVAr	GEC	Each	280,000.00
29-3830	- Ditto - but for	100	KVAr	Energypac	Each	260,000.00
29-3831	- Ditto - but for	90	KVAr	Micro	Each	150,000.00
29-3832	- Ditto - but for	125	KVAr	GEC	Each	318,000.00
29-3833	- Ditto - but for	120	KVAr	Energypac	Each	269,000.00
29-3834	- Ditto - but for	120	KVAr	Micro	Each	180,000.00
29-3835	- Ditto - but for	160	KVAr	GEC	Each	385,000.00
29-3836	- Ditto - but for	160	KVAr	Energypac	Each	335,000.00
29-3837	- Ditto - but for	160	KVAr	Micro	Each	210,000.00
29-3838	- Ditto - but for	200	KVAr	GEC	Each	435,000.00
29-3839	- Ditto - but for	200	KVAr	Micro	Each	250,000.00
29-3840	- Ditto - but for	190	KVAr	Energypac	Each	370,000.00
29-3841	- Ditto - but for	190	KVAr	Micro	Each	250,000.00
29-3842	- Ditto - but for	300	KVAr	GEC	Each	580,000.00
29-3843	- Ditto - but for	300	KVAr	Micro	Each	345,000.00
29-3844	- Ditto - but for	300	KVAr	Energypac	Each	516,780.00
29-3845	- Ditto - but for	300	KVAr	Micro	Each	345,000.00
29-3846	- Ditto - but for	400	KVAr	GEC	Each	665,000.00
29-3847	- Ditto - but for	400	KVAr		Each	-
29-3848	- Ditto - but for	400	KVAr	Energypac	Each	610,000.00
29-3849	- Ditto - but for	400	KVAr	Micro	Each	405,000.00
29-3850	- Ditto - but for	500	KVAr	GEC	Each	820,000.00
29-3851	- Ditto - but for	500	KVAr	Energypac	Each	790,000.00
29-3852	- Ditto - but for	40	KVAr	Micro	Each	100,000.00

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SECTION-29

ELECTRIFICATION

PART - II

HT / LT EQUIPMENTS

Item no	Description of Equipments	Capacity	Brand	Unit	Rate in Taka	Remarks
29-3853	Energy Meter with panel 11 KV, 3 Phase (HT)	630	Amps	Energypac / ELSTER (USA)	Each	282,187.00
29-3854	- Ditto - but for	630	Amps	GEM	Each	248,325.00
29-3855	- Ditto - but for	630	Amps	Other Brand	Each	236,500.00
29-3856	Disconnecter / Isolator 11 KV, TP for 3 Ph System	320	Amps	GEC	Each	37,625.00
29-3857	- Ditto - but for	320	Amps	GEM	Each	32,196.00
29-3858	- Ditto - but for	320	Amps	Other Brand	Each	45,150.00
29-3859	Lightning arrestor	9 - 11	KV	GEC	Each	5,978.00
29-3860	- Ditto - but for	9 - 11	KV	GEM	Each	1,720.00
29-3861	- Ditto - but for	9 - 11	KV	Other Brand	Each	1,700.00
29-3862	Drop out Fuse 11 KV	100	Amps	GEC	Each	5,578.00
29-3863	- Ditto - but for	100	Amps	GEM	Each	2,822.00
29-3864	- Ditto - but for	100	Amps	Other Brand	Each	2,150.00
29-3865	Transformer oil			Litre		205.00
29-3866 to 29-3900	Blank					

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SECTION-29

RATES OF MATERIALS ONLY (With Carrying Charges)

WATER SUPPLY & SANITARY FITTINGS

PART -III

Item No.	Description of Materials	Unit	Rate in Taka	Remarks
<u>TUBINGS</u>				
29-3901	Water Tube (GI) Brand National Tubes Ltd, Size (Bore & thickness) 12.5x2 mm	Metre	144.00	
29-3902	-Ditto-but 18.7x2.35 mm	Metre	213.00	
29-3903	-Ditto-but 25x2.65 mm	Metre	301.00	
29-3904	-Ditto-but 37.5x2.90 mm	Metre	469.00	
29-3905	-Ditto-but 50x2.90 mm	Metre	552.00	
29-3906	-Ditto-but 75x3.25 mm	Metre	903.00	
29-3907	-Ditto-but 100x3.65 mm	Metre	1,318.00	
29-3908	-Ditto-but 150x4.85 mm	Metre	-	
29-3909	-Ditto-but 200x4.78 mm	Metre	-	
29-3910	Water Tube (GI) Brand Other than National tubes ltd , Size 12.5x2 mm	Metre	138.00	
29-3911	-Ditto-but 18.7x2.35 mm	Metre	180.00	
29-3912	-Ditto-but 25x2.65 mm	Metre	230.00	
29-3913	-Ditto-but 37.5x2.90 mm	Metre	409.00	
29-3914	-Ditto-but 50x2.90 mm	Metre	512.00	
29-3915	-Ditto-but 75x3.25 mm	Metre	907.00	
29-3916	-Ditto-but 100x4-4.2 mm (diamond)	Metre	1,499.00	
29-3917	-Ditto-but 150x4.85 mm	Metre	2,399.00	
29-3918	-Ditto-but 200x4.78 mm	Metre	3,200.00	
29-3919	Steam Tube (MS) Brand National tubes ltd , 12.5x2 mm dia	Metre	93.00	
29-3920	-Ditto-but 18.7x2.35 mm	Metre	139.00	
29-3921	-Ditto-but 25x2.65 mm	Metre	197.00	
29-3922	-Ditto-but 37.5x2.90 mm	Metre	322.00	
29-3923	-Ditto-but 50x2.90 mm	Metre	408.00	
29-3924	-Ditto-but 75x3.25 mm	Metre	675.00	
29-3925	-Ditto-but 100x3.65 mm	Metre	957.00	
29-3926	-Ditto-but 150x4.85 mm	Metre	1,825.00	

SECTION-29

WATER SUPPLY & SANITARY FITTINGS

PART -III

Item No.	Description of Materials	Unit	Rate in Taka	Remarks
29-3927	PVC Tube (Water grade) 13 mmx Gde E (thickness 2.2mm)	Metre	28.00	
29-3928	-Ditto-but 16 mm x T/S (Thread type) thickness 2.5mm	Metre	32.00	
29-3929	-Ditto-but 20 mm x T/S (Thread type) thickness 3.5mm	Metre	42.00	
29-3930	-Ditto-but 25 mm x T/S (Thread type) thickness 4.0mm	Metre	52.00	
29-3931	-Ditto-but 30 mm x T/S (Thread type) thickness 4.5mm	Metre	74.00	
29-3932	-Ditto-but 40 mm x T/S (Thread Type) thickness 4mm	Metre	99.00	
29-3933	-Ditto-but 50 mm x 4.0 mm thick	Metre	131.00	
29-3934	-Ditto-but 75 mm x 6.0 mm thick	Metre	290.00	
29-3935	-Ditto-but 100 mm x 7.5 mm thick	Metre	459.00	
29-3936	-Ditto-but 150 mm x 10.50 mm thick	Metre	1,041.00	
29-3937	-Ditto-but 200 mm x 14.00 mm thick	Metre	1,500.00	
29-3938	-Ditto-but 250 mm x 10.00 mm thick	Metre	1,774.00	
29-3939	uPVC Tube 16 mm gde-E (thickness 3.2mm)	Metre	32.00	
29-3940	-Ditto-but 20 mm gde-E (thickness 3.5mm)	Metre	47.00	
29-3941	-Ditto-but 25 mm gde-E (thickness 4.0mm)	Metre	64.00	
29-3942	-Ditto-but 30 mm x 4.5 mm thick	Metre	87.00	
29-3943	-Ditto-but 40 mm x 4.5 mm thick	Metre	117.00	
29-3944	-Ditto-but 50 mm x 4.5 mm thick	Metre	150.00	
29-3945	-Ditto-but 75 mm x 6.0 mm thick	Metre	340.00	
29-3946	-Ditto-but 100 mm 8.0 mm thick	Metre	530.00	
29-3947	-Ditto-but 150 mm 12.0 mm thick	Metre	1,180.00	
29-3948	-Ditto-but 200 mm 14.0 mm thick	Metre	1,704.00	
29-3949	-Ditto-but 250 mm 18.0 mm thick	Metre	2,815.00	
29-3950	-Ditto-but 300 mm 12.0 mm thick	Metre	2,556.00	
29-3951	PVC Pipe (Light gd-C) 75 mm x 3.5 mm thick	Metre	166.00	
29-3952	-Ditto- but 100 mm x 4.5 mm thick	Metre	265.00	
29-3953	PVC Corrugated flexible pipe Aziz brand 13 mm dia	Metre	14.00	
29-3954	- Ditto - but for 20 mm dia	Metre	15.00	
29-3955	- Ditto - but for 25 mm dia	Metre	22.00	
29-3956	- Ditto - but for 30 mm dia	Metre	30.00	
29-3957	- Ditto - but for 40/50 mm dia	Metre	38.00	
29-3958	PVC Water grade Coil pipe (HDPE) any length & brand 13 mm dia 2.0 mm thick	Metre	25.00	
29-3959	- Ditto - but for 20 mm dia 2.3 mm thick	Metre	35.00	
29-3960	- Ditto - but for 25 mm dia 2.3 mm thick	Metre	46.00	

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SECTION-29

WATER SUPPLY & SANITARY FITTINGS

PART -III

Item No.	Description of Materials	Unit	Rate in Taka	Remarks
<u>LINE FITTINGS</u>				
29-3961	Socket GI 12.50 mm dia	Each	13.00	
29-3962	- Ditto - but for 18.70 mm dia	Each	15.00	
29-3963	- Ditto - but for 25.00 mm dia	Each	24.00	
29-3964	- Ditto - but for 37.50 mm dia	Each	65.00	
29-3965	- Ditto - but for 50.00 mm dia	Each	81.00	
29-3966	- Ditto - but for 75.00 mm dia	Each	237.00	
29-3967	- Ditto - but for 100.00 mm dia	Each	376.00	
29-3968	- Ditto - but for 150.00 mm dia	Each	484.00	
29-3969	- Ditto - but for 200.00 mm dia	Each	600.00	
29-3970	Socket redg GI 18.70x12.50	Each	19.00	
29-3971	- Ditto - but for 25.00x12.50	Each	30.00	
29-3972	- Ditto - but for 37.50 x to 12.50	Each	54.00	
29-3973	- Ditto - but for 50.00 x to 12.50	Each	86.00	
29-3974	- Ditto - but for 75.00 x to 12.50	Each	250.00	
29-3975	- Ditto - but for 100.00 x to 12.50	Each	560.00	
29-3976	- Ditto - but for 150.00 x to 12.50	Each	694.00	
29-3977	Tee GI 12.50 mm dia	Each	16.00	
29-3978	- Ditto - but for 18.70 mm dia	Each	52.00	
29-3979	- Ditto - but for 25.00 mm dia	Each	81.00	
29-3980	- Ditto - but for 37.50 mm dia	Each	86.00	
29-3981	- Ditto - but for 50.00 mm dia	Each	124.00	
29-3982	- Ditto - but for 75.00 mm dia	Each	430.00	
29-3983	- Ditto - but for 100.00 mm dia	Each	591.00	
29-3984	- Ditto - but for 150.00 mm dia	Each	2,150.00	
29-3985	- Ditto - but for 200.00 mm dia	Each	2,500.00	
29-3986	Tea redg GI 18.70 x 12.50 mm	Each	38.00	
29-3987	- Ditto - but for 25.00 x to 12.50 mm	Each	54.00	
29-3988	- Ditto - but for 37.50 x to 12.50 mm	Each	113.00	
29-3989	- Ditto - but for 50.00 x to 12.50 mm	Each	129.00	
29-3990	- Ditto - but for 75.00 x to 12.50 mm	Each	430.00	
29-3991	- Ditto - but for 100.00 x to 12.50 mm	Each	692.00	
29-3992	- Ditto - but for 150.00 x to 12.50 mm	Each	2,365.00	

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WATER SUPPLY & SANITARY FITTINGS

PART -III

Item No.	Description of Materials	Unit	Rate in Taka	Remarks
29-3993	Elbow GI 12.50 mm dia	Each	15.00	
29-3994	- Ditto - but for 18.70 mm dia	Each	22.00	
29-3995	- Ditto - but for 25.00 mm dia	Each	38.00	
29-3996	- Ditto - but for 37.50 mm dia	Each	70.00	
29-3997	- Ditto - but for 50.00 mm dia	Each	97.00	
29-3998	- Ditto - but for 75.00 mm dia	Each	452.00	
29-3999	- Ditto - but for 100.00 mm dia	Each	591.00	
29-4000	- Ditto - but for 150.00 mm dia	Each	1,774.00	
29-4001	Bend GI 12.50 mm dia	Each	27.00	
29-4002	- Ditto - but for 18.70 mm dia	Each	38.00	
29-4003	- Ditto - but for 25.00 mm dia	Each	81.00	
29-4004	- Ditto - but for 37.50 mm dia	Each	140.00	
29-4005	- Ditto - but for 50.00 mm dia	Each	236.00	
29-4006	- Ditto - but for 75.00 mm dia	Each	914.00	
29-4007	- Ditto - but for 100.00 mm dia	Each	1,881.00	
29-4008	- Ditto - but for 150.00 mm dia	Each	4,515.00	
29-4009	- Ditto - but for 200.00 mm dia	Each	4,800.00	
29-4010	Elbow redg GI 18.70 x to 12.50 mm	Each	30.00	
29-4011	- Ditto - but for 25.00 x to 12.50 mm	Each	45.00	
29-4012	- Ditto - but for 37.50 x to 12.50 mm	Each	70.00	
29-4013	- Ditto - but for 50.00 x to 12.50 mm	Each	91.00	
29-4014	- Ditto - but for 75.00 x to 12.50 mm	Each	454.00	
29-4015	- Ditto - but for 100.00 x to 12.50 mm	Each	612.00	
29-4016	- Ditto - but for 150.00 x to 12.50 mm	Each	1,780.00	
29-4017	- Ditto - but for 200.00 x to 12.50 mm	Each	2,000.00	
29-4018	Check / Back Nut GI 12.50 mm dia	Each	15.00	
29-4019	- Ditto - but for 18.70 mm dia	Each	20.00	
29-4020	- Ditto - but for 25.00 mm dia	Each	28.00	
29-4021	- Ditto - but for 37.50 mm dia	Each	43.00	
29-4022	- Ditto - but for 50.00 mm dia	Each	48.00	
29-4023	- Ditto - but for 75.00 mm dia	Each	161.00	
29-4024	- Ditto - but for 100.00 mm dia	Each	268.00	
29-4025	- Ditto - but for 150.00 mm dia	Each	387.00	
29-4026	- Ditto - but for 200.00 mm dia	Each	500.00	

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WATER SUPPLY & SANITARY FITTINGS

PART -III

Item No.	Description of Materials	Unit	Rate in Taka	Remarks
29-4027	Union Socket GI 12.50 mm dia	Each	48.00	
29-4028	- Ditto - but for 18.70 mm dia	Each	65.00	
29-4029	- Ditto - but for 25.00 mm dia	Each	75.00	
29-4030	- Ditto - but for 37.50 mm dia	Each	140.00	
29-4031	- Ditto - but for 50.00 mm dia	Each	194.00	
29-4032	- Ditto - but for 75.00 mm dia	Each	591.00	
29-4033	- Ditto - but for 100.00 mm dia	Each	968.00	
29-4034	Nipple GI/MS 12.50 mm dia	Each	11.00	
29-4035	- Ditto - but for 18.70 mm dia	Each	16.00	
29-4036	- Ditto - but for 25.00 mm dia	Each	22.00	
29-4037	- Ditto - but 37.50 mm dia	Each	43.00	
29-4038	- Ditto - but for 50.00 mm dia	Each	81.00	
29-4039	- Ditto - but for 75.00 mm dia	Each	237.00	
29-4040	- Ditto - but for 100.00 mm dia	Each	484.00	
29-4041	Plug MS/GI 12.50 mm dia	Each	9.00	
29-4042	- Ditto - but for 18.70 mm dia	Each	13.00	
29-4043	- Ditto - but for 25.00 mm dia	Each	16.00	
29-4044	- Ditto - but for 37.50 mm dia	Each	32.00	
29-4045	- Ditto - but for 50.00 mm dia	Each	48.00	
29-4046	Cap GI 37.50 mm dia	Each	72.00	
29-4047	- Ditto - but for 50.00 mm dia	Each	78.00	
29-4048	- Ditto - but for 75.00 mm dia	Each	150.00	
29-4049	- Ditto - but for 100.00 mm dia	Each	193.00	
29-4050	- Ditto - but for 150.00 mm dia	Each	268.00	
29-4051	- Ditto - but for 200.00 mm dia	Each	420.00	
29-4052	Flange GI 50.00 mm dia	Pair	215.00	
29-4053	- Ditto - but for 75.00 mm dia	Pair	537.00	
29-4054	- Ditto - but for 100.00 mm dia	Pair	900.00	
29-4055	- Ditto - but for 150.00 mm dia	Pair	1,100.00	
29-4056	- Ditto - but for 200.00 mm dia	Pair	1,250.00	
29-4057	Dresser joint CI upto 75.00 mm dia	Each	376.00	
29-4058	- Ditto - but for 100.00 mm dia	Each	483.00	
29-4059	- Ditto - but for 150.00 mm dia	Each	698.00	
29-4060	- Ditto - but for 200.00 mm dia	Each	850.00	

