



**GOVERNMENT OF INDIA**  
**CENTRAL PUBLIC WORKS DEPARTMENT**



**DELHI SCHEDULE OF RATES**

**2007**

**PUBLISHED BY**  
**DIRECTOR GENERAL (WORKS) CPWD, NIRMAN BHAWAN, NEW DELHI-110011**



GOVERNMENT OF INDIA

CENTRAL PUBLIC WORKS DEPARTMENT

# DELHI SCHEDULE OF RATES

## 2007



Published under the Authority of Director General of Works, CPWD, New Delhi

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## FOREWORD

Delhi Schedule of Rates, being published by C.P.W.D. from time to time, is a very comprehensive document and useful in execution of works. Apart from C.P.W.D., this Schedule of Rates is being used as a guide by a number of departments, public sector undertakings, private sector builders and architects etc.

The Central Public Works Department Schedule of Rates was first compiled in the year 1931, followed by a number of revisions from time to time in order to bring it in line with the prevailing technology and market rates. In the last thirty years, the Delhi Schedule of Rate has been revised seven times in the years 1977, 1981, 1985, 1989, 1993, 1997 & 2002.

The last Delhi Schedule of Rates was printed in 2002. The prices of labour and materials have registered substantial increase since then. Besides the cost, there has been spurt of new construction materials and introduction of mechanized construction techniques for speedier construction. This has necessitated revision of existing DSR 2002 to include the above changes. Accordingly, this Delhi Schedule of Rates, 2007 has been prepared incorporating element of machinery and prefabricated building components, wherever applicable.

Although this DSR contains most of the items of DSR 2002, the nomenclature of many items has been improved by making it more generic by deleting the brand names and making it more comprehensive by providing reference to various BIS standards and locations in regard to their applicability. Items which are either obsolete or are not in use have been deleted. Number of items have been clubbed to facilitate convenience in taking measurements. **Several new items, based on new materials and new technologies in the construction sector, being adopted in CPWD works, have also been included in this document.**

I wish to place on record the technical input and the effective coordination on the part of Shri D.S.Sachdev, ADG(TD) and the efforts put in by Shri Suresh Kumar, CE(CSQ) and his team of officers in TAS unit in finalising the DSR in a record time.

I am sure that this Schedule of Rates will be quite useful to all concerned in the Building industry in general and CPWD in particular.

New Delhi  
December, 2007



**(A. CHAKRABARTI)**  
**DIRECTOR GENERAL (WORKS)**

## PREFACE

- 1.0 Delhi Schedule of Rates, 2007 is the revised edition of Delhi Schedule of Rates, 2002.
- 2.0 This Delhi Schedule of Rates, 2007 incorporates most of the items of DSR 2002 with all Correction Slips up-to date and will replace DSR 2002. The nomenclature of many items has been improved by making it more generic and comprehensive. Items of DSR 2002, which have become obsolete over a period of time or are not in use have been deleted. Some items have been clubbed to facilitate quick measurements. Many new items using new materials and latest technology have also been added.
- 3.0 Efforts have been made to introduce items pertaining to execution of different works by using various electrical and mechanical equipments i.e. excavators, tower cranes, mobile cranes, mechanical platforms, Batch Mix plant, transit mixers and pumps, piling rigs, pneumatic cutters, chisels, chippers, hammers etc. Built-in provision has been taken in the analysis of rates for new construction technology/ mechanisation.
- 4.0 Items of dry work using prefabricated materials and pre-finished elements are included for speedier construction viz gypsum block walls, calcium silicate and non- asbestos cement board partitions, pre-finished counter tops for kitchen and washbasins, pre-moulded and pre-finished stone work in risers and treads of steps and window sills, dry stone cladding, sub-frames for windows, use of chemical and mechanical fasteners, laying of tiles in flooring and dado with polymer based adhesives etc.
- 5.0 Brand names of materials have been deleted from nomenclature of items to make them generic in nature.
- 6.0 This Schedule of Rates is based on the study of current market rates of materials at Delhi, collected during the period of April, 2007 to October, 2007 and labour rates are the current minimum wages issued by the Government of Delhi w.e.f. 01-09-2007..
- 7.0 DARs 1997 are under revision. Till the publication of revised DARs, existing DARs -1997 shall be followed after correlating with relevant items. The sundries should be considered as 2.60 times based on C.I. of Delhi as 260 as on 1.10.2007 over DPAR 1-01-1992 as 100.
- 8.0 The following are the salient features of DSR 2007 :
  - 8.1 DSR 2007 is a bilingual document (Hindi version will follow).
  - 8.2 Basic rates of relevant/related materials are provided sub-head wise at the start of each sub-head for the first time for convenience of the users.
  - 8.3 All the sub-heads of building work, road work, services, horticulture and cement & bitumen consumption coefficients of various items, have been compiled in this volume.
  - 8.4 This Schedule will be read along with CPWD Specifications, 1996 Vol. I to VI with up-to date correction Slip nos. 1 to 19 & Revised CPWD Specifications 2002 for Mortar, Cement Concrete & RCC till these are amended/ modified.
  - 8.5 For the new items introduced in this DSR, new Code Nos., have been assigned as indicated in the list of basic materials.

- 8.6 Generally, the basic rates of materials, incorporated in the schedule, are pertaining to materials conforming to BIS Standards/CPWD Specifications/Materials of best quality available in the market.
- 8.7 Lump sum provision of labour/ T& P is replaced with mechanisation inputs. Prominent items incorporating mechanization are earth-work in excavation, RMC / BMC, brick work in superstructure above floor V level, road work, dismantling of R.C.C. work, dismantling of C.C. and flexible pavements, pile work etc.
- 9.0 Sub- head wise salient features are as follows:
- 9.1 **Carriage of Materials:** Items have been properly serial numbered.
- 9.2 **Earth Work:** Items of Earth work in excavation in soils, ordinary rocks and hard rocks by manual means have been modified to manual or mechanical means and component of mechanization is included with corresponding reduction in labour component.
- 9.3 **Mortars:** Items with lime mortar which are not in use now a days have been deleted.
- 9.4 **Concrete Work:** Items of lime concrete which are not in use now a days are deleted. Number of uses of steel and wooden shuttering reduced from 80 and 16 times to 40 and 8 times respectively, so that proper quality of shuttering is put to use.
- 9.5 **Reinforced Cement Concrete:** Minimum mix of RCC is kept as M-25 instead of M-20 concrete. It is as per CPWD Specifications, 2002 and IS: 456: 2000 for durability of structures. New item of form work with 12 mm thick pre- laminated ply has been included. Use of fly ash conforming to Grade I of IS: 3812 ( Pt. 1 ) : 2003 has been allowed in Batch Mix Concrete and Ready Mixed Concrete as part replacement of OPC. Fly-ash should be uniformly blended with cement in accordance of Clause 5.2 & 5.2.1 of IS-456. Number of uses of steel and wooden shuttering reduced from 80 and 16 times to 40 and 8 times respectively, so that proper quality of shuttering is put to use.
- 9.6 **Brick Work:** Items pertaining to brick work with lime mortar and cement mortar with fine sand deleted, since these items are not in use now a days. Items of auto-claved aerated cement block masonry, mechanized auto-claved fly-ash lime bricks & gypsum panel partitions included.
- 9.7 **Stone Work:** New items of stone work for providing and fixing dry cladding at all heights with 40 mm thick gang saw cut sand stone etc. and structural steel frame work for stone cladding ( to be paid in kg.) has been added. Items of stone masonry in cement mortar with fine sand and with lime mortar are deleted.
- 9.8 **Marble Work:** Measurement for area of marble/granite stone flooring modified to two groups of up to 0.50 sqm & over 0.50 sqm. Items of pre-moulded and pre-polished flooring in treads/risers of staircase, kitchen/ washbasin counters and window sills have been provided.
- 9.9 **Wood Work:** Wood work in doors & windows for frames / shutters in deodar wood deleted as deodar wood is not easily available. However, use of other species of wood available in market has been allowed. Relevant IS codes for items of LVL door shutters & frames, Flush door shutters, veneer boards etc, wherever not mentioned in the items earlier, have been added now. Ordinary glass panes substituted with float glass which is to be specified by thickness and not by weight. Items of bamboo jaffery fencing, magnetic catcher in cup board, mortice lock, telescopic drawer channel included. FRP flush & panelled doors & frames and FRP chajjas included.

- 9.10 **Steel Work:** Steel glazed doors & windows fixed, side hung, top hung, centre hung, composite units including mullion bar and steel beadings are clubbed together and to be paid in Kg in one item instead of earlier being measured in sqm. Nomenclature modified to specify “Flash welding & Factory made” Steel glazed doors & windows in item.
- 9.11 **Flooring:** Items pertaining to extra for brick flooring in specified pattern, 25mm & 50mm thick C.C. flooring, flooring & skirting in red oxide, & other items not in frequent use deleted. New item of laying tiles in flooring and dado with polymer based adhesives included.
- 9.12 **Roofing :** Non- asbestos cement sheet provided in place of asbestos cement sheet roofing. Items of corrugated G.S. sheet roofing -1.60mm thick & 1.25mm thick deleted as these are not readily available. 20 mm thick wooden planks ceiling, 18mm insulating board, 18 mm flame retardant board on roofs deleted as boards of these thicknesses are not readily available. Lime concrete terracing deleted.
- 9.13 **Finishing:** Flush/ ruled/ struck/ weathered pointing in brick work, tile work and stone work clubbed. New item of 12 mm thick gypsum plaster on brick /RCC surfaces added. Items of plaster with lime deleted. Providing and mixing water proofing material is to be paid in Kg per bag of cement instead of sqm.
- 9.14 **Repair to Building:** Making opening in brick masonry for doors, windows and clerestory windows to be paid in sqm instead of being paid in numbers. Fixing chowkhats in brick / RCC opening with mechanical/ chemical fasteners included. Double scaffolding for repairs to building included. Items of wooden cleats, safeda posts & hollock ballies deleted. Pointing with lime putty on brick/tile work deleted. Coal tarring on old work, floor painting with enamel paint, rubber plug for sink/ wash basin etc deleted. Ordinary glass panes changed to float glass and thickness to be measured in mm. instead of weight.
- 9.15 **Dismantling and Demolishing :** New item of dismantling and demolishing by pneumatic hammers, chisels, chippers etc. included.
- 9.16 **Road Work:** Fencing with M.S.barbed wire on sal ballies, concrete rail & pale and RCC sign/ name boards deleted. Items of preparation and consolidation of sub grade clubbed together. Supplying R.C.C. posts /struts /rails /pales at site are clubbed together and to be paid in cubic meter instead of numbers. Mix modified to 1: 1.5:3 instead of 1:2:4. New items of Concertina coil fencing & Chain link fencing, Dense Bituminous Macadam, Bituminous Macadam, Dense Bituminous Concrete with CRMB & PMB are added. Various signages viz Caution / regulatory retro- reflective boards & over head signage boards, Road marking (retro- reflective ) are also included. Kerb channel, post delineators. Factory made RCC pavement slabs, CC interlocking paver blocks & kerb stones, vacuum de-watered CC pavement, scarifying BM by mechanical means etc have also been included.
- 9.17 **Sanitary Installations:** Items of long pan W.C., C..P. brass trap & union, G.I. chain with G.I. pull are not in use now a days and hence deleted. Relevant IS 1729 has been mentioned with fittings of sand cast iron pipes. Fittings of Centrifugally cast Iron pipes have been modified as ‘ Sand cast iron S&S as per IS: 3989’ from existing ‘ Centrifugally cast ( Spun) iron S&S’, as fittings are not manufactured by centrifugal process.
- 9.18 **Water Supply:** PE-AL-PE fittings have been clubbed with main item of PE-AL-PE pipe. New items of PP-R pipes and CPVC pipes included. Item of close hole basin mixer pillar tap has been deleted.

- 9.19 **Drainage:** Item of Stone ware pipes grade A with mixture of cement mortar 1:3 for storm water drains deleted. P traps of size 125x100 & 180x100 deleted. Manholes of size 90x80 & 60cm deep deleted as items of 45 cm depth & extra for depth beyond 45 cm are available. Circular Manholes 0.91 m dia, 1.6 m deep deleted as items of 0.91m depth & extra for depth are available. Similarly, circular manholes 1.22 m dia, 2.29 m deep and circular manholes 1.52 m dia, 4.18 m deep deleted. Brick masonry open surface drain deleted. Brick masonry work, plaster & excavation etc. shall be measured as per actual. Item of Grease trap deleted as not executed now a days.
- 9.20 **Pile Work :** Mechanical equipments such as hydraulic piling rig, crane, bentonite pump, vibrating pile driving hammer etc. have been introduced in place of lump sum provisions. The labour coefficients have been reduced due to the provisions made for mechanical equipments. Piles up to 1500 mm dia. have been incorporated.
- 9.21 **Aluminium Work :** Powder coated & Polyester powder coated aluminium sections and ‘Z’ sections included. Ordinary glass panes substituted with ‘float glass panes’. MS adjustable hangers substituted with GI adjustable hangers for false ceiling. Extra for providing anodic coating AC 25 instead of AC 15 on aluminium sections included. Items of weather silicon sealant, double glazed hermetically sealed glazing added. Stainless steel adjustable friction window stays for easy cleaning of glass on both sides from the room also included. Aluminium sub –frame for windows & ventilators included. New items of Tubular handle bar with anodizing, powder coating & polyester powder coating, Brass lock for aluminium doors, aluminium casement window fasteners for windows, aluminium round shape handles etc. included.
- 9.22 **Water Proofing :** Use of red sand stone, lime concrete in grading roof for water proofing treatment, composite roof insulation & water proofing is not in common use, hence deleted.
- 9.23 **Horticulture & Landscaping :** Rates of the items updated.
10. **A lot of effort has gone into the preparation of this Schedule of Rates. I convey my deep appreciation and sincere thanks to Shri Suresh Kumar CE CSQ, Shri Mayank Tilak S.E. (TAS), Sh. S.C Malik EE (S&S), Sh. S.K.Jain EE (S&S), Sh. A.V.R. Bhat EE (S&S), Sh. S.K.Sarkar AE, Sh. V.P.Singh AE, Sh.S.S.Pal AE and other officers and staff of TAS Unit for sincere efforts made in the preparation of this document in such a short time. Thanks are also due to all field officers who have contributed actively in finalising this DSR.**
11. Due care has been taken to print the Schedule of Rates as correctly as possible. It is, however, possible that some errors might have crept in. In case any error or omission is noticed, it may be brought to the notice of the **Superintending Engineer (TAS), CPWD, Room no. 418, ‘A’, Nirman Bhawan, New Delhi.**
12. In case of any discrepancy between English and Hindi versions, the English version shall be held valid.

Suggestions for improvement are welcome.



**(D.S.SACHDEV)**  
**ADG (TD), CPWD,**  
**Nirman Bhawan, New Delhi**



**BASIC APPROACH FOR PREPARATION OF  
DELHI SCHEDULE OF RATES, 2007**

1. DSR 2007 has been prepared on the basis of coefficients of labour, materials, sundries, hire charges etc. adopted in DAR 1997 and market rates of materials at Delhi collected during the period of April 2007 to October 2007. Labour rates are current minimum wage rates issued by the Government of National Capital Territory of Delhi w.e.f. 01-09-2007.
2. DARs 1997 are under revision. Till the issue of revised DARs, existing DARs – 1997 may be followed after correlating with relevant items.
3. Sundries have been considered as 2.60 times based on Cost Index of Delhi as 260 as on 1.10.2007 over DPAR 01-01-1992 as 100.
4. Contractor's profit and Overheads @ 15% has been adopted as approved by the DGW vide Office Memorandum no. DG (W) MAN/150 dated 14/12/2007.
5. This schedule will be read along with CPWD specifications, 1996 Vol-1 to VI with up-to-date correction slips, 1 to 19 and revised CPWD Specifications 2002 for Mortar, Cement concrete and RCC till these are amended/ modified.

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# **BASIC RATES**

**BASIC RATES**  
**0.1 HIRE CHARGES OF PLANTS**

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
0001	Hire charges of Coaltar Boiler 900 to 1400 litres	Day	595.00
0002	Hire charges of Concrete Mixer 0.14 cubic metre	Day	400.00
0003	Hire charges of Diesel Road Roller - 8 to 10 tonne	Day	1,000.00
0004	Production cost of concrete by batch mix plant.	cum	200.00
0005	Hire charges of Diesel Truck - 9 tonne	Day	1,008.00
0006	Hire charges of Spraying machine including electric charges	Day	173.00
0007	Hire charges of Coaltar Sprayer	Day	250.00
0008	Hire charges of Barber green, drying, mixing and Asphalt Plant, with accessories, capacity 30/45 tonne	Day	7,050.00
0009	Pumping charges of concrete including Hire charges of pump, piping work & accessories etc.	cum	80.00
0010	Hire charges of Derrick monkey rope	Day	500.00
0011	Hire charges of Pump set of capacity 4000 litres/hour.	Day	300.00
0012	Vibrator (Needle type 40mm)	Day	200.00
0013	Machine for rubbing of floors	Day	200.00
0014	Front end loader	Day	6,000.00
0016	Mastic Cooker	Day	515.00
0017	Hire and running charges of tipper	Day	1,030.00
0018	Hire and running charges of loader.	Day	800.00
0019	Hand Grinder For mirror polish	Day	100.00
0020	Hydraulic Excavator (3D) with driver and fuel.	Day	6,000.00
0021	Pin vibrator	Day	288.00
0022	Surface Vibrator	Day	330.00
0024	Hire and running charges of hydraulic piling rig with power unit etc. including complete accessories and shifting at site.	per day	28,000.00
0025	Hire and running charges of light crane.	per day	2,000.00
0026	Hire and running charges of bentonite pump.	per day	4,000.00
0027	Hire and running charges of vibrating pile driving hammer complete with power unit and accessories.	per day	28,000.00
0028	Hire and running charges of crane 20 tonne capacity.	per day	8,000.00
0029	Carriage of concrete by transit mixer.	km/ cum	18.00
0030	Generator 250 KVA.	per day	1,600.00
0033	Paint applicator.	per day	680.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
0037	Mobile crane.	per day	5,000.00
0038	Tractor with ripper attachment.	per day	1,000.00
0039	Tractor with trolley.	per day	1,000.00
0040	Air compressor 250 cfm with two leads for pneumatic cutters/ hammers.	day	1,600.00
0041	Joint cutting machine with 2-3 blades	per day	800.00
0042	C.C .batch mix plant.	day	88,000.00
0043	Road sweeper	day	480.00
0045	Slip form paver with sensor.	day	12,000.00
0046	Water tanker.	day	800.00
0047	Concrete joint cutting machine.	day	800.00
0048	Texturing machine.	day	800.00

Note :- Above hire - charges include cost of services of operating staff and supply of lubricating oil.

## BASIC RATES

### 0.2 LABOUR

Note :- These rates are exclusive of contractor's profit and over heads and are inclusive of wages for weekly day of rest

Code No	Description	Unit	Rate Rs.
0100	Bandhani	Day	138.45
0101	Bhisti	Day	138.45
0102	Blacksmith 1st class	Day	151.50
0103	Blacksmith 2nd class	Day	141.60
0111	Carpenter 1st class	Day	151.50
0112	Carpenter 2nd class	Day	141.60
0113	Chowkidar	Day	135.25
0114	Beldar	Day	135.25
0115	Coolie	Day	135.25
0116	Fitter (grade 1)	Day	151.50
0117	Assistant Fitter or 2nd class Fitter	Day	141.60
0119	Glazier	Day	141.60
0122	Mason (for plaster of paris work) 1st class	Day	151.50
0123	Mason (brick layer) 1st class	Day	151.50
0124	Mason (brick layer) 2nd class	Day	141.60
0125	Mason (for plain stone work) 2nd class)	Day	141.60
0126	Mason (for ornamental stone work) 1st class	Day	151.50
0127	Driver (for Road Roller, Concrete Mixer, Truck etc.)	Day	151.50
0128	Mate	Day	138.45
0130	Mistry	Day	151.50
0131	Painter	Day	141.60
0132	Rock Excavator	Day	135.25
0133	Rock Breaker	Day	135.25
0134	Rock Hole Driller	Day	135.25
0135	Stone Chiseller	Day	138.45
0138	Sprayer (for bitumen, tar etc.)	Day	138.45
0139	Skilled Beldar (for floor rubbing etc.)	Day	138.45
0141	White Washer	Day	138.45
0155*	Mason (average)	Day	146.55

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
0156*	Carpenter (average)	Day	146.55
0157	Operator (Pile/ Special machine)	Day	166.00
0159	Skilled torch operator for laying tack	Day	151.50

Note :- \* These rates are average of 1<sup>st</sup> class and 2<sup>nd</sup> class categories. This is for use in the analysis of rate only.

## BASIC RATES

### 0.3 MATERIALS

Note :- These rates are exclusive of contractor's profit, over heads and carriage but include octroi, royalty, sales tax (VAT) etc.

Code No	Description	Unit	Rate Rs.
0222	Seam bolts and nuts 6 mm dia and 25 mm long	10 Nos	30.00
0223	Non - Asbestos fibre cement corrugated sheet 6mm thick.	sqm	205.00
0224	Non - Asbestos fibre cement close fitting adjustable ridge.	metre	203.00
0225	Non - Asbestos fibre cement corrugate serrated adjustable ridge.	metre	174.00
0226	Non - Asbestos fibre cement plain wing adjustable ridge.	metre	188.00
0227	Non - Asbestos fibre cement unserrated adjustable ridge for hips.	metre	195.00
0228	Non - Asbestos fibre cement corrugated apron piece.	metre	126.00
0229	Non - Asbestos fibre cement eaves filler piece.	each	93.00
0230	Non - Asbestos fibre cement north light curves.	metre	197.00
0231	Non - Asbestos fibre cement ventilator curves.	each	267.00
0232	Non - Asbestos fibre cement barge boards 6 mm thick.	metre	232.00
0233	Non - Asbestos fibre cement ridge finial .	pair	84.00
0234	Non - Asbestos fibre cement special north light curves.	each	275.00
0235	Non - Asbestos fibre cement S type louvers.	each	161.00
0236	Non - Asbestos multi purpose fibre cement board 6mm thick.	sqm	180.00
0237	Non - Asbestos multi purpose fibre cement board 8mm thick.	sqm	239.00
0285	Brick Aggregate (Single size) : 63 mm nominal size	cum	350.00
0286	Brick Aggregate (Single size) : 50 mm nominal size	cum	355.00
0287	Brick Aggregate (Single size) : 40 mm nominal size	cum	360.00
0291	Stone Aggregate (Single size) : 63 mm nominal size	cum	600.00
0292	Stone Aggregate (Single size) : 50 mm nominal size	cum	625.00
0293	Stone Aggregate (Single size) : 40 mm nominal size	cum	650.00
0294	Stone Aggregate (Single size) : 25 mm nominal size	cum	675.00
0295	Stone Aggregate (Single size) : 20 mm nominal size	cum	700.00
0296	Stone Aggregate (Single size) : 12.5 mm nominal size	cum	700.00
0297	Stone Aggregate (Single size) : 10 mm nominal size	cum	700.00
0298	Stone Aggregate (Single size) : 06 mm nominal size	cum	750.00
0302	Safeda ballies 125 mm diameter	metre	29.00
0304	Bajri	cum	510.00
0305	Bamboo 25 mm dia 2.5 metre long	score	192.00