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WATER SUPPLY & SANITARY FITTINGS

PART -III

Item No.	Description of Materials	Unit	Rate in Taka	Remarks
<u>CONTROL COCKS & VALVES</u>				
29-4061	Sluice valve CI 50.00 mm dia (Milnars / KSB)	Each	3,000.00	
29-4062	- Ditto - but for 75.00 mm dia (Milnars / KSB)	Each	4,595.00	
29-4063	- Ditto - but for 100.00 mm dia (Milnars / KSB)	Each	6,495.00	
29-4064	- Ditto - but for 150.00 mm dia (Milnars / KSB)	Each	7,895.00	
29-4065	- Ditto - but for 200.00 mm dia (Milnars / KSB)	Each	11,385.00	
29-4066	Gate valve Gun metal 12.50 mm dia	Each	199.00	
29-4067	- Ditto - but for 18.70 mm dia	Each	247.00	
29-4068	- Ditto - but for 25.00 mm dia	Each	360.00	
29-4069	- Ditto - but for 37.50 mm dia	Each	559.00	
29-4070	- Ditto - but for 50.00 mm dia	Each	860.00	
29-4071	- Ditto - but for 75.00 mm dia	Each	2,795.00	
29-4072	- Ditto - but for 100.00 mm dia	Each	3,363.00	
29-4073	Non-return valve CI 50 mm dia	Each	2,418.00	
29-4074	- Ditto - but for 75 mm dia (Milnars / KSB)	Each	3,600.00	
29-4075	- Ditto - but for 100 mm dia (Milnars / KSB)	Each	4,800.00	
29-4076	- Ditto - but for 150 mm dia (Milnars / KSB)	Each	8,600.00	
29-4077	- Ditto - but for 200 mm dia	Each	11,500.00	
29-4078	Check valve Gun metal 25 mm dia	Each	409.00	
29-4079	- Ditto - but for 37.5 mm dia	Each	624.00	
29-4080	- Ditto - but for 50 mm dia	Each	968.00	
29-4081	- Ditto - but for 75 mm dia	Each	2,365.00	
29-4082	- Ditto - but for 100 mm dia	Each	3,225.00	
29-4083	- Ditto - but for 125/150 mm dia	Each	7,740.00	
29-4084	Float valve brass 12.50 mm dia with copper ball	Each	280.00	
29-4085	- Ditto - but for 18.70 mm dia	Each	360.00	
29-4086	- Ditto - but for 25.00 mm dia	Each	530.00	
29-4087	- Ditto - but for 37.50 mm dia	Each	590.00	
29-4088	- Ditto - but for 50.00 mm dia	Each	590.00	
29-4089	Float valve brass with Plastic ball 12.50 mm dia	Each	204.00	
29-4090	- Ditto - but 18.70 mm dia	Each	247.00	
29-4091	- Ditto - but 25.00 mm dia	Each	344.00	
29-4092	- Ditto - but 37.50 mm dia	Each	452.00	

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WATER SUPPLY & SANITARY FITTINGS

PART -III

Item No.	Description of Materials	Unit	Rate in Taka	Remarks
29-4093	Gloria brand Bib Cock Model GBC-30100	Each	484.00	
29-4094	- Ditto - but Con. (M) Model GBC-3042	Each	624.00	
29-4095	- Ditto - but (H) Model GBC-3045	Each	667.00	
29-4096	- Ditto - but (H-SP) Model GBC-30117	Each	710.00	
29-4097	- Ditto - but Sink Cock Model GSC-3085	Each	736.00	
29-4098	Nazma metal brand Fancy Bib Cock Model Sixcorn	Each	768.00	
29-4099	- Ditto - but Con. Model Sixcorn	Each	784.00	
29-4100	- Ditto - but Sink Cock 8" Model Tristar	Each	806.00	
29-4101	Bib cock brass 12.50 mm dia approved brand (Weight not less than 250 gm)	Each	193.00	
29-4102	- Ditto - 18.70 mm dia	Each	205.00	
29-4103	- Ditto - but 12.50 mm dia long size	Each	240.00	
29-4104	- Ditto - 18.70 mm dia long size	Each	286.00	
29-4105	- Ditto - double knob (Hot & Cold) 12.50 mm dia CP	Each	1,145.00	
29-4106	- Ditto - 18.70 mm dia CP	Each	1,323.00	
29-4107	Bib cock CP 12.50 mm dia approved brand	Each	516.00	
29-4108	- Ditto - 18.70 mm dia	Each	592.00	
29-4109	- Ditto - long 150 mm size 12.50 mm dia	Each	666.00	
29-4110	- Ditto - 18.70 mm dia	Each	786.00	
29-4111	- Ditto - long 200 mm size 12.50 mm dia	Each	709.00	
29-4112	- Ditto - 18.70 mm dia	Each	784.00	
29-4113	Bib cock plastic 12.50 mm dia (Local)	Each	32.00	
29-4114	- Ditto - 18.70 mm dia	Each	40.00	
29-4115	Bib Cock CP Raja metal, Model R-719	Each	516.00	
29-4116	- Ditto - but Con. Model A-716	Each	634.00	
29-4117	- Ditto - but Sink Model A-717	Each	709.00	
29-4118	- Ditto - but Fancy Sharif, Model	Each	527.00	
29-4119	- Ditto - but Con. Model	Each	634.00	
29-4120	- Ditto - but Sink Cock, Model	Each	710.00	
29-4121	Stop cock brass 12.50 mm dia approved brand	Each	183.00	
29-4122	- Ditto - 18.70 mm dia	Each	205.00	
29-4123	- Ditto - 25.00 mm dia	Each	235.00	

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WATER SUPPLY & SANITARY FITTINGS

PART -III

Item No.	Description of Materials	Unit	Rate in Taka	Remarks
29-4124	Stop cock CP 12.50 mm dia (Concealed)	Each	768.00	
29-4125	- Ditto - 18.70 mm dia	Each	892.00	
29-4126	Stop cock CP Surface type 12.50 mm dia	Each	527.00	
29-4127	- Ditto - 18.70 mm dia	Each	546.00	
29-4128	Stop cock Gloria, Model GSC-30105	Each	510.00	
29-4129	- Ditto - but (M) Model GSC-30106	Each	725.00	
29-4130	- Ditto - but (H) Model GSC-30104	Each	779.00	
29-4131	- Ditto - but (H-SP) Model GSC-30118	Each	817.00	
29-4132	Stop cock Con (H) Nazma, Model TRI-STAR	Each	930.00	
29-4133	- Ditto - but Con (L) Model Sixcorn	Each	839.00	
29-4134	- Ditto - but Con. (M) Model TRI-STAR	Each	839.00	
29-4135	Stop cock Con. Raja metal, Model A-713	Each	828.00	
29-4136	Stop cock con Sharif metal, Model	Each	827.00	
29-4137	Angle stop cock CP 12.5 mm approved brand	Each	532.00	
29-4138	- Ditto - but Gloria, Model GASC-30116	Each	505.00	
29-4139	- Ditto - but Con. Model GASC-30115	Each	527.00	
29-4140	- Ditto - Nazma, Model Sixcorn	Each	586.00	
29-4141	- Ditto - Raja metal, Model A-718	Each	532.00	
29-4142	- Ditto - Sharif metal, Model	Each	532.00	
29-4143	Elbow action Bib Cock Gloria, Model GEBC-046	Each	1,397.00	
29-4144	- Ditto - but Raja metal, Model A-826	Each	1,755.00	
29-4145	- Ditto - but Sink Cock Model A-828	Each	1,209.00	
29-4146	Elbow action Pillar Cock Gloria, Model GEPC-0122	Each	1,451.00	
29-4147	- Ditto - but Raja metal, Model A-827	Each	1,209.00	
29-4148	Push Cock CP Raja metal, Model A-836	Each	408.00	
29-4149	- Ditto - but Brass Model A-837	Each	398.00	
29-4150	Bathtub Mixture hand Shower Gloria, Model GBTM-3058	Each	3,171.00	
29-4151	- Ditto - but Nazma Model TRI-STAR	Each	3,349.00	
29-4152	- Ditto - but Raja Metal Model R-701	Each	3,225.00	
29-4153	- Ditto - but Sharif metal, Model	Each	3,225.00	
29-4154	Sink Mixture Tap Gloria, Model GSM-3071	Each	2,096.00	
29-4155	- Ditto - but Nazma brand, Model TRI-STAR	Each	2,128.00	
29-4156	- Ditto - but Raja metal, Model R-703	Each	2,128.00	
29-4157	- Ditto - but Sharif metal, Model	Each	2,150.00	

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WATER SUPPLY & SANITARY FITTINGS

PART -III

Item No.	Description of Materials	Unit	Rate in Taka	Remarks
29-4158	WHB Mixture Tap Gloria, Model GBM-3054	Each	1,935.00	
29-4159	- Ditto - but Nazma brand, Model TRI-STAR	Each	1,940.00	
29-4160	- Ditto - but Raja metal, Model R-702	Each	1,666.00	
29-4161	- Ditto - but Sharif metal, Model	Each	1,612.00	
29-4162	Bottle trap Gloria, Model GBT-13	Each	752.00	
29-4163	- Ditto - but Nazma brand, Model	Each	838.00	
29-4164	- Ditto - but Raja metal, Model A-835	Each	946.00	
29-4165	- Ditto - but Sharif metal, Model	Each	957.00	
29-4166	Pillar Cock (L) Gloria, Model GPC-3082	Each	591.00	
29-4167	- Ditto - but (M) Model GPC-3095	Each	623.00	
29-4168	- Ditto - but (H) Model GPC-3083	Each	657.00	
29-4169	- Ditto - but (H-SP) Model GPC-30119	Each	736.00	
29-4170	- Ditto - but (L) Nazma, Model TRI-STAR	Each	694.00	
29-4171	- Ditto - but (H) Model	Each	812.00	
29-4172	- Ditto - but (SPL) Moving Model TRI-STAR	Each	1,102.00	
29-4173	- Ditto - but (H-SP) Model TRI-STAR	Each	661.00	
29-4174	- Ditto but 12.50 mm approved brand	Each	528.00	
29-4175	- Ditto - 12.50 mm foreign made	Each	1,120.00	
29-4176	- Ditto - but Raja metal Model R-710	Each	527.00	
29-4177	- Ditto - but (NL) Sharif metal, Model	Each	666.00	
29-4178	- Ditto - but (L) Model	Each	613.00	
29-4179	- Ditto - but (M) Model	Each	527.00	
29-4180	- Ditto - but (N-H) Model SM-7016	Each	720.00	
29-4181	Shower Moving 12.50 mm dia approved brand	Each	561.00	
29-4182	- Ditto - but Gloria, Model GMS-032	Each	725.00	
29-4183	- Ditto - but Raja metal, Model A-832	Each	591.00	
29-4184	Shower Round Raja metal, Model A-830	Each	726.00	
29-4185	Shower CP 12.50 mm dia approved brand	Each	344.00	
29-4186	- Ditto - but 18.70 mm dia approved brand	Each	370.00	
29-4187	Shower Telephonic 12.50 mm dia approved brand	Each	655.00	
29-4188	Plastic pipe connection with brass union on both ends 12.50 mm dia	Each	86.00	
29-4189	- Ditto - but 18.70 mm dia	Each	97.00	

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WATER SUPPLY & SANITARY FITTINGS

PART -III

Item No.	Description of Materials	Unit	Rate in Taka	Remarks
<u>WATER TANKS</u>				
29-4190	PVC / Plastic food grade water Tank any shape and size (Gazi / Polycon / Padma)	Litre	9.50	
29-4191	Water tank GI 1600 Litre with 16 BG sheet	Each	8,831.04	
29-4192	- Ditto - 18 BG sheet	Each	7,402.79	
29-4193	Water tank GI 800 Litre 16 BG sheet	Each	6,116.83	
29-4194	- Ditto - 18 BG sheet	Each	4,898.03	
29-4195	Ferro Cement W/Tank 1800 Litre complete	Each	7,019.50	
29-4196	GP Sheet for water Tank	Kg	76.00	
29-4197	Rivet	Each	0.70	
29-4198	Locking arrangement (Hinges, Haps & staple)	Each	150.00	
<u>HAND TUBE WELLS</u>				
29-4199	Hand pump no .6 with handle, plunger , head, base, bucket etc.	Each	2,290.00	
29-4200	Handle for hand pump	Each	361.00	
29-4201	Base plate for hand pump	Each	262.00	
29-4202	Plunger for hand pump	Each	101.00	
29-4203	Head cover for hand pump	Each	307.00	
29-4204	Seat valve for hand pump	Each	19.00	
29-4205	Bucket for hand pump	Each	16.00	
29-4206	Strainer brass for tube well 37.5 mm	Metre	698.00	
29-4207	- Ditto - but for 50 mm	Metre	789.00	
29-4208	Strainer PVC/uPVC approved brand for tube well 37.5 mm	Metre	111.00	
29-4209	- Ditto - but for 50 mm	Metre	141.00	
<u>DEEP TUBE WELLS & PUMPS</u>				
29-4210	Strainer Stainless (SS) foreign made, 20 - 40 Slot, 20% - 25% opening Area having wall thickness 2.75 mm, for 200 mm dia	Metre	16,753.00	
29-4211	- Ditto - but for 150 mm dia	Metre	12,600.00	
29-4212	- Ditto - but for 100 mm dia	Metre	8,250.00	
29-4213	- Ditto - but for 75 mm dia	Metre	6,400.00	

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WATER SUPPLY & SANITARY FITTINGS

PART -III

Item No.	Description of Materials	Unit	Rate in Taka	Remarks
29-4214	Strainer uPVC 20 - 40 Slot, 20% - 25% opening area, 200 mm dia wall thickness 9 mm	Metre	2,565.00	
29-4215	- Ditto - but for 150 mm dia wall thickness 7.9 mm	Metre	1,800.00	
29-4216	- Ditto - but for 100 mm dia wall thickness 6.2 mm	Metre	850.00	
29-4217	- Ditto - but for 75 mm dia wall thickness 4.8	Metre	550.00	
29-4218	Casing / housing pipe, thickness 6.35 for 400 mm dia	Metre	5,000.00	
29-4219	- Ditto - but for 350 mm dia	Metre	4,500.00	
29-4220	- Ditto - but for 300 mm dia	Metre	4,000.00	
29-4221	- Ditto - but for 250 mm dia	Metre	3,400.00	
29-4222	Casing / housing pipe, thickness 4 for 600 mm dia	Metre	4,400.00	
29-4223	- Ditto - but for 650 mm dia	Metre	4,900.00	
29-4224	- Ditto - but for 700 mm dia	Metre	5,800.00	
29-4225	Casing / housing pipe, thickness 8 for 400 mm dia	Metre	6,300.00	
29-4226	Casing / housing pipe, thickness 10 for 400 mm dia	Metre	7,400.00	
29-4227	Reducer MS thickness 6.35 mm for 400x200 mm dia	Each	6,450.00	
29-4228	- Ditto - but for 350 x 150 mm dia	Each	5,775.00	
29-4229	- Ditto - but for 300x 150 mm dia	Each	4,300.00	
29-4230	- Ditto - but for 300x 100 mm dia	Each	3,760.00	
29-4231	- Ditto - but for 250 x 75 mm dia	Each	3,010.00	
29-4232	Centralizer made of 12.50 mm dia round bar	Each	540.00	
29-4233	Well graded pea gravel	c.um	2,640.00	
29-4234	Nut Bolt for Hand Pump	Each	16.00	
29-4235	Drinking water quality test full package	Sample	5,000.00	
29-4236	Column pipe 1.5 / 3.04 m long wall thickness not less than 6.35 mm with shaft ,bush socket etc (KSB / Milnars Pump) for 75 mm dia	Metre	6,590.00	
29-4237	- Ditto - but for 100 mm dia	Metre	8,470.00	
29-4238	- Ditto - but for 125 mm dia	Metre	10,470.00	
29-4239	- Ditto - but for 150 mm dia	Metre	11,230.00	
29-4240	- Ditto - but for 200 mm dia	Metre	16,600.00	
29-4241	Both Ends flanged type MS Column Pipe 150 mm with special cable groove, nut-bolts and gasket	Metre	3,050.00	
29-4242	- Ditto - but for 100 mm pipe	Metre	1,700.00	
29-4243	- Ditto - but for 75 mm pipe	Metre	1,350.00	
29-4244	Both Ends flanged type MS Column / Riser Pipe (API-5L grade-B) 150 mm with special cable groove, nut-bolts and gasket & anticorrosive paint (length 3.05 M)	Each	3,625.00	
29-4245	- Ditto - but for 100 mm pipe	Each	2,185.00	
29-4246	- Ditto - but for 75 mm pipe	Each	1,650.00	

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Item No.	Description of Materials	Unit	Rate in Taka	Remarks
29-4247	- Ditto - but for 50 mm pipe	Each	1,200.00	
29-4248	Both Ends flanged type MS/GI Bend 150 mm	Each	3,762.00	
29-4249	- Ditto - but for 100 mm pipe	Each	1,612.00	
29-4250	- Ditto - but for 75 mm pipe	Each	806.00	
29-4251	Butterfly Valve 75 mm complete with nut bolts and flanges foreign made	Each	3,305.00	
29-4252	- Ditto - but for 100 mm	Each	4,112.00	
29-4253	- Ditto - but for 150 mm	Each	5,214.00	
29-4254	- Ditto - but for 200 mm	Each	7,418.00	
29-4255	Discharge head complete with priming funnel, pressure Metre gauge for outlet 75 mm dia.	Each	22,000.00	
29-4256	- Ditto - but for 100 mm dia	Each	22,500.00	
29-4257	- Ditto - but for 125 mm dia	Each	25,000.00	
29-4258	- Ditto - but for 150 mm dia	Each	25,500.00	
29-4259	- Ditto - but for 175/200 mm dia	Each	30,000.00	
29-4260	Direct on line Push button starter suitable for 230 / 400 V 3 ph / 1 ph up to 2 HP motor	Each	645.00	
29-4261	- Ditto - but for 230/ 400 V 3 ph / 1 ph over 2 to 5 HP motor	Each	1,290.00	
29-4262	Star Delta Push button auto starter suitable for 380/ 400 V (6 HP to 20 HP Motor) China / Korea / Taiwan	Each	3,440.00	
29-4263	- do - but for 40 HP	Each	5,590.00	
29-4264	- do - but for 60 HP	Each	7,740.00	
29-4265	Starter Push Button auto Star Delta other than China / Korea / Taiwan for 5 HP Motor	Each	3,440.00	
29-4266	- Ditto- but for 7.5 - 15 HP Motor	Each	3,762.00	
29-4267	- Ditto- but for 20 - 30 HP Motor	Each	4,300.00	
29-4268	- Ditto- but for 40 - 50 HP Motor	Each	5,590.00	
29-4269	- Ditto- but for Over 50 HP Motor	Each	6,987.00	

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Item No.	Description of Materials	Unit	Rate in Taka	Remarks
29-4270	Panel Box (275x125x175 mm) type Auto Starter Complete with 1xMCB, 1xAmMetre with ASS, 1xVolt Metre with VSS, 3xPh indicator, 1xpneumatic timer, 2xPush button, indicator lamp for ON/TRIP, Thermal over load relay for protection against phase failure, phase reverse and dry run complete with cables and lugs having rating for 5 / 6 HP motor foreign made	Set	37,033.00	
29-4271	- Ditto - but (size 350x275x175) for 10 HP motor	Set	51,062.00	
29-4272	- Ditto - but (size 450x350x200) for 15 HP motor	Set	56,867.00	
29-4273	- Ditto - but (size 450x350x200) for 20 HP motor	Set	58,802.00	
29-4274	- Ditto - but (size 450x350x200) for 25 HP motor	Set	65,897.00	
29-4275	- Ditto - but (size 450x350x200) for 30 HP motor	Set	73,906.00	
29-4276	- Ditto - but (575x500x200 mm) for 41 HP motor	Set	87,612.00	
29-4277	- Ditto - but (625x500x200 mm) for 52 HP motor	Set	101,211.00	
29-4278	- Ditto - but (625x500x200 mm) for 62/75 HP motor	Set	129,000.00	
29-4279	Submersible Marine cable flat 3 core size 4 mm	Metre	387.00	
29-4280	- Ditto - but size 6 mm	Metre	591.00	
29-4281	- Ditto - but size 10 mm	Metre	914.00	
29-4282	- Ditto - but size 16 mm	Metre	1,354.00	
29-4283	- Ditto - but size 25 mm	Metre	1,741.00	
29-4284	Submersible type pumping set complete with electric Motor SP 220 Volts 50 Hz, Brand CALAMA having lifting head 78-45 M capacity 2.4-4.5 M³/hr , Model no. Gold 3/17+2 HP	Each	40,635.00	
29-4285	- Ditto - but head 50-27 M capacity 12 - 20 M³/hr , Model no. Gold 5/13.2+5 HP (3 ph)	Each	72,562.00	
29-4286	- Ditto - but head 34-20 M capacity 35 - 57 M³/hr , Model no. QM 63/5+10 HP (3 ph)	Each	94,573.13	
29-4287	- Ditto - but head 63 - 41 M capacity 50 - 71 M³/hr , Model no. QM 65/8+20 HP (3 ph)	Each	140,190.75	
29-4288	- Ditto - but head 79 - 52 M capacity 121 - 136 M³/hr , Model no. QM 83/IV+30 HP (3 ph)	Each	217,687.50	
29-4289	- Ditto - but head 50 - 30 M capacity 142 - 214 M³/hr , Model no. GM - 185/2+40 HP (3 ph)	Each	178,987.50	

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Item No.	Description of Materials	Unit	Rate in Taka	Remarks
29-4290	Centrifugal pumping set complete with electric Motor SP 220 Volts 50 Hz, 2900 rpm, Brand STRIATE / Pedrolla / Marina / GAZI / RFL having lifting head 15-30 M capacity 100-20 LPM (0.75/1 HP)	Each	11,556.00	
29-4291	- Ditto - but for head 20-45 M, capacity 140-20 LPM (1.5 HP)	Each	20,693.00	
29-4292	- Ditto - but for head 25-55 M, capacity 20-160 LPM (2 HP)	Each	26,337.00	
29-4293	- Ditto - but for head 25-55 M, capacity 20-180 LPM (3 HP)	Each	41,871.00	
29-4294	- Ditto - but for head 35-60 M, capacity 100-350 LPM (5 HP)	Each	60,737.00	
29-4295	- Ditto - but for head 25-40 M, capacity 270-540 LPM (7.5 HP), KSB / Milnars Pump with SIEMENS Motor 3 Ph, 400 volts, 50 Hz	Each	80,982.00	
29-4296	- Ditto - but for 260-580 LPM (10 HP) KSB / Milnars Pump with SIEMENS / GEC / Crompton Motor 400 Volt, 3 Ph, 50 Hz against head 50-40 metre with suction 50 mm delivery 40 mm. Complete	Each	89,559.00	
29-4297	- Ditto - but for 360-630 LPM (15 HP) KSB / Milnars Pump with SIEMENS / GEC / Crompton Motor , 3 Ph, 50 Hz, 400 Volts against head 55-40 metre with suction 50 mm delivery 40 mm complete	Each	111,988.00	
29-4298	- Ditto - but for 780-1500 LPM (20 HP) KSB / Milnars Pump with SIEMENS / GEC / Crompton Motor , 400 Volts, 3 Ph, 50 Hz against head 50-40 metre with suction 75 mm delivery 65 mm complete.	Each	126,383.00	
29-4299	Horizontal Electric Induction Motor 400 Volt, 3 phase 50 Hz, rpm 1400-1500, 5 HP GEC / China / Crompton / Teco / Siemens brand	Each	19,054.00	
29-4300	- Ditto - but for 7.5 HP GEC / China / Crompton / Teco / Siemens brand	Each	26,203.00	
29-4301	- Ditto - but for 10 HP GEC / China / Crompton / Teco / Siemens brand	Each	30,530.00	
29-4302	- Ditto - but for 15 HP GEC / China / Crompton / Teco / Siemens brand	Each	44,827.00	
29-4303	- Ditto - but for 20 HP GEC / China / Crompton / Teco / Siemens brand	Each	49,342.00	
29-4304	- Ditto - but for 25 HP GEC / China / Crompton / Teco / Siemens brand	Each	68,653.00	
29-4305	- Ditto - but for 30 HP GEC / China / Crompton / Teco / Siemens brand	Each	74,013.00	
29-4306	- Ditto - but for 40 HP GEC / China / Crompton/ Teco / Siemens brand	Each	115,169.00	

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Item No.	Description of Materials	Unit	Rate in Taka	Remarks
29-4307	Horizontal Electric Induction Motor 400 Volt, 3 phase 50 Hz, rpm 2800-2900, 5 HP GEC / China / Crompton / Teco / Siemens brand	Each	17,871.88	
29-4308	- Ditto - but for 7.5 HP GEC / China / Crompton / Teco / Siemens brand	Each	25,343.13	
29-4309	- Ditto - but for 10 HP GEC / China / Crompton / Teco / Siemens brand	Each	29,938.75	
29-4310	- Ditto - but for 15 HP GEC / China / Crompton / Teco / Siemens brand	Each	43,725.63	
29-4311	- Ditto - but for 20 HP GEC / China / Crompton / Teco / Siemens brand	Each	46,762.50	
29-4312	- Ditto - but for 25 HP GEC / China / Crompton / Teco / Siemens brand	Each	53,158.75	
29-4313	- Ditto - but for 30 HP GEC / China / Crompton / Teco / Siemens brand	Each	70,950.00	
29-4314	- Ditto - but for 40 HP GEC / China / Crompton/ Teco / Siemens brand	Each	96,051.25	
29-4315	Centrifugal Pumping set KSB / Milnars suitable for 5 HP Primeover / Electric Motor 3Ph 50 Hz 400 Volts 2900 rpm	Each	18,687.00	
29-4316	- Ditto - but for 7.5 HP Primeover / Electric Motor	Each	25,155.00	
29-4317	- Ditto - but for 10 HP Primeover / Electric Motor	Each	25,155.00	
29-4318	- Ditto - but for 15 HP Primeover / Electric Motor	Each	25,155.00	
29-4319	- Ditto - but 20/25/30 HP Primeover / Electric Motor	Each	25,568.00	
29-4320	KSB (India) Brand, Centrifugal Pump only, 1450 rpm Model Mega G 40-315, rated HP 10, Head 40 - 20 M, Discharge "Q" 9 - 31 m ³ /hr, Suction 65 mm Delivery 40 mm Complete.	Set	44,612.00	
29-4321	KSB (India) Brand, Centrifugal Pump only, 1450 rpm Model Mega G 50-315, rated HP 15, Head 36 - 20 M, Discharge "Q" 16 - 56 m ³ /hr, Suction 80 mm Delivery 50 mm Complete.	Set	46,225.00	
29-4322	KSB (India) Brand, Centrifugal Pump only, 1450 rpm Model Mega G 65-315, rated HP 20, Head 37 - 20 M, Discharge "Q" 30 - 100 m ³ /hr, Suction 100 mm Delivery 65 mm Complete.	Set	62,156.00	
29-4323	KSB (India) Brand, Centrifugal Pump only, 1450 rpm Model Mega G 125-250, rated HP 25, Head 23 - 9 M, Discharge "Q" 100 - 350 m ³ /hr, Suction 150 mm Delivery 125 mm Complete.	Set	67,993.00	
29-4324	KSB (India) Brand, Centrifugal Pump only, 1450 rpm Model Mega G 80-315, rated HP 30, Head 40 - 23 M, Discharge "Q" 50 - 160 m ³ /hr, Suction 125 mm Delivery 80 mm Complete.	Set	69,552.00	
29-4325	KSB (India) Brand, Centrifugal Pump only, 1450 rpm Model Mega G 100-315, rated HP 35, Head 40 - 22 M, Discharge "Q" 70 - 230 m ³ /hr, Suction 125 mm Delivery 100 mm Complete.	Set	70,950.00	
29-4326	KSB (India) Brand, Centrifugal Pump only, 1450 rpm Model Mega G 80-400, rated HP 40, Head 56 - 30 M, Discharge "Q" 60 - 170 m ³ /hr, Suction 125 mm Delivery 80 mm Complete.	Set	74,658.00	

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Item No.	Description of Materials	Unit	Rate in Taka	Remarks
29-4327	KSB (India) Brand, Centrifugal Pump only, 1450 rpm Model Mega G 125-315, rated HP 50, Head 40 - 22 M, Discharge "Q" 100 - 340 m3/hr, Suction 150 mm Delivery 125 mm Complete.	Set	74,175.00	
29-4328	KSB (India) Brand, Centrifugal Pump only, 2900 rpm Model Mega G 40-125, rated HP 5.5, Head 47 - 17 M, Discharge "Q" 18 - 64 m3/hr, Suction 65 mm Delivery 40 mm Complete.	Set	29,670.00	
29-4329	KSB (India) Brand, Centrifugal Pump only, 2900 rpm Model Mega G 40-160, HP 10, Head 47 - 17 M, Discharge "Q" 18 - 64 m3/hr, Suction 65 mm Delivery 40 mm Complete.	Set	32,841.00	
29-4330	KSB (India) Brand, Centrifugal Pump only, 2900 rpm Model Mega G 40-200, rated HP 15/16, Head 60 - 24 M, Discharge "Q" 16 - 62 m3/hr, Suction 65 mm Delivery 40 mm Complete.	Set	35,045.00	
29-4331	KSB (India) Brand, Centrifugal Pump only, 2900 rpm Model Mega G 32-250, rated HP 20, Head 94 - 50 M, Discharge "Q" 9 - 31 m3/hr, Suction 50 mm Delivery 32 mm Complete.	Set	39,237.00	
29-4332	KSB (India) Brand, Centrifugal Pump only, 2900 rpm Model Mega G 65-160, rated HP 20, Head 41 - 18 M, Discharge "Q" 45 - 150 m3/hr, Suction 100 mm Delivery 65 mm Complete.	Set	38,807.00	
29-4333	KSB (India) Brand, Centrifugal Pump only, 2900 rpm Model Mega G 40-250, rated HP 30, Head 91 - 40 M, Discharge "Q" 18 - 64 m3/hr, Suction 65 mm Delivery 40 mm Complete.	Set	41,269.00	
29-4334	KSB (India) Brand, Centrifugal Pump only, 2900 rpm Model Mega G 65-200, rated HP 40, Head 66 - 36 M, Discharge "Q" 50 - 160 m3/hr, Suction 100 mm Delivery 65 mm Complete.	Set	41,720.00	
29-4335	KSB (India) Brand, Centrifugal Pump only, 2900 rpm Model Mega G 50-250, HP 45, Head 95 - 50 M, Discharge "Q" 30 - 100 m3/hr, Suction 80 mm Delivery 50 mm Complete.	Set	42,301.00	
29-4336	KSB (India) Brand, Centrifugal Pump only, 2900 rpm Model Mega G 65-250, rated HP 50/60, Head 92 - 50 M, Discharge "Q" 50 - 150 m3/hr, Suction 100 mm Delivery 65 mm Complete.	Set	46,708.00	
29-4337	KSB Brand, Centrifugal Pump with Motor, TRIABLOC, origin Germany Nickle cast iron impeller, 2900 rpm, Model 32-160, HP 3, Head 31 - 22 M, Discharge "Q" 05 - 20 m3/hr, Suction 50 mm Delivery 32 mm Complete as spd by SIGMA Pumps Ltd.	Set	55,093.00	
29-4338	KSB Brand, Centrifugal Pump with Motor, TRIABLOC, origin Germany Nickle cast iron impeller, 2900 rpm, Model 32-160, HP 5, Head 40 - 22 M, Discharge "Q" 05 - 34 m3/hr, Suction 50 mm Delivery 32 mm Complete as spd by SIGMA Pumps Ltd.	Set	85,140.00	
29-4339	KSB Brand, Centrifugal Pump with Motor, TRIABLOC, origin Germany Nickle cast iron impeller, 2900 rpm, Model 40-160, HP 7.5, Head 35 - 24 M, Discharge "Q" 10 - 62 m3/hr, Suction 65 mm Delivery 40 mm Complete as spd by SIGMA Pumps Ltd.	Set	94,922.00	

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Item No.	Description of Materials	Unit	Rate in Taka	Remarks
29-4340	KSB Brand, Centrifugal Pump with Motor, TRIABLOC, origin Germany Nickle cast iron impeller, 2900 rpm, Model 40-160, HP 10, Head 45 - 31 M, Discharge "Q" 10 - 66 m ³ /hr, Suction 65 mm Delivery 40 mm Complete as spd by SIGMA Pumps ltd.	Set	104,194.00	
29-4341	KSB Brand, Centrifugal Pump with Motor, TRIABLOC, origin Germany Nickle cast iron impeller, 2900 rpm, Model 40-200, HP 15, Head 61 - 44 M, Discharge "Q" 10 - 56 m ³ /hr, Suction 65 mm Delivery 40 mm Complete as spd by SIGMA Pumps ltd.	Set	136,471.00	
29-4342	KSB Brand, Centrifugal Pump with Motor, TRIABLOC, origin Germany Nickle cast iron impeller, 2900 rpm, Model 40-250, HP 20, Head 75 - 48 M, Discharge "Q" 10 - 58 m ³ /hr, Suction 65 mm Delivery 40 mm Complete as spd by SIGMA Pumps ltd.	Set	185,115.00	
29-4343	Centrifugal Pumping set (KSB/Milnars) 3 HP complete with Horizontal induction Motor Electric 3 Ph, AC 400V 50 Hz (local / foreign) as required, having capacity to lift water 50-200 LPM at static head not less than 25 M.	Set	26,821.00	
29-4344	Centrifugal Pumping set (KSB/Milnars) 5 HP complete with Horizontal induction Motor Electric 3 Ph, AC 400V 50 Hz (local / foreign) as required, having capacity to lift water 300-400 LPM at static head not less than 25 M.	Set	38,904.00	
29-4345	Centrifugal Pumping set (KSB/Milnars) 7.5 HP complete with Horizontal induction Motor Electric 3 Ph, AC 400V 50 Hz (local / foreign) as required, having capacity to lift water 600-750 LPM at static head not less than 25 M.	Set	49,440.00	
29-4346	Centrifugal Pumping set (KSB/Milnars) 10 HP complete with Horizontal induction Motor Electric 3 Ph, AC 400V 50 Hz (local / foreign) as required, having capacity to lift water 900-1100 LPM at static head not less than 35 M .	Set	67,491.00	
29-4347	Centrifugal Pumping set (KSB/Milnars) 15 HP complete with Horizontal induction Motor Electric 3 Ph, AC 400V 50 Hz (local / foreign) as required, having capacity to lift water 1100-1350 LPM at static head not less than 35 M .	Set	68,907.00	
29-4348	Centrifugal Pumping set (KSB/Milnars) 20 HP complete with Horizontal induction Motor Electric 3 Ph, AC 400V 50 Hz (local / foreign) as required, having capacity to lift water 1500-1350 LPM at static head not less than 35 M .	Set	69,770.00	