Code No	Description	Unit	Rate Rs.
0308	Bhusa	quintal	200.00
0309	Paving bitumen S-90 of approved quality	tonne	22,500.00
0310	Bitumen emulsion	tonne	19,500.00
0312	Bitumen grade PMB - 40	M.T.	30,000.00
0313	Blown type petroleum bitumen of penetration 85/25 of approved quality	tonne	25,000.00
0314	Bitumen hot sealing compound : grade A	kilogram	20.00
0316	Bitumen solution primer of approved quality	litre	28.00
0317	Premoulded joint filler 12 mm thick	sqm	300.00
0318	Bitumen felt fibre base (vegetable or animal):Type 2 grade 1	sqm	45.00
0322	Bitumen felt :Type 3 grade 1	sqm	45.00
0324	Coal Tar	litre	16.00
0325	Blasting powder	kilogram	25.00
0326	Blasting fuse (fuse wire)	each	10.00
0328	White face insulating board:12 mm thick	sqm	239.00
0332	Natural colour insulating board:12 mm thick	sqm	175.00
0336	Flame retardant face insulating board: 12 mm thick	sqm	208.00
0339	Flame retardant face insulating, Impregnated fibre board 12 mm thick	sqm	279.00
0341	Flat pressed 3 layer particle board (medium density) Grade I :12 mm thick	sqm	258.00
0346	Extra for veneered particle board with : Teak veneering on one side and commercial veneered on other side	sqm	198.00
0347	Extra for veneered particle board with : Commercial veneering on both sides	sqm	102.00
0348	Extra for veneered particle board with : Teak veneering on both sides	sqm	366.00
0362	Brick bats	cum	253.00
0364	Wire brush	each	15.00
0365	Soft brush	each	12.00
0367	Portland Cement	tonne	4,500.00
0368	White Cement	tonne	9,700.00
0370	Coal (steam)	quintal	300.00
0373	Cramp Gun metal 25x6x300 mm	each	53.00
0378	Brass butt hinges (light/ordinary type) : 125x70x4 mm	10 Nos	450.00
0379	Brass butt hinges (light/ordinary type) : 100x70x4 mm	10 Nos	300.00
0380	Brass butt hinges (light/ordinary type) : 75x40x2.5 mm	10 Nos	160.00
0381	Brass butt hinges (light/ordinary type) : 50x40x2.5 mm	10 Nos	90.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
0382	Brass butt hinges (heavy type) : 125x85x5.5 mm(.70)kg	10 Nos	1,500.00
0383	Brass butt hinges (heavy type) : 100x85x5.5 mm(.56)kg	10 Nos	1,300.00
0384	Brass butt hinges (heavy type) :75x65x4.0 mm(.20)kg	10 Nos	450.00
0385	Brass parliamentary hinges 150x125x27x5 mm	10 Nos	1,650.00
0386	Brass parliamentary hinges 125x125x27x5 mm	10 Nos	1,450.00
0387	Brass parliamentary hinges 100x125x27x5 mm	10 Nos	1,175.00
0388	Brass parliamentary hinges75x100x20x3.2 mm	10 Nos	888.00
0389	Brass single acting spring hinges 150 mm	each	200.00
0390	Brass single acting spring hinges 125 mm	each	158.00
0391	Brass single acting spring hinges 100 mm	each	106.00
0392	Brass double acting spring hinges 150 mm	each	317.00
0393	Brass double acting spring hinges 125 mm	each	216.00
0394	Brass double acting spring hinges 100 mm	each	173.00
0400	Brass tower bolt (barrel type) 250x10 mm	each	123.00
0401	Brass tower bolt (barrel type) 200x10 mm	each	100.00
0402	Brass tower bolt (barrel type) 150x10 mm	each	75.00
0403	Brass tower bolt (barrel type) 100x10 mm	each	51.00
0404	Brass flush bolt 250 mm	each	84.00
0405	Brass flush bolt 150 mm	each	65.00
0406	Brass flush bolt 100 mm	each	44.00
0408	Brass handles 125 mm with plate 175x32 mm	each	85.00
0409	Brass handles 100 mm with plate 150x32 mm	each	75.00
0410	Brass handles75 mm with plate 125x32 mm	each	55.00
0411	Brass door latch 300x16x5 mm (0.380 kg)	each	85.00
0412	Brass door latch 250x16x5 mm (0.350 kg)	each	82.00
0413	Brass mortice latch and lock 100x65 mm with6 levers and a pair of brass lever handles	each	257.00
0414	Brass mortice latch 100x65mm with a pair of brass lever handles	each	235.00
0417	Brass 150 mm floor door stopper (0.357kg)	each	104.00
0418	Brass hard drawn hooks and eyes 300 mm	10 Nos	457.00
0419	Brass hard drawn hooks and eyes 250 mm	10 Nos	423.00
0420	Brass hard drawn hooks and eyes 200 mm	10 Nos	390.00
0421	Brass hard drawn hooks and eyes 150 mm	10 Nos	364.00
0422	Brass hard drawn hooks and eyes 100 mm	10 Nos	300.00
0423	Brass casement window fastener	Each	26.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
0424	Brass casement stays (straight peg type ) 300 mm weighing not less than 0.33 kg	each	66.00
0425	Brass casement stays (straight peg type ) 250 mm weighing not less than 0.28 kg	Each	55.00
0426	Brass casement stays (straight peg type ) 200 mm weighing not less than 0.24 kg	each	46.00
0427	Brass quadrant stays 300 mm	each	73.00
0428	Brass fanlight catch	10 Nos	109.00
0429	Brass fanlight pivot	10 Nos	128.00
0430	Brass chain with hook for fan light catch	each	13.00
0431	Brass hasps and staples (safety type) 300 mm	10 Nos	458.00
0432	Brass hasps and staples (safety type) 115 mm	10 Nos	378.00
0433	Brass hasps and staples (safety type)90 mm	10 Nos	300.00
0438	Brass Night latch	each	338.00
0442	Brass helical spring 150 mm	each	185.00
0444	Brass curtain rod 20 mm dia 1.25 mm thick	metre	63.00
0445	Brass curtain rod 25 mm dia 1.25 mm thick	metre	79.00
0446	Brass brackets (curtain rods) 20 mm	each	24.00
0447	Brass cupboard knob or ward robe knob 50 mm	each	18.00
0449	Brass screws 50 mm	100 Nos	107.00
0450	Brass screws 40 mm	100 Nos	96.00
0451	Brass screws 30 mm	100 Nos	86.00
0452	Brass screws 25 mm	100 Nos	76.00
0453	Brass screws 20 mm	100 Nos	53.00
0524	Chromium plated Brass butt hinges (heavy) type 75x65x4 .0 mm (200gms)	10 Nos	430.00
0525	Chromium plated Brass butt hinges (light/ordinary) type 125x70x4 mm	10 Nos	433.00
0526	Chromium plated Brass butt hinges (light/ordinary) type 100x70x4 mm	10 Nos	385.00
0527	Chromium plated Brass butt hinges (light/ordinary) type 75x40x2.5 mm	10 Nos	135.00
0528	Chromium plated Brass butt hinges (light/ordinary) type 50x40x2.5 mm	10 Nos	105.00
0555	Chromium plated Brass handles 125 mm with plate 175 x32 mm	Each	92.00
0556	Chromium plated Brass handles 100 mm with plate 150 x 32 mm	Each	79.00
0557	Chromium plated Brass handles 75mm with plate 125x32 mm	Each	68.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
0558	Chromium plated Brass mortice latch and lock 100x65 mm with 6 levers and a pair of brass lever handles	each	323.00
0568	Chromium plated brass casement window fastener	each	55.00
0569	Chromium plated Brass casement stays (straight peg type ) 300 mm weighing not less than 0.33 kg	each	73.00
0570	Chromium plated Brass casement stays (straight peg type ) 250 mm weighing not less than 0.28 kg	each	67.00
0571	Chromium plated Brass casement stays (straight peg type ) 200 mm weighing not less than 0.24 kg	each	56.00
0583	Chromium plated Brass Night latch	each	383.00
0584	Chromium plated Brass Wardrobe Knob 50 mm	each	25.00
0585	Chromium plated Brass screws 50 mm	100 Nos	123.00
0586	Chromium plated Brass screws 40 mm	100 Nos	150.00
0587	Chromium plated Brass screws 30 mm	100 Nos	90.00
0588	Chromium plated Brass screws 25 mm	100 Nos	83.00
0589	Chromium plated Brass screws 20 mm	100 Nos	63.00
0590	Chromium plated Brass curtain rod 12 mm dia 1.25mm thick	metre	122.00
0591	Chromium plated Brass curtain rod 20 mm dia 1.25mm thick	metre	143.00
0592	Chromium plated Brass curtain rod 25 mm dia 1.25mm thick	metre	239.00
0594	Bright finished or black enameled mild steel butt hinges 125x65x2.12 mm	10 Nos	78.00
0595	Bright finished or black enameled mild steel butt hinges 100x58x1.90 mm	10 Nos	54.00
0596	Bright finished or black enameled mild steel butt hinges 75x47x1.70 mm	10 Nos	34.00
0597	Bright finished or black enameled mild steel butt hinges 50x37x1.50 mm	10 Nos	28.00
0608	Nickel plated mild steel piano hinges 1 mm thick 35 mm wide	metre	21.00
0635	Bright finished or black enameled mild steel screws 50 mm	100 Nos	40.00
0637	Bright finished or black enameled mild steel screws 40 mm	100 Nos	30.00
0638	Bright finished or black enameled mild steel screws 30 mm	100 Nos	24.00
0639	Bright finished or black enameled mild steel screws 25 mm	100 Nos	15.00
0640	Bright finished or black enameled mild steel screws 20 mm	100 Nos	15.00
0641	Bright finished or black enameled mild steel bolts and nuts 50x6 mm	each	4.00
0642	Oxidised mild steel butt hinges 125x65x2.12 mm	10 Nos	92.00
0643	Oxidised mild steel butt hinges 100x58x1.90 mm	10 Nos	53.00
0644	Oxidised mild steel butt hinges 75x47x1.70 mm	10 Nos	32.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
0645	Oxidised mild steel butt hinges 50x37x1.50 mm	10 Nos	27.00
0646	Oxidised mild steel parliamentary hinges 150x125x27x2.8 mm	10 Nos	255.00
0647	Oxidised mild steel parliamentary hinges 125x125x27x2.8 mm	10 Nos	205.00
0648	Oxidised mild steel parliamentary hinges 100x125x27x2.8 mm	10 Nos	165.00
0649	Oxidised mild steel parliamentary hinges 75x100x20x2.24 mm	10 Nos	122.00
0650	Oxidised mild steel single acting spring hinges 150 mm	each	71.00
0651	Oxidised mild steel single acting spring hinges 125 mm	each	66.00
0652	Oxidised mild steel single acting spring hinges 100 mm	each	51.00
0653	Oxidised mild steel double acting spring hinges 150 mm	each	73.00
0654	Oxidised mild steel double acting spring hinges 125 mm	each	63.00
0655	Oxidised mild steel double acting spring hinges 100 mm	each	47.00
0656	Nickel plated mild steel piano hinges 1 mm thick 35 mm wide	metre	24.00
0660	Oxidised mild steel sliding door bolt 300x16 mm	each	45.00
0661	Oxidised mild steel sliding door bolt 250x16 mm	each	37.00
0662	Oxidised mild steel door latch 300x20x6 mm	each	25.00
0663	Oxidised mild steel door latch 250x20x6 mm	each	25.00
0664	Oxidised mild steel tower bolt (barrel type) 250x10 mm	each	25.00
0665	Oxidised mild steel tower bolt (barrel type) 200x10 mm	each	21.00
0666	Oxidised mild steel tower bolt (barrel type) 150x10 mm	each	17.00
0667	Oxidised mild steel tower bolt (barrel type) 100x10 mm	each	12.00
0668	Oxidised mild steel handles 125 mm	each	7.00
0669	Oxidised mild steel handles 100 mm	each	5.00
0670	Oxidised mild steel handles 75 mm	each	3.00
0679	Oxidised mild steel hasps and staples(safety type) 150 mm	10 Nos	79.00
0680	Oxidised mild steel hasps and staples(safety type) 115 mm	10 Nos	70.00
0681	Oxidised mild steel hasps and staples(safety type) 90 mm	10 Nos	52.00
0682	Oxidised mild steel screws 50 mm	100 Nos	40.00
0683	Oxidised mild steel screws 40 mm	100 Nos	35.00
0684	Oxidised mild steel screws 30 mm	100 Nos	24.00
0685	Oxidised mild steel screws 25 mm	100 Nos	16.00
0686	Oxidised mild steel screws 20 mm	100 Nos	15.00
0687	Anodised Aluminium butt hinges 125x75x4 mm	10 Nos	478.00
0688	Anodised Aluminium butt hinges 125x63x4 mm	10 Nos	447.00
0689	Anodised Aluminium butt hinges 100x75x4 mm	10 Nos	416.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
0690	Anodised Aluminium butt hinges 100x63x3.2 mm	10 Nos	390.00
0691	Anodised Aluminium butt hinges 100x63x4 mm	10 Nos	354.00
0692	Anodised Aluminium butt hinges 75x63x4 mm	10 Nos	281.00
0693	Anodised Aluminium butt hinges 75x63x3.2 mm	10 Nos	215.00
0694	Anodised Aluminium butt hinges 75x45x3.2 mm	10 Nos	98.00
0696	Anodised Aluminium sliding door bolt 300x16 mm	each	125.00
0697	Anodised Aluminium sliding door bolt 250x16 mm	each	104.00
0698	Anodised Aluminium tower bolt (barrel type)300x10 mm	10 Nos	520.00
0699	Anodised Aluminium tower bolt (barrel type)250x10 mm	10 Nos	440.00
0700	Anodised Aluminium tower bolt (barrel type)200x10 mm	10 Nos	354.00
0701	Anodised Aluminium tower bolt (barrel type)150x10 mm	10 Nos	281.00
0702	Anodised Aluminium tower bolt (barrel type)100x10 mm	10 Nos	208.00
0703	Anodised Aluminium handles 125 mm with plate 175 x 32 mm	10 Nos	375.00
0704	Anodised Aluminium handles 100 mm with plate 150 x 32 mm	10 Nos	260.00
0705	Anodised Aluminium handles 75mm with plate 125 x 32 mm	10 Nos	208.00
0706	Anodised Aluminium kicking plate 50 cm long100x3.15 mm	each	94.00
0713	Block board construction flush door with teak wood ply on both faces 35 mm thick	sqm	1,100.00
0714	Block board construction flush door with teak wood ply on both faces 30 mm thick	sqm	1,050.00
0715	Block board construction flush door with teak wood ply on both faces 25 mm thick	sqm	1,000.00
0717	Block board construction flush door with commercial ply on both faces 35 mm thick	sqm	632.00
0718	Block board construction flush door with commercial ply on both faces 30 mm thick	sqm	610.00
0719	Block board construction flush door with commercial ply on both faces 25 mm thick	sqm	600.00
0752	Block board construction flush door lipping	sqm of door area	245.00
0753	Square vision panel in Block board construction flush door	sqm of door area	86.00
0754	Circular vision panel in Block board construction flush door	Sqm of door area	118.00
0755	Decorative type Louvers in Block board construction flush door	sqm of door area	210.00
0757	Rebate cutting in Block board construction flush door	sqm of door area	57.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
0759	Decorative plywood 4 mm	sqm	250.00
0761	Fuel wood	quintal	265.00
0763	Glue	kilogram	50.00
0765	Hessian cloth	sqm	10.00
0768	Cement Concrete Jali 50 mm thick	sqm	145.00
0769	Cement Concrete Jali 40 mm thick	sqm	115.00
0770	Cement Concrete Jali 25 mm thick	sqm	92.00
0771	Kerosene oil	litre	19.00
0773	Unslaked lime	quintal	260.00
0775	Dehradun white lime	quintal	295.00
0776	Satna lime	quintal	178.00
0777	Dry hydrated lime (factory made)	quintal	177.00
0784	Marble dust/ powder	cum	800.00
0785	Marble chips up to 4mm and downsize White & black	quintal	115.00
0788	Marble chips large size above 4 mm White & black	quintal	115.00
0810	Moorum	cum	310.00
0811	Mud (dry)	cum	20.00
0815	Dry distemper	kilogram	26.00
0816	Oil bound washable distemper/ Acrylic distemper	kilogram	40.00
0818	Linseed oil (double boiled)	litre	80.00
0820	Cement primer	litre	70.00
0821	Distemper primer	litre	73.00
0823	Pink primer (for wood)	litre	72.00
0826	Aluminium paint	litre	89.00
0827	Acid proof paint (chocolate or black)	litre	93.00
0828	Anticorrosive bituminous paint (black)	litre	52.00
0829	Black Japan	litre	65.00
0830	Enamel paint	litre	115.00
0831	Floor enamel paint in all shades except green	litre	100.00
0833	Synthetic enamel paint in black or chocolate shade	litre	115.00
0834	Synthetic enamel paint in all shades except black or chocolate shade	litre	120.00
0835	Plastic emulsion paint	litre	140.00
0845	Roofing paint for iron sheets in red colour	litre	95.00
0850	White lead	kilogram	60.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
0851	Water proofing cement paint	kilogram	36.00
0855	Wax polish (ready made)	kilogram	150.00
0856	Ordinary varnish	litre	49.00
0857	Superior copal varnish	litre	100.00
0858	Superior spar varnish	litre	105.00
0859	Oil type wood preservative	litre	60.00
0863	Putty for wood work	kilogram	24.00
0865	Pig lead	kilogram	58.00
0868	Premixed super white gypsum plaster.	kg	5.20
0869	Plaster of Paris	kilogram	2.50
0870	Plug	each	6.00
0873	Copper pins 6 mm dia 7.5 cm long	each	7.50
0874	Black colour dark shade pigment	kilogram	42.00
0875	Red, chocolate, orange, buff or yellow (red oxide of iron) light shade pigment	kilogram	65.00
0876	Green or blue medium shade pigment	kilogram	45.00
0886	Standard holder bat clamps for sand cast iron or cast iron pipes 150 mm dia	each	20.00
0966	Sand Cast iron plain shoe 150 mm dia	each	222.00
0967	Copper plate	kilogram	195.00
0969	Pulley 25 mm dia	each	18.00
0973	Rolling shutter made of 80x1.25 mm machine rolled laths	sqm	767.00
0974	Top cover for rolling shutters	metre	400.00
0975	27.5 cm long wire spring grade no 2 for rolling shutters	each	170.00
0976	Ball bearing for rolling shutters	each	280.00
0977	Extra for mechanical devices chain and cranked operation for operating rolling shutters : exceeding 10.00 sq.m and up to 16.80 sq.m area of door	sqm	400.00
0978	Extra for mechanical devices chain and cranked operation for operating rolling shutters : exceeding 16.80 sq.m area of door	sqm	450.00
0979	Royalty for good earth	cum	11.00
0980	Royalty for sludge	cum	60.00
0982	Coarse sand (zone III)	cum	600.00
0983	Fine sand (zone IV)	cum	320.00
0992	Galvanised steel plain sheets	quintal	3,450.00
0994	Standard quality hard board sheet 3 mm thick	sqm	103.00



<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
0996	Standard quality hard board sheet 4.5 mm thick	sqm	120.00
0999	Shellac	kilogram	192.00
1000	Spirit	litre	37.00
1001	Spun yarn	kilogram	30.00
1002	Mild steel round bar 12 mm dia and below	quintal	3,100.00
1003	Mild steel round bar above 12 mm dia	quintal	3,050.00
1004	Average rate of Mild steel round bars for reinforcements	quintal	3,075.00
1005	Twisted steel / deformed bars	quintal	3,175.00
1006	Mild steel square bars	quintal	3,175.00
1007	Structural steel such as tees, angles channels and R.S. joists	quintal	3,100.00
1008	Flats up to 10 mm in thickness	quintal	2,900.00
1009	Flats exceeding 10 mm in thickness	quintal	2,875.00
1010	Mild steel plates	quintal	3,400.00
1013	Mild steel sheets for tanks	quintal	3,475.00
1015	Mild steel expanded metal 20x60 mm strands	sqm	200.00
1019	Mild steel hooks	each	22.00
1020	Mild steel rivets	quintal	3,500.00
1021	Hard drawn steel wire fabric	sqm	310.00
1022	Galvanised steel bolts & nuts 6 mm dia and 25 mm long round head with slots	10 Nos	9.00
1023	Galvanised steel J or L hooks 8 mm dia	10 Nos	58.00
1024	Galvanised steel bolts & nuts 10 mm dia and 125 mm long round head with slots	each	7.00
1025	Mild stel bolts 6 mm dia and 25 mm long with hexagonal head	10 Nos	18.00
1028	Straining bolts	each	50.00
1029	Galvanised steel barbed wire	quintal	4,400.00
1030	Galvanised steel turn buckles	each	9.00
1031	Galvanised steel bolts & nuts 10 mm dia and 27 cm long both sides threaded with 4 galvanised steel nuts	each	13.00
1032	Galvanised steel bolts 10 mm dia and 7 cm long with nuts	each	9.00
1034	Bolts and nuts up to 300 mm in length	quintal	4,300.00
1035	Bolts and nuts above 300 mm in length	quintal	4,300.00
1036	Iron pintels including welded pin	each	28.00
1143	Steel beading	metre	15.00
1145	Aluminium Plain Strip edging 38x12x3 mm	metre	78.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
1149	Glass strip 4 mm thick 40 mm deep	metre	6.00
1151	Boundary stone top chisel dressed 15x15x90 cm	each	46.00
1154	Through and bond stone	100 Nos	970.00
1157	Stone for masonry work	cum	332.00
1158	Stone for pitching 15 cm x 22.5 cm	cum	332.00
1159	Stone dust	cum	700.00
1160	Red sand stone block	10 cudm	45.00
1161	White sand stone block	10 cudm	50.00
1163	White sand stone slab 75 mm thick (un-dressed)	sqm	256.00
1164	Red sand stone slab 40 mm thick (un-dressed)	sqm	120.00
1165	White sand stone slab 40 mm thick (un-dressed)	sqm	140.00
1166	Red sand stone slab 30 mm thick (un-dressed)	sqm	97.00
1168	Kota stone slab 20 mm to 25 mm thick (semi-polished)	sqm	239.00
1169	Kota stone slab 25mm thick (rough chiseled)	Sq.m.	150.00
1174	Red sand stone slab 45 mm and 50 mm thick (un-dressed)	sqm	145.00
1175	White sand stone slab 45 mm and 50 mm thick (un-dressed)	sqm	160.00
1177	Stone grit 6 mm and down size or pea sized gravel	cum	717.00
1179	Crushed stone 2.36 mm to 12.5 mm size	cum	675.00
1186	Superior class teak wood such as Dandeli, Balarshah or Malabar in planks	10 cudm	895.00
1187	First class teak wood in scantling	10 cudm	492.00
1188	First class teak wood in planks	10 cudm	506.00
1189	Second class teak wood in scantling	10 cudm	394.00
1190	Second class teak wood in planks	10 cudm	410.00
1194	Second class deodar wood in planks	10 cudm	335.00
1196	First class kail wood in planks	10 cudm	186.00
1197	Second class kail wood in scantling	10 cudm	160.00
1198	Second class kail wood in planks	10 cudm	178.00
1199	Sal wood in scantling	10 cudm	218.00
1201	Precast terrazzo tiles 22 mm thick (light shade)	sqm	198.00
1202	Precast terrazzo tiles 22 mm thick (medium shade)	sqm	175.00
1203	Precast terrazzo tiles 22 mm thick (dark shade)	sqm	170.00
1207	G.I. Limpet washer	100 Nos	20.00
1208	Bitumen washer	100 Nos	18.00
1209	G.I. plain washer thick	100 Nos	27.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
1210	G.I. plain washer thin	100 Nos	20.00
1211	G.I. plain washer for seam bolts	100 Nos	21.00
1213	Water proofing materials	kilogram	20.00
1214	Welding by gas plant	cm	1.00
1215	Welding by electric plant	cm	1.00
1216	Whiting	quintal	329.00
1219	Wire nails	kilogram	40.00
1220	Wire mesh (rabbit)	sqm	38.00
1221	20 mm dia holding down bolts	quintal	3,800.00
1222	Mild steel sheets with bolts and nuts to rest on pintels	each	75.00
1224	Hard drawn steel wire	quintal	3,100.00
1225	Mild steel flat strap fitting	quintal	2,900.00
1227	Chequered terrazzo tiles 22 mm thick(light shade)	sqm	230.00
1228	Chequered terrazzo tiles 22 mm thick(medium shade)	sqm	200.00
1229	Chequered terrazzo tiles 22 mm thick (dark shade)	sqm	170.00
1231	Extra for selected planks of second class teakwood	10 cudm	72.00
1234	Aluminium Plain Strip edging 57x12x3 mm	metre	105.00
1235	Diesel oil	litre	30.25
1237	Cutting marble or sand stone slab up to 50 mm thick by mechanical device	metre	6.00
1238	Extra for selected planks of first class teakwood	10 cudm	80.00
1241	Commercial LPG in cylinder.	kg	35.00
1301	Bleaching powder	quintal	1,550.00
1304	Surface box for stop cock	each	72.00
1305	Surface box for sluice valve	each	140.00
1307	Surface box for water meter	each	185.00
1309	C.I. bracket for wash basin and sinks	pair	48.00
1314	C.P.brass chain with 32 mm dia rubber plug	each	21.00
1315	C.P.brass chain with 40 mm dia rubber plug	each	22.00
1330	Clamps and M.S. stays including bolts and nuts for 100 mm pipe	each	28.00
1331	M.S.Holder bat clamp of approved design for 100 mm S.C.I. pipe	each	13.00
1332	M.S.Holder bat clamp of approved design for 75 mm S.C.I. pipe	each	11.00
1334	Clamps and M.S. stays including bolts and nuts for 50 mm pipe	each	20.00
1335	Clamps and M.S. stays including bolts and nuts for 75 mm pipe	each	25.00
1336	Clearing eye with chain and lid 100 mm dia	each	37.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
1337	Clearing eye with chain and lid 150 mm dia	each	41.00
1339	Brass bib-cock 15 mm dia	each	157.00
1340	Brass bib-cock 20 mm dia	each	193.00
1342	Brass stop-cock 15 mm dia	each	157.00
1343	Brass stop-cock 20 mm dia	each	193.00
1350	Mosquito proof coupling of approved design	each	23.00
1352	C.I. cover and frame 300x300 mm inside	each	265.00
1353	C.I.cover without frame 300x300mm inside i/c cover of 4.50 kg	each	170.00
1354	Rectangular cover 455x610 mm with frame (low duty)	each	1,395.00
1355	Rectangular cover 455x610mm without frame (low duty)	each	844.00
1356	500 mm dia cover with frame (medium duty)	each	4,257.00
1357	500 mm dia cover without frame (medium duty)	each	2,129.00
1360	C.I.mouth, brass ferrule 15 mm dia	each	80.00
1361	C.I.mouth, brass ferrule 20 mm dia	each	114.00
1362	C.I.mouth, brass ferrule 25 mm dia	each	156.00
1363	Vitreous china foot rests 250x130x30 mm	pair	79.00
1364	C.I. grating 100x100 mm	each	10.00
1366	C.I. grating 150x150 mm	each	19.00
1367	C.I. grating 180x180 mm	each	23.00
1369	S.C.I. gully or nahani grating 100 mm dia	each	10.00
1373	Rubber insertions for 80 mm dia pipe joints	each	9.00
1374	Rubber insertions for 100 mm dia pipe joints	each	12.00
1375	Rubber insertions for 125 mm dia pipe joints	each	13.00
1376	Rubber insertions for 150 mm dia pipe joints	each	15.00
1377	Rubber insertions for 200 mm dia pipe joints	each	20.00
1378	Rubber insertions for 250 mm dia pipe joints	each	30.00
1379	Rubber insertions for 300 mm dia pipe joints	each	38.00
1380	Rubber insertions for 350 mm dia pipe joints	each	45.00
1381	Rubber insertions for 400 mm dia pipe joints	each	66.00
1382	Rubber insertions for 450 mm dia pipe joints	each	83.00
1383	Rubber insertions for 500 mm dia pipe joints	each	106.00
1384	Rubber insertions for 600 mm dia pipe joints	each	118.00
1392	Mirror of superior make glass 60x45 cm	each	249.00
1396	Vitreous china pedestal for wash basin	each	527.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
1397	Pig lead	kilogram	58.00
1464	S & S.C.I. standard specials up to 300 mm dia (heavy class)	quintal	2,400.00
1466	S & S.C.I. standard specials over 300 mm dia (heavy class)	quintal	2,595.00
1468	Flanged C.I. standard specials up to 300 mm dia (heavy class)	quintal	4,320.00
1470	Flanged C.I. standard specials over 300 mm dia (heavy class)	quintal	4,772.00
1472	Casing pipe 100 mm dia	metre	292.00
1532	Flush pipe with union spreaders and clamps all in C.P. brass for single stall	each	204.00
1533	Flush pipe with union spreaders and clamps all in C.P. brass for double stall	each	333.00
1534	Flush pipe with union spreaders and clamps all in C.P. brass for range of three stall	each	415.00
1535	Flush pipe with union spreaders and clamps all in C.P. brass for range of four stall	each	465.00
1540	Flush pipe and spreaders G.I. for single set of one squatting plate urinal	each	138.00
1541	Flush pipe and spreaders G.I. for range of two squatting plates urinal	each	203.00
1542	Flush pipe and spreaders G.I. for range of three squatting plates urinal	each	255.00
1543	Flush pipe and spreaders G.I. for range of four squatting plates urinal	each	320.00
1545	G.I. pipes 15 mm dia	metre	58.00
1546	G.I. pipes 20 mm dia	metre	77.00
1547	G.I. pipes 25 mm dia	metre	109.00
1548	G.I. pipes 32 mm dia	metre	140.00
1549	G.I. pipes 40 mm dia	metre	160.00
1550	G.I. pipes 50 mm dia	metre	211.00
1551	G.I. pipes 65 mm dia	metre	269.00
1552	G.I. pipes 80 mm dia	metre	355.00
1555	G.I. back (jam) nuts 25 mm dia	each	5.00
1559	G.I. back (jam) nuts 65 mm dia	each	15.00
1608	G.I. tees (equal) 25 mm	each	38.00
1612	G.I. tees (equal) 65 mm	each	215.00
1614	G.I. inlet connection	each	50.00
1616	S.C.I. soil, waste and vent single socketed pipe 1.80 metres long: 75 mm dia	each	537.00
1617	S.C.I. soil, waste and vent single socketed pipe 1.80 metres long: 100 mm dia	each	610.00
1618	S.C.I. soil, waste and vent single socketed pipe 1.80 metres long:	each	1,205.00