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Item No.	Description of Materials	Unit	Rate in Taka	Remarks
29-4349	Submersible pumping set with 30 M marine cable Brand CALAMA , Model PM83/2 + 17.5 HP, Head 43-32 M, Discharge " Q " 50-85 m3/hr Complete.	Set	140,190.00	
29-4350	Submersible pumping set with 30 M marine cable Brand CALAMA , Model PM83/3 + 25 HP, Head 65-47 M, Discharge " Q " 50-85 m3/hr Complete.	Set	154,654.00	
29-4351	Submersible pumping set with 30 M marine cable Brand CALAMA , Model PM83/3 + 35 HP, Head 87-64 M, Discharge " Q " 50-85 m3/hr Complete.	Set	185,808.00	
29-4352	Submersible pumping set with 30 M marine cable Brand CALAMA , Model PM83/5 + 45 HP, Head 109-80 M, Discharge " Q " 50-85 m3/hr Complete.	Set	241,875.00	
29-4353	Submersible pumping set with 30 M marine cable Brand CALAMA , Model PM83/6 + 55 HP, Head 130-96 M, Discharge " Q " 50-85 m3/hr Complete.	Set	280,575.00	
29-4354	Submersible pumping set with 30 M marine cable Brand CALAMA , Model PM83/7 + 60 HP, Head 153-93 M, Discharge " Q " 50-85 m3/hr Complete.	Set	290,250.00	
29-4355	Submersible pumping set with 30 M marine cable Brand CALAMA , Model PM84/1 + 15 HP, Head 17-13 M, Discharge " Q " 80-115 m3/hr Complete.	Set	137,965.00	
29-4356	Submersible pumping set with 30 M marine cable Brand CALAMA , Model PM84/2 + 20 HP, Head 34-25 M, Discharge " Q " 80-115 m3/hr Complete.	Set	163,555.00	
29-4357	Submersible pumping set with 30 M marine cable Brand CALAMA , Model PM84/3 +30 HP, Head 50-37 M, Discharge " Q " 80-115 m3/hr Complete.	Set	246,712.00	
29-4358	Submersible pumping set with 30 M marine cable Brand CALAMA , Model PM84/4 +40 HP, Head 68-50 M, Discharge " Q " 80-115 m3/hr Complete.	Set	231,426.00	
29-4359	Submersible pumping set with 30 M marine cable Brand CALAMA , Model PM84/6 +55 HP, Head 102-68 M, Discharge " Q " 80-115 m3/hr Complete.	Set	275,737.00	
29-4360	Bore Well type Submersible Pump Motor Brand KSB (India) , Model CORA 100-7c / 22 + UMA 100-4.5/22 , Size 38 mm, Capacity 0.05 Cusec - 0.08 Cusec against Water Head 110 M - 65 M, Speed 2900 RPM Powered with AC 3 Phase, 50 Hz 400 Volts 6 HP Complete with built in Non - return valve.	Set	94,062.00	
29-4361	- Ditto - but for Model BPD 242/7 + UMA 150 - 8/22 or BPD 273/6 + UMA 150 - 8/22 or BPD 302/4 + UMA 150 - 8/22 or BPH 333/2 + UMA 150 - 8/22 , Size as per manufacturer, Capacity 0.06 Cusec - 0.90 Cusec against Water Head 70 M - 15 M, Speed 2900 RPM Powered with AC 3 Phase, 50 Hz 400 Volts 10 HP Complete with built in Non - return valve.	Set	141,900.00	

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Item No.	Description of Materials	Unit	Rate in Taka	Remarks
29-4362	- Ditto - but for Model BPD 273/8 + UMA 150 - 13/21 or BPD 302/6 + UMA 150 - 13/21 or BPD 302/7 + UMA 150 - 13/21 or BPH 333/2 + UMA 150 - 13/22 or BPH 384/2 + UMA 150 - 13/21 , Size as per manufacturer, Capacity 0.10 Cusec - 0.45 Cusec against Water Head 20 M - 48 M , Speed 2900 RPM Powered with AC 3 Phase, 50 Hz 400 Volts 15 HP Complete with built in Non - return valve.	Set	180,600.00	
29-4363	- Ditto - but for Model BPD 302/8 + UMA 150 - 21/21 or BPD 273/10 + UMA 150 - 21/21 or BPH 333/3 + UMA 150 - 21/21 or BPH 333/3 + HB - 203 or BPH 384/2 + UMA 150 - 21/21 or BPH 384/2 + HB - 203 , Size as per manufacturer Capacity 0.15 Cusec - 1.10 Cusec against Water Head 80 M - 24 M , Speed 2900 RPM Powered with AC 3 Phase, 50 Hz 400 Volts 20 HP Complete with built in Non - return valve.	Set	201,025.00	
29-4364	- Ditto - but for Model BPD 273/12 + UMA 150 - 24/21 or BPD 302/10 + UMA 150 - 24/21 or BPH 333/4 + UMA 150 - 24/21 or BPH 384/2 + HB - 253 or BPH 384/3 + UMA 150 - 24/21 Size as per manufacturer, Capacity 0.10 Cusec - 1.10 Cusec against Water Head 125 M - 30 M , Speed 2900 RPM Powered with AC 3 Phase, 50 Hz 400 Volts 25 HP Complete with built in Non - return valve.	Set	238,650.00	
29-4365	- Ditto - but for Model BPH 333/4 + HB 303 or BPH 384/3 + HB 303 or BPN 274/2 + HB 303 or BPH 425/1 + HB 303 , Size as per manufacturer, Capacity 0.40 Cusec - 1.95 Cusec against Water Head 75 M - 15 M , Speed 2900 RPM Powered with AC 3 Phase, 50 Hz 400 Volts 30 HP Complete with built in Non - return valve.	Set	298,850.00	
29-4366	- Ditto - but for Model BPH 333/5 + HB 413 or BPN 373/3 + HB 413 or BPN 394/2 + HB 413 , Size as per manufacturer, Capacity 0.40 Cusec - 1.80 Cusec against Water Head 115 M - 30 M , Speed 2900 RPM Powered with AC 3 Phase, 50 Hz 400 Volts 41 HP Complete with built in Non - return valve.	Set	367,650.00	
29-4367	- Ditto - but for Model BPH 384/4 + HB 413 , Size 125 mm , Capacity 0.60 Cusec -1.10 Cusec against Water Head 90 M - 50 M , Speed 2900 RPM Powered with AC 3 Phase, 50 Hz 400 Volts 41 HP Complete with built in Non - return valve.	Set	367,650.00	
29-4368	- Ditto - but for Model BPH 384/4 + HB 523 or BPH 384/5 + HB 523 , Size as per manufacturer, Capacity 0.60 Cusec -1.40 Cusec against Water Head 120 M - 45 M , Speed 2900 RPM Powered with AC 3 Phase, 50 Hz 400 Volts 52 HP Complete with built in Non - return valve.	Set	485,900.00	
29-4369	- Ditto - but for Model BPN 374/3 + NB 523 , Size 150 mm , Capacity 0.65 Cusec -1.40 Cusec against Water Head 75 M - 45 M , Speed 2900 RPM Powered with AC 3 Phase, 50 Hz 400 Volts 52 HP Complete with built in Non - return valve.	Set	485,900.00	
29-4370	- Ditto - but for Model BPN 374/4 + NB 623 or BPN 394/3 + NB 625 , BPN 425/2 + NB 623 , Size as per manufacturer, Capacity 0.65 Cusec -1.95 Cusec against Water Head 103 M - 42 M , Speed 2900 RPM Powered with AC 3 Phase, 50 Hz 400 Volts 62 HP Complete with built in Non - return valve.	Set	535,350.00	

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Item No.	Description of Materials	Unit	Rate in Taka	Remarks
29-4371	- Ditto - but for Model BPN 374/4 + NB 753 or BPN 425/2 + NB 753 , Size 150 mm , Capacity 0.65 Cusec -1.95 Cusec against Water Head 103 M - 51 M , Speed 2900 RPM Powered with AC 3 Phase, 50 Hz 400 Volts 75 HP Complete with built in Non - return valve.	Set	612,750.00	
29-4372	- Ditto - but for Model BPN 374/5 + NBC 853 or BPN 425/3 + NB 853 , Size 150 mm , Capacity 0.98 Cusec -2.13 Cusec against Water Head 130 M - 64 M , Speed 2900 RPM Powered with AC 3 Phase, 50 Hz 400 Volts 85 HP Complete with built in Non - return valve.	Set	747,125.00	
29-4373	Multistage Turbine Pump set 25 - 65 M head 100 / 75 mm dia 450 - 600 LPM Brand KSB / Milnars Pumps (BD) Ltd Model B7B/12	Per Set	151,912.00	
29-4374	- Ditto - but 125 / 125 mm dia 900- 1200 LPM , Model B8B/10	Per Set	176,926.00	
29-4375	- Ditto - but 150 / 125 mm dia 1200- 1350 LPM , Model B8D/12	Per Set	203,176.00	
29-4376	- Ditto - but 150 / 125 mm dia 1500-1700 LPM , Model B10B/6	Per Set	168,154.00	
29-4377	- Ditto - but 150 / 125 mm dia 1500-1700 LPM , Model B10D/8	Per Set	220,064.00	
29-4378	Vertical hollow shaft induction Motor 380 / 400 Volts 3 Phase 1450 / 2900 RMP , Brand SIEMENS , having capacity 10 HP	Each	127,618.00	
29-4379	- Ditto - but 15 HP	Each	129,161.00	
29-4380	- Ditto - but 20 HP	Each	150,694.00	
29-4381	- Ditto - but 30 HP	Each	244,487.00	
29-4382	- Ditto - but 40 HP	Each	299,841.00	
29-4383	- Ditto - but 50 HP	Each	361,250.00	
29-4384	- Ditto - but 60 HP	Each	384,785.00	
29-4385	- Ditto - but Brand GEC , having capacity, 10 HP	Each	36,768.00	
29-4386	- Ditto - but 15 HP	Each	45,532.00	
29-4387	- Ditto - but 20 HP	Each	50,154.00	
29-4388	- Ditto - but 30 HP	Each	79,160.00	
29-4389	- Ditto - but 40 HP	Each	120,647.00	

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SECTION-29

WATER SUPPLY & SANITARY FITTINGS

PART -III

Item No.	Description of Materials	Unit	Rate in Taka	Remarks
<u>GEYSER</u>				
29-4390	Water heater electric SP having capacity 45 Litre local made	Each	6,665.00	
29-4391	- Ditto - but for 55 - 70 Litre	Each	7,740.00	
29-4392	- Ditto - but for 80 - 90 Litre	Each	10,300.00	
29-4393	- Ditto - but for gas operated	Each	15,513.00	
29-4394	Water heater electric having capacity 100-115 Litre	Each	12,200.00	
29-4395	- Ditto - but gas operated	Each	18,600.00	
29-4396	- Ditto - but gas 125-140 Litre	Each	20,425.00	
29-4397	- Ditto - but gas 160-230 Litre	Each	21,500.00	
29-4398	Pressure relief valve fro water heater	Each	1,300.00	
29-4399	Gas thermos couple for gas geyser	Each	1,700.00	
29-4400	Element for water heater 1500 / 2000 Watt made in USA / Italy	Each	1,935.00	
29-4401	Bleaching powder	Kg	37.00	
29-4402	Caustic Soda	Kg	43.00	
29-4403	Wire brush	Each	48.00	
29-4404	Thread tape taflon	Roll	11.00	
<u>SANITARY FITTINGS</u>				
29-4405	Wash hand basin 645x460 mm code-204, white	Each	1,125.00	
29-4406	-Ditto - but Colour	Each	1,187.00	
29-4407	-Ditto - but Special Colour	Each	1,400.00	
29-4408	Wash hand basin 570x420 mm code-211, white	Each	915.00	
29-4409	-Ditto -but Colour	Each	1,105.00	
29-4410	-Ditto - but special Colour	Each	1,325.00	
29-4411	Wash hand basin RAK, (Karla)	Each	1,387.00	
29-4412	-Ditto -but (Orient)	Each	1,634.00	
29-4413	-Ditto -but (Washington)	Each	1,849.00	
29-4414	-Ditto -but (Venice)	Each	3,182.00	
29-4415	-Ditto -but (Windsor)	Each	2,612.00	
29-4416	Wash hand basin RAK size 590x475, (Cabinat type)	Each	2,020.00	
29-4417	Porcelain Pedestal code-701A, for WHB white	Each	670.00	
29-4418	-Ditto - but Colour	Each	703.00	
29-4419	-Ditto - but special Colour	Each	740.00	

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WATER SUPPLY & SANITARY FITTINGS

PART -III

Item No.	Description of Materials	Unit	Rate in Taka	Remarks
29-4420	Bath mirror 350x450 mm	Each	240.00	
29-4421	-Ditto - but 450x600 mm	Each	333.00	
29-4422	Porcelain Pedestal RAK, (Karla)	Each	1,023.00	
29-4423	-Ditto -but (Orient)	Each	1,072.00	
29-4424	-Ditto -but (Washington)	Each	1,288.00	
29-4425	-Ditto -but (Venice)	Each	1,796.00	
29-4426	-Ditto -but (Windsor)	Each	1,563.00	
29-4427	Glass self 5 mm thick 125x600 mm with braket local	Each	210.00	
29-4427A	Glass self 5 mm thick 125x600 mm only	each	60.00	
29-4428	- Ditto - but foreign	Each	290.00	
29-4429	Stainless steel sink single bowl	Each	2,900.00	
29-4430	-Ditto - but double bowl	Each	5,400.00	
29-4431	-Ditto - but double bowl foreign (72" x 24")	Each	7,800.00	
29-4432	Sink (BISF) code-501, size 515 x 430 x 275 mm	Each	1,682.00	
29-4433	- Ditto - but code-502, size 625 x 490 x 224 mm	Each	1,814.00	
29-4434	Asiatic type glazed porcelain water closet (BISF) code-313, white	Each	520.00	
29-4435	-Ditto - but Colour	Each	618.00	
29-4436	-Ditto - but special Colour	Each	716.00	
29-4437	Asiatic type glazed porcelain water closet (BISF) code-316, white	Each	989.00	
29-4438	-Ditto - but Colour	Each	1,236.00	
29-4439	-Ditto - but special Colour	Each	1,483.00	
29-4440	Asiatic type glazed porcelain water closet (BISF) code-314 E, white	Each	398.00	
29-4441	Asiatic type glazed porcelain water closet RAK	Each	1,054.00	
29-4442	Oriental pan Orissa type code no. 318	Each	1,276.00	
29-4443	-Ditto - but Colour	Each	1,595.00	
29-4444	European type Water closet White code 106 / 106A	Each	1,460.00	
29-4445	- Ditto - but Colour	Each	1,830.00	
29-4446	- Ditto - but Special Colour	Each	2,250.00	
29-4447	European type glazed porcelain water closet "P" & "S" trap white (BISF) code no .105 / 105-A	Each	1,404.00	
29-4448	-Ditto - but coloured	Each	1,750.00	
29-4449	-Ditto - but special coloured	Each	2,107.00	

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WATER SUPPLY & SANITARY FITTINGS

PART -III

Item No.	Description of Materials	Unit	Rate in Taka	Remarks
29-4450	European type glazed porcelain water closet with seat cover RAK, (Karla)	Each	2,648.00	
29-4451	- Ditto - but (Orient)	Each	2,903.00	
29-4452	- Ditto - but (Washington)	Each	4,786.00	
29-4453	- Ditto - but (Venice)	Each	7,202.00	
29-4454	Water Combi closet with "P" & "S" trap without fittings (BISF) code-118/418, White	Each	6,540.00	
29-4455	-Ditto - but colour	Each	7,680.00	
29-4456	-Ditto - but special colour	Each	8,685.00	
29-4457	-Ditto - but foreign made	Each	9,800.00	
29-4458	Water Combi closet with "P" & "S" trap without fittings (BISF) code-114/414, White	Each	6,540.00	
29-4459	- Ditto but Colour	Each	7,680.00	
29-4460	- Ditto - but Special Colour	Each	8,685.00	
29-4461	Cistern flushing porcelain with for WC without fittings (BISF) code-401	Each	1,542.00	
29-4462	- Ditto -but colour	Each	1,918.00	
29-4463	- Ditto -but special colour	Each	2,300.00	
29-4464	Combi closet flushing mechanism / fittings local made	Each	1,600.00	
29-4465	- Ditto - but foreign made	Each	2,350.00	
29-4466	Low down cistern flushing mechanism / fittings local	Each	650.00	
29-4467	C I Cistern flushing mechanism local made	Each	1,935.00	
29-4468	Cistern (BISF) code-403, for WC white	Each	1,279.00	
29-4469	- Ditto - but Colour	Each	1,598.00	
29-4470	- Ditto - but Special Colour	Each	1,917.00	
29-4471	Water Tank with flushing unit RAK (Karla)	Each	1,519.00	
29-4472	- Ditto - but (Orient)	Each	1,952.00	
29-4473	- Ditto - but (Washington)	Each	2,157.00	
29-4474	- Ditto - but (Venice)	Each	2,405.00	
29-4475	Full set of spare parts for low down cistern / Combi closet (BISF) / foreign	Each	1,600.00	
29-4476	Porcelain foot rest white	Pair	144.00	
29-4477	Porcelain Standing Urinal BISF code no . 603	Each	893.00	
29-4478	Glazed Porcelain squatting type Urinal BISF	Each	865.00	

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WATER SUPPLY & SANITARY FITTINGS

PART -III

Item No.	Description of Materials	Unit	Rate in Taka	Remarks
29-4479	Porcelain lid for low down cistern	Each	450.00	
29-4480	-Ditto - but colour / spl colour	Each	560.00	
29-4481	Plastic seat cover any colour local (Hammer)	Each	750.00	
29-4482	-Ditto - but foreign	Each	800.00	
29-4483	Plastic seat cover Local (Victory)	Each	800.00	
29-4484	PVC waste pipe for WHB / Sink / Urinal	Each	50.00	
29-4485	-Ditto -but low down cistern	Each	50.00	
29-4486	-Ditto - but C I cistern	Each	80.00	
29-4487	C P chain with rubber plug	Each	48.00	
29-4488	Basin / Sink PVC waste	Each	150.00	
29-4489	Bracket for WHB/ Sink / Cistern	Each	110.00	
29-4490	Paper holder	Each	120.00	
29-4491	-Ditto - but RAK	Each	370.00	
29-4492	C P soap dish	Each	98.00	
29-4493	-Ditto - but foreign	Each	280.00	
29-4494	-Ditto - but RAK	Each	223.00	
29-4494A	-Ditto - but Melamine	Each	150.00	
29-4495	C P Towel rail 20 mm	Each	208.00	
29-4496	-Ditto - but 25 mm	Each	256.00	
29-4497	-Ditto - but RAK	Each	370.00	
29-4498	C P Towel rail triangular type	Each	430.00	
29-4498A	C P Towel rail circular type	Each	350.00	
29-4499	CP Shower curtain pipe rail 20 mm	Each	120.00	
29-4500	C P gratings 100 mm	Each	83.00	
29-4501	CP Bottle trap approved brand	Each	480.00	
29-4502	CI floor trap 100 mm	Each	420.00	
29-4503	CI 10 cm dia grating	Each	60.00	
29-4504	Box type PVC grating 100mm any colour	Each	258.00	
29-4505	RCC Pipe 100 mm Bore (30 mm Thick)	Metre	160.00	
29-4506	- Ditto - but 150 mm (30 mm Thick)	Metre	240.00	
29-4507	- Ditto - but 225 mm (40 mm Thick)	Metre	350.00	
29-4508	- Ditto - but 300 mm (40 mm Thick)	Metre	460.00	
29-4509	- Ditto - but 375 mm (40 mm Thick)	Metre	570.00	

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WATER SUPPLY & SANITARY FITTINGS

PART -III

Item No.	Description of Materials	Unit	Rate in Taka	Remarks
29-4510	- Ditto - but 450 mm (60 mm Thick)	Metre	916.00	
29-4511	- Ditto - but 600 mm (75 mm Thick)	Metre	1,622.00	
29-4512	- Ditto - but 750 mm (75 mm Thick)	Metre	2,133.00	
29-4513	- Ditto - but 900 mm (100 mm Thick)	Metre	4,073.00	
29-4514	- Ditto - but 1200 mm (125 mm Thick)	Metre	7,300.00	
29-4515	CI Pipe 50 mm Bore approved brand	Metre	650.00	
29-4516	- Ditto - but 100 mm	Metre	1,360.00	
29-4517	- Ditto - but 150 mm	Metre	1,600.00	
29-4518	CI Bend 50 mm bore (Plain)	Each	105.00	
29-4519	- Ditto - but 100 mm (Plain)	Each	328.00	
29-4520	CI Bend 50 mm bore (Door)	Each	116.00	
29-4521	- Ditto - but 100 mm (Door)	Each	339.00	
29-4522	CI Tee 50 mm bore (Plain)	Each	138.00	
29-4523	- Ditto - but 100 mm (Plain)	Each	457.00	
29-4524	uPVC Tee section 100x100 mm	Each	321.00	
29-4525	- Ditto - but 50x50 mm	Each	91.00	
29-4526	uPVC Tee section 100x50 mm	Each	376.00	
29-4527	- Ditto - but 150x50 mm	Each	946.00	
29-4528	- Ditto - but 50x50 mm	Each	177.00	
29-4529	uPVC Tee reducing 150x100 mm	Each	779.00	
29-4530	CI Tee 50 mm bore (Door)	Each	165.00	
29-4531	- Ditto - but 100 mm (Door)	Each	457.00	
29-4532	CI Branch Pieces 100 mm Bore (Double)	Each	425.00	
29-4533	- Ditto - but (Single)	Each	198.00	
29-4534	Guard Cowl 50 mm bore	Each	40.00	

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PART -III

Item No.	Description of Materials	Unit	Rate in Taka	Remarks
29-4535	- Ditto - but 100 mm bore	Each	70.00	
29-4536	Guard Cowl uPVC 150 mm bore	Each	172.00	
29-4537	Lead	kg	120.00	
29-4538	Gasket / rope wire	kg	80.00	
29-4539	Clamp with rawl plug & screws for pipe	Each	12.00	
29-4540	Manhole Cover 375 mm dia	Each	366.00	
29-4541	- Ditto - but 450 mm dia	Each	520.00	
29-4542	- Ditto - but 525 mm dia	Each	748.00	
29-4543	Push / commode hand shower 12.50 mm for toilet use	Each	450.00	
29-4544	Y Strainer / Filter (brass) PN20, brand : Itap, (Italy) 12.50 mm	Each	258.00	
29-4545	- Ditto - but 20 mm dia	Each	392.00	
29-4546	- Ditto - but 25 mm dia	Each	607.00	
29-4547	- Ditto - but 37.5 mm dia	Each	1,236.00	
29-4548	- Ditto - but 50 mm dia	Each	1,935.00	
29-4549	- Ditto - but 75 mm dia	Each	4,122.00	
29-4550	- Ditto - but 100 mm dia	Each	8,664.00	
29-4551	Pressure reducer Valve, light model RINOX2 , brand : Itap, (Italy) 12.50 mm	Each	1,607.00	
29-4552	- Ditto - but 20 mm dia	Each	1,875.00	
29-4553	- Ditto - but 25 mm dia	Each	3,676.00	
29-4554	- Ditto - but 37.5 mm dia	Each	7,546.00	
29-4555	Pressure reducer Valve, Heavy model RINOX , brand : Itap, (Italy) 12.50 mm	Each	3,094.00	
29-4556	- Ditto - but 20 mm dia	Each	3,726.00	

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Item No.	Description of Materials	Unit	Rate in Taka	Remarks
29-4557	- Ditto - but 25 mm dia	Each	4,225.00	
29-4558	- Ditto - but 37.5 mm dia	Each	8,062.00	
29-4559	Ball Valves for standard flow, brand : Itap, (Italy) 12.50 mm	Each	252.00	
29-4560	- Ditto - but 20 mm dia	Each	338.00	
29-4561	- Ditto - but 25 mm dia	Each	403.00	
29-4562	- Ditto - but 37.5 mm dia	Each	521.00	
29-4563	- Ditto - but 25 mm dia Heavy duty foreign made (UK)	Each	1,650.00	
29-4564	- Ditto - but 40/37.5 mm dia	Each	2,200.00	
29-4565	- Ditto - but 50 mm dia		3,500.00	
29-4566	Globe Valves working 300 PSIG 100 mm (UK/Japan)	Each	7,500.00	
29-4567	- Ditto - but 75 mm dia	Each	6,550.00	
29-4568	- Ditto - but 50 mm dia	Each	5,750.00	
29-4569	- Ditto - but 37.5 mm dia	Each	4,550.00	
29-4570	Air Vent Valves working 300 PSIG 25 mm (UK/ Japan)	Each	3,500.00	
29-4571	- Ditto - but 20 mm dia	Each	3,250.00	
29-4572	- Ditto - but 12.5 mm dia	Each	2,850.00	
29-4573	Auto Relief Valves working 300 PSIG 50 mm (Italy)	Each	8,800.00	
29-4574	- Ditto - but 37.5 mm dia	Each	7,600.00	
29-4575	- Ditto - but 25 mm dia	Each	4,200.00	
29-4576	Auto Pressure switch 25 mm (China)	Each	5,800.00	
29-4577	Pressure gauge 0 to 500 PSIG for 25 mm line (China)	Each	2,500.00	
29-4578	Flexible joint 100 mm dia foreign made	Each	5,500.00	
29-4579	- Ditto - but 75 mm dia	Each	4,000.00	

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Item No.	Description of Materials	Unit	Rate in Taka	Remarks
29-4580	- Ditto - but 50 mm dia	Each	3,800.00	
29-4581	- Ditto - but 37.5/40 mm dia	Each	3,400.00	
29-4582	- Ditto - but 25 mm dia	Each	2,000.00	
29-4583	- Ditto - but 20 mm dia	Each	1,500.00	
29-4584	- Ditto - but 12.5 mm dia	Each	1,100.00	
29-4585	Landing Valve 50 mm	Each	6,000.00	
29-4586	- Ditto - but 37.5/40 mm dia	Each	5,800.00	
29-4587	- Ditto - but 25 mm dia	Each	4,400.00	
29-4588	Fire alarm bell foreign made	Each	3,500.00	
29-4589	Frie break glass switch foreign made	Each	2,500.00	
29-4590	Central fire control alarm station 16 zone 24 volt DC foreign origin	Each	110,000.00	
29-4591	High pressure Multistage in line pump size 25x25 mm capacity 0.7-3.6M³/hr , head 152-66 , 2.2 kw with motor foreign made (KSB Holland) complete.	Set	123,410.00	
29-4592	High pressure Multistage in line pump size 32x32 mm capacity 1.4-7.2M³/hr , head 230-110 , 4 kw with motor foreign made (KSB Holland) complete	Set	168,990.00	
29-4593	High pressure Multistage in line pump size 50x50 mm capacity 4.3-23.8M³/hr , head 113-70 , 7.5 kw with motor foreign made (KSB Holland) complete	Set	218,601.00	
29-4594	High pressure Multistage in line pump size 32x32 mm capacity 1.4-7.2M³/hr , 1.1 kw with motor foreign made (KSB Holland) suitable for bosting package unit	Set	70,788.00	
29-4595	High pressure Multistage in line pump size 75x75 mm capacity 45-25M³/hr , pressure 3-4 kg , 1.5 kw with motor foreign made (KSB Holland) suitable for bosting package unit	Set	91,160.00	

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WATER SUPPLY & SANITARY FITTINGS

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Item No.	Description of Materials	Unit	Rate in Taka	Remarks
29-4596	High pressure Multistage in line pump size 100x100 mm capacity 80-36M³/hr , pressure 3-4 kg, 3 kw with motor foreign made (KSB Holland) suitable for boosting package unit	Set	156,950.00	
29-4597	High pressure Multistage in line pump size 150x150 mm capacity 80-36M³/hr , pressure 3.5-5 kg, 5.5 kw with motor foreign made (KSB Holland) suitable for boosting package unit	Set	168,775.00	
29-4598	Fire pump centrifugal with motor 3 ph 50 hz, 25 HP foreign origin GPM 150, head 60 M complete	Set	138,019.00	
29-4599	Jockey pump multi stage complete with motor GPM 12, head 60 M foreign origin	Set	91,160.00	
29-4600	Fire Hydrant Box 100 mm dia vertical riser pipe complete as spd.	Each	10,750.00	
29-4601	Pressurised control panel for 4xunit boosting pumping package unit complete set	Set	190,000.00	
29-4602	Carbon steel pressure tank 60/75 litre capacity	Each	90,000.00	
29-4603	High pressure centrifugal / boosting pump multistage complete with Vertical induction single / three phase Motor electric AC 400/220 volt, 50 Hz, HP 2/3 as required. Made in USA / Italy.	Set	64,500.00	
29-4604	Gas chlorinator control unit (Vacuum regulator) capacity 10-50 PPD foreign made (Regal brand USA)	Each set	145,000.00	
29-4605	Chlorine gas ejector unit foreign made (Regal brand USA)	Each	55,000.00	
29-4606	Chlorine Test Kit foreign made (USA)	Set	20,000.00	
29-4607	Chlorine gas empty cylinder capacity 50 kg	Each	50,000.00	
29-4608	Chlorine gas	kg	125.00	
29-4609	Chlorine gas leakage detector with sensor alarm foreign made (Regal brand USA)	Each	125,000.00	

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Item No.	Description of Materials	Unit	Rate in Taka	Remarks
29-4610	Gas cylinder weighing scale, capacity 150 kg foreign made (China)	Each	25,000.00	
29-4611	Safety Gas Mask Canister type foreign made	Each	40,000.00	
	<u>SPARE PARTS CHLORINATION PLANT</u>			
29-4612	Bearing thrust (foreign) no. 6313 NTN	Each	1,800.00	
29-4613	Bearing thrust (foreign) no. 7311/6312 NTN	Each	1,500.00	
29-4614	Bearing (foreign) no. 51313 NTN	Each	1,800.00	
29-4615	Adaptor face seal S-404	Each	500.00	
29-4616	Adaptor seal S-406	Each	350.00	
29-4617	Bearing for chlorine plant	Each	300.00	
29-4618	Body back inlet seal S-413	Each	300.00	
29-4619	Body seal S-403	Each	140.00	
29-4620	Check Valve E-250	Each	2,250.00	
29-4621	Check Valve seat gasket G-203	Each	295.00	
29-4622	Cylinder Valve	Each	3,500.00	
29-4623	Diaphragm body seal S-408	Each	500.00	
29-4624	Diaphragm Plate seal S-407	Each	400.00	
29-4625	Diffuser for chlorine plant	Each	2,300.00	
29-4626	Ejector / body gasket G-204	Each	300.00	
29-4627	Chlorine test tablet DPD-I / DPD-3	Each	10.00	
29-4628	Ejector seat O-ring S-405	Each	250.00	
29-4629	Filter Y-275	Each	200.00	
29-4630	Gum boot (Rubber)	Each	480.00	

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Item No.	Description of Materials	Unit	Rate in Taka	Remarks
29-4631	Indicator seal S-301	Each	150.00	
29-4632	Lead Gasket	Each	155.00	
29-4633	Metering tube gasket G-202	Each	200.00	
29-4634	Nozzle for chlorine plant	Each	3,000.00	
29-4635	Rate valve plug seal S-302	Each	344.00	
29-4636	Rate valve tool Z-297	Each	317.00	
29-4637	Safety Googols	Each	430.00	
29-4638	Safety Helmet	Each	645.00	
29-4639	Trolley for cylinder	Each	5,500.00	
29-4640	Vacuum seal 4-409	Each	290.00	
29-4641	Valve seal seat S-402	Each	560.00	
29-4642	Vent line bug screen Z-297	Each	300.00	
29-4643	Vent seal S-401	Each	190.00	
29-4644	High pressure leakproof uPVC/PVC tube 6 to 12 mm dia for chlorine gas line foreign made	Metre	550.00	
29-4645	Metering tube for chlorine gas 10-50 PPD as required length foreign made	Each	6,000.00	
29-4646				
To				
29-4700	Blank			

RESTRICTED

SECTION-29

MATERIALS SUPPLIED ONLY (With Carrying Charges)