Code No	Description	Unit	Rate Rs.
	150mm dia		
1620	S.C.I. plain bend 75mm dia	each	140.00
1621	S.C.I. plain bend 100mm dia	each	178.00
1622	S.C.I. plain bend 150mm dia	each	407.00
1624	S.C.I. bend with access door 75mm dia	each	161.00
1625	S.C.I. bend with access door 100mm dia	each	194.00
1627	S.C.I. plain single equal junctions 75x75x75 mm dia	each	205.00
1628	S.C.I. plain single equal junctions 100x100x100 mm dia	each	265.00
1630	S.C.I. single equal junctions 75x75x75 mm dia with access door.	each	224.00
1631	S.C.I. single equal junctions 100x100x100 mm dia with access door.	each	297.00
1633	S.C.I. plain double equal junctions 75x75x75x75 mm dia	each	296.00
1634	S.C.I. plain double equal junctions 100x100x100x100 mm dia	each	394.00
1636	S.C.I. double equal junctions 75x75x75x75 mm dia with access door.	each	333.00
1637	S.C.I. double equal junctions 100x100x100x100 mm dia with access door.	each	417.00
1639	Slotted cowl (terminal guard ) 75 mm dia	each	109.00
1640	Slotted cowl (terminal guard ) 100 mm dia	each	152.00
1641	G.I. Union 15 mm nominal bore	each	32.00
1642	G.I. Union 20 mm nominal bore	each	50.00
1643	G.I. Union 25 mm nominal bore	each	59.00
1644	G.I. Union 32 mm nominal bore	each	73.00
1645	G.I. Union 40 mm nominal bore	each	108.00
1646	G.I. Union 50 mm nominal bore	each	158.00
1647	G.I. Union 65 mm nominal bore	each	324.00
1648	G.I. Union 80mm nominal bore	each	392.00
1649	Polyethylene water storage tank with cover and suitable locking arrangement	per litre	4.00
1653	Sand cast iron S&S plain single unequal junctions : 100x100x75 mm dia	each	288.00
1656	Sand cast iron S&S single unequal junctions: 100x100x75 mm dia with access door.	each	321.00
1659	Sand cast iron S&S plain double unequal junctions : 100x100x75x75 mm dia	each	423.00
1662	Sand cast iron S&S double unequal junctions: 100x100x75x75 mm dia with access door.	each	453.00
1666	Sand cast iron heel rest bend 75mm dia	each	165.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
1667	Sand cast iron heel rest bend 100mm dia	each	197.00
1669	S.C.I. single equal invert branch of required degree 75x75x75 mm dia	each	239.00
1670	S.C.I. single equal invert branch of required degree 100x100x100 mm dia	each	321.00
1672	S.C.I. double equal invert branch of required degree 75x75x75x75 mm dia	each	314.00
1673	S.C.I. double equal invert branch of required degree 100x100x100x100 mm dia	each	422.00
1674	S.C.I. single unequal invert branch of required degree 100x100x75 mm dia	each	382.00
1677	S.C.I. double unequal invert branch of required degree 100x100x75x75 mm dia	each	458.00
1682	S.C.I. door pieces 75 mm dia	each	211.00
1683	S.C.I. door pieces 100 mm dia	each	291.00
1685	S.C.I. collar 75 mm dia	each	82.00
1686	S.C.I. collar 100 mm dia	each	110.00
1687	Unplasticised P.V.C. connection pipe with brass union 30 cm long 15 mm bore	each	18.00
1688	Unplasticised P.V.C. connection pipe with brass union 30 cm long 20 mm bore	each	25.00
1689	Unplasticised P.V.C. connection pipe with brass union 45 cm long 15 mm bore	each	25.00
1690	Unplasticised P.V.C. connection pipe with brass union 45 cm long 20 mm bore	each	35.00
1693	S.C.I. hand pump	each	450.00
1700	R.C.C. pipes NP2 class 100 mm dia	metre	118.00
1701	R.C.C. pipes NP2 class 150 mm dia	metre	135.00
1702	R.C.C. pipes NP2 class 250 mm dia	metre	157.00
1703	R.C.C. pipes NP2 class 300 mm dia	metre	228.00
1704	R.C.C. pipes NP2 class 450 mm dia	metre	333.00
1705	R.C.C. pipes NP2 class 500 mm dia	metre	398.00
1706	R.C.C. pipes NP2 class 600 mm dia	metre	642.00
1707	R.C.C. pipes NP2 class 700 mm dia	metre	719.00
1709	R.C.C. pipes NP2 class 800 mm dia	metre	836.00
1710	R.C.C. pipes NP2 class 900 mm dia	metre	986.00
1711	R.C.C. pipes NP2 class 1000 mm dia	metre	1,243.00
1712	R.C.C. pipes NP2 class 1100 mm dia	metre	1,500.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
1713	R.C.C. pipes NP2 class 1200 mm dia	metre	1,543.00
1714	R.C.C. collarsNP2 class 100 mm dia	each	16.00
1715	R.C.C. collarsNP2 class 150 mm dia	each	21.00
1716	R.C.C. collarsNP2 class 250 mm dia	each	34.00
1717	R.C.C. collarsNP2 class 300 mm dia	each	42.00
1718	R.C.C. collarsNP2 class 450 mm dia	each	63.00
1719	R.C.C. collarsNP2 class 500 mm dia	each	73.00
1720	R.C.C. collarsNP2 class 600 mm dia	each	92.00
1721	R.C.C. collarsNP2 class 700 mm dia	each	102.00
1723	R.C.C. collarsNP2 class 800 mm dia	each	146.00
1724	R.C.C. collarsNP2 class 900 mm dia	each	178.00
1725	R.C.C. collarsNP2 class 1000 mm dia	each	210.00
1726	R.C.C. collarsNP2 class 1100 mm dia	each	241.00
1727	R.C.C. collarsNP2 class 1200 mm dia	each	280.00
1854	Stoneware pipes grade A (60 cm long) 100 mm dia	each	30.00
1855	Stoneware pipes grade A (60 cm long) 150 mm dia	each	42.00
1856	Stoneware pipes grade A (60 cm long) 200 mm dia	each	80.00
1857	Stoneware pipes grade A (60 cm long) 230 mm dia	each	85.00
1858	Stoneware pipes grade A (60 cm long) 250 mm dia	each	113.00
1859	Stoneware pipes grade A (60 cm long) 300 mm dia	each	165.00
1863	Fire clay kitchen sink: 600x450x250 mm	each	1,192.00
1871	White vitreous china laboratory sink450x300x150 mm	each	664.00
1872	White vitreous china laboratory sink600x450x200 mm	each	1,400.00
1875	White plastic seat (solid)with lid C.P.brass hinges and rubber buffers	each	275.00
1876	Black plastic seat (solid) with lid C.P.brass hinges and rubber buffers	each	250.00
1878	Shower rose C.P.brass for 15 to 20 mm inlet 100 mm dia	each	28.00
1879	Shower rose C.P.brass for 15 to 20 mm inlet 150 mm dia	each	40.00
1881	Spun yarn	kilogram	30.00
1882	Strainer brass 40 mm dia 1.5 metre long	each	405.00
1885	15 mm C.P.brass tap	each	103.00
1889	C.P.brass toilet paper holder of standard size	each	70.00
1891	C.I. trap for standard urinal with vent arm with operating and other couplings in C.P.brass: 50 mm dia	each	125.00
1893	C.I. trap for standard urinal with vent arm with operating and other couplings in C.P.brass: 80 mm dia	each	158.00



<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
1895	C.P.brass trap40 mm dia	each	99.00
1896	100 mm S.C.I. trap with vent heel	each	260.00
1897	100 mm S.C.I. trap with 100 mm inlet and 100 mm outlet	each	221.00
1898	100 mm S.C.I. trap with 100 mm inlet and75 mm outlet	each	164.00
1900	S.W. gully trap P type 100x100 mm	each	55.00
1902	S.W. gully trap P type 150x100 mm	each	86.00
1904	S.W. gully trap P type 180x150 mm	each	160.00
1913	Vitreous china lipped front urinal	each	380.00
1915	Vitreous china squatting plate urinal	each	610.00
1922	H.P. or L.P. ball valve with polythene floats: 15 mm dia	each	175.00
1923	H.P. or L.P. ball valve with polythene floats: 20 mm dia	each	260.00
1924	H.P. or L.P. ball valve with polythene floats: 25 mm dia	each	300.00
1927	Brass full way valve with C.I. wheel (screwed end) 25 mm dia	each	235.00
1928	Brass full way valve with C.I. wheel (screwed end) 32 mm dia	each	296.00
1929	Brass full way valve with C.I. wheel (screwed end) 40 mm dia	each	330.00
1930	Brass full way valve with C.I. wheel (screwed end) 50 mm dia	each	483.00
1931	Brass full way valve with C.I. wheel (screwed end) 65 mm dia	each	700.00
1932	Brass full way valve with C.I. wheel (screwed end) 80 mm dia	each	1,160.00
1933	Gunmetal non-return valve-horizontal (screwed end) 25 mm dia	each	238.00
1934	Gunmetal non-return valve-horizontal (screwed end) 32 mm dia	each	305.00
1935	Gunmetal non-return valve-horizontal (screwed end) 40 mm dia	each	410.00
1936	Gunmetal non-return valve-horizontal (screwed end) 50 mm dia	each	618.00
1937	Gunmetal non-return valve-horizontal (screwed end) 65 mm dia	each	1,085.00
1938	Gunmetal non-return valve-horizontal (screwed end) 80 mm dia	each	1,540.00
1940	C.I.sluiice valve (with caps) class I : 100 mm dia	each	1,890.00
1941	C.I.sluiice valve (with caps) class I : 125 mm dia	each	2,365.00
1942	C.I.sluiice valve (with caps) class I : 150 mm dia	each	2,840.00
1943	C.I.sluiice valve (with caps) class I : 200 mm dia	each	5,405.00
1944	C.I.sluiice valve (with caps) class I : 250 mm dia	each	8,050.00
1945	C.I.sluiice valve (with caps) class I : 300 mm dia	each	9,920.00
1947	Vitreous china flat back wash basin 630x450 mm	each	585.00
1949	Vitreous china angle back wash basin 600x480 mm	each	540.00
1950	Vitreous china angle back wash basin 400x400 mm	each	347.00
1951	C.P. brass waste 32 mm	each	48.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
1952	C.P. brass waste 40 mm	each	53.00
1953	Vitreous china Indian type w.c. pan size 580 mm	each	290.00
1954	Vitreous china orrisa type w.c. pan size 580 mm	each	700.00
1955	Vitreous china pedestal type water closet	each	554.00
1956	Bolts and nuts 16 mm dia 60 mm long	each	8.00
1957	Bolts and nuts 16 mm dia 65 mm long	each	8.00
1958	Bolts and nuts 20 mm dia 65 mm long	each	12.00
1959	Bolts and nuts 20 mm dia 70 mm long	each	12.00
1960	Bolts and nuts 20 mm dia 75 mm long	each	12.00
1961	Bolts and nuts 20 mm dia 80 mm long	each	13.00
1962	Bolts and nuts 24 mm dia 85 mm long	each	24.00
1963	Bolts and nuts 24 mm dia 90 mm long	each	26.00
1964	Bolts and nuts 27 mm dia 100 mm long	each	30.00
1965	White vitreous china dual purpose closet (Anglo Indian W.C.) suitable for use as squatting pan or European type water closet as per manufacturer's specifications	each	796.00
1970	Vitreous china foot rests 250x125x25 mm	pair	80.00
1980	Fly ash	cum	6.00
1984	F.P.S. bricks tile class designation 100	1000 Nos	1,950.00
1986	Modular bricks class designation 75	1000 Nos	2,700.00
2391	Strips-Aluminium fluted 3.15mm thick and 150mm wide	metre	216.00
2392	Strips Aluminium fluted 3.15mm thick and 200mm wide	Metre	288.00
2406	Float glass sheet of nominal thickness 4 mm (weight not less than 10kg/sqm).	sqm	248.00
2407	Float glass sheet of nominal thickness 5.5 mm.(weight not less than 13.50 kg/sqm).	sqm	340.00
2412	Ply wood 5 ply with commercial ply on both faces 6 mm thick	sqm	282.00
2447	Hollock ballies 125 mm diameter	metre	27.00
2449	Oxidised mild steel pull bolt lock (locking bolt) of size 85 mm x 42 mm with screws, bolts, nuts and washers complete	each	27.00
2451	Brass cupboard lock 6 levers (best make of approved quality) 40 mm size	each	36.00
2452	Brass cupboard lock 6 levers (best make of approved quality) 50 mm size	each	43.00
2453	Brass cupboard lock 6 levers (best make of approved quality) 65 mm size	each	55.00
2454	Brass cupboard lock 6 levers (best make of approved quality) 75 mm	each	70.00

Code No	Description	Unit	Rate Rs.
	size		
2455	Brass hanging type door stopper 150 mm	each	46.00
2456	Hydraulic door closer bottle type M.S. body with necessary accessories and screws complete	each	506.00
2459	Anodised Aluminium hanging type door stopper	each	14.00
2464	Anodised Aluminium pull bolt lock (locking bolt) of size 85 mmx42 mm with screws, bolts ,nuts and washers complete	each	34.00
2465	Anodised Aluminium Casement stay 250 mm	each	36.00
2466	Hollock wood in scantling	10 cudm	217.00
2467	Chromium plated Brass pull bolt lock (locking bolt) of size 85 mmx42 mm with screws, bolts, nuts and washers complete	each	130.00
2468	Nickeled Chromium Brass cupboard lock 40 mm size	each	38.00
2469	Nickeled Chromium Brass cupboard lock 50 mm size	each	53.00
2470	Nickeled Chromium Brass cupboard lock 65 mm size	each	64.00
2471	Nickeled Chromium Brass cupboard lock 75 mm size	each	75.00
2480	Ply wood 5 ply with teak ply on both faces 9 mm thick	sqm	693.00
2481	Ply wood 5 ply with teak ply on one face and commercial ply on another face 9 mm thick	sqm	550.00
2483	Ply wood 7 ply with teak ply on one face and commercial ply on another face 9 mm thick	sqm	585.00
2500	Extra for selected planks of second class deodar wood	10 cudm	59.00
2504	Kiln seasoning of timber	cum	539.00
2505	Hollock wood in planks	10 cudm	230.00
2602	F.P.S. bricks class designation75	1000 Nos	1,900.00
2603	F.P.S. bricks class designation50	1000 Nos	1,700.00
2704	Aluminium Strip 40 mm wide and 2 mm thick	kilogram	195.00
2710	White marble makrana second quality plain veined stone pieces for crazy flooring	quintal	105.00
2750	8 mm thick granite stone tiles (mirror polished of all shades)	sqm	555.00
2751	8 mm thick marble tiles (polished) Raj Nagar	sqm	294.00
2901	Stone Aggregate (Single size) : 100 mm nominal size	cum	575.00
2902	Stone Aggregate (Single size) : 80 mm nominal size	cum	575.00
2903	Stone chippings/ screenings 4.75 mm nominal size	cum	800.00
2904	Stone chippings/ screenings 150 micron nominal size	cum	800.00
2908	Over burnt (Jhama) Brick Aggregate: 120 mm to 40 mm size	cum	285.00
2909	Over burnt (Jhama) Brick Aggregate: 90 mm to 40 mm size	cum	320.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
2910	Stone chippings/ screenings 12.5/ 13.2 mm nominal size	cum	700.00
2911	Stone chippings/ screenings 10/ 11.2 mm nominal size	cum	700.00
2914	Solvent	kilogram	18.00
2916	Paving Asphalt 80/100 penetration	tonne	22,500.00
3002	Polyvinyl chloride sheet 400 micron thick	sqm	26.00
3004	Stone ware spouts 100 mm dia 60 cm long	each	28.00
3050	Galvanised steel corrugated sheets	quintal	3,650.00
3080	Gunmetal non-return valve-horizontal (screwed end) 25 mm dia	each	260.00
3084	Gunmetal non-return valve-horizontal (screwed end) 32 mm dia	each	385.00
3088	Gunmetal non-return valve-horizontal (screwed end) 40 mm dia	each	505.00
3092	Gunmetal non-return valve-horizontal (screwed end) 50 mm dia	each	712.00
3096	Gunmetal non-return valve-horizontal (screwed end) 65 mm dia	each	1,245.00
3213	Vitreous china Surgeon type wash basin of size 660x460 mm	each	810.00
3228	600x120 mm glass shelf with anodised aluminium angle frame, C.P. brass brackets and guard rail of standard size	each	95.00
3229	Vitreous china flat back wash basin 550x400 mm	each	450.00
3300	Gunmetal non-return valve-horizontal (screwed end) 80 mm dia	each	2,038.00
3311	C.I.slauce valve (with caps) class II : 100 mm dia	each	1,950.00
3314	C.I.slauce valve (with caps) class II : 125 mm dia	each	2,465.00
3317	C.I.slauce valve (with caps) class II : 150 mm dia	each	3,000.00
3320	C.I.slauce valve (with caps) class II : 200 mm dia	each	5,800.00
3321	C.I.slauce valve (with caps) class II : 250 mm dia	each	8,200.00
3326	C.I.slauce valve (with caps) class II : 300 mm dia	each	10,250.00
3617			
3620	C.C.I.(spun) socketed soil, waste and vent pipe 1.80 metres long:100mm dia	each	978.00
3621	C.C.I.(spun) socketed soil, waste and vent pipe 1.80 metres long:75mm dia	each	846.00
3624	S.C.I. S&S bends with access door100mm dia	each	225.00
3625	S.C.I. S&S bends with access door75mm dia	each	179.00
3628	S.C.I. S&S bend100mm dia	each	190.00
3629	S.C.I. S&S bend75mm dia	each	143.00
3634	S.C.I. S&S heel rest sanitary bend 100mm dia	each	233.00
3635	S.C.I. S&S heel rest sanitary bend 75mm dia	each	204.00
3640	S.C.I. S&S single equal junctions100x100x100 mm	each	367.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
3641	S.C.I. S&S single equal junctions 75x75x75 mm	each	276.00
3644	S.C.I. S&S single equal junctions with access door 100x100x100 mm	each	396.00
3645	S.C.I. S&S single equal junctions with access door 75x75x75 mm	each	294.00
3650	S.C.I. S&S double equal junctions 100x100x100x100 mm	each	467.00
3651	S.C.I. S&S double equal junctions 75x75x75x75 mm	each	373.00
3654	S.C.I. S&S double equal junctions with access door 100x100x100x100 mm.	each	502.00
3655	S.C.I. S&S double equal junctions with access door 75x75x75x75 mm.	each	400.00
3660	S.C.I. S&S single unequal junctions 100x100x75 mm	each	461.00
3664	S.C.I. S&S single unequal junctions with access door 100x100x75 mm	each	523.00
3670	S.C.I. S&S double unequal junctions 100x100x75x75 mm	each	639.00
3674	S.C.I. S&S double unequal junctions with access door 100x100x75x75 mm	each	700.00
3681	S.C.I. S&S single equal invert branch of required degree 100x100x100 mm dia	each	325.00
3682	S.C.I. S&S single equal invert branch of required degree 75x75x75 mm dia	each	247.00
3685	S.C.I. S&S double equal invert branch of required degree 100x100x100x100 mm dia	each	414.00
3686	S.C.I. S&S double equal invert branch of required degree 75x75x75x75 mm dia	each	334.00
3690	S.C.I. S&S single unequal invert branch of required degree 100x100x75 mm dia	each	422.00
3695	S.C.I. S&S double unequal invert branch of required degree 100x100x75x75 mm dia	each	574.00
3699	S.C.I. S&S, 75 mm offset for 75 mm dia pipe	each	179.00
3707	S.C.I. S&S, 150 mm offset for 75 mm dia pipe	each	223.00
3708	S.C.I. S&S, 150 mm offset for 100 mm dia pipe	each	306.00
3712	S.C.I. S&S, 114 mm offset for 75 mm dia pipe	each	220.00
3713	S.C.I. S&S, 114 mm offset for 100 mm dia pipe	each	289.00
3716	S.C.I. S&S, 152 mm offset for 75 mm dia pipe	each	275.00
3717	S.C.I. S&S, 152 mm offset for 100 mm dia pipe	each	361.00
3728	Centrifugally cast (spun) iron S&S door pieces 100 mm dia	each	230.00
3729	Centrifugally cast (spun) iron S&S door pieces 75 mm dia	each	176.00
3733	C.C.I.(spun)S&S, Slotted Cowl (Terminal Guard) 100 mm	each	154.00
3734	C.C.I.(spun)S&S, Slotted Cowl (Terminal Guard) 75 mm	each	142.00

Code No	Description	Unit	Rate Rs.
3738	C.C.I.(spun)S&S, collars 100 mm	each	161.00
3739	C.C.I.(spun)S&S, collars 75 mm	each	115.00
3746	S.C.I. S&S, 76 mm offset for 75 mm dia pipe	each	126.00
3747	S.C.I. S&S, 76 mm offset for 100 mm dia pipe	each	220.00
3749	Vitreous china toilet paper holder of standard size	each	89.00
3860	560 mm dia cover with frame (Heavy duty)	each	7,634.00
3861	560 mm dia cover without frame (Heavy duty)	each	3,664.00
4006	Pressed steel door frames (mild steel sheet 1.25mm) Profile "B"	metre	170.00
4007	Pressed steel door frames (mild steel sheet 1.25mm) Profile "C"	metre	187.00
4008	Pressed steel door frames (mild steel sheet 1.25mm) Profile "E"	metre	214.00
4009	Mild steel tubes hot finished welded type	kilogram	38.00
4010	Mild steel tubes hot finished seamless type	kilogram	66.00
4011	Mild steel tubes electric resistant or induction butt welded	kilogram	77.00
4012	Circular C.I. Box for ceiling fan	each	35.00
4013	Pulley 40 mm dia	each	19.00
4014	Ready made steel door with necessary hinges, lugs and glazing clips excluding other fittings & their fixing	sqm	1,406.00
4201	Aluminium primer	litre	63.00
4202	Red oxide Zinc chromate primer	litre	58.00
4203	Copper acetate	kilogram	228.00
4204	Hydrochloric acid	kilogram	27.00
4205	Copper chloride	kilogram	244.00
4206	Copper nitrate	kilogram	173.00
4207	Ammonium chloride	kilogram	12.00
5001	Mobil oil	litre	95.00
6001	White marble slab Makrana second quality plain veined 18 mm thick	sqm	1,722.00
6007	Pink marble slab plain 18mm thick	sqm	546.00
6010	Udaypur green marble slab plain 18mm thick	sqm	580.00
6019	Black Zebra marble slab plain 18mm thick	sqm	415.00
6501	Sand zone V (Jamuna)	cum	175.00
7001	Brass 100mm mortice latch and lock with 6 levers without pair of handles	each	150.00
7003	Pair of Anodised Aluminium lever handles for 100mm mortice latch and lock	each	195.00
7004	Vitreous china flat back wash basin 450x300 mm	each	360.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
7005	Vitreous china 10 litres low level cistern without fittings	each	824.00
7006	Vitreous china 10 litres low level cistern with fittings	each	1,390.00
7008	F.P.S. clay fly ash bricks class designation 75	1000 Nos	1,412.00
7009	Gypsum board	sqm	140.00
7010	Ceiling sections	metre	36.00
7011	Perimeter channel	metre	23.00
7012	Intermediate channel	metre	38.00
7013	Ceiling angle	metre	16.00
7014	Connecting clips	each	5.00
7015	Soffit cleat	each	3.00
7016	Joint filler	kilogram	19.00
7017	Joint finisher	kilogram	22.00
7018	Joint tape roll	roll	120.00
7019	Dash fastener	each	8.00
7020	All drive screws ( for gypsum board)	100 Nos	40.00
7021	Primer ( for gypsum board)	litre	76.00
7022	Chlorpyrifos 20% E.C. / Lindane 20% E.C.	litre	150.00
7023	Chromium plated brackets ( curtain rods)	each	5.00
7024	Acid Proof cement	tonne	7,400.00
7027	M.S. Butt hinges 125x90x4 mm	10 Nos	80.00
7029	Galvanised wire mesh of average width of aperture 1.4 mm and nominal dia. of wire 0.63 mm	sqm	142.00
7032	Frosted glass sheet of nominal thickness 4 mm (weighing not less than 10 kg/sqm)	sqm	257.00
7034	Nickel plated M.S. pipe 20 mm dia.	metre	54.00
7035	Nickel plated M.S. Brackets for curtain rod 20 mm	each	3.00
7036	Nickel plated M.S. Brackets for curtain rod 25 mm	each	4.00
7040	Oxidised mild steel screws 35 mm	100 Nos	28.00
7042	Mild steel conduit pipe (heavy type) ISI marked-20 mm dia.	metre	44.00
7043	Mild steel conduit pipe (heavy type) ISI marked-25 mm dia.	metre	49.00
7044	Rolling shutters of 80x0.90 mm laths	sqm	576.00
7045	Rolling shutters of 80x1.2 mm laths	sqm	615.00
7046	Top cover of Rolling shutters 0.90 mm thick	metre	205.00
7047	Top cover of Rolling shutters 1.20 mm thick	metre	228.00
7048	Rawl plug 50 mm (designation 10 no.)	each	7.00