GAS & OIL SUPPLY

PART-IV

Item No	Description of Materials	Unit	Rate in Tk	Remarks
29-4701	API grade Gas pipe, 150 mm outer dia 168.3 mm	Metre	3,848.00	
29-4702	- Ditto - but 100 mm outer dia 114.3 mm	Metre	2,226.00	
29-4703	- Ditto - but 75 mm outer dia 88.9 mm	Metre	1,437.00	
29-4704	- Ditto - but 50 mm outer dia 60.3 mm	Metre	928.26	
29-4705	- Ditto - but 40 mm outer dia 43.4 mm	Metre	680.00	
29-4706	- Ditto - but 25 mm outer dia 33.7 mm	Metre	431.61	
29-4707	- Ditto - but 20 mm outer dia 26.7 mm	Metre	290.00	
29-4708	Bend / Elbow (MS) API grade 150 mm dia	Each	1,365.00	
29-4709	- Ditto - but 100 mm	Each	584.54	
29-4710	- Ditto - but 75 mm	Each	298.57	
29-4711	- Ditto - but 50 mm	Each	122.00	
29-4712	- Ditto - but 40 mm	Each	120.00	
29-4713	- Ditto - but 25 mm	Each	44.37	
29-4714	- Ditto - but 20 mm	Each	30.00	
29-4715	Tee equal (MS) API grade 150 mm	Each	1,932.00	
29-4716	- Ditto - but 100 mm	Each	788.00	
29-4717	- Ditto - but 75 mm	Each	572.00	
29-4718	- Ditto - but 50 mm	Each	350.00	
29-4719	- Ditto - but 40 mm	Each	256.00	
29-4720	- Ditto - but 25 mm	Each	138.00	
29-4721	- Ditto - but 20 mm	Each	309.00	
29-4722	Tee unequal (MS) API grade 150 mm x down to 20 mm	Each	2,045.00	
29-4723	- Ditto - but 100 mm x down to 20 mm	Each	867.00	
29-4724	- Ditto - but 75 mm x down to 20 mm	Each	573.00	
29-4725	- Ditto - but 50 mm x down to 20 mm	Each	254.00	
29-4726	- Ditto - but 40 mm x down to 20 mm	Each	234.00	
29-4727	- Ditto - but 25 mm x down to 20 mm	Each	307.00	

RESTRICTED

SECTION-29

GAS & OIL SUPPLY

PART-IV

Item No	Description of Materials	Unit	Rate in Tk	Remarks
29-4728	MS Reducer 150x100 down to 20 mm dia	Each	676.00	
29-4729	- Ditto - but 100x75 down to 20 mm dia	Each	334.80	
29-4730	- Ditto - but 75x50 down to 20 mm dia	Each	329.00	
29-4731	- Ditto - but 50 x 40 down to 20 mm dia	Each	93.00	
29-4732	- Ditto - but 40 x 25 down to 20 mm dia	Each	93.00	
29-4733	Flange W/N nut gas quality 150 mm	Each	2,478.00	
29-4734	- Ditto - but 100 mm	Each	1,153.00	
29-4735	- Ditto - but 75 mm dia	Each	1,095.00	
29-4736	- Ditto - but 50 mm dia	Each	570.00	
29-4737	- Ditto - but 40 mm dia	Each	532.00	
29-4738	- Ditto - but 25 mm dia	Each	211.00	
29-4739	Gasket asbestos gas quality 150 mm	Each	389.00	
29-4740	- Ditto - but 100 mm	Each	103.00	
29-4741	- Ditto - but 75 mm dia	Each	88.00	
29-4742	- Ditto - but 50 mm dia	Each	63.81	
29-4743	- Ditto - but 25 mm dia	Each	49.84	
29-4744	Flange Tee gas quality for 150 x 100, down to 20 mm dia	Each	159,415.00	
29-4745	- Ditto - but 100 x 75, down to 20 mm dia	Each	94,284.00	
29-4746	- Ditto - but 75 x 50, down to 20 mm dia	Each	73,470.00	
29-4747	Service Tee 25x20 mm dia	Each	1,510.00	
29-4748	Valve Plug 150 mm dia	Each	44,970.00	
29-4749	- Ditto - but 100 mm dia	Each	19,152.00	
29-4750	- Ditto - but 75 mm dia	Each	11,114.00	
29-4751	- Ditto - but 50 mm dia	Each	5,441.00	
29-4752	- Ditto - but 40 mm dia	Each	4,825.00	
29-4753	- Ditto - but 25 mm dia	Each	2,778.00	
29-4754	- Ditto - but 20 mm dia	Each	1,558.00	

RESTRICTED

SECTION-29

GAS & OIL SUPPLY

PART-IV

Item No	Description of Materials	Unit	Rate in Tk	Remarks
29-4755	Valve Tee 50 x 40 down to 20 mm dia	Each	13,992.00	
29-4756	- Ditto - but 40 x25 down to 20 mm dia	Each	13,992.00	
29-4757	Saddle welding and drilling consumable / kits for 100x75 mm	Set	457.00	
29-4758	-Ditto-but 75x50 mm dia	Each	403.00	
29-4759	-Ditto-but 50x37.5 mm dia	Each	253.00	
29-4760	-Ditto-but 40x25 mm dia	Each	245.00	
29-4761	-Ditto-but 25x20 mm dia	Each	242.00	
29-4762	Stud bolt 20 x30 mm	Each	88.00	
29-4763	- Ditto - but 25 x 50 mm	Each	86.00	
29-4764	Welding Electrode 8 SWG	Each	5.50	
29-4765	Wrapping Tape 100 mm x 120 metre	Reel	2,453.00	
29-4766	- Ditto - but 50 mm x 60 metre	Reel	640.00	
29-4767	PVC Primer	Litre	285.00	
29-4768	Rent / Fee for T&P / apparatus for GT test point (Cathodic protection)	Point	3,332.00	
29-4769	- Ditto - but for thrust boring equipments	Day	390.00	
29-4770	- Ditto - but for Purging/Testing	Day	250.00	
29-4771	Gas Regulator for 25 / 20 mm dia (Domestic)	Each	963.00	
29-4772	- Ditto - but (Commercial)	Each	2,500.00	
29-4773	Gas Valve for 25 mm dia	Each	456.00	
29-4774	- Ditto - but 20 mm dia	Each	370.00	
29-4775	- Ditto - but 13 mm dia	Each	322.00	
29-4776	- Ditto - but 6.5 mm dia	Each	150.00	
29-4777	Gas Chulla (Single) 350 x 350 mm made with 22 BG sheet	Each	525.00	
29-4778	- Ditto - but 300 x 300 mm	Each	430.00	
29-4779	- Ditto - but 20 BG 750 x 310 mm / 750x300 mm RFL (Double)	Each	1,200.00	

620

RESTRICTED

RESTRICTED

SECTION-29

GAS & OIL SUPPLY

PART-IV

Item No	Description of Materials	Unit	Rate in Tk	Remarks
29-4780	- Ditto - but 650 x 350 mm (Double)	Each	750.00	
29-4781	- Ditto - but auto fire, local made double as available	Each	2,935.00	
29-4782	- Ditto - but auto foreign made ss double as available	Each	3,600.00	
29-4783	LP Gas Chulla (350x350 mm) Single with brass burner & nozzle	Each	650.00	
29-4784	- Ditto - but with CI burner & nozzle	Each	525.00	
29-4785	Knob for gas burner	Each	20.00	
29-4786	Injector Nozzle 4.25 cu. m	Each	592.00	
29-4787	- Ditto - but 3.5 cu. m	Each	570.00	
29-4788	- Ditto - but 2.75 cu. m	Each	550.00	
29-4789	- Ditto - but 2.00 cu. m	Each	540.00	
29-4790	- Ditto - but 1.50 cu. m	Each	530.00	
29-4791	Injector only	Each	82.00	
29-4792	Commercial Star burner 4.25 cu. M	Each	592.00	
29-4793	- Ditto - but 3.50 cu. m	Each	540.00	
29-4794	- Ditto - but 2.75 cu. m	Each	475.00	
29-4795	- Ditto - but 2.00 cu. m	Each	455.00	
29-4796	- Ditto - but 1.50 cu. m	Each	430.00	
29-4797	Earthen Tondoor large	Each	1,200.00	
29-4798	- Ditto - but medium	Each	1,000.00	
29-4799	- Ditto - but small	Each	880.00	
29-4800	Top plate for tondoor made by MS plate of 20 mm thick	Each	2,970.00	
29-4801	- Ditto - but 13 mm thick	Each	1,827.00	
29-4802	- Ditto - but 9 mm thick	Each	1,290.00	
29-4803	MS Steel Plate 20 mm thick	kg	68.00	
29-4804	- Ditto - but 13 mm thick	kg	68.00	
29-4805	- Ditto - but 9 mm thick	kg	68.00	
29-4806	MS Sheet 3 mm thick for Steel tondoor	kg	75.00	

RESTRICTED

SECTION-29

GAS & OIL SUPPLY

PART-IV

Item No	Description of Materials	Unit	Rate in Tk	Remarks
29-4807	Valve pit cover (MS) as per gas co.'s specification	kg	96.00	
29-4808	LP Gas Regulator standard size foreign made and approved brand	Each	690.00	
29-4809	- Ditto - hose pipe PVC 12 mm dia approved brand	Each	70.00	
29-4810	- Ditto - Nipple made of brass	Each	70.00	
29-4811	Ditto - Cylinder (Empty) foreign made approved brand	Each	1,740.00	
29-4812	- Ditto - Cylinder (with gas) foreign made approved brand	Each	2,600.00	

End

RESTRICTED

SECTION-30

LABOUR RATES

The following labour rates have been used in compiling the rates in MES Schedule - 2010 and the same rates will be used in preparing star price etc.

Item No	Labour with usual tools	Rate per day of 8 hrs.	Rate with 10% profit+ 3.5% overhead & 4.5% VAT for making STAR Rate	Remarks
30-01	Head mason	400.00	474.40	
30-02	Labour (Skilled)	200.00	237.20	
30-03	Labour (Unskilled)	175.00	207.55	
30-04	Black smith / Rod mistry	350.00	415.10	
30-05	Brick layerer / Mason	300.00	355.80	
30-06	Carpenter	350.00	415.10	
30-07	Helper for carpenter	200.00	237.20	
30-08	Glazier	300.00	355.80	
30-09	Hammer man	200.00	237.20	
30-10	Mali	250.00	296.50	
30-11	Mate	350.00	415.10	
30-12	Painter / Sign writer	350.00	415.10	
30-13	Pipe fitter	350.00	415.10	
30-14	Plumber	350.00	415.10	
30-15	Sweeper	400.00	474.40	
30-16	Thatcher	350.00	415.10	
30-17	Mosaic mistry	400.00	474.40	
30-18	Tiler	400.00	474.40	
30-19	Marble / Granite layerer	500.00	593.00	
30-20	Wire man	350.00	415.10	
30-21	Line man	400.00	474.40	

RESTRICTED

SECTION-30

LABOUR RATES

The following labour rates have been used in compiling the rates in MES Schedule - 2010 and the same rates will be used in preparing star price etc.

Item No	Labour with usual tools	Rate per day of 8 hrs.	Rate with 10% profit+ 3.5% overhead & 4.5% VAT for making STAR Rate	Remarks
30-22	Cable jointer / Layerer	400.00	474.40	
30-23	Tin smith	350.00	415.10	
30-24	Welder	400.00	474.40	
30-25	Gas fitter	350.00	415.10	
30-26	Air condition & Refrigerator Mechanic	400.00	474.40	
30-27	Cabinet maker	400.00	474.40	
30-28	Polisher	350.00	415.10	
30-29	Upholster	450.00	533.70	
30-30	Upholster helper	200.00	237.20	
30-31	Technician	450.00	533.70	
30-32	Aluminium fabricator	450.00	533.70	
30-33	Helper for aluminium / SS fabricator	200.00	237.20	
30-34	Cane man	350.00	415.10	
30-35	Foreman	450.00	533.70	
30-36	Rig man	400.00	474.40	
30-37	Winch man	400.00	474.40	
30-38	O E D (Generator / Road roller / Vibrator / Mixer Machine etc.)	400.00	474.40	
30-39	Pilling crew	350.00	415.10	
30-40	SS Welder / Fabricator	450	533.70	

RESTRICTED

METRIC CONVERSION TABLES

Inches			Miles			Feet		
Milli Metres			Kilo Metres			Metres		
0.039	1	25.400	0.621	1	1.609	3.281	1	0.305
0.079	2	50.800	1.243	2	3.219	6.562	2	0.610
0.118	3	76.200	1.864	3	4.828	9.843	3	0.914
0.157	4	101.600	2.485	4	6.437	13.123	4	1.219
0.197	5	127.00	3.107	5	8.047	16.404	5	1.524
0.236	6	152.400	3.728	6	9.656	19.685	6	1.829
0.276	7	177.800	4.350	7	11.265	22.966	7	2.314
0.315	8	203.200	4.971	8	12.875	26.247	8	2.438
0.354	9	228.600	5.592	9	14.484	29.528	9	2.743

Square Feet			Yards			Square Yards		
Square Metres			Metres			Square Metres		
10.764	1	0.093	1.094	1	0.914	1.196	1	0.836
21.528	2	0.186	2.187	2	1.829	2.392	2	1.672
32.292	3	0.279	3.281	3	2.743	3.588	3	2.508
43.056	4	0.372	4.374	4	3.658	4.784	4	3.345
58.820	5	0.465	5.468	5	4.572	5.980	5	4.181
64.583	6	0.557	<p>The key figure printed in the centre column, can be read as either the metric or the British measure, Thus 1 meter =1.094 yard and 1 yard = 0.914 meter</p>					
75.347	7	0.650						
86.111	8	0.743						
96.875	9	0.836						

RESTRICTED

Cubic Feet	To	Cubic Metre	Cubic Yards	To	Cubic Metre	
35.315	1	0.028	1.308	1	0.765	
70.629	2	0.057	2.616	2	1.529	
105.944	3	0.085	3.924	3	2.294	
141.259	4	0.113	5.232	4	3.058	
176.573	5	0.142	6.540	5	3.823	
211.888	6	0.170	7.848	6	4.587	
247.203	7	0.198	9.156	7	5.352	
282.517	8	0.227	10.464	8	6.116	
317.832	9	0.255	11.772	9	6.881	

Gallons	To	Litres	Ounces	To	Grams	Pounds	To	Kilo Grams
0.220	1	4.546	0.035	1	28.350	2.205	1	0.454
0.440	2	9.092	0.071	2	56.699	4.409	2	0.907
0.660	3	13.638	0.106	3	85.049	6.614	3	1.361
0.880	4	18.184	0.141	4	113.398	8.818	4	1.814
1.100	5	22.730	0.176	5	141.748	11.023	5	2.268
1.320	6	27.276	0.212	6	170.097	13.228	6	2.722
1.540	7	31.822	0.247	7	198.447	15.432	7	3.175
1.760	8	36.368	0.282	8	226.796	17.637	8	3.629
1.980	9	40.914	0.317	9	255.146	19.841	9	4.082

RESTRICTED

CONVERSION FORMULA

To Convert	Multiply	To convert	Multiply by
Inches to cm	2.540	cu. cm to cu. inch	0.061
cm to inches	0.3937	cu. ft to cu m.	0.028
ft to metre	0.3048	cu. m to cu. ft	35.315
metre to feet	3.281	cu. m to cu. yards	0.7646
yards to metres	0.9144	cu. yards to cu. m	1.308
metres to yards	1.094	cu. inch to litre	0.01639
miles to K. metres	1.609	Litres to cu. inch.	61.03
K. metres to miles	0.6214	Gallons to litres	4.546
Sq. inch to Sq. cm	6.452	Litres to Gallons	0.22
Sq. cm to Sq. inch	0.1550	Grains to Grams	0.0648
Sq. m to Sq. ft	10.764	Grams to Grains	15.43
Sq. ft to Sq. m	0.093	Ounces to Grams	28.35
Sq. yard to Sq. m	0.8361	Grams to Ounces	0.03527
Sq. m to Sq. yards	1.196	Pound to grams	453.60
Sq. miles to Sq.	2.590	Grams to Pounds	0.002205
Sq. to Sq. Miles	0.3861	Pounds to Kilograms	0.44536
Acres to Hectares	0.405	Kilograms to Pounds	2.205
Hectares to Acres	2.471	Tons to Kilograms	1000.00
Cu. inch to cu. cm	16.39	Kilograms to Ton	0.001

MPH	20	30	40	50	60	70	80	90	100					
PH	32	48	64	80	96	112	128	144	160					
0_F		32	40	50	60	70	75	85	95	105	140	175	212	
0_C		0	5	10	15	20	25	30	35	40	60	80	100	

RESTRICTED

LINEAR MEASURES

FPS Unit	Metric Unit	Metric Unit	FPS Unit
1 Inch	2.54 cm	1 cm	0.3937 Inch
	or 25.4 mm		or 0.0328 Foot
1 Foot	30.48 cm	1 metre	3.281 Feet
	or 304.8 mm		or 39.37 Inch
1 Mile	1.609	1	0.6215 Mile
	or 1609 Metre		or 3281.54 Feet

SQUARE MEASURES

FPS Unit	Metric Unit	Metric Unit	FPS Unit
1 Sq. in	6.452 Sq. cm	1 Sq. Cm	0.155 Sq. in
1 Sq. ft	929.03 Sq. cm	1 Sq. m	10.764 Sq. ft
	or 0.093 Sq. m		
1 Sq. mile	2.590 Sq.	1 Sq.	0.3861 Sq. mile

CUBIC MEASURES

FPS Unit	Metric Unit	Metric Unit	FPS Unit
1 Cu. ft	0.028 Cu. m	1 Cu. m	35.315 Cu. ft
	or 28316.85 Cu. cm		
1 Cu. inch	16.39 Cu. cm	1 Cu. cm	0.061 Cu. inch