Code No	Description	Unit	Rate Rs.
7049	Teak wood lipping of size 25x3 mm in pelmets	metre	16.00
7055	Flat pressed 3 layer and graded particle board (medium density) Grade 1 conforming to IS : 3087 - 18 mm thick	sqm	301.00
7056	Aluminium tee channel (heavy duty) with rollers and stop end	metre	35.00
7059	Aluminium hanging floor door stopper with twin rubber & stopper	each	44.00
7060	Hydraulic door closer tubular type Aluminium section body	each	765.00
7063	Oxidised M.S.casement stay (straight peg type) 300 mm not less than 0.33 kg	each	14.00
7064	Oxidised M.S.casement stay (straight peg type) 250 mm not less than 0.28 kg	each	12.00
7065	Oxidised M.S.casement stay (straight peg type) 200 mm not less than 0.24 kg	each	11.00
7068	Extra for providing grilled rolling shutters with 8 mm dia M.S. rod	sqm	185.00
7070	Chequered precast cement concrete tiles 22mm thick using marble chips of size 6mm - Light shade using white	sqm	415.00
7071	White marble Raj Nagar plain 20 mm thick (slab area 0.10 sqm to 0.20 sqm)	sqm	415.00
7077	Acid and alkali resistant tiles 300x300 mm size, 10 mm thick	10 Nos	460.00
7087	S.C.I. Tee 150 mm	each	460.00
7090	Expanded polystyrene type N- Normal	sqm	108.00
7091	Expanded polystyrene type - SE	sqm	131.00
7095	Stainless steel kitchen sink - with drain board bowl depth 250 mm.	each	4,900.00
7096	Stainless steel kitchen sink - with drain board 510 x 1040mm bowl depth 225 mm.	each	4,600.00
7097	Stainless steel kitchen sink - with drain board 510 x 1040mm bowl depth 200 mm.	each	4,100.00
7098	Stainless steel kitchen sink - with drain board 510x1040mm bowl depth 178 mm	each	2,600.00
7101	Stainless steel kitchen sink - without drain board 610x510mm bowl depth 200 mm	each	2,700.00
7102	Stainless steel kitchen sink - without drain board 610x460mm bowl depth 200 mm.	each	2,500.00
7103	Stainless steel kitchen sink - without drain board 470x420mm bowl depth 178 mm	each	1,600.00
7104	Coloured Orissa pattern W.C. pan 580x440 mm	each	1,043.00
7105	Coloured Pedestal type W.C. pan 580x440 mm (European type)	each	865.00
7106	Coloured Vitreous china 10 lit. low level cistern	each	1,268.00
7107	Coloured (other than black) solid P.V.C. seat in European W.C. pan	each	380.00



Code No	Description	Unit	Rate Rs.
7112	Circular shape 450 mm dia Mirror with Plastic moulded frame	each	370.00
7113	Rectangular shape 453x357 mm Mirror with Plastic moulded frame	each	245.00
7114	Oval shape 450x350 mm (outer dimensions) Mirror with Plastic moulded frame	each	280.00
7115	Rectangular shape 1500x450 mm Mirror with Plastic moulded frame	each	635.00
7116	Hard board 6 mm thick	sqm	151.00
7117	Semi Rigid PVC waste pipe for sink and wash basin 32 mm dia with length not less than 700 mm i/c PVC waste fittings	each	16.00
7118	Semi Rigid PVC waste pipe for sink and wash basin 40 mm dia with length not less than 700 mm i/c PVC waste fittings	each	21.00
7119	Flexible (coil shaped) PVC waste pipe for sink and wash basin 32 mm dia with length not less than 700 mm i/c PVC waste fittings	each	20.00
7120	Flexible (coil shaped) PVC waste pipe for sink and wash basin 40 mm dia with length not less than 700 mm i/c PVC waste fittings	each	22.00
7123	Coloured High density polyethylene/ poly propylene 10 lit. (full flush) capacity controlled low level flushing cistern with fittings	each	632.00
7126	White Vitreous china 10 lit. (full flush) capacity controlled low level flushing cistern with all fittings	each	858.00
7127	Coloured Vitreous china 10 lit. (full flush) capacity controlled low level flushing cistern with all fittings	each	1,277.00
7128	S.W. intercepting trap 100 mm dia	each	144.00
7129	S.W. intercepting trap 150 mm dia	each	202.00
7130	Rectangular shape 600x450 mm precast R.C.C. manhole cover with frame - L.D. - 25	each	628.00
7131	Square shape 350x350 mm precast R.C.C. manhole cover with frame - L.D. - 25	each	540.00
7132	Circular shape 450 mm dia precast R.C.C. manhole cover with frame - L.D. - 25	each	474.00
7133	Rectangular shape 500x500 mm precast R.C.C. manhole cover with frame - M.D. - 10	each	575.00
7134	Circular shape 500 mm dia precast R.C.C. manhole cover with frame - M.D. - 10	each	575.00
7135	Circular shape 560 mm dia precast R.C.C. manhole cover with frame - H.D. - 20	each	838.00
7136	Circular shape 560 mm dia precast R.C.C. manhole cover with frame - E.H.D. - 35	each	935.00
7137	Factory made 35 mm thick shutters with laminated veneer lumber styles rails as per TADS IS:1995 and panels of 12 mm thick plain type-I, medium density flat pressed three layer, graded particle board (FPT-I) as per IS:3087-1985 bonded with BWP type synthetic resin	sqm	1,500.00

Code No	Description	Unit	Rate Rs.
	adhesive, as per IS:848-1974		
7139	Factory made 35 mm thick shutters with laminated veneer lumber styles rails as per TADS IS:1995 and panels of 12 mm thick both sides prelaminated type-I, medium density flat pressed three layer, graded particle board (FPT-I) as per IS:3087-1985 bonded with BWP type synthetic resin adhesive, as per IS:848-1974	sqm	1,618.00
7143	Factory made 35 mm thick shutters with laminated veneer lumber styles rails as per TADS IS:1995 and panels of 12 mm thick one side prelaminated type-I, and other side balancing lamination, medium density flat pressed three layer, graded particle board (FPT-I) as per IS:3087-1985 bonded with BWP type synthetic resin adhesive, as per IS:848-1974	sqm	1,572.00
7151	Factory made 30 mm thick shutters with laminated veneer lumber styles rails as per TADS IS:1995 and panels of sheet glass using 10 kg/ sqm glass panes	sqm	1,290.00
7154	Factory made 35 mm thick shutters with laminated veneer lumber styles rails as per TADS IS:1995 and panels of galvanised wire gauge with average width of aperture 1.4 mm on both directions with wire of dia 0.63 mm	sqm	1,328.00
7155	Factory made 30 mm thick shutters with laminated veneer lumber styles rails as per TADS IS:1995 and panels of galvanised wire gauge with average width of aperture 1.4 mm on both directions with wire of dia 0.63 mm	sqm	1,150.00
7157	Laminated veneer lumber confirming to TADSS IS:1995 manufactured in factory in frames of doors, windows	10 cudm	540.00
7181	C.I. pile shoe	kilogram	40.00
7182	M.S. clamps for pile shoe	kilogram	35.00
7183	Bentonite	tonne	2,700.00
7184	Oxidised M.S. safety chain (weighing not less than 450 gms) for door	each	43.00
7187	C.I. grating 150 mm dia. (Weighing not less than 440 gm)	each	16.00
7188	U-PVC pipes (working pressure 4 kg / cm <sup>2</sup> ) Single socketed pipe 75 mm dia.	metre	58.00
7189	U-PVC pipes (working pressure 4 kg / cm <sup>2</sup> ) Single socketed pipe 110 mm dia.	metre	112.00
7190	U-PVC pipes (working pressure 4 kg / cm <sup>2</sup> ) Rubber (Seal) Ring 75 mm dia.	metre	14.00
7191	U-PVC pipes (working pressure 4 kg / cm <sup>2</sup> ) Rubber (Seal) Ring 110 mm dia.	metre	17.00
7192	UPVC coupler for UPVC drainage pipes 75 mm	each	30.00
7193	UPVC coupler for UPVC drainage pipes 110 mm	each	40.00
7194	UPVC pushfit coupler (single) 75 mm thick	each	47.00

Code No	Description	Unit	Rate Rs.
7195	UPVC pushfit coupler (single) 110 mm thick	each	72.00
7196	UPVC single equal Tee (with door) 75x75x75 mm	each	83.00
7197	UPVC single equal Tee (with door) 110x110x110 mm	each	115.00
7198	UPVC single equal Tee (with door) 75x75x75 mm	each	100.00
7199	UPVC single equal Tee (with door) 110x110x110 mm	each	160.00
7208	UPVC bend 87.5o 75 mm bend	each	50.00
7209	UPVC bend 87.5o 110 mm bend	each	85.00
7212	UPVC plain shoe 75 mm bend	each	105.00
7213	UPVC plain shoe 110 mm bend	each	196.00
7214	UPVC pipe clip 75 mm bend	each	15.00
7215	UPVC pipe clip 110 mm bend	each	30.00
7231	Resin Bonded Glass wool 16 kg/m <sup>3</sup> 50 mm thick	sqm	114.00
7232	Resin Bonded Glass wool 24 kg/m <sup>3</sup> 50 mm thick	sqm	163.00
7233	Fibre glass tissue reinforcement Type II Grade I	sqm	55.00
7236	Precast chequered cement tiles 22 mm thick Dark shade using ordinary cement	sqm	193.00
7239	Epoxy paint	litre	280.00
7240	Fire retardant paint	litre	318.00
7241	Melamine polish	litre	228.00
7244	Table rubbed polished stone 18 mm thick (75x50cm) Agaria Marble stone - 18 mm thick	sqm	1,440.00
7245	Table rubbed polished stone 18mm thick (75x50cm) Granite stone - 18mm thick	sqm	1,670.00
7246	Vertical load testing (INITIAL) of piles in accordance with IS : 2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification and up to 50MT capacity pile.	per test	19,500.00
7247	Vertical load testing (INITIAL) of piles in accordance with IS : 2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & above 50MT and up to 100MT.	per test	27,500.00
7248	Vertical load testing (INITIAL) of piles in accordance with IS : 2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & group of two or more up to 50MT.	per test	37,500.00
7249	Cyclic vertical load testing of piles in accordance with IS : 2911 (Part-IV) including preparation of pile head etc. for Single pile up to 50 tonne capacity	per test	11,500.00

Code No	Description	Unit	Rate Rs.
7250	Cyclic vertical load testing of piles in accordance with IS : 2911 (Part-IV) including preparation of pile head etc. for Single pile above 50 tonne capacity pile and up to 100 tonne capacity pile	per test	18,000.00
7251	Cyclic vertical load testing of piles in accordance with IS : 2911 (Part-IV) including preparation of pile head etc. for Group of two piles up to 50 tonne capacity each	per test	23,000.00
7252	Lateral load testing of single pile in accordance with IS : 2911 part -IV for determining safe allowable lateral load on pile. Up to 50 tonne capacity	per test	11,500.00
7253	Lateral load testing of single pile in accordance with IS : 2911 part -IV for determining safe allowable lateral load on pile. Above 50 tonne capacity	per test	18,000.00
7254	Hard crete	litre	29.00
7255	Road marking paint (spirit based)	litre	97.00
7256	Superior quality road marking paint	litre	148.00
7257	C.P. Brass bibcock 15 mm	each	258.00
7258	C.P. Brass long nose bibcock 15 mm	each	220.00
7259	C.P. Brass long body bibcock 15 mm	each	258.00
7260	C.P. Brass stop cock (concealed) 15 mm	each	258.00
7261	C.P. Brass angle valve 15 mm	each	288.00
7266	Pressed clay tiles	1000 Nos	8,900.00
7267	Plain ceiling tiles (BWP type phenol formaldehyde synthetic resin bonded) (600x600x12 mm)	each	90.00
7268	Semi perforated ceiling tiles (600x600x12 mm)	each	90.00
7269	25 mm thick particle board	sqm	390.00
7270	30 mm thick prelaminated flush door shutter	sqm	716.00
7271	Ilnd class teak wood lipping 25 mm wide x 12 mm thick	metre	28.00
7272	25 mm thick melamine faced prelaminated three layer particle board	sqm	708.00
7295	Granite Black marble, 18 mm thick slab, above 0.2 sqm up to 0.5 sqm (areawise)	sqm	1,500.00
7297	Granite Black marble, 18 mm thick slab, above 1.0 sqm up to 2.0 sqm (areawise)	sqm	1,615.00
7306	Aluminium T or L sections	kilogram	195.00
7307	For flush door shutters Extra for providing teak veneering on one side instead of commercial veneering	sqm	225.00
7309	Paving Asphalt 60/70 penetration	tonne	23,200.00
7312	Expandable fastener with plastic sleeve and M.S. screws. 25 mm long	each	6.00
7313	Expandable fastener with plastic sleeve and M.S. screws. 32 mm	each	7.00

Code No	Description	Unit	Rate Rs.
	long		
7314	Expandable fastener with plastic sleeve and M.S. screws. 40 mm long	each	9.00
7315	Expandable fastener with plastic sleeve and M.S. screws. 50 mm long	each	11.00
7318	Plasticizer / super plasticizer	kilogram	30.00
7319	Wall form panel 1250x500 mm	each	980.00
7320	Tie bolt 12 mm dia 100 mm length	each	31.00
7321	Tie bolt 12 mm dia 150 mm length	each	29.00
7322	Tie bolt 20 mm dia 150 mm length	each	57.00
7323	Tie bolt 20 mm dia 225 mm length	each	72.00
7324	Spring coil 12 mm	each	10.00
7325	Plastic cone 12 mm dia	each	12.00
7326	Corner angle 45x45x5 mm 1.50 m long	each	280.00
7327	100 mm channel shoulder 2.5 m long	each	1,000.00
7328	Double clip ( bridge clip)	each	75.00
7329	Single clip	each	60.00
7330	M.S. tube 40 mm dia	metre	225.00
7331	Wall form panel 1250x450 mm	each	900.00
7332	Corner angle 45x45x5 m 2.50 m long	each	275.00
7333	Column clamp 450x1070 m	each	1,100.00
7334	Prop 2 m ( 2-3.5m)	each	750.00
7335	Binding wire	kilogram	40.00
7338	Gun metal cramp	kilogram	270.00
7339	Stainless steel cramp	kilogram	280.00
7340	Stainless steel pin .	kg	130.00
7342	Adjustable span ESO+SI (2.35-3.40)	each	1,600.00
7343	Adjustable telescopic prop 3 m (2.02-3.75 m)	each	1,000.00
7344	Beam clamp 300-380 mm (450-1070 mm)	each set	375.00
7345	Prop 4 m	each	1,030.00
7346	Double coupler	each	45.00
7347	Cadmium plated full threaded steel screws (30x4 mm dia.)	100 Nos	23.00
7348	Aluminium washer 2 mm thick 15 mm dia	100 Nos	7.00
7349	12 mm M.S. 'U' beading	metre	9.00
7354	Plastic encapsulated M.S. foot rest 30x20x15 cm	each	93.00

Code No	Description	Unit	Rate Rs.
7358	Flushing Cistern P.V.C. 10 lts capacity ( low level ) (White) ( with fittings, accessories and flush pipe)	each	570.00
7359	P.V.C. automatic flushing cistern 5 lts capacity	each	430.00
7361	P.V.C. automatic flushing cistern 10 lts capacity	each	465.00
7363	15 mm C.P. brass tap with elbow operation lever	each	396.00
7364	White glazed fire clay draining board 600x450x25 mm	each	390.00
7366	Glass reinforced Gyp sum ( GRG) board 8.5 mm thick	sqm	190.00
7367	Galvanised M.S. sheet 0.5 mm thick pressed channel section of size 50x32 mm	metre	48.00
7369	Galvanised M.S. sheet 0.50 mm thick pressed stud. 48x34x36 mm	metre	55.00
7375	G.I. flush pipe and C.P. brass spreader including C.P. connecting pipe Single lipped urinal	each	352.00
7376	G.I. flush pipe and C.P. brass spreader including C.P. connecting pipe Range of two lipped urinals	each	880.00
7377	G.I. flush pipe and C.P. brass spreader including C.P. connecting pipe Range of three lipped urinals	each	1,070.00
7378	G.I. flush pipe and C.P. brass spreader including C.P. connecting pipe Range of four lipped urinals	each	1,530.00
7379	White vitreous china clay half stall urinal flat back 580x380x350 mm or angle back 450x375x350 mm with waste fittings as per IS : 2556	each	1,224.00
7380	Precast R.C.C. grating with frame 500x450 mm horizontal grating	each	533.00
7381	Precast R.C.C. grating with frame 450x100 mm vertical grating	each	250.00
7382	Bitumen emulsion rapid setting (R.S.) confirming to IS : 8887-1995	tonne	32,000.00
7385	3 mm thick translucent white acrylic plastic sheet	sqm	515.00
7386	12 thick particle board ceiling tile	sqm	225.00
7388	Dash hold fastener 12.5 mm dia, 40 mm long with 6 mm dia bolt	each	30.00
7389	Anodising 15 microns on aluminium sections	kilogram	32.00
7390	Neoprene/EPDM rubber gasket	metre	22.00
7391	Anodising 25 microns on aluminium sections	kilogram	40.00
7392	Powder coating 50 microns on aluminium sections.	kilogram	45.00
7393	Polyester powder coating 50 microns on aluminium sections	kilogram	50.00
7394	Double action hydraulic floor spring with stainless steel cover plate	each	1,400.00
7395	6 mm dia. G.I. adjustable hangers including clips (up to 1.2 m length)	each	25.00
7396	Double action hydraulic floor spring with brass cover plate	each	1,550.00
7400	15 mm PTMT bib cock	each	96.00
7401	15 mm PTMT bib cock with flange (fancy)	each	220.00
7402	15 mm PTMT bib cock long body with flange	each	155.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
7403	15 mm dia PTMT stop cock(male thread)	each	96.00
7405	20 mm dia. PTMT stop cock	each	120.00
7406	PTMT pillar cock	each	150.00
7407	PTMT push cock 15 mm dia.	each	90.00
7408	PTMT push cock 12 mm dia. 20 mm BSP	each	75.00
7409	PTMT grating 100 mm dia.	each	30.00
7411	125 mm grating with waste hole	each	36.00
7412	Rectangular type with openable circular lid 150 mm size 18 mm high with 100 mm dia. (110 gm)	each	90.00
7415	Double acting air valve 50 mm	each	3,050.00
7416	Double acting air valve 80 mm	each	4,480.00
7417	Double acting air valve 100 mm	each	5,800.00
7418	Water meter (including testing charges) 80 mm	each	1,800.00
7419	Water meter (including testing charges) 100 mm	each	2,800.00
7420	Water meter (including testing charges) 150 mm	each	4,000.00
7421	Water meter (including testing charges) 200 mm	each	4,500.00
7422	Dirt box strainer 80 mm	each	2,500.00
7423	Dirt box strainer 100 mm	each	3,750.00
7424	Dirt box strainer 150 mm	each	4,850.00
7425	Dirt box strainer 200 mm	each	6,800.00
7426	Cat's eye	each	450.00
7427	Water stops Serrated with central bulb (225 mm wide, 8-11 mm thick)	metre	330.00
7428	Water stops Dumb bell with central bulb	metre	306.00
7429	Kickers	metre	325.00
7430	Wedge expansion hold fastener 1/4" or 6 mm	each	10.00
7431	Wedge expansion hold fastener 3/8" or 10 mm	each	12.00
7432	Wedge expansion hold fastener 1/2" or 12 mm	each	23.00
7439	8mm thick (mirror polished tiles machine cut edge) Raj Nagar white	sqm	430.00
7442	Wheel 75 mm dia. 40 mm wide	each	52.00
7443	Aluminium single cleat of size 30x32x3	each	10.00
7444	Aluminium grip strip of size 50x12x2	each	7.00
7445	25 mm prelaminated flush door both side decorative	sqm	650.00
7449	Aluminium U beading	kilogram	195.00
7451	Glass sheet (Pin headed) 4 mm thick	sqm	160.00
7452	Raj nagar plain white marble (table rubbed and polished) 18 mm thick	sqm	540.00

Code No	Description	Unit	Rate Rs.
	above 0.10 sqm up to 0.20 sqm		
7453	Raj nagar plain white marble (table rubbed and polished) 18 mm thick above 0.20 sqm up to 0.50 sqm	sqm	580.00
7466	Second class deodar teak wood lipping 30 mm widthx12mm	metre	15.00
7468	Veneered particle board with commercial veneering on both sides 12 mm thick	sqm	418.00
7477	Prelaminated particle board with one side decorative and other side balancing lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade)12 mm thick	sqm	595.00
7478	Prelaminated particle board with one side decorative and other side balancing lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade)18 mm thick	sqm	716.00
7479	Prelaminated particle board with one side decorative and other side balancing lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade)25 mm thick	sqm	775.00
7480	Prelaminated particle board with both sides decorative lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade)12 mm thick	sqm	625.00
7485	Oxidised M. S. hinges finished with nickel plating 50 mm (Over all width)	metre	29.00
7486	Oxidised M. S. hinges finished with nickel plating 65 mm (Over all width)	metre	34.00
7491	Waste Coupling 31/32MM	Each	45.00
7492	Waste Coupling 38/40MM	Each	66.00
7493	Bottle Trap 31/32MM	Each	295.00
7494	Bottle Trap 38/40MM	Each	320.00
7495	Ball Cock 15mm Complete with Epoxy Coated Aluminium Road & H.D. Ball	Each	121.00
7496	Ball Cock 20mm Complete with Epoxy Coated Aluminium Road & H.D. Ball	Each	175.00
7497	Ball Cock 25mm Complete with Epoxy Coated Aluminium Road & H.D. Ball	Each	396.00
7498	Ball Cock 40mm Complete with Epoxy Coated Aluminium Road & H.D. Ball	Each	745.00
7499	Ball Cock 50mm Complete with Epoxy Coated Aluminium Road & H.D. Ball	Each	1,120.00
7500	Angle Stop cock with Flange 15mm	Each	120.00
7501	Swiveling shower 15mm	Each	81.00
7503	Liquid Soap Container of 400ml capacity	Each	135.00
7504	Towel Ring 215xd200x37mm	Each	108.00



<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
7505	Towel Rail (450MM)	Each	180.00
7506	Towel Rail (600MM)	Each	210.00
7507	Shelf 450x124x36mm	Each	245.00
7508	Urinal Spreader 15MM	Each	120.00
7509	Soap Dish/Holder 138x102x75mm	Each	108.00
7512	PTMT handle 125x34x24mm	Each	27.00
7513	PTMT handle 150x34x24mm	Each	30.00
7514	PTMT butt hinges 75x60x10mm	Each	36.00
7515	PTMT butt hinges 100x75x10mm	Each	48.00
7516	PTMT Tower bolt 152x42x18mm	Each	60.00
7517	PTMT Tower bolt 202x42x18mm	Each	72.00
7518	PTMT door catcher 72x42mm	Each	24.00
7552	Coir veneered board 4mm thick	sqm	235.00
7553	Coir veneered board 6mm thick	sqm	308.00
7555	Coir veneered board 12mm thick	sqm	548.00
7556	Coir veneered board 18mm thick	sqm	820.00
7651	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 100mm dia	Metre	658.00
7652	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 150mm dia	Metre	978.00
7653	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 200mm dia	Metre	1,348.00
7654	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 250mm dia	Metre	1,743.00
7655	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 300mm dia	Metre	2,238.00
7656	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 350mm dia	Metre	2,625.00
7657	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 400mm dia	Metre	3,763.00
7658	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 450mm dia	Metre	4,175.00
7659	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 500mm dia	Metre	5,600.00
7660	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 600mm dia	Metre	6,275.00
7661	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 700mm dia	Metre	8,538.00
7662	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 750mm dia	Metre	9,725.00
7663	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 800mm dia	Metre	10,000.00
7664	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 900mm dia	Metre	11,663.00
7665	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 1000mm dia	Metre	13,125.00
7666	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 100mm dia	Each	25.00
7668	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 150mm dia	Each	35.00
7669	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 200mm dia	Each	62.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
7670	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 250mm dia	Each	68.00
7671	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 300mm dia	Each	98.00
7672	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 350mm dia	Each	123.00
7673	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 400mm dia	Each	248.00
7674	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 450mm dia	Each	275.00
7675	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 500mm dia	Each	285.00
7676	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 600mm dia	Each	348.00
7677	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 700mm dia	Each	550.00
7678	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 750mm dia	Each	648.00
7679	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 800mm dia	Each	725.00
7680	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 900mm dia	Each	968.00
7681	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 1000mm dia	Each	1,188.00
7682	Ductile Iron K - 12 specials suitable for push on jointing up to 600mm dia	Quintal	8,938.00
7683	Ductile Iron K - 12 specials suitable for push on jointing over 600mm dia	Quintal	13,413.00
7684	Ductile Iron specials suitable for mechanical jointing as per I.S. 9523 - up to 600mm dia	Quintal	9,400.00
7685	Ductile Iron Specials suitable for mechanical jointing as per I.S. 9523 over 600mm dia	Quintal	14,239.00
7686	Ductile Iron Pipe Class K-9 flanges and welding 100mm dia	Metre	1,888.00
7687	Ductile Iron Pipe Class K-9 flanges and welding 150 dia	metre	2,613.00
7688	Ductile Iron Pipe Class K-9 flanges and welding 200mm dia	Metre	3,388.00
7689	Ductile Iron Pipe Class K-9 flanges and welding 250mm dia	Metre	4,498.00
7690	Ductile Iron Pipe Class K-9 flanges and welding 300mm dia	metre	5,788.00
7691	Ductile Iron Pipe Class K-9 flanges and welding 350mm dia	Metre	7,210.00
7692	Ductile Iron Pipe Class K-9 flanges and welding 400mm dia	Metre	8,613.00
7693	Ductile Iron Pipe Class K-9 flanges and welding 450mm dia	Metre	10,413.00
7694	Ductile Iron Pipe Class K-9 flanges and welding 500mm dia	Metre	12,625.00
7695	Ductile Iron Pipe Class K-9 flanges and welding 600mm dia	Metre	17,125.00
7696	Ductile Iron Pipe Class K-9 flanges and welding 700mm dia	Metre	21,125.00
7697	S&S Centrifugally (Spun) C.I. Pipe class LA 100mm dia	Metre	624.00
7698	S&S Centrifugally (Spun) C.I. Pipe class LA 125mm dia	metre	763.00
7699	S&S Centrifugally (Spun) C.I. Pipe class LA 150mm dia	metre	901.00
7700	S&S Centrifugally (Spun) C.I. Pipe class LA 200mm dia	Metre	1,252.00
7701	S&S Centrifugally (Spun) C.I. Pipe class LA 250mm dia	Metre	1,779.00

Code No	Description	Unit	Rate Rs.
7702	S&S Centrifugally (Spun) C.I. Pipe class LA 300mm dia	Metre	2,366.00
7703	S&S Centrifugally (Spun) C.I. Pipe class LA 350mm dia	metre	2,918.00
7704	S&S Centrifugally (Spun) C.I. Pipe class LA 400mm dia	Metre	3,574.00
7705	S&S Centrifugally (Spun) C.I. Pipe class LA 450mm dia	Metre	4,276.00
7706	S&S Centrifugally (Spun) C.I. Pipe class LA 500mm dia	Metre	5,211.00
7707	S&S Centrifugally (Spun) C.I. Pipe class LA 600mm dia	Metre	6,884.00
7708	S&S Centrifugally (Spun) C.I. Pipe Specials as per IS 1538 suitable for lead jointing up to 300mm dia	Quintal	3,530.00
7709	S&S Centrifugally (Spun) C.I. Pipe Specials as per IS 1538 suitable for lead jointing over 300mm dia	Quintal	3,988.00
7710	S&S Centrifugally (Spun) C.I. Pipe specials suitable for mechanical joint as per I.S. 13382 up to 300mm dia	Quintal	5,338.00
7711	S&S Centrifugally (Spun) C.I. Pipe Specials suitable for mechanical joint as per IS 13382 over 300mm dia	Quintal	5,580.00
7712	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 100mm dia	Metre	977.00
7713	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 150mm dia	Metre	1,511.00
7714	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 200mm dia	Metre	2,092.00
7715	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 250mm dia	Metre	2,800.00
7716	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 300mm dia	Metre	3,559.00
7717	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 350mm dia	Metre	4,553.00
7718	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 400mm dia	metre	5,885.00
7719	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 450mm dia	Metre	7,627.00
7720	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 500mm dia	metre	9,962.00
7721	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 600mm dia	Metre	12,992.00
7722	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 100mm dia	Metre	597.00
7723	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 150mm dia	Metre	870.00
7724	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 200mm dia	Metre	1,237.00
7725	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 250mm dia	Metre	1,675.00
7726	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 300mm dia	Metre	2,369.00

Code No	Description	Unit	Rate Rs.
7727	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 350mm dia	Metre	2,728.00
7728	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 400mm dia	Metre	3,256.00
7729	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 450mm dia	Metre	3,861.00
7730	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 500mm dia	Metre	4,557.00
7731	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 600mm dia	metre	6,011.00
7732	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 700mm dia	Metre	7,463.00
7733	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 800mm dia	Metre	10,405.00
7734	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 900mm dia	metre	12,798.00
7735	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 1000mm dia	metre	15,505.00
7736	Extruded burnt flyash clay sewer bricks conforming to I.S 4885 - 1988	1000 Nos	3,550.00
7737	Fly ash lime bricks (FALG Bricks) conforming to I.S. 12894-1989	1000 Nos	1,792.00
7738	Calcium Silicate Bricks machine moulded confirming to I.S. 4139 - 1989	1000 Nos	3,083.00
7739	Modified Bitumen Refinery produced CRMB - 55	Tonne	26,000.00
7741	Modified Bitumen Refinery produced CRMB - 60	tonne	26,300.00
7742	Bitumen emulsion medium setting (M.S.) confirming to IS : 8887-1995	tonne	19,500.00
7800	Ceramic Glazed Tiles 1st quality minimum thickness 5mm in all colours shades and designs except burgundy, bottle green, black	Sq.m.	268.00
7801	Ceramic Glazed Tiles 1st quality 300 x 300mm in all shades and designs of White, Ivory, grey, Fume Red brown etc.	Sq.m.	320.00
7802	Ceramic Glazed Tiles 1st quality 300 x 300 in all shades designs except White, Ivory, Grey, Fume Red Brown etc.	Sq.m.	347.00
7803	Ceramic Glazed Tiles 1st quality 400 x 400 in all shades designs White, Ivory, Grey, Fume Red Brown etc.	Sq.m.	462.00
7804	Ceramic Glazed Tiles 1st quality 400 x 400 in all shades designs except White, Ivory, Grey, Fume Red Brown etc.	Sq.m.	496.00
7805	Salem Stainless steel AISI - 304 (18/8) Orrisa pattern W.C. pan 724mm X 578mm	each	3,350.00
7806	Salem Stainless steel AISI - 304 (18/8) Round basin 405mm X 355mm	each	1,500.00
7807	Salem Stainless steel AISI - 304 (18/8) Wash basin 530mm X 345mm	each	1,350.00
7808	Centrifugally cast (spun) iron S&S 100 mm inlet and 100 mm outlet	each	309.00
7809	Centrifugally cast (spun) iron S&S 100 mm inlet and 75 mm outlet	each	334.00
7850	Agaria White marble slab plain 18mm thick	sqm	1000.00
7857	P.T.M.T. Grating square slit 150mm	each	70.00
7858	P.T.M.T. Urinal cock 15mm dia	each	90.00
7859	P.T.M.T. Bib cock with nozzle 15mm	each	110.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
7861	P.T.M.T. Stop cock (concealed) 15mm	each	160.00
7862	15 mm nominal bore and 30 cm length PVC connection pipe with P.T.M.T. Nuts	each	27.00
7863	15 mm nominal bore and 45 cm length PVC connection pipe with P.T.M.T. Nuts	each	32.00
7864	P.T.M.T. extension nipple 15mm	each	30.00
7865	P.T.M.T. extension nipple 20mm	each	36.00
7866	P.T.M.T. extension nipple 25mm	each	54.00
7900	Modular bricks of class designation 75	1000 Nos	2,050.00
7901	Machine moulded perforated FPS bricks of class designation 125	1000 Nos	3,233.00
7902	Machine moulded modular perforated bricks of class designation 125	1000 Nos	3,200.00
7903	Machine moulded FPS bricks of class designation 125	1000 Nos	2,767.00
7904	Machine moulded tile bricks of class designation 125	1000 Nos	2,717.00
8001	24 mm thick Factory made shutters with frame, rails and panels of PVC extruded sections in white, grey or wooden finish	sqm	1,830.00
8002	30 mm thick Factory made shutters with frame, rails and panels of PVC extruded sections in white, grey or wooden finish	sqm	1,900.00
8003	Factory made PVC rigid foam paneled shutter i/c carriage	sqm	1,743.00
8004	Factory made PVC rigid foam paneled shutter as per IS : 4020 i/c carriage	sqm	2,148.00
8006	Factory made PVC rigid foam sheet 1mm thick	sqm	145.00
8007	Factory made PVC rigid foam sheet 5mm thick	sqm	558.00
8008	Factory made prelaminated PVC rigid foam sheet 5mm thick	sqm	660.00
8010	48mmX40mmX1.5mm thick Factory made door frame of PVC extruded sections in white, grey or wooden finish	metre	112.00
8011	Factory made door frame PVC extruded sheet i/c carriage	metre	294.00
8012	Adhesive solvent cement	kg	150.00
8100	Powder coated M.S. butt hinges 100mm X58mmX1.9mm	10 Nos	66.00
8200	A.P.P. modified polymeric felt (two layers) 1.5 mm thick	sqm	50.00
8201	A.P.P. modified polymeric felt (two layers) 2 mm thick	sqm	85.00
8203	A.P.P. modified 2 mm thick membrane reinforced with glass fibre matt	sqm	147.00
8204	A.P.P. modified 3 mm thick membrane reinforced with glass fibre matt	sqm	185.00
8205	A.P.P. modified 3 mm thick membrane reinforced with polyester matt	sqm	221.00
8206	Bitumen primer for bitumen membrane	litre	54.00
8207	Geotextile 120 gsm membrane	sqm	25.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
8210	Stainless steel screws 50 mm	100 Nos	213.00
8211	Stainless steel screws 40 mm	100 Nos	157.00
8212	Stainless steel screws 30 mm	100 Nos	98.00
8214	Stainless steel screws 20 mm	100 Nos	63.00
8215	Stainless steel butt hinges 125x64x1.9 mm IS : 12817 marked	10 Nos	200.00
8216	Stainless steel butt hinges 100x58x1.9 mm IS : 12817 marked	10 Nos	143.00
8217	Stainless steel butt hinges 75x47x1.8 mm IS : 12817 marked	10 Nos	112.00
8218	Stainless steel butt hinges 50x37x1.5 mm IS : 12817 marked	10 Nos	90.00
8219	Stainless steel butt hinges (heavy weight) 125x64x2.5 mm IS : 12817 marked	10 Nos	261.00
8220	Stainless steel butt hinges (heavy weight) 100x60x2.5 mm IS : 12817 marked	10 Nos	185.00
8221	Stainless steel butt hinges (heavy weight) 75x50x2.5 mm IS : 12817 marked	10 Nos	155.00
8222	M.S. heavy weight but hinges 125x90x4.0mm IS : 1341 marked.	10 Nos	256.00
8223	M.S. heavy weight butt hinges 100x75x3.5 mm IS: 1341 marked	10 Nos.	133.00
8224	M.S. heavy weight butt hinges 75x60x3.1 mm IS: 1341 marked	10 Nos	67.00
8225	M.S. heavy weight butt hinges 50x40x2.5 mm IS : 1341 marked	10 Nos	52.00
8300	1216 mm PE-AL-PE Composite pressure pipe	Metre	79.00
8301	1620 mm PE-AL-PE Composite pressure pipe	Metre	97.00
8302	2025 mm PE-AL-PE Composite pressure pipe	Metre	126.00
8303	2532 mm PE-AL-PE Composite pressure pipe	Metre	172.00
8304	3240 mm PE-AL-PE Composite pressure pipe	Metre	227.00
8305	4050 mm PE-AL-PE Composite pressure pipe	Metre	304.00
8501	Polymer modified cementation coating	kilogram	114.00
8502	Fibre glass cloth	sqm	33.00
8504	Multi surface paint	litre	264.00
8505	Acrylic exterior paint	litre	123.00
8506	Premium Acrylic exterior paint	litre	202.00
8507	Textured exterior paint	litre	183.00
8508	Primer for cement paint	litre	52.00
8509	Special Primer (C.W.)	litre	76.00
8510	Metal Primer (U.G.)	litre	91.00
8611	Main T ceiling sections 24x38x0.3 mm (3 metre long)	each	162.00
8612	Perimeter wall angle 21x21 mm (3 metre long)	each	102.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
8613	Intermediate cross channel (1.2 mtrs)	each	62.00
8614	Intermediate cross channel (1.6 mtrs)	each	29.00
8615	Hanger rod 0.5 mm thick	each	5.00
8616	Adjustment clip	each	4.40
8617	Soffit cleat	each	2.30
8618	Dash fastener 6 mm dia 50 mm long	each	8.00
8620	Polished porcelain floor tile 50x50 cm	sqm	932.00
8621	Polished porcelain floor tile 60x60 cm	sqm	1,050.00
8622	Polished porcelain floor tile 80x80 cm	sqm	1,553.00
8623	Polished porcelain floor tile 100x100 cm	sqm	2,149.00
8625	Poly propylene- Random - Co - Polymer (PPR) pipes SDR 7.4 - 16 Outer dia	metre	29.00
8626	Poly propylene - Random - Co - Polymer (PPR) pipes SDR 7.4 - 20mm Outer dia.	metre	44.00
8627	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 - 25 mm outer dia.	metre	68.00
8628	Poly propylene - Random - Co - poymer (PPR) pipes SDR 7.4 - 32 mm Outer dia.	metre	111.00
8629	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 - 40mm Outer dia.	metre	176.00
8630	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 - 50mm Outer dia.	metre	257.00
8631	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 - 63mm Outer dia.	metre	400.00
8632	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 - 75mm Outer dia.	metre	575.00
8633	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 - 90mm Outer dia.	metre	917.00
8634	Poly propylene - Random - Co - polymer (PPR) pipes SDR - 11 - 110mm Outer dia.	metre	962.00
8635	Poly propylene - Random - Co - polymer (PPR) pipes SDR - 11- 160mm Outer dia.	metre	2,028.00
8636	Chlorinated Polyvinyl - chloride (CPVC) pipe 15 mm outer dia.	metre	45.00
8637	Chlorinated Polyvinyl - chloride (CPVC) pipe 20 mm outer dia.	metre	55.00
8638	Chlorinated Polyvinyl - chloride (CPVC) pipe 25 mm outer dia.	metre	78.00
8639	Chlorinated Polyvinyl - chloride (CPVC) pipe 32 mm outer dia.	metre	105.00
8640	Chlorinated Polyvinyl - chloride (CPVC) pipe 40 mm outer dia.	metre	150.00
8641	Chlorinated Polyvinyl - chloride (CPVC) pipe 50 mm outer dia.	metre	245.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
8642	Chlorinated Polyvinyl - chloride (CPVC) pipe 62.5mm inner dia.	metre	783.00
8643	Chlorinated Polyvinyl - chloride (CPVC) pipe 75 mm inner dia.	metre	1,030.00
8644	Chlorinated Polyvinyl - chloride (CPVC) pipe 100 mm inner dia.	metre	1,430.00
8645	Chlorinated Polyvinyl - chloride (CPVC) pipe 150 mm inner dia.	metre	2,490.00
8646	Silicon sealant.	cartridge	281.00
8647	Stainless steel screws 30mm x4mm.	cent	25.00
8648	Hermetically sealed double glazed unit made with 6mm thick clear float glass both side having 12 mm air gap.	sqm	1,980.00
8649	Stainless steel (SS 304 grade) adjustable friction window stay. 205 x 19mm	each	145.60
8650	Stainless steel (SS 304 grade) adjustable friction window stay 255 x 19mm	each	161.20
8651	Stainless steel (SS 304 grade) adjustable friction window stay. 355 x 19mm	each	208.00
8652	Stainless steel (SS 304 grade) adjustable friction window stay. 510 x 19mm	each	390.00
8653	Stainless steel (SS 304 grade) adjustable friction window stay. 710 x 19mm	each	715.00
8654	Masking tape.	metre	1.40
8655	Autoclaved aerated cement (AAC) blocks.	cum	1,650.00
8656	Gypsum panel 666 X 500 X 100 mm size.	sqm	544.00
8657	Bonding plaster for Gypsum panel.	kg	50.00
8658	Mechanised Autoclaved fly ash lime bricks.	1000 Nos	2,200.00
8659	Water proof ply 12mm thick.	sqm	572.00
8660	Aluminium casement window fastener (Anodised AC 15 )	each	30.00
8661	Aluminium casement window fastener (powder coated ).	each	33.00
8662	Aluminium casement window fastener (polyester powder coated).	each	35.00
8663	Aluminium round shape handle (anodised AC 15)	each	37.00
8664	Aluminium round shape handle (powder coated)	each	41.00
8665	Aluminium round shape handle (polyester powder coated).	each	43.00
8666	Stainless steel screws 25mm x4mm	cent	21.00
8667	UV stabilised 2 mm thick plain FRP sheet .	sqm	474.00
8668	UV stabilised 2 mm thick corrugated FRP sheet .	sqm	474.00
8669	Mangalore ridge tiles 20mm thick.	each	25.00
8670	Mangalore tiles 20mm thick.	each	9.50
8671	Precoated galvanised iron profile sheet 0.50 mm TCT	sqm	325.00



Code No	Description	Unit	Rate Rs.
8672	Precoated galvanised steel plain ridges.	metre	330.00
8673	Precoated galvanised steel flashings/aprons.	metre	330.00
8674	Precoated galvanised steel gutter	metre	360.00
8675	Precoated galvanised steel north light curves.	metre	360.00
8676	Precoated galvanised steel barge board.	metre	330.00
8677	Precoated galvanised steel crimp curve	sqm	420.00
8678	1mm thick 35mm wide bright finished stainless steel piano hinges .	metre	30.00
8683	Red sand stone gang saw cut 30mm thick.	sqm	325.00
8684	White sand stone gang saw cut 30mm thick.	sqm	360.00
8685	Delineator	each	560.00
8686	Precast C.C. Kerb stone M - 25	cum	3,500.00
8687	Thermoplastic paint	kg	67.22
8688	Glass beads	kg	68.00
8689	Interlocking C.C. paver block ( 60 mm thick, M-30 )	sqm	225.00
8690	High intensity retro - reflective sheet.	sqm	1,400.00
8691	Punched tape concertina coil 600 m dia. 10m openable length (Total length 90m)	bundle	650.00
8692	RBT reinforced barbed wire.	metre	7.50
8693	Turn buckle and strengthening bolt.	each set	35.00
8694	Precast pavement slab 450 x 450 x 50mm (M - 30).	each	40.00
8695	Chain link fabric fencing mesh of size 50x50mm made of G.I. wire of dia. 4mm.	sqm	225.00
8696	Chain link fabric fencing mesh of size 50x50mm made of G.I. wire of dia. 4mm, PVC coated to outer dia. 5mm.	sqm	250.00
8697	Chain link fabric fencing mesh of size 25x25mm made of G.I. wire of dia. 3mm.	sqm	300.00
8698	Stainless steel cramps with nuts, bolts and washer for dry stone cladding .	each	200.00
8699	8 mm thick tapered edge calcium silicate board .	sqm	194.00
8700	10 mm thick calcium silicate board.	sqm	323.00
8703	Telescopic drawer channels 300mm long .	set	92.00
8704	Stainless steel roller for sliding arrangement in racks/ cupboards/ cabinets shutter .	each	5.00
8705	50mmX42mmX2mm thick Factory made door frame of PVC extruded sections in white, grey or wooden finish	metre	117.00
8706	25mm thick factory made PVC flush door shutter i/c carriage.	sqm	1,975.00
8707	Factory made glass reinforced plastic door frame 90x45 mm i/c	metre	333.00

Code No	Description	Unit	Rate Rs.
	carriage.		
8708	30 mm thick factory made glass fiber reinforced plastic panel door shutter i/c carriage.	sqm	1,100.00
8710	Factory made solid PVC door frame 60 x 30mm i/c carriage.	metre	223.00
8711	28mm factory made solid PVC panel door shutter i/c carriage.	sqm	1,975.00
8713	Fiber glass reinforced plastic chajja.	sqm	3,520.00
8714	Magnetic catcher triple strip vertical type.	each	13.50
8715	Magnetic catcher double strip horizontal type.	each	10.00
8716	100 mm mortice lock with 6 levers for aluminium door.	each	152.50
8717	12.5 mm thick Glass fibre reinforced Gypsum board .	sqm	130.00
8719	2nd class teak wood lipping/ moulded beading or Taj beading of size 18X5mm	metre	19.00
8720	Ceiling sections 0.55 mm thick having a knurled web of 51.55mm and two flanges of 26mm each with lips of 10.55mm.	metre	34.00
8721	Perimeter channel having one flange of 20mm and another flange of 30mm with thickness of 0.55mm and web of length 27mm.	metre	20.00
8722	Nylon sleeves & wooden screws (40mm)	each	1.50
8723	Counter sunk ribbed head screw 25mm.	cent	60.00
8724	12mm thick marine plywood conforming to IS:710	sqm	740.00
8725	12mm thick fire retardant plywood conforming to IS: 5509.	sqm	690.00
8726	1.5mm thick decorative laminated sheet	sqm	405.00
8727	1.0mm thick decorative laminated sheet	sqm	330.00
8730	30 mm thick factory made glass fiber reinforced plastic flush door shutter i/c carriage.	sqm	1,960.00
8731	High polymer modified quickset tile adhesive.	per kg	13.75
9999	Sundries	L.S.	2.60

## BASIC RATES

### 0.4 CARRIAGE CODES

(Carriage by Mechanical Transport including loading, Unloading and stacking)

Note: - These rates are exclusive of contractor's profit and overhead charges.

Code No	Description	Unit	Rate Rs.
2200	Steam coal	tonne	60.81
2201	Bricks	1000 Nos	141.88
2202	Stone aggregate below 40 mm nominal size	cum	53.21
2203	Coarse sand	cum	53.21
2204	Timber	cum	60.81
2205	Steel	tonne	47.29
2206	Stone aggregate 40 mm nominal size and above	cum	57.83
2207	Brick tiles	1000 Nos	85.13
2208	Lime	cum	53.21
2209	Cement	tonne	47.29
2211	Tar bitumen	tonne	53.21
2215	Soling stone & masonry stone	cum	62.60
2216	Stone blocks white & red sand stone & kota stone slab	tonne	47.29
2224	S.W. pipes100 mm dia	100 metre	70.94
2225	S.W. pipes150 mm dia	100 metre	141.88
2226	S.W. pipes200 mm dia	100 metre	236.47
2227	S.W. pipes230 mm dia	100 metre	337.82
2228	S.W. pipes250 mm dia	100 metre	405.38
2229	S.W. pipes300 mm dia	100 metre	506.73
2241	Good earth	cum	66.51
2242	Dump manure	cum	57.83
2260	Brick aggregate	cum	57.83
2261	Fine sand (1 part badarpur sand : 2 parts jamuna sand)	cum	53.21
2262	Fly ash	cum	53.21
2264	Rubbish	cum	53.21
2265	Moorum	cum	53.21
2266	Surkhi	cum	53.21

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
2267	Stone dust	cum	53.21
2268	Marble dust and marble chips	cum	53.21
2271	G.I. pipes below 100 mm dia	tonne	47.29
2273	A.C.sheet and accessories	tonne	47.29
2275	R.C.C. pipes 100 mm dia	100 metre	116.30
2281	R.C.C. pipes 150 mm dia	100 metre	193.83
2287	R.C.C. pipes 250 mm dia	100 metre	448.05
2290	R.C.C. pipes 300 mm dia	100 metre	553.80
2299	R.C.C. pipes 450 & 500 mm dia	100 metre	1,292.20
2302	G.I.sheet and accessories	tonne	47.29
2303	R.C.C. pipes 600, 700, 750 & 800 mm dia	100 metre	1,938.30
2308	Plaster of paris	tonne	47.29
2309	Cast iron fittings	tonne	47.29
2311	Red bajri	cum	53.21
2314	Barbed wire	tonne	47.29
2317	Sludge	cum	57.83
2319	Spun iron S & S pipes 100 mm dia	100 metre	116.30
2320	Spun iron S & S pipes 125 mm dia	100 metre	155.35
2321	Spun iron S & S pipes 150 mm dia	100 metre	193.83
2322	Spun iron S & S pipes 200 mm dia	100 metre	315.30
2323	Spun iron S & S pipes 250 mm dia	100 metre	448.05
2324	Spun iron S & S pipes 300 mm dia	100 metre	553.80
2325	Spun iron S & S pipes 350 mm dia	100 metre	775.32
2326	Spun iron S & S pipes 400 mm dia	100 metre	1,057.26
2327	Spun iron S & S pipes 450 mm dia	100 metre	1,292.20
2328	Spun iron S & S pipes 500 mm dia	100 metre	1,292.20
2329	Spun iron S & S pipes 600mm dia	100 metre	1,938.30
2330	C.I. pipes 500 mm dia	100 metre	1,292.20
2331	R.C.C. pipes 900 mm dia	100 metre	2,907.45
2332	R.C.C. pipes 1000 mm dia	100 metre	3,876.61
2333	R.C.C. pipes 1100 mm dia	100 metre	3,876.61
2334	R.C.C. pipes 1200 mm dia	100 metre	3,876.61

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
2335	Jamuna sand	cum	53.21
2341	Pig lead	tonne	47.29
2342	Solvent/ Diesel.	quintal	5.32
2343	Ductile iron pipes (k7) 100 mm dia	100 metre	116.30
2344	Cast iron pipes 150 mm dia	100 metre	193.83
2345	Cast iron pipes 200 mm dia	100 metre	315.30
2346	Cast iron pipes 250 mm dia	100 metre	448.05
2347	Cast iron pipes 300 mm dia	100 metre	553.80
2348	Cast iron pipes 350 mm dia	100 metre	775.32
2349	Cast iron pipes 400 mm dia	100 metre	1,057.26
2350	Cast iron pipes 450 mm dia	100 metre	1,292.20
2351	Cast iron pipes 500 mm dia	100 metre	1,292.20
2352	Cast iron pipes 600 mm dia	100 metre	1,938.30
2353	Cast iron pipes 700 mm dia	100 metre	1,938.30
2355	Cast iron pipes 800 mm dia	100 metre	1,938.30
2356	Cast iron pipes 900 mm dia	100 metre	2,907.45
2357	Cast iron pipes 1000 mm dia	100 metre	3,876.61

**SUB HEAD : 1.0**

# **CARRIAGE OF MATERIALS**

### BASIC RATES (SH: 1.0 CARRIAGE OF MATERIALS)

Code No	Description	Unit	Rate Rs.
0005	Hire Charges of truck		
0114	Beldar	Day	135.25
0115	Cooli	Day	135.25
0128	Mate	Day	138.45
1235	High Speed Diesel	Litre	30.25
5001	Mobil Oil	Litre	95.00
9999	Sundries	L.S.	2.60

## 1. CARRIAGE OF MATERIALS

### 1.1 Carriage of material by mechanical transport including loading, unloading and stacking

Code	Materials	Unit	Rate								Remarks
			1 Km	2 Km	3 Km	4 Km	5 Km	Beyond 5 Km upto 10 Km. per Km.	Beyond 10 Km. upto 20 Km. per Km.	Beyond 20 Km. per Km.	
1	2	3	4	5	6	7	8	9	10	11	12
1.1.1	Lime, moorum, building rubbish	Cum	39.53	45.13	50.66	55.99	61.19	4.67	3.90	3.24	The rates will be applicable to net quantities after deduction of prescribed percentage for voids mentioned in the specification under subhead "Carriage of Materials"
1.1.2	Earth	Cum	49.42	56.41	63.32	69.99	76.48	5.84	4.88	4.05	
1.1.3	Manure or sludge	Cum	42.97	49.05	55.07	60.86	66.51	5.08	4.24	3.52	
1.1.4	Excavated rock	Cum	79.07	90.25	101.32	111.99	122.37	9.35	7.80	6.48	
1.1.5	Sand, stone aggregate below 40 mm nominal size.	Cum	39.53	45.13	50.66	55.99	61.19	4.67	3.90	3.24	
1.1.6	Stone aggregate 40 mm nominal size and above.	Cum	42.97	49.05	55.07	60.86	66.51	5.08	4.24	3.52	
1.1.7	Soling stone	Cum	46.51	53.09	59.60	65.87	71.99	5.50	4.59	3.81	
1.1.8	Bricks	1000 Nos.	105.42	120.33	135.09	149.32	163.17	12.46	10.40	8.64	
1.1.9	Brick Tiles	1000 Nos	63.25	72.20	81.06	89.59	97.90	7.48	6.24	5.18	
1.1.10	Cement, stone blcks, G.I., C.I., A.C. & C.C. pipes below 100 mm dia and other heavy materials	Tonne	35.14	40.11	45.03	49.77	54.39	4.15	3.47	2.88	
1.1.11	Steel	Tonne	35.14	40.11	45.03	49.77	54.39	4.15	3.47	2.88	
1.1.12	Timber	Cum	45.18	51.57	57.90	63.99	69.93	5.34	4.46	3.70	
1.1.13	Tar Bitumen	Tonne	39.53	45.13	50.66	55.99	61.19	4.67	3.90	3.24	
1.1.14	Solvent	Qtl	3.95	4.51	5.07	5.60	6.12	0.47	0.39	0.32	
1.1.15	Steam Coal	Tonne	45.18	51.57	57.90	63.99	69.93	5.34	4.46	3.70	