WEIGHT MEASURES

FPS Unit	Metric Unit	Metric Unit	FPS Unit
1 Lbs	0.4536 Kg	1 Kg	2.205 Lb
	or 453.60 gram		
1 CWT	50 kg	1 Litre	0.22 Gallons
			or 1.761 Pint
1 Ton	1000.00 Kg	1 Gram	0.03527 OZ

RESTRICTED

UNIT WEIGHT OF M.S. ANGLES

(a) EQUAL ANGLES

Size		Weight		Size		Weight	
inch	Mm	lb/ft	kg/m	inch	mm	lb/ft	kg/m
.75x.75x.125	19.05x19.05x3.17 20x20x3	0.60	0.87 0.90	2x2x.375	50.8x50.8x9.52 50x50x10	4.63	6.88 7.10
.75x.75x.19	19.05x19.05x4.76 20x20x5	0.85	1.25 1.40	2.25x2.25x.25	57.15x57.15x6.35 60x60x6	3.62	5.38 5.40
1x1x.125	25.4x25.4x3.17 25x25x3	0.80	1.19 1.10	2.25x2.25x.3125	57.15x57.15x7.93 60x60x8	4.45	6.62 7.10
1x1x.19	25.4x25.4x4.76 25x25x5	1.17	1.72 1.80	2.25x2.25x.375	57.15x57.15x9.52 60x60x10	5.26	7.83 8.70
1x1x.25	25.4x25.4x6.35 25x25x6	1.49	2.22 2.10	2.50x2.50x.25	63.5x63.5x6.35 65x65x6	4.04	6.01 5.90
1.25x1.25x.19	31.75x31.75x4.76 30x30x5	1.49	2.21 2.20	2.50x2.50x.3125	63.5x63.5x7.93 65x65x8	4.99	7.41 7.70
1.25x1.25x.25	31.75x31.75x6.35 30x30x6	1.91	2.85 2.60	2.50x2.50x.375	63.5x63.5x9.52 65x65x10	5.90	8.78 9.40
1.50x1.50x.19	38.1x38.1x4.76 40x40x5	1.79	2.67 3.00	2.50x2.50x.50	63.5x63.5x12.7 65x65x12	7.66	11.40 11.10
1.50x1.50x.25	38.1x38.1x6.35 40x40x6	2.34	3.48 3.50	3x3x.25	76.2x76.2x6.35 75x75x6	4.89	7.28 6.80
1.50x1.50x.375	38.1x38.1x9.52 40x40x10	3.35	4.98 5.50	3x3x.3125	76.2x76.2x7.93 75x75x8	6.05	9.00 8.90
1.75x1.75x0.19	44.45x44.45x4.76 45x45x5	2.14	3.14 3.40	3x3x.375	76.2x76.2x9.52 75x75x10	7.18	10.68 11.00
1.75x1.75x.25	44.45x44.45x6.35 45x45x6	2.77	4.12 4.00	3x3x.50	76.2x76.2x12.7 75x75x12	9.36	13.93 13.00
1.75x1.75x.375	44.45x44.45x9.52 45x45x10	3.99	5.93 6.30	3x3x.375	88.9x88.9x9.52 90x90x10	7.18	12.58 13.40
2x2x.19	50.8x50.8x4.76 50x50x5	2.46	3.62 3.80	3.50x3.50x.50	88.9x88.9x12.17 90x90x12	11.06	16.46 15.80
2x2x.25	50.8x50.8x6.35 50x50x6	3.19	4.75 4.50				

(b) UNEQUAL ANGLES

RESTRICTED

Size		Weight		Size		Weight	
inch	mm	lb/ft	kg/m	inch	mm	lb/ft	kg/m
2X1.50X.25	50.8X38.1X6.35		4.12	3x2.50x.25	76.2X63.5X6.35		6.65
	50X40X6	2.77	4.00		75X65X6	4.47	6.30
2.50X2X.25	63.5X50.8X6.35		5.38	3X2.50X.32	76.2X63.5X7.93		8.20
	65X50X6	3.62	5.15		75X65X8	5.64	8.30
2.50X2.25X31.25	63.5X57X15X7.93		7.02	3X2.50X.38	76.2X63.5X9.52		9.73
	65X60X8	4.72	7.40		75X65X10	6.62	10.20
3X2X.25	76.2X50.8X6.35		6.01	3.50X2.50X.25	88.9X63.5X6.35		7.28
	75X50X6	4.04	5.60		90X65X6	4.89	7.00
3X2X.3125	76.2X50.8X7.93		7.41	3.50X2.50X.32	88.9X63.5X7.93		9.00
	75X50X8	4.99	7.40		90X65X8	6.19	9.25
3X2X.375	76.2X50.8X9.52		8.78	3.50X2.50X.38	88.9X63.5X9.52		10.68
	75X50X10	5.90	9.00		90X65X10	7.27	11.38

UNIT WEIGHT OF M.S. TEE

Size		Weight		Size		Weight	
inch	mm	lb/ft	kg/m	inch	mm	lb/ft	kg/m
1X1X.125	25.4X25.4X3.17		1.20	2.25X2.25X.25	57.15X57.15X6.35		5.41
	25X25X.3	0.81	1.12		60X60X6	3.64	5.40
1X1X.25	25.4X25.4X6.35		2.29	2.50X2.50X.25	63.5X63.5X6.35		6.05
	25X25X6	1.54	2.24		65X65X6	4.07	5.85
1.25X1.25X.19	31.75X31.75X4.76		2.23	2.50X2.50X.3125	63.5X63.5X7.93		7.44
	30X30X5	1.50	2.25		65X65X8	5.00	7.80
1.25X1.25X.25	31.75X31.75X6.35		2.80	2.50X2.50X.375	63.5X63.5X9.52		8.80
	30X30X6	1.88	2.70		65X65X10	5.92	9.75
1.50X1.50X.1875	38.1X38.1X4.76		2.70	3X3X.25	76.2X76.2X6.35		7.30
	40X40X5	1.81	3.00		75X75X6	4.91	6.75
1.50X1.50X.25	38.1X38.1X6.35		3.50	3X3X12.50	76.2X76.2X9.52		10.71
	40X40X6	2.35	3.60		75X75X10	7.20	11.25
1.75X1.75XX.25	44.45X44.45X6.35		4.15	3X3X.50	76.2X76.2X12.7		13.95
	45X45X6	2.79	4.05		75X75X12	9.38	13.50
1.75X1.75X.1875	44.45X44.45X4.76		3.14	3.50X3.50X.375	88.9X88.9X9.52		12.63
	45X45X5	2.11	3.37		90X90X10	8.49	13.50
2X2X.25	50.8X50.8X6.35		4.77	3.50X3.50X.50	88.9X88.9X12.7		16.48
	50X50X6	3.21	4.50		90X90X12	11.08	16.20
2X2X.375	50.8X50.8X9.52		6.90				
	50X50X10	4.64	7.50				

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UNIT WEIGHT OF FLAT BARS

Breadth		Thickness									
inch	mm	³ / ₁₆ in	4.76 mm 5 mm	¹ / ₄ in	6.35 mm 6mm	⁵ / ₁₆ in	7.93 mm 8 mm	³ / ₈ in	9.52 in 10 mm	¹ / ₂ in	12.70 mm 12 mm
	mm (round)	lb/ft lb/ft (round)	kg/m k/m (round)	lb/ft lb/ft (round)	kg/m kg/m (round)	lb/ft lb/ft (round)	kg/m kg/m (round)	lb/ft lb/ft (round)	kg/m kg/m (round)	lb/ft lb/ft (round)	kg/m kg/m (round)
¹ / ₂	12.7	0.319	0.475	0.43	0.633	0.53	0.79	0.64	0.95	0.85	1.27
	12		0.50		0.65		0.80		0.95		1.30
⁵ / ₈	15.875		0.59		0.791		0.99		1.19		1.58
	16	0.400	0.60	0.54	0.80	0.67	1.00	0.80	1.20	1.07	1.60
³ / ₄	19.05		0.71		0.95		1.19		1.42		1.90
	19	0.479	0.75	0.64	0.95	0.80	1.20	0.96	1.45	1.28	1.90
1	25.40		0.95		1.27		1.58		1.90		2.53
	25	0.638	1.00	0.85	1.30	1.07	1.60	1.28	1.90	1.70	2.55
1 ¹ / ₄	31.75		1.19		1.58		1.98		2.37		3.17
	32	0.798	1.30	1.07	1.60	1.33	2.00	1.60	2.40	2.13	3.20
1 ¹ / ₂	38.10		1.42		1.90		2.37		2.85		3.80
	38	0.757	1.50	1.28	1.90	1.60	2.40	1.92	2.85	2.56	3.80
1 ³ / ₄	44.45		1.66		2.21		2.77		3.32		4.43
	45	1.117	1.70	1.49	2.20	1.87	2.80	2.34	3.35	2.98	4.45
2	50.80		1.90		2.53		3.16		3.80		5.06
	50	1.276	2.00	1.70	2.55	2.13	3.20	2.56	3.80	3.40	5.10
2 ¹ / ₄	57.15		2.14		2.85		3.56		4.27		5.70
	57	1.436	2.20	1.92	2.85	2.40	3.60	2.87	4.30	3.83	5.70
2 ¹ / ₂	63.50		2.37		3.17		3.95		4.75		6.33
	63	1.595	2.40	2.13	3.20	2.66	4.00	3.19	4.75	4.26	6.35
3	76.20		2.85		3.80		4.74		5.70		7.60
	76	1.914	2.90	2.56	3.80	3.19	4.75	3.83	5.70	5.10	7.60

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FLAT IRON BARS

Size in inches	Size in mm	Area in sq. inch	Area in sq. cm	Weight in lbs per Rft	Weight in kg per metre
0.75x.125	19.05x3.17	0.094	0.603	0.319	0.470
0.75x.1875	19.05x4.76	0.140	0.906	0.476	0.71
1x.0625	25.4x1.59	0.063	0.404	0.210	0.317
1x.125	25.4x3.17	0.125	0.805	0.423	0.632
1x.1875	25.4x4.76	0.188	1.210	0.639	0.949
1x.25	25.4x6.35	0.250	1.610	0.850	1.264
1x.3125	25.4x7.937	0.313	2.01	1.065	1.580
1x.375	25.4x9.53	0.375	2.42	1.276	1.900
1x.4375	25.4x11.11	0.438	2.82	1.489	2.213
1x0.50	25.4x12.70	0.500	3.22	1.700	2.528
1.25x.0625	31.75x1.59	0.078	0.505	0.265	0.396
1.25x.125	31.75x3.17	0.156	1.006	0.530	0.785
1.25x.1875	31.75x4.76	0.234	1.511	0.796	1.186
1.25x0.25	31.75x6.35	0.313	2.016	1.065	1.582
1.25x.3125	31.75x7.94	0.390	2.52	1.327	1.978
1.25x.375	31.75x9.53	0.469	3.025	1.595	2.374
1.25x.4375	31.75x11.11	0.547	3.527	1.861	2.768
1.25x0.50	31.75x12.70	0.625	4.032	2.126	3.165
1.50x0.0625	38.10x1.59	0.094	0.625	0.319	0.474
1.50x0.125	38.10x3.17	0.188	1.207	0.639	0.947
1.50x.1875	38.10x4.76	0.281	1.183	0.956	1.429
1.50x0.25	38.10x6.35	0.375	2.419	1.276	1.900
1.50x.3125	38.10x7.94	0.469	2.025	1.595	2.374
1.50x.375	38.10x9.53	0.563	3.63	1.915	2.849
1.50x.4375	38.10x11.11	0.656	4.232	2.232	3.322
1.50x0.50	38.10x12.70	0.750	4.838	2.552	3.800
1.75x.0625	44.45x1.59	0.109	0.706	0.370	0.550
1.75x.125	44.45x3.17	0.219	1.409	0.745	1.106
1.75x.1875	44.45x4.76	0.328	2.115	1.116	1.660
1.75x0.25	44.45x6.35	0.438	2.822	1.49	2.215
1.75x.3125	44.45x7.94	0.547	3.529	1.862	2.770
1.75x.375	44.45x9.53	0.656	4.236	2.232	3.325
1.75x.4375	44.45x11.1	0.766	4.938	2.606	3.876
1.75x0.50	44.45x12.70	0.875	5.645	2.977	4.431
2x0.0625	50.80x1.59	0.125	0.807	0.425	0.633

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Size in inches	Size in mm	Area in sq. inch	Area in sq. cm	Weight in lbs per Rft	Weight in kg per metre
2x.125	50.80x3.17	0.250	1.61	0.850	1.263
2x.1875	50.80x4.76	0.375	2.418	1.276	1.90
2x0.25	50.80x6.35	0.50	3.225	1.700	2.53
2x.3125	50.80x7.94	0.625	4.033	2.126	3.166
2x.375	50.80x9.53	0.750	4.841	2.552	3.800
2x.4375	50.80x11.17	0.875	5.674	2.977	4.454
2x0.50	50.80x12.70	1.00	6.451	3.400	5.064

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**REQUIREMENT OF STORES FOR VARIOUS
ITEM OF WORKS**

1. **Concrete.**

Per cum

Mix	Cement in Kg	Sand in Cum	Aggregate in Cum
1:1.5:3	388.47	0.412	0.825
1:2:4	302.70	0.425	0.850
1:3:6	197.76	0.420	0.840
1:4:8	148.32	0.420	0.840
1:6:12	100.65	0.427	0.885

2. **Lime concrete.**

Per cum

Mix	Lime unslaked in Kg	Surki in Cum	Brick aggregate in Cum
1:2.5:5	172.97	0.450	0.900

3. **Building block (1:3:6) & set in CM (1:6).**

Per cum

Type	Cement in Kg	Sand in Cum	Aggregate in Cum
Solid block	211.89	0.420	0.840
Hollow block (3-14 to 3-17)	158.92	0.340	0.600

4. **Pudlo 5% in concrete.**

Mix	Pudlo in Kg
1:2:4 (3-58)	15.01
1:1.5:3 (3-59)	19.42

5. **PB-4 for 1.25 cm wide expn joint.**

Per sqm.

Fire wood 9.04 kg,

PB-4 = 17.70 Kg

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6. **Road works.**

Per Sqm

Description	Bricks	Aggregate in Cum	Sand in Cum
Bottoming brick flat 7.50 cm thick	31 Nos	-	0.015
Bottoming brick on edge 12.50 cm thick	52 Nos	-	0.025
Bottoming brick on end 25cm thick	103 Nos	-	0.050
Bottoming boulders 10 cm thick	-	0.100	0.030
Bottoming boulders 15 cm thick	-	0.152	0.046
Water bound macadam carpet 7.50cm thick	38 Nos	0.012 Cum screeding	-
Water bound macadam carpet 10 cm thick	50 Nos	0.012 Cum screeding	-
Water bound macadam carpet 15 cm thick	73 Nos	0.012 Cum screeding	-
Water bound macadam carpet using stone aggregate 7.50 cm thick	-	0.094 Cum stone 50 mm graded screeding 0.012 Cum	-
Water bound macadam carpet using stone aggregate 10 cm thick	-	0.128 Cum stone 50 mm graded screeding 0.012 Cum	-
Water bound macadam carpet using stone aggregate 15 cm thick	-	0.192 Cum stone 50 mm graded screeding 0.012 Cum	-
	-	-	-
<u>Per cum</u>			
Providing Compacted aggregate & sand sub base course	380 Nos	-	-

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Premix bituminous carpet road

Per sq.m

Description	Bitumen in Kg	Sand in Cum		Bricks in Nos.	Shingle/crushed stone in Cum	Fire wood in Kg
		Syl	Local			
Premix carpet 25 mm thick on bituminous surface	2.05+.49= 2.540	-	-	-	0.023	08
Premix carpet 38mm thick on bituminous surface	3.075+0.488 =3.563	-	-	-	0.045	12
Premix carpet 50 mm thick on bituminous surface	4.10+0.488= 4.588	-	-	-	0.061	16
Premix carpet 25 mm thick on non-bituminous surface	2.05+0.976= 3.026	-	-	-	0.030	08
Premix carpet 38 mm thick on non-bituminous surface	3.075+0.976 =4.051	-	-	-	0.045	12
Premix carpet 50mm thick on non-bituminous surface	4.10+0.976= 5.076	-	-	-	0.061	16
Semi-grouting with brick aggregate 75 mm thick	4.20+1.00= 5.200	-	-	39 Nos	-	08
Semi-grouting with stone aggregate-do-	4.20+1.00= 5.200	-	-	-	0.096	08
Seal coat on freshly laid premix capreting using Sylhet and local sand	0.60	0.01	0.01	-	-	0.51
Premix bituminous seal coat without tack coat	1.20	-	0.01	-	0.015	0.51
Pot holes repair n. exc. 1.00 Sqm	3.026	-	-	-	0.030	0.08
Tack coat for seal coat if laid on old bituminous surface (2-25)	0.488	-	-	-	-	-
Tack coat for seal coat if laid on non-bituminous surface (2-26)	0.732	-	-	-	-	-

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Ser	Mix	Cement	Brick agg. in Cum	Crushed stone	Gravel in Cum	Local sand in Cum	Sylhet sand in Cum
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Concrete road landing ground etc.