SUB HEAD - 1.0 CARRIAGE OF MATERIALS



Code	Materials	Unit	Rate								Remarks
			1 Km	2 Km	3 Km	4 Km	5 Km	Beyond 5 Km upto 10 Km. per Km.	Beyond 10 Km. upto 20 Km. per Km.	Beyond 20 Km. per Km.	
1	2	3	4	5	6	7	8	9	10	11	12
1.1.16	S.W.Pipe										
1.1.16.1	100 mm dia	100m	52.71	60.17	67.55	74.66	81.58	6.23	5.20	4.32	
1.1.16.2	150 mm dia	100m	105.42	120.33	135.09	149.32	163.17	12.46	10.40	8.64	
1.1.16.3	200 mm dia	100m	175.71	200.56	225.15	248.86	271.94	20.77	17.34	14.40	
1.1.16.4	230 mm dia	100m	251.01	286.51	321.65	355.51	388.49	29.67	24.77	20.57	
1.1.16.5	250 mm dia	100m	301.21	343.81	385.98	426.62	466.19	35.61	29.72	24.69	
1.1.16.6	300 mm dia	100m	376.52	429.76	482.47	533.27	582.74	44.51	37.15	30.86	
1.1.16.7	350 mm dia	100m	527.12	601.67	675.46	746.58	815.83	62.31	52.01	43.20	
1.1.16.8	400 mm dia	100m	753.03	859.53	964.95	1066.54	1165.47	89.02	74.30	61.72	
1.1.16.9	450 mm dia	100m	958.40	1093.94	1228.12	1357.41	1483.33	113.30	94.57	78.55	
1.1.16.10	500 mm dia	100m	1054.24	1203.34	1350.93	1493.15	1631.66	124.63	104.03	86.41	
1.1.16.11	600 mm dia	100m	1317.80	1504.17	1688.66	1866.44	2039.58	155.79	130.03	108.01	
1.1.17	AC pipes, Steel Cylinder, RC Pipes, CI Pipes and unreinforced cement pipes										
1.1.17.1	100 mm dia	100 m	86.41	98.63	110.73	122.39	133.74	10.22	8.53	7.08	
1.1.17.2	125 mm dia	100 m	115.43	131.75	147.91	163.48	178.65	13.65	11.39	9.46	
1.1.17.3	150 mm dia	100 m	144.02	164.39	184.55	203.98	222.90	17.03	14.21	11.80	
1.1.17.4	200 mm dia	100 m	234.28	267.41	300.21	331.81	362.59	27.70	23.12	19.20	
1.1.17.5	250 mm dia	100 m	332.92	380.00	426.61	471.52	515.26	39.36	32.85	27.29	
1.1.17.6	300 mm dia	100 m	411.49	469.69	527.29	582.81	636.87	48.64	40.60	33.73	
1.1.17.7	350 mm dia	100 m	576.09	657.56	738.21	815.93	891.62	68.10	56.85	47.22	

**SUB HEAD - 1.0 CARRIAGE OF MATERIALS**

Code	Materials	Unit	Rate								Remarks
			1 Km	2 Km	3 Km	4 Km	5 Km	Beyond 5 Km upto 10 Km. per Km.	Beyond 10 Km. upto 20 Km. per Km.	Beyond 20 Km. per Km.	
1	2	3	4	5	6	7	8	9	10	11	12
1.1.17.8	400 mm dia	100 m	785.58	896.67	1006.65	1112.63	1215.84	92.87	77.52	64.39	
1.1.17.9	450, 500 mm dia	100 m	960.15	1095.93	1230.35	1359.88	1486.03	113.50	94.74	78.69	
1.1.17.10	600, 700, 750 & 800 mm dia	100 m	1440.22	1643.90	1845.53	2039.83	2229.05	170.26	142.11	118.04	
1.1.17.11	900 mm dia	100 m	2160.33	2465.85	2768.30	3059.74	3343.57	255.39	213.17	177.06	
1.1.17.12	1000, 1100 & 1200 mm dia	100 m	2880.44	3287.80	3691.06	4079.65	4458.10	340.51	284.23	236.08	

**SUB HEAD - 1.0 CARRIAGE OF MATERIALS**

## 1.0 CARRIAGE OF MATERIALS

1.2 Carriage of material by manual labour including loading, unloading and stacking for lead less than 0.5 km

Code No.	Materials	Unit	Cost of carriage including loading, unloading & stacking for first 50 m.	Every additional lead of 50m or part thereof beyond 1st 50m upto 9 such additional leads.	Remarks
1	2	3	4	5	6
1.2.1	Lime, moorum, building rubbish.	Cum	34.08	7.42	The rate is applicable to net quantities after deduction of prescribed percentage for voids mentioned in the specifications under sub-head "Carriage of Materials"
1.2.2	Earth	Cum	42.61	9.28	
1.2.3	Manure or sludge	Cum	37.05	8.07	
1.2.4	Excavated rock	Cum	68.17	14.84	
1.2.5	Sand, stone aggregate below 40 mm nominal size.	Cum	42.61	9.28	
1.2.6	Stone aggregate 40 mm nominal size and above.	Cum	46.06	10.03	
1.2.7	Soling stone	Cum	50.12	10.91	
1.2.8	Bricks	1000			
		Nos.	79.53	17.32	
1.2.9	Brick tiles, Allahabad roofing tiles (flat or round)	1000			
		Nos.	49.71	10.82	
1.2.10	Steam Coal	1000	39.77	8.66	
1.2.11	Stone blocks, G.I., C.I. Pipes below 100 mm dia. and other heavy materials	Tonne	31.11	4.56	
1.2.12	Cement	Tonne	24.68	3.62	
1.2.13	Steel	Tonne	53.00	7.78	
1.2.14	Timber	Cum	34.07	5.00	
1.2.15	Tar, Bitumen etc.	Tonne	31.11	4.56	
1.2.16	S.W.Pipes				The length of S.W. pipes will be measured exclusive of the internal depth of sockets.
1.2.16.1	100mm dia	100 m	62.27	9.14	
1.2.16.2	150mm dia	100 m	102.36	15.02	
1.2.16.3	200mm dia	100 m	143.24	21.02	
1.2.16.4	230mm dia	100 m	183.45	26.92	
1.2.16.5	250mm dia	100 m	238.49	35.00	
1.2.16.6	300mm dia	100 m	340.70	49.99	

1	2	3	4	5	6
1.2.16.7	350mm dia	100 m	476.98	69.99	
1.2.16.8	400mm dia	100 m	596.23	87.49	
1.2.16.9	450mm dia	100 m	722.70	106.05	
1.2.16.10	500mm dia	100 m	883.30	129.61	
1.2.16.11	600mm dia	100 m	1084.05	159.07	
1.2.17	R.C.C pipes, steel cylinder, R.C pipes,C.I. Pipes and unreinforced cement pipes				The length of flanged or plain ended concrete
1.2.17.1	100mm dia	100 m	84.07	12.34	R.C.C.Pipes, steel
1.2.17.2	125mm dia	100 m	102.87	15.10	Cylinders, R.C.
1.2.17.3	150mm dia	100 m	118.46	17.38	pipes and C.I. Pipes
1.2.17.4	200mm dia	100 m	177.76	26.08	shall be measured
1.2.17.5	250mm dia	100 m	312.43	45.85	overall. The length
1.2.17.6	300mm dia	100 m	390.97	57.37	of socketed pipes
1.2.17.7	350mm dia	100 m	558.96	82.02	shall be measured
1.2.17.8	400mm dia	100 m	650.43	95.44	exclusive of internal
1.2.17.9	450 & 500mm dia	100 m	867.24	127.26	depth of sockets.
1.2.17.10	600,700,750 & 800mm dia	100 m	953.96	139.98	
1.2.18	Asbestos Cement				The length of
1.2.18.1	50 mm dia	100 m	14.22	2.09	asbestos cement
1.2.18.2	80mm dia	100 m	39.10	5.74	pipes shall be
1.2.18.3	100mm dia	100 m	55.85	8.20	measured exclusive
1.2.18.4	150mm dia	100 m	78.19	11.47	of internal depth of sockets.

Code No.	Description	Unit	Rate Rs.	Remarks
1	2	3	4	5
1.3	Loading in or unloading cement from the Railway wagon at siding and carrying the same from or into godowns adjacent to the siding, including stacking the same properly in rows upto any height as per direction of Engineer-in-charge, sweeping the wagons and screening the swept cement and filling in bags complete.	Tonne	25.70	
1.4	Loading in or unloading from the Railway wagon as per the direction of Engineer-in-charge.			
1.4.1	Steel	Tonne	37.65	The rates will be applicable in all cases whether materials are unloaded on or loaded from railway siding or directly unloaded on or loaded from transport
1.4.2	G.I., C.I., R.C.C or C.C. pipes upto 500 mm dia. and similar heavy materials	Tonne	22.90	
1.4.3	Heavy materials where each piece or bundle, crate or case weighs more than one tonne and R.C.C., C.I. and concrete pipes above 500 mm dia.	Tonne	50.60	No deduction shall be made from carriage rates for such direct unloading or loading.

**SUB HEAD : 2.0**

**EARTH WORK**

## BASIC RATES (SH: 2.0 EARTH WORK)

Code No	Description	Unit	Rate Rs.
0003	Hire charges of Diesel Road Roller - 8 to 10 tonne	Day	1,000.00
0017	Hire and running charges of tipper	Day	1,030.00
0018	Hire and running charges of loader.	Day	800.00
0020	Hydraulic Excavator (3D) with driver and fuel.	Day	6,000.00
0101	Bhisti	Day	138.45
0103	Blacksmith 2nd class	Day	141.60
0112	Carpenter 2nd class	Day	141.60
0113	Chowkidar	Day	135.25
0114	Beldar	Day	135.25
0115	Coolie	Day	135.25
0124	Mason (brick layer) 2nd class	Day	141.60
0128	Mate	Day	138.45
0132	Rock Excavator	Day	135.25
0133	Rock Breaker	Day	135.25
0134	Rock Hole Driller	Day	135.25
0135	Stone Chiseller	Day	138.45
0302	Safeda ballies 125 mm diameter	metre	29.00
0325	Blasting powder	kilogram	25.00
0326	Blasting fuse (fuse wire)	each	10.00
0771	Kerosene oil	litre	19.00
1197	Second class kail wood in scantling	cudm	160.00
1198	Second class kail wood in planks	cudm	178.00
1235	Diesel oil	litre	30.25
2204	Carriage of Timber	cum	60.81
2335	Carriage of Jamuna sand	cum	53.21
2342	Carriage of solvent/ Diesel.	quintal	5.32
6501	Sand zone V (Jamuna)	cum	175.00
7022	Chlorpyriphos 20% E.C. / Lindane 20% E.C.	litre	150.00
9999	Sundries	L.S.	2.60

## 2.0 EARTH WORK

Code No	Description	Unit	Rate Rs.
2.1	Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including disposal of excavated earth upto 50 m and lift upto 1.5 m, disposed soil to be levelled and neatly dressed :		
2.1.1	All kinds of soil	sqm	2,073.60
2.2	Earth work in rough excavation, banking excavated earth in layers not exceeding 20 cm in depth, breaking clods watering, rolling each layer with ½ tonne roller or wooden or steel rammers, and rolling every 3rd and top-most layer with power roller of minimum 8 tonnes and dressing up in embankments for roads, flood banks, marginal banks and guide banks or filling up ground depressions, lead upto 50 m and lift upto 1.5 m :		
2.2.1	All kinds of soil	cum	157.55
2.3	Banking excavated earth in layers not exceeding 20 cm. in depth, breaking clods, watering, rolling each layer with ½ tonne roller, or wooden or steel rammers, and rolling every 3rd and top-most layer with power roller of minimum 8 tonnes and dressing up, in embankments for roads, flood banks, marginal banks, and guide banks etc., lead upto 50 m and lift upto 1.5 m.		
2.3.1	All kinds of soil	cum	99.45
2.4	Deduct for not rolling with power roller of minimum 8 tonnes for banking excavated earth in layers not exceeding 20 cm in depth.	cum	1.75
2.5	Deduct for not watering the excavated earth for banking	cum	6.45
2.6	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.		
2.6.1	All kinds of soil	cum	101.85
2.7	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30 cm in depth, 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50 m and lift upto 1.5 m, disposed earth to be levelled and neatly dressed.		
2.7.1	Ordinary rock	cum	152.60
2.7.2	Hard rock (requiring blasting)	cum	252.20
2.7.3	Hard rock (blasting prohibited)	cum	325.25
2.8	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.		



Code No	Description	Unit	Rate Rs.
	2.8.1 All kinds of soil.	cum	103.40
2.9	Excavation work in foundation trenches or drains not exceeding 1.5 m in width or 10 sqm on plan including dressing of sides and ramming of bottoms lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soils as directed, within a lead of 50m.		
	2.9.1 Ordinary rock	cum	162.65
	2.9.2 Hard rock (requiring blasting)	cum	272.95
	2.9.3 Hard rock (blasting prohibited)	cum	332.45
2.10	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m :		
	2.10.1 All kinds of soil		
	2.10.1.1 Pipes, cables etc, not exceeding 80 mm dia.	metre	70.45
	2.10.1.2 Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia.	metre	115.05
	2.10.1.3 Pipes, cables etc. exceeding 300 mm dia but not exceeding 600 mm.	metre	179.65
2.11	Extra for excavating trenches for pipes, cables etc. in all kinds of soil for depth exceeding 1.5 m, but not exceeding 3 m. (Rate is over corresponding basic item for depth upto 1.5 metre).	metre	133 %
2.12	Extra for excavating trenches for pipes, cables, etc, in all kinds of soil for depth exceeding 3 m in depth, but not exceeding 4.5 m. (Rate is over corresponding basic item for depth upto 1.5 metre.)	metre	340%
2.13	Excavating trenches of required width for pipes, cables, etc, including excavation for sockets, depth upto 1.5 m including getting out the excavated materials, returning the soil as required in layers not exceeding 20 cm in depth including consolidating each deposited layers by ramming, watering etc. stacking serviceable material for measurements and disposal of unserviceable material as directed, within a lead of 50m :		
	2.13.1 Ordinary rock :		
	2.13.1.1 Pipes, cables etc. not exceeding 80 mm dia.	metre	100.20
	2.13.1.2 Pipes, cables etc. exceeding 80 mm dia but not exceeding 300 mm dia.	metre	248.10
	2.13.1.3 Pipes, cables exceeding 300 mm dia but not exceeding 600mm dia	metre	285.50
	2.13.2 Hard rock (requiring blasting)		
	2.13.2.1 Pipes, cables etc. not exceeding 80 mm dia.	metre	135.90

Code No	Description	Unit	Rate Rs.
2.13.2.2	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia.	metre	336.55
2.13.2.3	Pipes, cables etc. exceeding 300 mm dia but not exceeding 600mm dia	metre	387.30
2.13.3	Hard rock (blasting prohibited)		
2.13.3.1	Pipes, cables etc. not exceeding 80 mm dia.	metre	160.35
2.13.3.2	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia.	metre	397.10
2.13.3.3	Pipes, cables etc. exceeding 300 mm dia but not exceeding 600mm dia.	metre	457.00
2.14	Extra for excavating trenches for pipes, cables, etc. in ordinary/hard rock exceeding 1.5 m in depth but not exceeding 3 m. (Rate is over corresponding basic item for depth upto 1.5 metre.)	metre	110%
2.15	Extra for excavating trenches for pipes, cables, etc. in ordinary/hard rock exceeding 3m in depth but not exceeding 4.5 m. (Rate is over corresponding basic item for depth upto 1.5 metre.)	metre	354%
2.16	Close timbering in trenches including strutting, shoring and packing cavities (wherever required) complete. (Measurements to be taken of the face area timbered).		
2.16.1	Depth not exceeding 1.5 m.	sqm	69.80
2.16.2	Depth exceeding 1.5 m but not exceeding 3 m.	sqm	72.20
2.16.3	Depth exceeding 3 m but not exceeding 4.5 m.	sqm	77.60
2.17	Close timbering in case of shafts, wells, cesspits, manholes and the like including strutting, shoring and packing cavities (wherever required) etc. complete. (Measurements to be taken of the face area timbered).		
2.17.1	Depth not exceeding 1.5 m.	sqm	71.60
2.17.2	Depth exceeding 1.5 m but not exceeding 3 m.	sqm	76.70
2.17.3	Depth exceeding 3 m but not exceeding 4.5 m.	sqm	82.00
2.18	Close timbering over areas including strutting, shoring and packing, cavities (wherever required) etc. complete. (Measurements to be taken of the face area timbered) :		
2.18.1	Depth not exceeding 1.5 m.	sqm	62.40
2.18.2	Depth exceeding 1.5 m but not exceeding 3 m.	sqm	65.15
2.18.3	Depth exceeding 3 m but not exceeding 4.5 m.	sqm	68.15
2.19	Extra for planking, strutting and packing materials for cavities (in close timbering) if required to be left permanently in position. (Face area of timber permanently left to be measured).	sqm	923.05
2.20	Open timbering in trenches including strutting and shoring complete (measurements to be taken of the face area timbered):		
2.20.1	Depth not exceeding 1.5 m.	sqm	35.20

Code No	Description	Unit	Rate Rs.
	2.20.2 Depth exceeding 1.5 m but not exceeding 3 m.	sqm	36.70
	2.20.3 Depth exceeding 3 m but not exceeding 4.5 m.	sqm	39.10
2.21	Open timbering in case of shafts, wells, cesspits, manholes and the like including strutting and shoring complete (Measurements to be taken of the face area timbered):		
	2.21.1 Depth not exceeding 1.5 m.	sqm	30.40
	2.21.2 Depth exceeding 1.5 m but not exceeding 3 m.	sqm	32.75
	2.21.3 Depth exceeding 3 m but not exceeding 4.5 m.	sqm	35.80
2.22	Open timbering over areas including strutting, shoring etc. complete. (Measurements to be taken of the face area timbered):		
	2.22.1 Depth not exceeding 1.5 m.	sqm	21.50
	2.22.2 Depth exceeding 1.5 m but not exceeding 3 m.	sqm	23.20
	2.22.3 Depth exceeding 3 m but not exceeding 4.5 m.	sqm	25.80
2.23	Extra for planking and strutting in open timbering if required to be left permanently in position. (Face area of the timber permanently left to be measured).	sqm	463.85
2.24	Extra rates for quantities of works, executed:		
	2.24.1 In or under water and/or liquid mud, including pumping out water as required.	metre depth	20%
	2.24.2 In or under foul position, including pumping out water as required.	metre depth	25%
	<b>Note for item no. 2.24:-</b> The extra percentage rate is applicable in respect of each item but limited to quantities of work executed in these difficult conditions. The unit, namely, metre depth, to be considered for payment, shall be the depth measured from the sub soil water level upto the centre of gravity of the quantity executed in difficult conditions. The depth shall be reckoned correct to 0.1 metre, 0.05 metre or more shall be taken as 0.1 metre and less than 0.05 metre ignored.		
2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	cum	45.70
2.26	Extra for every additional lift of 1.5 m or part thereof in.		
	2.26.1 All kinds of soil.	cum	18.90
	2.26.2 Ordinary or hard rock.	cum	33.85
2.27	Supplying and filling in plinth with Jamuna sand under floors including, watering, ramming consolidating and dressing complete.	cum	301.50
2.28	Surface dressing of the ground including removing vegetation and in-equalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m.		
	2.28.1 All kinds of soil.	100sqm	512.10

Code No	Description	Unit	Rate Rs.
2.29	Ploughing the existing ground to a depth of 15 cm to 25 cm and watering the same.		
2.29.1	All kinds of soil.	100sqm	512.40
2.30	Excavating holes upto 0.5 cum including getting out the excavated soil, then returning the soil as required in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering etc, disposing of surplus excavated soil; as directed within a lead of 50 m and lift upto 1.5 m.		
2.30.1	All kinds of soil.	each	54.30
2.30.2	Ordinary rock	each	82.85
2.30.3	Hard rock (requiring blasting)	each	134.30
2.30.4	Hard rock (blasting prohibited)	each	160.20
2.31	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth upto 30 cm measured at a height of 1 m above ground level and removal of rubbish upto a distance of 50 m outside the periphery of the area cleared.	100sqm	263.90
2.32	Clearing grass and removal of the rubbish upto a distance of 50 m outside the periphery of the area cleared.	100sqm	135.65
2.33	Felling trees of the girth (measured at a height of 1 m above ground level) including cutting of trunks and branches removing the roots and stacking of serviceable material and disposal of unserviceable material.		
2.33.1	Beyond 30 cm girth upto and including 60 cm girth	each	81.70
2.33.2	Beyond 60 cm girth upto and including 120 cm girth	each	359.80
2.33.3	Beyond 120 cm girth upto and including 240 cm girth	each	1,658.85
2.33.4	Above 240 cm girth	each	3,330.20
2.34	Supplying chemical emulsion in sealed containers including delivery as specified.		
2.34.1	Chlorpyriphos/ Lindane emulsifiable concentrate of 20%	litre	174.30
2.35	Diluting and injecting chemical emulsion for POST-CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion) :		
2.35.1	Along external wall where the apron is not provided using chemical emulsion @ 7.5 litres / sqm of the vertical surface of the substructure to a depth of 300 mm including excavation channel along the wall & rodding etc. complete:		
2.35.1.1	With Chlorpyriphos/ Lindane E.C. 20% with 1% concentration.	sqm	6.75
2.35.2	Along the external wall below concrete or masonry apron using chemical emulsion @ 2.25 litres per linear metre including drilling and plugging holes etc.		
2.35.2.1	With Chlorpyriphos/ Lindane E.C. 20% with 1%	sqm	10.45

Code No	Description	Unit	Rate Rs.
	concentration.		
2.35.3	Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1 :2 (1 cement : 2 Coarse sand) to match the existing floor :		
2.35.3.1	With Chlorpyriphos/Lindane E.C. 20% with 1% concentration.	sqm	48.70
2.35.4	Treatment of existing masonry using chemical emulsion @ one litre per hole at 300 mm interval including drilling holes at 45 degree and plugging them with cement mortar 1:2 (1 cement : 2 coarse sand) to the full depth of the hole :		
2.35.4.1	With Chlorpyriphos/Lindane E.C. 20% with 1% concentration.	metre	7.60
2.35.5	Treatment at points of contact of wood work by chemical emulsion Chlorpyriphos/ Lindane (in oil or kerosene based solution) @ 0.5 litres per hole by drilling 6 mm dia holes at downward angle of 45 degree at 150 mm centre to centre and sealing the same.	metre	79.80
2.35.5	Treatment at points of contact of wood work by chemical emulsion Chlorpyriphos/ Lindane (in oil or kerosene based solution) @ 0.5 litres per hole by drilling 6 mm dia holes at downward angle of 45 degree at 150 mm centre to centre and sealing the same.	metre	13.85
2.36	Deduct for disposed soil not levelled and neatly dressed (against Item No. 2.6,&2.7)	cum	91.25

**SUB HEAD : 3.0**

**MORTARS**

### BASIC RATES (SH:3.0 MORTAR)

Code No	Description	Unit	Rate Rs.
0101	Bhisti	Day	138.45
0114	Beldar	Day	135.25
0367	Portland Cement	tonne	4,500.00
0368	White Cement	tonne	9,700.00
0784	Marble dust/ powder	cum	800.00
0811	Mud (dry)	cum	20.00
0982	Coarse sand (zone III)	cum	600.00
0983	Fine sand (zone IV)	cum	320.00
1159	Stone dust	cum	700.00
2203	Carriage of Coarse sand	cum	53.21
2209	Carriage of Cement	tonne	47.29
2261	Carriage of Fine sand (1 part badarpur sand : 2 parts jamuna sand)	cum	53.21
2267	Carriage of Stone dust	cum	53.21
2268	Carriage of Marble dust and marble chips	cum	53.21
9999	Sundries	L.S.	2.60

### 3.0 MORTAR

Note : These rates are exclusive of water charges, overheads and contractor's profit.