2-30	1:3:6	29.66	-	0.126	-	0.032	0.032
	1:2:4	45.03	-	0.13	-	0.0324	0.0324
2-31	1:3:6	29.66	-	-	0.126	0.032	0.032
	1:2:4	45.03	-	-	0.13	0.0324	0.0324
2-32	1:3:6	29.66	0.126	-	-	0.032	0.032
	1:2:4	45.03	0.13	-	-	0.0324	0.0324
2-33	1:3:6	39.55	-	0.168	-	0.0420	0.0420
	1:2:4	60.04	-	0.170	-	0.043	0.043
2-34	1:3:6	39.55	-	-	0.168	0.0420	0.0420
	1:2:4	60.04	-	-	0.170	0.043	0.043
2-35	1:3:6	39.55	0.168	-	-	0.0420	0.0420
	1:2:4	60.04	0.170	-	-	0.043	0.043

		Bitumen	Sand	fire wood
2-38	Expn joint	2.18 Kg	0.02 cum	09 kg
2-39	Bitumen painting on seal coat	0.70 Kg	0.012 cum	-

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Per Cubic metre

Description	Mix	Bricks in Nos	Cement in Kg	Sand in Cum
For brick works built straight or to curve with 6m radius & above	1:3	406	130.48	0.277
	1:4	406	97.11	0.275
	1:6	406	65.33	0.277
For brick works built with less than 6metre radius	1:3	406	146.55	0.311
	1:4	406	109.12	0.309
	1:6	406	72.92	0.309
Cut and rubbed bricks in arches etc.	1:3	406	130.48	0.277
	1:4	406	97.65	0.275
	1:4	320	35.32	0.09
Honey-comb brick work	1:6	320	26.49	0.093
Ceramic brick facing work: per square metre for 100 mm wide (Pavement)	1:4	46	9.85	0.014

Description	Mix	Bricks in Nos	Cement in Kg	Sand in Cum
Ceramic brick facing work: per square metre for 50 mm wide	1:3	46	13.24	0.028
	1:3	92	6.62	0.014
	1:4	92	4.90	0.013
8. Pointing to brick struck flush or recessed				
Per sq.m	1:3	-	0.90	0.002
	1:4	-	0.70	0.002
9. Brick work with ceramic brick				
Per	1:3	406	130.48	0.277
	1:4	406	97.11	0.275
10. DPC 1:3 19mm thick	1:3	-	9.68	-

11. **38 mm PCC with one coat bitumen on roof per SqM**

Ser	Mix	Cement in Kg	Bitumen in Kg	Sand in Cum	Brick aggregate Cum
4-47 to 4-50	1:1.5:3	14.80	0.24	0.02	0.03

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12. **Floors & wall tiling**

Per Square metre

Description	Brick in Nos	Sand in CuM	Cement in Kg
Brick flat soling jointed with sand	31	0.015	-
-Ditto-laid & jointed in cm (1:4)	31	0.015	2.42
-Ditto-in (1:6)	31	0.015	2.15
Brick soling laid on edge and jointed with sand	52	0.021	-
-Ditto-laid & jointed in CM (1:4)	52	0.021	3.23
-Ditto-in (1:6)	52	0.021	2.96
Neat cement finishing in floors	-	-	2.69

Description	Bitumen in Kg	Sand in Cum	Shingle in Cum	Fire wood in Kg
19mm thick bitumen premix carpet under floor	2.11+0.73=2.84	0.012	0.012	8.00

Description	Mix	Cement in Kg	Bricks agg. in Cum	Sand in Cum
150 mm thick per Sqm	1:6:12	15.34	0.130	0.065
	1:4:8	22.60	0.128	0.064
	1:3:6	30.14	0.128	0.059
	1:2:4	45.75	0.129	0.060
100mm thick	1:6:12	10.22	0.087	0.043
	1:4:8	15.07	0.085	0.043
	1:3:6	20.07	0.085	0.043
	1:2:4	30.51	0.085	0.043
75mm thick	1:6:12	7.67	0.065	0.033
	1:4:8	11.30	0.064	0.032
	1:3:6	15.07	0.064	0.032
	1:2:4	22.87	0.065	0.032
50mm thick	1:2:4	15.83	0.022	0.044
38mm thick	1:3:6	7.53	0.032	0.016
	1:2:4	11.44	0.032	0.016
29 mm thick	1:3:6	5.65	0.024	0.012
	1:2:4	8.56	0.024	0.012
25mm thick	1:3:6	5.00	0.021	0.011
	1:2:4	7.62	0.021	0.011

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Stonolithic finish to floors

Description	Shingle/Gravels	Cement in Kg	Sand in Cum
Stonolithic layer 12 mm thick (1:1.5)	0.011	10.33	-
Stonolithic layer 12mm thick for stair rise & tread.	0.011	10.33	-
Stonolithic 12mm thick in dados skirting etc.(1:1.5)	0.011	10.33	0.0085
		+4.04	
		14.37	

Description	Grey cement in Kg	White cement in Kg	Coloured black chips in Kg	White chips in Kg	Oxalic acid in Kg
Silver grey mosaic 6mm thick for (sch. item 11-15)	4.05	4.05	1.16	6.94	0.024
-do- in dados/skirting (sch. item 11-15)	4.04	4.05	1.16	6.94	0.024
	4.05				
	8.09				
-do- but using grey cement only in floor (sch itme 11-16)	8.10	-	1.16	6.94	0.024
-do- for dados/skirting (sch item 11-16)	8.10	-	1.16	6.94	0.024
	4.04				
	12.14				
-do-but using white cement in floor (Sch item 11-17)	-	8.10	1.16	6.94	0.024
-do-for dados/skirting (Sch item 11-17)	4.04	8.10	1.16	6.94	0.024
Silver grey mosaic in floor (Sch item 11-18)	4.05	4.05	2.025	6.075	0.024
-do-in dados.skirting (Sch item 11-18)	4.05	4.05	2.025	6.075	0.024
	4.04				
	8.09				
-do- but using grey cement only in floor (Sch item 11-19)	8.10	-	2.025	6.075	0.024
-do- in dados/skirting (Sch item 11-19)	8.10	-	2.025	6.075	0.024
	4.04				
	12.14				
Silver grey situ mosaic using white cement only in floor (Sch item 11-20)	-	8.10	2.205	6.075	0.024
-do- but in dados/skirting (Sch item 11-20)	4.04	8.10	2.025	6.075	0.024

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Description	Grey cement in Kg	White cement in Kg	Coloured black chips in Kg	White chips in Kg	Oxalic acid in Kg
Silver grey mosaic 9mm thick for (Sch item 11-21)	5.50	5.50	1.58	9.42	0.024
-do-in dados & skirting (Sch item 11-21)	4.04 5.50 9.54	5.50	1.58	9.42	0.024
-do-but using grey cement only in floor (Sch item 11-22)	11.00	-	1.58	9.42	0.024
-do-in dados/skirting (Sch item 11-22)	11.00 4.04 15.04	-	1.58	9.42	0.024
-do- but using white cement only in floor (Sch item 11-23)	-	11.00	1.58	9.42	0.024
-do-in dados/skirting (Sch item 11-23)	4.04	11.00	1.58	9.42	0.024
Silver gray mosaic 9mm thick for (Sch item 11-24)	5.50	5.50	2.75	8.25	0.024
-do- in dados & skirting (Sch item 11-24)	4.04 5.50 9.54	5.50	2.75	8.25	0.024
Silver grey situ mosaic using grey cement only in floor (Sch item 11-25)	11.00	-	2.75	8.25	0.024
-do-in dados/skirting (Sch item 11-25)	11.00 4.04 15.04	-	2.75	8.25	0.024
-do-but using white cement only in floor (Sch item 11-26)	-	11.00	2.75	8.25	0.024
-do-in dados/skirting (Sch item 11-26)	4.04	11.00	2.75	8.25	0.024
Base of all kinds of 19mm thick mosaic tiles	9.23	-	-	-	-
Brick Bonded concrete floor (1:2:4) Sch Item 11-50	8.83	Bricks 21 Nos	Sand 0.012 Cum	Khoa 0.024 CUM	-

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Description	Grey cement in Kg	White cement in Kg	Sand Cum
Requirement of stores for Floor tiles/Sqm 19mm thick CM (1:4)	9.36	.022	.025
Requirement of stores for Wall tiles / Sqm 6 mm thick CM (1:2)	9.37	.022	.012

13. **Pointing flush to brick floors**

Per Sqm

Description	Mix	Cement in Kg	Sand in Cum
laid edge normal bricks	1:3	0.91	0.0019
Flat soling -do-	1:3	0.64	0.001

Pointing flush incl laying & jointing in CM

Description	Mix	Cement in Kg	Sand in Cum	Bricks
Ceramic solid brick laid flat	1:4	7.53	0.021	46 Nos
-do- but on edge	1:4	11.30	0.032	92 Nos

14. **Plastering**

Per SqM

Description	Mix	If with pudlo 2.5% (in Kg)	Cement in Kg	Sand in Cum
12mm thick	1:3	0.021	8.075	0.017
12mm thick	1:4	0.161	6.46	0.018
12mm thick	1:6	-	4.57	0.019
19mm thick	1:3	0.289	11.57	0.024
19mm thick	1:4	0.228	9.14	0.025
19mm thick	1:6	-	6.45	0.027

Description	Mix	Cement incl slurry in Kg	Sand in Cum
6mm thick plaster on RCC faces	1:4	3.23+0.43=3.66	0.009
6mm thick plaster on top of wall	1:4	3.23	0.009
Neat cement finish to walls where applicable	-	1.35	

15. **Filleting**

Per Metre

Exc 3.75cm n.exc 7.50 cm	1:3	0.771	0.001
-do- but exc 7.50cm & n. exc 15cm	1:3	1.55	0.003

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COMPARISON OF CONDUCTOR SIZE OF DIFFERENT SPECIFICASTIONS

Imperial standard size B.S.S (Old)			Metric standard size		Symbol & Meaning
Construction (Inch)	Normal		B.S.S (New) VDE mm ²	Symbol	Meaning
	Inch ²	mm ²			
1/.044	0.0015	0.97	1.0*	*	Single solid wire
3/.029	0.002	1.29	1.5*		
3/.036	0.003	1.94	1.5*		
7/.029	0.0045	2.90	2.5*		
7/.036	0.007	4.52	4+	+	Single solid wire or 7 wire.
7/.052	0.015	9.34	10+		round standard
7/.064	0.0225	14.42	16+		
19/.044	0.03	19.35	16x	x	7-wire or 19-wire round standard
19/.052	0.04	25.81	25x		
19/.064	0.06	38.71	35**	**	19-wire round of 20-wire sector shaped standard
19/.072	0.075	48.39	50**		
19/.083	0.1	64.52	70**		
37/.072	0.15	96.77	95**		37 wire round
37/.083	0.2	129.00	120		or
37/.093	0.25	161.30	150		39 wire sector
37/.103	0.3	193.50	185		Shaped standard
61/.093	0.4	258.10	240 0	0	61 wire round
61/.103	0.5	322.60	300 0	0	or 39 wire sector shaped standard
91/.093	0.6	387.10	400 0	00	91 wire round
91/.103	0.75	483.90	500		standard
127/.103	1.0	654.20	630		127 wire round standard

PLINTH AREA RATES OF BUILDING
EFFECTIVE FROM 1ST JULY 2010

General

1. On the publication of this New Schedule of Rates, effective from 1st July 2010 rough estimates for work, schemes, projects etc should from now onwards may be prepared on the basis of the following plinth area rates.

a. Normal building built in bricks with five storied foundation having brick flat soling, cement concrete (1:4:8) and brick work (1:4/1:6) including PCC and DPC in foundation and plinth, 250 mm thick brick work in superstructure, door and windows made of best local timber/steel with standard window grills, RCC works (1:2:4) in roof slab, beams, lintels, stair cases, minimum 12mm thick cement plaster (1:6) to both sides of superstructure walls, minimum 12mm thick cement plaster (1:4) in plinth steps and dado, 6mm thick cement plaster 1:4 to ceiling, beams etc. (if directed) white washing, colour washing and necessary earth work in foundation, earth and sand filling in plinth and other petty items as required.

b. **Foundation Upto Plinth Level.**

(1)	1(One) storied building	Tk. 5000.00 per sq.m
(2)	2(Two) storied building	Tk. 5400.00 per sq.m
(3)	3(Three) storied building	Tk. 5900.00 per sq.m
(4)	4(Four) storied building	Tk. 6395.00 per sq.m
(5)	5(Five) storied building	Tk. 7095.00 per sq.m

c. **Superstructure Only Without Foundation.**

(1)	Ground floor	Tk. 8800.00 per sq.m
(2)	First floor	Tk. 9200.00 per sq.m
(3)	Second floor	Tk. 9800.00 per sq.m
(4)	Third floor	Tk. 10350.00 per sq.m
(5)	Fourth floor	Tk. 11100.00 per sq.m

d. **Lime Terracing and Parapet.**

	Add for top floor	Tk. 1440.00 per sq.m
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RESTRICTED

2. RCC (Framed structure) building built in RCC/ Bricks with six storied foundation having brick flat soling / PCC (1:4:8) and RCC (1:2:4) with brick work 1:4 / 1:6 including PCC and DPC in foundation and plinth, 250mm / 125mm thick brick work in superstructure, door and windows made of best local timber / steel with standard window grills. RCC works (1:2:4) in column, roof slab, beams. Lintels, stair case, 12 mm thick cement plaster (1:6) to both side of superstructure walls, 12mm thick cement plaster (1:4) in plinth, steps and dado, 6mm thick cement plaster (1:4) to ceiling beams etc. White washing, colour washing and necessary earth work in foundation, earth and sand filling in plinth and other petty items as required.

a. **Foundation Upto Plinth Level.**

(1)	1 (One) storied building	Tk. 5825.00 per sq.m
(2)	2 (Two) storied building	Tk. 6225.00 per sq.m
(3)	3 (Three) storied building	Tk. 6700.00 per sq.m
(4)	4 (Four) storied building	Tk. 7250.00 per sq.m
(5)	5 (Five) storied building	Tk. 8000.00 per sq.m
(6)	6 (Six) storied building	Tk. 8180.00 per sq.m

b. **Superstructure Only Without Foundation.**

(1)	Ground floor	Tk. 9480.00 per sq.m
(2)	First floor	Tk. 9600.00 per sq.m
(3)	Second floor	Tk. 9800.00 per sq.m
(4)	Third floor	Tk. 10000.00 per sq.m
(5)	Fourth floor	Tk. 10200.00 per sq.m
(6)	Fifth floor	Tk. 11200.00 per sq.m

3. Normal buildings built in bricks with general specifications as noted in item No. 1 together with special specification:

a. For mosaic/tiles work in all rooms Add @ Tk. 1380.00 (One thousand three hundred eighty) only per square metre for each floor of item No. 1(b).

b. For mosaic/Tiles work in all rooms, door and windows made of Teak wood Chowkats, distemper, snowcem and plastic painting

Add @ Tk. 2950.00 (Two thousand nine hundred fifty) only per sq.m for each floor of item No. 1 (b)

c. For mosaic/Tiles work in all rooms, aluminium door and windows, distemper, snowcem and plastic painting.

Add @ Tk. 3150.00 (Three thousand one hundred fifty) only per square metre for each floor of item No. 1(b).

RESTRICTED

4. Semi-permanent building with CI sheet roofing on best local timber truss, brick flat soling, cement concrete (1:4:8) and brick works (1:4/1:6) (including 19 mm thick DPC) foundation and plinth 125 mm thick brick work in superstructure with 250 mm x 250 mm intermediate pillar at 2.4 m to 3 m C/C, doors and windows made of best local timber with standard window grills, RCC work (1:2:4) in lintels, patent stone flooring (1:2:4), minimum 12mm thick cement plaster (1:6) to both sides of superstructure walls and 12mm thick cement plaster (1:4) in plinth, steps and dado, white washing, colour washing and necessary earth work in foundation, earth and sand filling in plinth and other petty items as required:

@ Tk. 7500.00 (Seven thousand five hundred) only per sq.m.

5. For internal electric and water supply including sanitary fitting-fixtures, add 15% (fifteen) percent on the gross calculated amount of the normal building mentioned above.

6. Plinth area rate for Permanent R.C.C framed structure high rise building (15 storied) incl internal svcs .

a.	Residential Building (Rate per sq.m).		Rate
(1)	Foundation up to plinth incl pile fdn.	Tk.	36,700/00
(2)	Ground floor (Open) incl floor.	Tk.	12,618/00
(3)	1st floor	Tk.	17,195/00
(4)	2nd floor	Tk.	17,296/00
(5)	3rd floor	Tk.	17,397/00
(6)	4th floor	Tk.	17,498/00
(7)	5th floor	Tk.	17,600/00
(8)	6th floor	Tk.	17,732/00
(9)	7th floor	Tk.	17,864/00
(10)	8th floor	Tk.	17,996/00
(11)	9th floor	Tk.	18,150/00
(12)	10th floor	Tk.	18,305/00
(13)	11th floor	Tk.	18,460/00
(14)	12th floor	Tk.	18,615/00
(15)	13th floor	Tk.	18,770/00
(16)	14th floor (Top floor)	Tk.	22,500/00