Code No	Description	Unit	Rate Rs.
3.1	Cement Mortar 1:1 (1 cement : 1 fine sand)	cum	5,055.70
3.2	Cement mortar 1:2 (1 cement : 2 fine sand).	cum	3,598.25
3.3	Cement mortar 1:3 (1 cement : 3 fine sand).	cum	2,870.00
3.4	Cement mortar 1:4 (1 cement : 4 fine sand).	cum	2,278.85
3.5	Cement mortar 1:5 (1 cement : 5 fine sand).	cum	1,960.55
3.6	Cement mortar 1:6 (1 cement : 6 fine sand).	cum	1,687.70
3.7	Cement mortar 1:2 (1 cement : 2 coarse sand).	cum	3,864.25
3.8	Cement mortar 1:3 (1 cement : 3 coarse sand).	cum	3,169.60
3.9	Cement mortar 1:4 (1 cement : 4 coarse sand).	cum	2,578.45
3.10	Cement mortar 1:5 (1 cement : 5 coarse sand).	cum	2,260.15
3.11	Cement mortar 1:6 (1 cement : 6 coarse sand).	cum	1,987.30
3.12	Cement mortar 1:2 (1 cement : 2 stone dust).	cum	3,959.25
3.13	Cement mortar 1:2 (1 cement : 2 marble dust).	cum	4,054.25
3.14	Cement mortar 1:5 (1 cement : 5 marble dust).	cum	2,474.15
3.15	White cement mortar 1:2 (1 white cement : 2 marble dust).	cum	7,590.25
3.16	White cement mortar 1:3 (1 white cement : 3 marble dust).	cum	6,035.60
3.17	White cement mortar 1:5 (1 white cement : 5 marble dust).	cum	4,086.15
3.18	Mud mortar	cum	156.85



**SUB HEAD : 4.0**

**CONCRETE WORK**

### BASIC RATES (SH: 4.0 CONCRETE WORK)

Code No	Description	Unit	Rate Rs.
0002	Hire charges of Concrete Mixer 0.14 cubic metre	Day	400.00
0011	Hire charges of Pump set of capacity 4000 litres/hour.	Day	300.00
0012	Vibrator(Needle type 40mm)	Day	200.00
0101	Bhisti	Day	138.45
0114	Beldar	Day	135.25
0115	Coolie	Day	135.25
0116	Fitter (grade 1)	Day	151.50
0123	Mason (brick layer) 1st class	Day	151.50
0124	Mason (brick layer) 2nd class	Day	141.60
0131	Painter	Day	141.60
0155	Mason (average)	Day	146.55
0287	Brick Aggregate (Single size) : 40 mm nominal size	cum	360.00
0293	Stone Aggregate (Single size) : 40 mm nominal size	cum	650.00
0295	Stone Aggregate (Single size) : 20 mm nominal size	cum	700.00
0296	Stone Aggregate (Single size) : 12.5 mm nominal size	cum	700.00
0297	Stone Aggregate (Single size) : 10 mm nominal size	cum	700.00
0309	Paving bitumen S-90 of approved quality	tonne	22,500.00
0367	Portland Cement	tonne	4,500.00
0370	Coal (steam)	quintal	300.00
0771	Kerosene oil	litre	19.00
0982	Coarse sand (zone III)	cum	600.00
0983	Fine sand (zone IV)	cum	320.00
1213	Water proofing materials	kilogram	20.00
1980	Fly ash	cum	6.00
2202	Carriage of Stone aggregate below 40 mm nominal size	cum	53.21
2203	Carriage of Coarse sand	cum	53.21
2206	Carriage of Stone aggregate 40 mm nominal size and above	cum	57.83
2209	Carriage of Cement	tonne	47.29
2211	Carriage of Tar bitumen	tonne	53.21
2260	Carriage of Brick aggregate	cum	57.83
2261	Carriage of Fine sand (1 part badarpur sand : 2 parts jamuna sand)	cum	53.21
2262	Carriage of Fly ash	cum	53.21
7319	Wall form panel 1250x500 mm	each	980.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
7326	Corner angle 45x45x5 mm 1.50 m long	each	280.00
7327	100 mm channel shoulder 2.5 m long	each	1,000.00
7328	Double clip ( bridge clip)	each	75.00
7329	Single clip	each	60.00
7330	M.S. tube 40 mm dia	metre	225.00
7331	Wall form panel 1250x450 mm	each	900.00
7332	Corner angle 45x45x5 m 2.50 m long	each	275.00
7333	Column clamp 450x1070 m	each	1,100.00
7334	Prop 2 m ( 2-3.5m)	each	750.00
9999	Sundries	L.S.	2.60

## 4.0 CONCRETE WORK

Code No	Description	Unit	Rate Rs.
<b>CEMENT CONCRETE (CAST – IN- SITU)</b>			
4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :		
4.1.1	1:1:2 (1 Cement : 1 coarse sand : 2 graded stone aggregate 20 mm nominal size)	cum	4,738.95
4.1.2	1:1½:3 (1 Cement: 1½ coarse sand: 3 graded stone aggregate 20 mm nominal size).	cum	3,629.80
4.1.3	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	3,257.45
4.1.4	1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size).	cum	3,194.10
4.1.5	1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size).	cum	2,791.05
4.1.6	1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size).	cum	2,713.05
4.1.7	1:3:6 (1 Cement : 3 fine sand : 6 graded stone aggregate 40 mm nominal size).	cum	2,560.20
4.1.8	1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size).	cum	2,449.00
4.1.9	1:4:8 (1 cement : 4 fine sand : 8 graded stone aggregate 40 mm nominal size)	cum	2,296.15
4.1.10	1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size)	cum	2,237.75
4.1.11	1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size)	cum	2,079.60
4.1.12	1:2:3½:9 (1 ordinary portland cement : 2 Fly ash : 3½ coarse sand : 9 graded stone aggregate 40 mm nominal size).	cum	2,388.45
4.1.13	1:2½:4:11 (1 ordinary portland cement : 2½ fly ash : 4 coarse sand : 11 graded stone aggregate 40 mm nominal size)	cum	2,154.45
4.2	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets etc. up to floor five level, excluding the cost of centering, shuttering and finishing :		
4.2.1	1:1:2 (1 cement : 1 coarse sand : 2 graded stone aggregate 20 mm nominal size)	cum	5,060.60

Code No	Description	Unit	Rate Rs.
4.2.2	1:1½:3 (1 cement:1½ coarse sand:3 graded stone aggregate 20 mm nominal size).	cum	3,951.45
4.2.3	1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	3,579.10
4.2.4	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size).	cum	3,515.75
4.2.5	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size).	cum	3,112.70
4.2.6	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size).	cum	3,034.70
4.2.7	1:3:6 (1 cement : 3 fine sand : 6 graded stone aggregate 40 mm nominal size).	cum	2,881.85
4.3	Centering and shuttering including strutting, propping etc. and removal of form work for :		
4.3.1	Foundations, footings, bases for columns.	sqm	119.25
4.3.2	Retaining walls, return walls, walls (any thickness) including attached pilasters, buttresses, plinth and string courses fillets etc.	sqm	180.40
4.3.3	Columns, piers, abutments, pillars, posts and struts.	sqm	238.40
4.4	Providing and laying cement concrete in kerbs, steps and the like at or near ground level excluding the cost of centering, shuttering and finishing.		
4.4.1	1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	3,257.45
4.4.2	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size).	cum	2,791.05
<b>CEMENT CONCRETE (PRE-CAST)</b>			
4.5	Providing and fixing up to floor five level precast cement concrete string or lacing courses, copings, bed plates, anchor blocks, plain window sills, shelves, louvers, steps, stair cases, etc. including hoisting and setting in position with cement mortar 1:3 (1 Cement : 3 coarse sand), cost of required centering, shuttering and finishing smooth with 6mm thick cement plaster 1:3 (1 Cement : 3 fine sand) on exposed surfaces complete.		
4.5.1	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size).	cum	4,814.35
4.5.2	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size).	cum	4,347.95
4.6	Providing and fixing at or near ground level precast cement concrete in kerbs, edgings etc. as per approved pattern and setting in position with cement mortar 1:3 (1 Cement : 3 coarse sand) including the cost of required centering, shuttering and finishing smooth with 6mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed		

Code No	Description	Unit	Rate Rs.
	surfaces complete.		
4.6.1	1:2:4 ( 1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size).	cum	4,115.15
4.7	Providing and fixing up to floor five level precast cement concrete solid block including hoisting and setting in position with cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centering, shuttering and finishing smooth with 6mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces complete :		
4.7.1	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size).	cum	5,555.85
4.7.2	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size).	cum	5,089.45
4.8	Providing and fixing up to floor five level precast cement concrete hollow block including hoisting and setting in position with cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centering, shuttering and finishing smooth with 6mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces complete :		
4.8.1	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size).	cum	4,840.40
4.8.2	1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size).	cum	4,625.80
4.9	Precasting and placing in position 125 mm dia Bollards 600 mm high of required shape including providing M.S. Pipe Sleeve 50 mm dia 300 mm long in the Bollard and M.S. Pipes 40 mm dia and 450 mm long with 150x150x6mm M.S. plate welded at bottom and embedded 150mm in cement concrete 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) including necessary excavation of size 250x250x450mm deep for the same in bitumen/concrete pavement at specified spacing.	each	324.70
<b>DAMP- PROOF COURSE</b>			
4.10	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size).	sqm	144.15
4.11	Providing and laying damp-proof course 50mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size).	sqm	178.05
4.12	Extra for providing and mixing water proofing material in cement concrete work @ 1 kg per 50kg of cement.	per 50 kg cement	27.45
4.13	Applying a coat of residual petroleum bitumen of penetration 80/100 of approved quality using 1.7kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	sqm	58.60

Code No	Description	Unit	Rate Rs.
<b>MISCELLANEOUS</b>			
4.14	Extra for concrete work in superstructure above floor V level for each four floors or part thereof.	sqm	235.65
4.15	Extra for laying concrete in or under water and/or liquid mud including cost of pumping or bailing out water and removing slush etc. complete.	Cum per meter depth	180.75
<b>Note for item No. 4.15 :-</b> The quantity will be calculated by multiplying the depth measured from the sub-soil water level up to centre of gravity of concrete under sub-soil water level with quantity of concrete in cum executed under sub-soil water. The depth of centre of gravity shall be reckoned correct to 0.1m, 0.05m or more shall be taken as 0.1m and less than 0.05m ignored.			
4.16	Extra for laying concrete in or under foul positions.	Cum	69.65
4.17	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement :3 coarse sand : 6graded stone aggregate 20mm nominal size) over 75mm bed by dry brick ballast 40mm nominal size well rammed and consolidated and grouted with fine sand including finishing the top smooth	sqm	222.65

**SUB HEAD : 5.0**

**REINFORCED CEMENT  
CONCRETE**



## BASIC RATES (SH: 5.0 REINFORCED CEMENT CONCRETE)

Code No	Description	Unit	Rate Rs.
0002	Hire charges of Concrete Mixer 0.14 cubic metre	Day	400.00
0004	Production cost of concrete by batch mix plant.	cum	200.00
0009	Pumping charges of concrete including Hire charges of pump, piping work & accessories etc.	cum	80.00
0011	Hire charges of Pump set of capacity 4000 litres/hour.	Day	300.00
0012	Vibrator(Needle type 40mm)	Day	200.00
0029	Carriage of concrete by transit mixer.	km/ cum	18.00
0101	Bhisti	Day	138.45
0102	Blacksmith 1st class	Day	151.50
0103	Blacksmith 2nd class	Day	141.60
0112	Carpenter 2nd class	Day	141.60
0114	Beldar	Day	135.25
0115	Coolie	Day	135.25
0116	Fitter (grade 1)	Day	151.50
0123	Mason (brick layer) 1st class	Day	151.50
0124	Mason (brick layer) 2nd class	Day	141.60
0126	Mason (for ornamental stone work) 1st class	Day	151.50
0128	Mate	Day	138.45
0155	Mason (average)	Day	146.55
0236	Non - Asbestos multi purpose fibre cement board 6mm thick.	sqm	180.00
0295	Stone Aggregate (Single size) : 20 mm nominal size	cum	700.00
0297	Stone Aggregate (Single size) : 10 mm nominal size	cum	700.00
0302	Safeda ballies 125 mm diameter	metre	29.00
0309	Paving bitumen S-90 of approved quality	tonne	22,500.00
0313	Blown type petroleum bitumen of penetration 85/25 of approved quality	tonne	25,000.00
0314	Bitumen hot sealing compound : grade A	kilogram	20.00
0316	Bitumen solution primer of approved quality	litre	28.00
0339	Flame retardant face insulating, Impregnated fibre board 12 mm thick	sqm	279.00
0367	Portland Cement	tonne	4,500.00
0370	Coal (steam)	quintal	300.00
0639	Bright finished or black enameled mild steel screws 25 mm	100 Nos	15.00
0768	Cement Concrete Jali 50 mm thick	sqm	145.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
0769	Cement Concrete Jali 40 mm thick	sqm	115.00
0770	Cement Concrete Jali 25 mm thick	sqm	92.00
0967	Copper plate	kilogram	195.00
0982	Coarse sand (zone III)	cum	600.00
0983	Fine sand (zone IV)	cum	320.00
0992	Galvanised steel plain sheets	quintal	3,450.00
1004	Average rate of Mild steel round bars for reinforcements	quintal	3,075.00
1005	Twisted steel / deformed bars	quintal	3,175.00
1015	Mild steel expanded metal 20x60 mm strands	sqm	200.00
1021	Hard drawn steel wire fabric	sqm	310.00
1034	Bolts and nuts upto 300 mm in length	quintal	4,300.00
1197	Second class kail wood in scantling	cudm	160.00
1198	Second class kail wood in planks	cudm	178.00
1224	Hard drawn steel wire	quintal	3,100.00
1225	Mild steel flat strap fitting	quintal	2,900.00
2200	Carriage of steam coal	tonne	60.81
2202	Carriage of Stone aggregate below 40 mm nominal size	cum	53.21
2203	Carriage of Coarse sand	cum	53.21
2204	Carriage of Timber	cum	60.81
2205	Carriage of Steel	tonne	47.29
2209	Carriage of Cement	tonne	47.29
2211	Carriage of Tar bitumen	tonne	53.21
2261	Carriage of Fine sand (1 part badarpur sand : 2 parts jamuna sand)	cum	53.21
2273	Carriage of A.C.sheet and accessories	tonne	47.29
2302	Carriage of G.I.sheet and accessories	tonne	47.29
2391	Strips-Aluminium fluted 3.15mm thick and 150mm wide	metre	216.00
2392	Strips Aluminium fluted 3.15mm thick and 200mm wide metre	Metre	288.00
2447	Hollock ballies 125 mm diameter	metre	27.00
7318	Plasticizer / super plasticizer	kilogram	30.00
7319	Wall form panel 1250x500 mm	each	980.00
7320	Tie bolt 12 mm dia 100 mm length	each	31.00
7321	Tie bolt 12 mm dia 150 mm length	each	29.00
7322	Tie bolt 20 mm dia 150 mm length	each	57.00
7323	Tie bolt 20 mm dia 225 mm length	each	72.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
7324	Spring coil 12 mm	each	10.00
7325	Plastic cone 12 mm dia	each	12.00
7326	Corner angle 45x45x5 mm 1.50 m long	each	280.00
7327	100 mm channel shoulder 2.5 m long	each	1,000.00
7328	Double clip ( bridge clip)	each	75.00
7329	Single clip	each	60.00
7330	M.S. tube 40 mm dia	metre	225.00
7331	Wall form panel 1250x450 mm	each	900.00
7332	Corner angle 45x45x5 m 2.50 m long	each	275.00
7333	Column clamp 450x1070 m	each	1,100.00
7334	Prop 2 m ( 2-3.5m)	each	750.00
7342	Adjustable span ESO+SI (2.35-3.40)	each	1,600.00
7343	Adjustable telescopic prop 3 m (2.02-3.75 m)	each	1,000.00
7344	Beam clamp 300-380 mm (450-1070 mm)	each set	375.00
7345	Prop 4 m	each	1,030.00
7346	Double coupler	each	45.00
8659	Water proof ply 12mm thick.	sqm	572.00
9999	Sundries	L.S.	2.60

## 5.0 REINFORCED CEMENT CONCRETE

Code No	Description	Unit	Rate Rs.
<b>CAST-IN-SITU</b>			
5.1	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :		
5.1.1	1:1:2 (1 cement : 1 coarse sand : 2 graded stone aggregate 20 mm nominal size).	cum	4,841.15
5.1.2	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	cum	3,732.00
5.1.3	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	3,359.60
5.2	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. up to floor five level excluding cost of centering, shuttering, finishing and reinforcement :		
5.2.1	1:1:2 (1 cement : 1 coarse sand : 2 graded stone aggregate 20 mm nominal size)	cum	5,201.50
5.2.2	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	cum	4,092.35
5.2.3	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	3,720.00
5.3	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases up to floor five level excluding the cost of centering, shuttering, finishing and reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	3,673.85
5.4	Providing and laying up to floor five level reinforced cement concrete in kerbs, steps and the like excluding the cost of centering, shuttering, finishing and reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	3,502.85
5.5	Reinforced cement concrete work in arches, archribs, domes, vaults, shells, folded plate and roofs having slope more than 15° up to floor five level excluding the cost of centering, shuttering, finishing and reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	3,545.90
5.6	Reinforced cement concrete work in chimneys, shafts, up to floor five level excluding the cost of centering, shuttering, finishing and reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	3,760.85

Code No	Description	Unit	Rate Rs.
5.7	Reinforced cement concrete work in well-steining excluding the cost of centering, shuttering, finishing and reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	3,270.00
5.8	Reinforced cement concrete work in vertical and horizontal fins individually or forming box louvers, facias and eaves boards up to floor five level excluding the cost of centering, shuttering, finishing and reinforcement with 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20mm nominal size).	cum	3928.75
<b>FORM WORK</b>			
5.9	Centering and shuttering including strutting, propping etc. and removal of form for :		
5.9.1	Foundations, footings, bases of columns, etc. for mass concrete.	sqm	119.25
5.9.2	Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc.	sqm	180.40
5.9.3	Suspended floors, roofs, landings, balconies and access platform.	sqm	187.35
5.9.4	Shelves (Cast in situ)	sqm	187.35
5.9.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers.	sqm	162.65
5.9.6	Columns, Pillars, Piers, Abutments, Posts and Struts.	sqm	238.40
5.9.7	Stairs, (excluding landings) except spiral-staircases.	sqm	204.00
5.9.8	Spiral staircases (including landing).	sqm	182.70
5.9.9	Arches, domes, vaults up to 6 m span	sqm	514.70
5.9.10	Extra for arches, domes, vaults exceeding 6 m span	sqm	259.60
5.9.11	Chimneys and shafts	sqm	147.15
5.9.12	Well steining	sqm	326.50
5.9.13	Vertical and horizontal fins individually or forming box louvers band, facias and eaves boards.	sqm	285.55
5.9.14	Extra for shuttering in circular work (20% of respective centering and shuttering items).	sqm	20.00%
5.9.15	Small lintels not exceeding 1.5m clear span, moulding as in cornices, window sills, string courses, bands, copings, bed plates, anchor blocks and the like.	sqm	119.25
5.9.16	Edges of slabs and breaks in floors and walls.		
5.9.16.1	Under 20 cm wide	metre	61.10
5.9.16.2	Above 20 cm wide	sqm	278.25
5.9.17	Cornices and mouldings	sqm	323.00

Code No	Description	Unit	Rate Rs.
5.9.18	Small surfaces such as cantilever ends, brackets and ends of steps, caps and bases to pilasters and columns and the like.	sqm	246.95
5.9.19	Weather shade, Chajjas, corbels etc., including edges.	sqm	258.60
5.9.20	Suspended floors, roofs, landings, balconies and access platform. with water proof ply 12mm thick.	sqm	987.70
5.9.21	Lintels, beams, plinth beams, girders, bressumers and cantilevers. with water proof ply 12mm thick.	sqm	916.70
5.10	Providing and fixing tie bolt, spring coil and plastic cone in wall shuttering complete as per the direction of Engineer-in-charge		
5.10.1	12 mm dia. & 100 mm length.	each set	89.00
5.10.2	12 mm dia. & 150 mm length.	each set	86.70
5.10.3	20 mm dia. & 150 mm length.	each set	119.20
5.10.4	20 mm dia. & 225 mm length.	each set	136.60
5.11	Extra for additional height in centering, shuttering where ever required with adequate bracing, propping etc. including cost of de-shuttering and decentering at all levels, over a height of 3.5 m, for every additional height of 1 metre or part thereof (Plan area to be measured)		
5.11.1	Suspended floors, roofs, landing, beams and balconies (Plan area to be measured).	sqm	106.20
<b>PRE – CAST R.C.C.</b>			
5.12	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete work in string courses, bands, copings, bed plates, anchor blocks, plain window sills and the like including the cost of required centering, shuttering, finishing smooth with 6 mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces complete but excluding cost of reinforcement with 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size).	cum	4,882.25
5.13	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in small lintels not exceeding 1.5m clear span up to floor five level including the cost of required centering, shuttering and finishing smooth with 6 mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces but excluding the cost of reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size).	cum	6,002.80
5.14	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in mouldings as in cornices, windows sills etc. including setting in cement mortar 1:3 (1 cement : 3 coarse sand) cost of required centering, shuttering and finishing smooth with 6 mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces complete but excluding the cost of	cum	6,725.35

Code No	Description	Unit	Rate Rs.
	reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).		
5.15	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in lintels, beams and bressumers including setting in cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centering and shuttering and finishing smooth with 6 mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces but excluding the cost of reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	5,243.25
5.16	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in shelves including setting in cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centering, shuttering and finishing with neat cement punning on exposed surfaces but excluding the cost of reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size).	cum	6,840.10
5.17	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in vertical & horizontal fins individually or forming box louvers setting in cement mortar 1:2 (1 cement : 2 coarse sand) including the cost of required centering, shuttering and finishing smooth with 6mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces complete but excluding the cost of reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	6,745.50
5.18	Providing precast cement concrete Jali 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6mm nominal size) reinforced with 1.6 mm dia mild steel wire including centering and shuttering, roughening cleaning, fixing and finishing in cement mortar 1:3 (1 cement: 3 fine sand) etc. complete excluding plastering of the jambs, sills and soffits.		
5.18.1	50 mm thick	sqm	359.20
5.18.2	40 mm thick	sqm	304.05
5.18.3	25 mm thick	sqm	277.35
<b>ENCASING ROLLED STEEL SECTION</b>			
5.19	Encasing rolled steel sections, in beams and columns, with cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 12.5mm nominal size) including centering and shuttering complete but excluding cost of reinforcement.	cum	4,953.50
5.20	Encasing rolled steel section in grillages with cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 12.5mm nominal size) including centering and shuttering but excluding cost of expanded metal and hangers.	cum	3,511.25

Code No	Description	Unit	Rate Rs.
5.21	Extra for providing and fixing expanded metal mesh of size 20x60mm and strands 3.25mm wide 1.6mm thick weighing 3.64 kg. per sqm. for encasing of rolled steel sections in beams, columns and grillages excluding cost of hangers.	sqm	255.40
<b>STEEL REINFORCEMENT</b>			
5.22	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.		
5.22.1	Mild steel and Medium Tensile steel bars.	kilogram	41.50
5.22.2	Hard drawn steel wire	kilogram	41.50
5.22.3	Cold twisted bars	kilogram	42.70
5.22.4	Hot rolled deformed bars	kilogram	42.70
5.22.5	Hard drawn steel wire fabric	kilogram	52.00
5.22.6	Thermo-Mechanically Treated bars.	kilogram	42.70
<b>MISCELLANEOUS</b>			
5.23	Deduct for omitting in R.C.C. work smooth finishing of the exposed surface with 6mm thick cement mortar 1:3 (1 Cement : 3 fine sand)	sqm	62.15
5.24	Extra for rendering smooth the top of suspended floors, landings and staircases (treads and risers) with cement mortar 1:2 (1 cement : 2 coarse sand) including a floating coat of neat cement and protecting the surface with a layer of 7.5 cm of earth laid over 15 mm of fine sand in case of suspended floor and bricks laid in mud mortar in case of landings and steps including subsequent removal and cleaning of the same.	sqm	47.40
5.25	Providing and fixing in position copper plate as per design for expansion joints.	kilogram	231.05
5.26	Providing and filling in position, blown bitumen in expansion joints.	per cm depth per cm width per 100m	348.70
5.27	Providing and filling in position bitumen mix filler of Proportion 80 kg. of hot bitumen, 1 kg. of cement and 0.25 cubicmetre of coarse sand for expansion joints.	per cm depth per cm width per 100m	98.85
5.28	Providing and fixing in position 12mm thick bitumen impregnated fibre board conforming to IS: 1838 including cost of primer, sealing compound in expansion joints.	per cm depth per per 100m	334.55
5.29	Providing and fixing sheet covering over expansion joints with iron screws as per design to match the colour / shade of wall treatment.		
5.29.1	Non-asbestos fibre cement board 6 mm thick as per IS: 14862.		



Code No	Description	Unit	Rate Rs.
	5.29.1.1 150mm wide.	metre	69.90
	5.29.1.2 200mm wide.	metre	93.80
	5.29.2 Aluminium fluted strips 3.15mm thick.		
	5.29.2.1 150 mm wide.	metre	276.80
	5.29.2.2 200 mm wide.	metre	368.40
5.30	Add or deduct for plaster drip course/ groove in plastered surface or moulding to R.C.C. projections.	metre	11.95
5.31	Extra for laying reinforced cement concrete in or under water and/ or liquid mud including cost of pumping or bailing out water and removing slush etc., complete.	cum	180.75
	<b>Note For Item No. 5.31:-</b> The quantity will be calculated by multiplying the depth measured from the subsoil water level up to the centre of gravity of the R.C.C. under subsoil water with the quantity of R.C.C. in cubic metre executed under subsoil water. The depth of centre of gravity shall be reckoned correct to 0.1m, 0.05 m or more shall be taken as 0.1 m and less than 0.05 m ignored. No extra payment shall be made for placing reinforcement or centering & shuttering under sub – sol water conditions.		
5.32	Extra for laying reinforced cement concrete in or under foul positions.	cum	69.65
	<b>DESIGN MIX CONCRETE</b>		
5.33	Providing and laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of specified grade for reinforced cement concrete work including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement. including Admixtures in recommended proportions as per IS 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge. M-25 grade reinforced cement concrete by using 410kg. of cement per cum of concrete. All work up to floor V level.	cum	4,147.40
5.34	Add or deduct for providing richer or leaner mixes respectively at all floor levels.		
	5.34.1 Providing M-30 grade concrete by using 420kg of cement per cum of concrete instead of M-25 grade B.M.C/ R.M.C..	cum	54.55
	5.34.2 Providing M-35 grade concrete by using 428kg of cement per cum of concrete instead of M-25 grade B.M.C./ R.M.C...	cum	98.20
	5.34.3 Providing M-40 grade concrete by using 435kg of cement per cum of concrete instead of M-25 grade B.M.C./ R.M.C..	cum	136.40

Code No	Description	Unit	Rate Rs.
5.35	Deduct for using less cement than the quantity as provided in the item of batch mix concrete/RMC as arrived as per mix design.	quintal	522.70
5.36	Providing and placing in position precast reinforced cement concrete waffle units square or rectangular as per design and shape for floors and roofs in 1:1½:3 (1 Cement : 1½ coarse sand : 3 graded stone aggregate 10mm nominal size) including flush or deep ruled pointing at joints in Cement mortar 1:2 (1 Cement : 2 Fine sand), making necessary holes of required sizes for carrying through service lines etc., providing steel hooks for lifting etc, form work in precasting, handling, hoisting, centering and erection complete for all floor levels but excluding the cost of reinforcement.	cum	9,683.15
5.37	Providing and laying in position ready mixed concrete manufactured in fully automatic batching plant and transported to site of work in transit mixer for a lead up to 10kms having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work including pumping of R.M.C. from transit mixer to site of laying , excluding the cost of centering, shuttering finishing and reinforcement including cost of admixtures in recommended proportions as per IS : 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. M-25 grade Reinforced cement concrete by using 410kg of cement per cum of concrete. All works up to floor V level.	cum	4,356.50
5.38	Extra for R.C.C./ B.M.C/ R.M.C. work above floor V level for each four floors or part thereof.	cum	92.90
5.39	Extra for carriage of R.M.C. beyond the initial lead of 10km.	cum/ km	20.00
	<b>Note:-</b> Flyash conforming to grade I of IS: 3812 (Part – I) may be used as part replacement of OPC provided uniform blending with cement is ensured in accordance with clauses 5.2 and 5.2.1 of 15:456:- 2000 in the items of BMC and RMC.		

**SUB HEAD : 6.0**

**BRICK WORK**

## BASIC RATES (SH: 6.0 BRICK WORK)

Code No	Description	Unit	Rate Rs.
0011	Hire charges of Pump set of capacity 4000 litres/hour.	Day	300.00
0037	Mobile crane.	per day	5,000.00
0101	Bhisti	Day	138.45
0112	Carpenter 2nd class	Day	141.60
0114	Beldar	Day	135.25
0115	Coolie	Day	135.25
0123	Mason (brick layer) 1st class	Day	151.50
0124	Mason (brick layer) 2nd class	Day	141.60
0155	Mason (average)	Day	146.55
0322	Bitumen felt :Type 3 grade 1	sqm	45.00
1002	Mild steel round bar 12 mm dia and below	quintal	3,100.00
1008	Flats upto 10 mm in thickness	quintal	2,900.00
1034	Bolts and nuts upto 300 mm in length	quintal	4,300.00
1197	Second class kail wood in scantling	10cudm	160.00
1225	Mild steel flat strap fitting	quintal	2,900.00
1235	Diesel oil	litre	30.25
1984	F.P.S. bricks tile class designation 100	1000 Nos	1,950.00
1986	Modular bricks class designation75	1000 Nos	2,700.00
2201	Carriage of Bricks	1000 Nos	141.88
2204	Carriage of Timber	cum	60.81
2205	Carriage of Steel	tonne	47.29
2207	Carriage of Brick tiles	1000 Nos	85.13
2208	Carriage of Lime	cum	53.21
2302	Carriage of G.I.sheet and accessories	tonne	47.29
2602	F.P.S. bricks class designation75	1000 Nos	1,900.00
7008	F.P.S. clay fly ash bricks class designation 75	1000 Nos	1,412.00
7736	Extruded burnt flyash clay sewer bricks conforming to I.S 4885 - 1988	1000 Nos	3,550.00
7737	Fly ash lime bricks (FALG Bricks) conforming to I.S. 12894-1989	1000 Nos	1,792.00
7738	Calcium Silicate Bricks machine moulded confirming to I.S. 4139 - 1989	1000 Nos	3,083.00
7900	Modular bricks of class designation 75	1000 Nos	2,050.00
7901	Machine moulded perforated FPS bricks of class designation 125	1000 Nos	3,233.00
7902	Machine moulded modular perforated bricks of class designation 125	1000 Nos	3,200.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
7903	Machine moulded FPS bricks of class designation 125	1000 Nos	2,767.00
7904	Machine moulded tile bricks of class designation 125	1000 Nos	2,717.00
8655	Autoclaved aerated cement (AAC) blocks.	cum	1,650.00
8656	Gypsum panel 666 X 500 X 100 mm size.	sqm	544.00
8657	Bonding plaster for Gypsum panel.	kg	50.00
8658	Mechanised Autoclaved flyash lime bricks.	1000 Nos	2,200.00
9999	Sundries	L.S.	2.60

## 6.0 BRICK WORK

Code No	Description	Unit	Rate Rs.
6.1	Brick work with F.P.S. bricks of class designation 75 in foundation and plinth in:		
6.1.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	2,293.40
6.1.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	2,121.75
6.2	Brick work with modular bricks of class designation 75 in foundation and plinth in:		
6.2.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	2,200.25
6.2.2	Cement Mortar 1:6 (1 cement : 6 coarse sand).	cum	2,049.20
6.3	Brick work with machine moulded perforated bricks of class designation 125 conforming to IS: 2222 -1991 in superstructure above plinth level up to floor five level in cement mortar 1:6 (1 cement : 6 coarse sand) :		
6.3.1	With F.P.S. bricks.	cum	3,195.10
6.3.2	With Modular bricks.	cum	3,001.25
6.4	Brick work with F.P.S. bricks of class designation 75 in superstructure above plinth level up to floor V level in all shapes and sizes in :		
6.4.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	2,529.05
6.4.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	2,357.40
6.5	Extra for brick work in superstructure above floor V level for each four floors or part thereof by mechanical means by lifting material using mobile crane.	cum	190.00
6.6	Extra for forming cavity 5cm to 7.5cm wide in cavity walls with necessary weep and vent holes including use of cores and cost of providing and fixing bitumastic coated M .S. ties 300mm long of 25x3mm section at not less than 3 ties per sqm as per approved design.	sqm	47.35
6.7	Providing half brick masonry with F.P.S. bricks of class designation 75 in cement mortar 1:3 (1 Cement : 3 coarse sand) in superstructure for closing cavity 5 to 7.5 cm wide in cavity wall complete with 10 cm / 11.4 cm wide bitumen felt type 3 grade 1.	metre	89.50
6.8	Brick work 7 cm thick with F.P.S. brick of class designation 75 in cement mortar 1:3 (1 cement : 3 coarse sand) in superstructure.	sqm	214.85
6.9	Brick work in plain arches in superstructure including centering and shuttering complete for span up to 6 metres with F.P.S. brick of class designation 75 in cement mortar 1:3 (1 cement : 3 coarse sand).	cum	3,847.45
6.10	Brick work in gauged arches in superstructure in cement mortar 1:3 (1 cement : 3 coarse sand) including centering and shuttering complete, for span up to 6 meters with F.P.S. brick of class designation 75.	cum	4,490.65

Code No	Description	Unit	Rate Rs.
6.11	Extra for additional cost of centering for arches exceeding 6m span including all shuttering, bolting, wedging and removal (Area of the soffit to be measured).	sqm	259.60
	<b>HALF BRICK MASONRY</b>		
6.12	Half brick masonry with F.P.S. brick of class designation 75 in foundations and plinth in.		
6.12.1	Cement mortar 1:3 (1 cement : 3 coarse sand)	sqm	289.60
6.12.2	cement mortar 1:4 (1 cement : 4 coarse sand)	sqm	270.35
6.13	Half brick masonry with F.P.S. bricks of class designation 75 in superstructure above plinth level up to floor V level.		
6.13.1	Cement mortar 1:3 (1 cement :3 coarse sand)	sqm	322.00
6.13.2	Cement mortar 1:4 (1 cement :4 coarse sand)	sqm	302.80
6.14	Extra for half brick masonry in superstructure, above floor V level for every four floors or part thereof by mechanical means by lifting material using mobile crane.	sqm	16.85
6.15	Extra for providing and placing in position 2 Nos. 6mm dia. M.S. bars at every third course of half brick masonry (with F.P.S. bricks).	sqm	47.80
	<b>BRICK TILE WORK</b>		
6.16	Tile brick masonry with tile bricks of class designation 100 in foundation and plinth in:		
6.16.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	3,552.30
6.16.2	Cement mortar 1:6 (1 cement : 6 coarse sand).	cum	3,277.65
6.17	Tile brick masonry with machine moulded tile bricks of class designation 125 conforming to IS : 2690 (Part I) - 1993 in foundation and plinth in cement mortar 1:6 (1 cement : 6 coarse sand).	cum	3,969.85
6.18	Tile brick masonry with machine moulded tile bricks of class designation 125 conforming to IS : 2690 (Part I) - 1993 in superstructure above plinth level up to floor V level. in cement mortar 1:6 (1 cement : 6 coarse sand).	cum	4,294.25
6.19	Extra for tile brick masonry with tile bricks of class designation 100 in superstructure above floor five level for every four floors or part thereof.	cum	235.65
6.20	Tile brick masonry with tile bricks of class designation 100 in plain arch work in superstructure in cement mortar 1:4 (1 cement : 4 coarse sand) including centering and shuttering complete.	cum	4,876.55
6.21	Tile brick masonry with tile bricks of class designation 100 in gauged arch work in superstructure in cement mortar 1:4 (1 cement : 4 coarse sand) including centering and shuttering complete.	cum	5,484.40
6.22	Tile brick masonry work 5 cm thick with tile bricks of class designation 100 in cement mortar 1:3 (1 cement : 3 coarse sand)	sqm	212.10

Code No	Description	Unit	Rate Rs.
	in superstructure.		
	<b>HONEY COMB WORK</b>		
6.23	Honey-comb brick work 10/11.4 cm thick with bricks of class designation 75 in cement mortar 1:4 (1 cement : 4 coarse sand).	sqm	182.25
6.24	Extra for laying brick work in or under water and/or liquid mud including cost of pumping or bailing out water and removing slush etc. complete.	cum	180.75
	<b>NOTE :-</b> The quantity will be calculated by multiplying the depth measured from sub - soil water level up to the centre to gravity of brick work under sub - water with the quantity of brick work in cum executed under the sub - soil water. The depth of centre of gravity shall be reckoned correct to 0.1m, 0.05m or more shall be taken as 0.1 m and less than 0.05m ignored.		
6.25	Extra for laying brick work in or under foul position.	cum	69.65
	<b>EXPOSED BRICK WORK</b>		
6.26	Brick work with selected F.P.S. bricks of class designation 75 in exposed brick work including making horizontal and vertical grooves 10mm wide 12mm deep complete from ground level up to plinth level in cement mortar 1:6 (1 cement : 6 coarse sand)	cum	2,165.60
6.27	Brick work with modular bricks of class designation 75 in exposed brick work including making horizontal and vertical grooves 10mm wide 12mm deep complete from ground level up to plinth level in cement mortar 1:6 (1 cement : 6 coarse sand).	cum	2,065.10
6.28	Brick work with machine moulded modular bricks of class designation 125 in exposed brick work including making horizontal and vertical grooves 10mm wide 12mm deep complete from ground level up to plinth level in cement mortar 1:6 (1 cement : 6 coarse sand).	cum	2,432.75
6.29	Brick work with machine moulded F.P.S. bricks of class designation 125 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12mm deep complete from ground level up to plinth level in cement mortar 1:6 (1 cement : 6 coarse sand)	cum	2,635.10
6.30	Brick work with machine moulded perforated F.P.S. bricks of class designation 125 conforming IS : 2222-1991 in exposed brick work including making horizontal and vertical grooves 10mm wide 12 mm deep complete from ground level up to plinth level in cement mortar 1:6 (1 cement : 6 coarse sand).	cum	2,902.45
6.31	Brick work with machine moulded perforated modular bricks of class designation 125 conforming to IS : 2222 -1991 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12mm deep complete from ground level up to plinth level in cement mortar 1:6 (1 cement : 6 coarse sand).	cum	2,715.60
6.32	Brick work with clay flyash F.P.S. brick of class designation 75 in superstructure above plinth level up to floor five level in :		



Code No	Description	Unit	Rate Rs.
	6.32.1 Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	2,306.35
	6.32.2 Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	2,134.70
6.33	Extra for exposed brick work/ clay flyash brick work in superstructure above floor five level, for each four floors or part thereof.	cum	235.65
6.34	Brick work with modular fly ash lime bricks (FALG Bricks) conforming to IS:12894-2002, class designation 100 average compressive strength in super structure above plinth level up to floor V level in :		
	6.34.1 Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	2,434.35
	6.34.2 Cement mortar 1:6 (1 cement : 6 Coarse sand)	cum	2,283.30
6.35	Brick work with modular calcium silicate bricks machine moulded conforming to IS:4139-1989, class designation 100 average compressive strength in super structure above plinth level up to floor V level in :		
	6.35.1 Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	3,164.60
	6.35.2 Cement mortar 1:6 (1 cement : 6 Coarse sand)	cum	3,013.55
6.36	Brick work with modular extruded brunt fly ash clay sewer bricks (Conforming to IS: 4885 - 1988) in foundation and plinth :		
	6.36.1 Cement Mortar 1:4 ( 1 cement : 4 coarse sand)	cum	3,048.75
6.37	Brick work with modular extruded brunt fly ash clay sewer bricks (conforming to IS : 4885-1988) in arches in foundation and plinth in cement mortar 1:3 ( 1 cement : 3 fine sand).	cum	4,550.30
6.38	Providing and laying autoclaved aerated cement blocks masonry with 100mm thick AAC blocks in super structure above plinth level up to floor V level in cement mortar 1:4 (1 cement : 4 coarse sand ) The rate includes providing and placing in position 2 Nos. 6 mm dia M.S. bars at every third course of masonry work.	cum	3,348.40
6.39	Extra for AAC block masonry in superstructure above floor V level for every four floors or part there of.	cum	235.65
6.40	Providing and laying Gypsum panel partitions 100mm thick with water proof Gypsum panels of size 666x500x100mm, made of calcite phosphor Gypsum fixed with tongue and groove, jointed with bonding plaster as per manufacturers specifications in superstructure above plinth level up to floor V level. Gypsum blocks will have a minimum compressive strength of 9.3 kg/cm2	sqm	803.10
6.41	Extra for Gypsum panel Partitions in superstructure above floor V level for every four floors or part thereof.	sqm	27.20
6.42	Brick work with mechanized autoclaved flyash lime bricks conforming to IS: 12894 :2002 of class designation 100 in superstructure above plinth level up to floor V level in.		
	6.42.1 Cement mortar 1:4 (1 cement :4 coarse sand)	cum	2,465.55
	6.42.2 Cement mortar 1:6 (1 cement :6 coarse sand).	cum	2,293.90

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
6.43	Extra for mechanized autoclave flyash lime bricks conforming to IS: 12894- 1990 of class designation 100 in superstructure above floor V level for each four floors or part thereof.	cum	235.65
6.44	Brick edging 7cm wide 11.4cm. deep to plinth protection with bricks of class designation 75 including grouting with cement mortar 1:4 (1 cement : 4 fine sand)	metre	16.25

**SUB HEAD : 7.0**

**STONE WORK**

## BASIC RATES (SH: 7.0 STONE WORK)

Code No	Description	Unit	Rate Rs.
0011	Hire charges of Pumpset of capacity 4000 litres/hour.	Day	300.00
0100	Bandhani	Day	138.45
0101	Bhisti	Day	138.45
0102	Blacksmith 1st class	Day	151.50
0103	Blacksmith 2nd class	Day	141.60
0112	Carpenter 2nd class	Day	141.60
0114	Beldar	Day	135.25
0115	Coolie	Day	135.25
0116	Fitter (grade 1)	Day	151.50
0123	Mason (brick layer) 1st class	Day	151.50
0124	Mason (brick layer) 2nd class	Day	141.60
0125	Mason (for plain stone work) 2nd class)	Day	141.60
0126	Mason (for ornamental stone work) 1st class	Day	151.50
0139	Skilled Beldar (for floor rubbing etc.)	Day	138.45
0367	Portland Cement	tonne	4,500.00
0373	Cramp Gun metal 25x6x300 mm	each	53.00
0873	Copper pins 6 mm dia 7.5 cm long	each	7.50
1002	Mild steel round bar 12 mm dia and below	quintal	3,100.00
1007	Structural steel such as tees, angles channels and R.S. joists	quintal	3,100.00
1034	Bolts and nuts up to 300 mm in length	quintal	4,300.00
1154	Through and bond stone	Nos	970.00
1157	Stone for masonry work	cum	332.00
1160	Red sand stone block	10 cudm	45.00
1161	White sand stone block	10 cudm	50.00
1163	White sand stone slab 75 mm thick (un-dressed)	sqm	256.00
1164	Red sand stone slab 40 mm thick (un-dressed)	sqm	120.00
1165	White sand stone slab 40 mm thick (un-dressed)	sqm	140.00
1169	Kota stone slab 25mm thick (rough chiseled)	Sq.m.	150.00
1197	Second class kail wood in scantling	10 cudm	160.00
1215	Welding by electric plant	cm	1.00
1225	Mild steel flat strap fitting	quintal	2,900.00
1237	Cutting marble or sand stone slab up to 50 mm thick by mechanical device	metre	6.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
2204	Carriage of Timber	cum	60.81
2215	Carriage of Soling stone & masonry stone	cum	62.60
2216	Carriage of Stone blocks white & red sand stone & kota stone slab	tonne	47.29
2302	Carriage of G.I.sheet and accessories	tonne	47.29
2750	8 mm thick granite stone tiles (mirror polished of all shades)	sqm	555.00
4009	Mild steel tubes hot finished welded type	kilogram	38.00
7339	Stainless steel cramp	kilogram	280.00
7439	8mm thick (mirror polished tiles machine cut edge) Raj Nagar white	sqm	430.00
8683	Red sand stone gang saw cut 30mm thick.	sqm	325.00
8684	White sand stone gang saw cut 30mm thick.	sqm	360.00
8698	Stainless steel cramps with nuts, bolts and washer for dry stone cladding .	each	200.00
9999	Sundries	L.S.	2.60

## 7.0 STONE WORK

Code No	Description	Unit	Rate Rs.
<b>RANDOM RUBBLE MASONRY</b>			
7.1	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20mm nominal size) at plinth level with :		
7.1.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	1,838.90
7.2	Extra for random rubble masonry with hard stone in superstructure above plinth level and upto floor five level, including leveling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20mm nominal size) at window sills, ceiling level and the like.	cum	372.35
7.3	Extra for random rubble masonry with hard stone in superstructure above floor V level for every four floors or part thereof	cum	314.20
7.4	Extra for random rubble masonry with hard stone in :		
7.4.1	Square or rectangular pillars	cum	137.80
7.4.2	Circular pillars.	cum	421.45
7.5	Extra for random rubble masonry with hard stone curved on plan for a mean radius not exceeding 6 m.	cum	173.50
<b>COURSED RUBBLE MASONRY</b>			
7.6	Coursed rubble masonry (first sort) with hard stone in foundation and plinth with :		
7.6.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	2,022.70
7.7	Coursed rubble masonry (second sort) with hard stone in foundation & plinth with :		
7.7.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	1,913.10
7.8	Extra for coursed rubble masonry with hard stone (first or second sort) in superstructure above plinth level and upto floor five level.	cum	361.50
7.9	Extra for coursed rubble masonry with hard stone (first or second sort) in superstructure above floor V level for every four floors or part thereof.	cum	314.20
7.10	Extra for coursed rubble masonry with hard stone (first or second sort) in :		
7.10.1	Square or rectangular pillars	cum	152.60
7.10.2	Circular pillars.	cum	476.30
7.11	Extra for coursed rubble masonry with hard stone (first or second sort) curved on plan for a mean radius not exceeding 6 m.	cum	187.95

Code No	Description	Unit	Rate Rs.
<b>ASHLAR MASONRY</b>			
7.12	Stone work in plain ashlar in super structure upto floor five level in cement mortar 1:6 (1 cement : 6 coarse sand) including pointing with cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade :		
7.12.1	One face dressed.		
7.12.1.1	Red sand stone	cum	14,154.00
7.12.1.2	White sand stone	cum	14,929.00
7.12.2	Both face dressed.		
7.12.2.1	Red sand stone.	cum	17,450.00
7.12.2.2	White sand stone	cum	18,225.00
7.13	Stone work plain ashlar in arches in cement mortar 1:3 (1 cement : 3 coarse sand) including centring, shuttering and pointing with white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade.		
7.13.1	Red sand stone	cum	16,424.00
7.13.2	White sand stone	cum	17,199.00
7.14	Stone work plain ashlar in domes in cement mortar 1:3 (1 cement : 3 coarse sand) including centring, shuttering and pointing with white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade.		
7.14.1	Red sand stone	cum	23,248.00
7.14.2	White sand stone	cum	24,024.00
7.15	Stone work ashlar punched (ordinary) in superstructure upto floor five level in cement mortar 1:6 (1 white cement : 6 coarse sand) including pointing with cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade.		
7.15.1	Red sand stone.		
7.15.1.1	One faced punched.	cum	14,502.00
7.15.1.2	Double faced punched.	cum	18,145.00
7.15.2	White sand stone.		
7.15.2.1	Single face punched.	cum	15,277.00
7.15.2.2	Double faced punched.	cum	18,920.00
7.16	Extra for stone work, plain ashlar or ashlar punched above floor V level for every four floors or part thereof.	cum	314.00
7.17	Extra for plain ashlar or ashlar punched in :		

Code No	Description	Unit	Rate Rs.
	7.17.1 Square or rectangular pillars	cum	1,042.00
7.18	Extra for stone work; plain ashlar or ashlar punched curved on plan with a mean radius not exceeding 6 m.	cum	724.00
7.19	Extra for additional cost of centering for arches exceeding 6m span including all strutting, bolting, wedging etc. and removal (area of soffit to be measured).	sqm	259.60
<b>SUNK, MOULDED, CARVED ASHLAR MASONRY</b>			
7.20	Stone work sunk or moulded or sunk and moulded upto floor five level in cement mortar 1:6 (1 cement : 6 coarse sand) including pointing with white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade :		
	7.20.1 Red sand stone	cum	18,430.00
	7.20.2 White sand stone	cum	19,204.00
7.21	Extra for stone work sunk or moulded or sunk and moulded or carved in :		
	7.21.1 Triangular or Square or rectangular pillars	cum	1,359.00
	7.21.2 Circular or polygonal pillars	cum	3,850.00
7.22	Extra for stone work sunk or moulded in cornices.	per metre per cm girth	8.90
<b>MISCELLANEOUS STONE WORK</b>			
7.23	Stone work (machine cut edges) for wall lining etc. (veneer work) backing filled with a grout of 12mm thick cement mortar 1:3 (1 cement : 3 coarse sand) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade : (To be secured to the backing by means of cramps which shall be paid for separately) :		
7.23.1	Red sand stone - exposed face fine dressed with rough backing.		
	7.23.1.1 70 mm thick.	sqm	1,251.75
	7.23.1.2 60 mm thick.	sqm	1,180.35
	7.23.1.3 50 mm thick.	sqm	1,109.15
	7.23.1.4 40 mm thick.	sqm	1,037.60
	7.23.1.5 30 mm thick.	sqm	966.20
	7.23.2 Red sand stone - Exposed face machine cut and table rubbed with rough backing.		
	7.23.2.1 70 mm thick	sqm	1,568.20
	7.23.2.2 60 mm thick	sqm	1,496.85



Code No	Description	Unit	Rate Rs.
7.23.2.3	50 mm thick	sqm	1,425.65
7.23.2.4	40 mm thick	sqm	1,354.10
7.23.2.5	30 mm thick	sqm	1,282.70
7.23.3	White sand stone - exposed face fine dressed with rough backing .		
7.23.3.1	70 mm thick.	sqm	1,305.95
7.23.3.2	60 mm thick.	sqm	1,226.85
7.23.3.3	50 mm thick.	sqm	1,147.90
7.23.3.4	40 mm thick.	sqm	1,068.45
7.23.3.5	30 mm thick.	sqm	989.45
7.23.4	White sand stone - Exposed face machine cut and table rubbed with rough backing.		
7.23.4.1	70 mm thick.	sqm	1,622.45
7.23.4.2	60 mm thick.	sqm	1,543.30
7.23.4.3	50 mm thick.	sqm	1,464.40
7.23.4.4	40 mm thick.	sqm	1,412.80
7.23.4.5	30 mm thick.	sqm	1,305.90
7.24	Extra for stone work (veneer work) curved on plan with a mean radius not exceeding 6 m.	cum	1,042.00
7.25	Providing and fixing stainless steel cramps of required size and shape for anchoring stone wall lining to the backing or securing adjacent stones in stone wall lining in cement mortar 1:2 (1 cement : 2 coarse sand) including making the necessary chases in stone and holes in walls wherever required.	kilogram	529.50
7.26	Providing and fixing stone dowels 10x5x2.50 cm cut to double wedge shape as per design in cement mortar 1:2 (1 cement : 2 coarse sand) including making the necessary chases.	each	21.25
7.27	Providing and fixing copper pins 7.5 cm long 6 mm diameter for securing adjacent stones in stone wall lining in cement mortar 1:2 (1 cement : 2 coarse sand) including making the necessary chases.	each	20.00
7.28	Providing and fixing sloping chajja of stone 40 mm thick and upto 80 cm wide beyond the wall as measured along the slope in cement mortar 1:4 (1 cement : 4 coarse sand) with 12mm diameter anchoring steel bar 45 cm long fixed in each stone and supported on and including with bricks cove of class designation 75 in cement mortar 1:4 (1 cement : 4 coarse sand) including pointing in cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment		

Code No	Description	Unit	Rate Rs.
	matching the stone shade:		
7.28.1	Red sand stone:		
7.28.1.1	With F.P.S Bricks	sqm	643.70
7.28.2	White sand stone:		
7.28.2.1	With F.P.S. bricks	sqm	675.60
7.29	Providing and fixing horizontal chajja of stone 40 mm thick and upto 80 cm projection in cement mortar 1:4 (1 cement : 4 coarse sand) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade: :		
7.29.1	Red sand stone	sqm	395.30
7.29.2	White sand stone	sqm	423.15
7.30	30mm red sand stone sun-shade (chisel-dressed) supported on red sand stone brackets, fixed in walls with cement mortar 1:4 (1 cement : 4 coarse sand) including finishing complete.	sqm	407.55
7.31	Providing and fixing red sand stone brackets 55x22.5x45cm sunk and moulded including providing and fixing with 4 Nos. gun metal cramp 25x6mm 30 cm long and dowel bars 7.5 cm long 6 mm dia as per design.	each	1,346.80
7.32	Stone work, plain in copings, cornices, string courses and plinth courses, upto 75 mm thick in Cement mortar 1:6 (1 cement : 6 coarse sand) including pointing with white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade.		
7.32.1	Red sand stone	cum	18,406.00
7.32.2	White sand stone	cum	19,181.00
7.33	Providing and fixing stone jali 40mm thick throughout in cement mortar 1:3 (1 cement : 3 coarse sand) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment, matching the stone shade, jali slab without any chamfers etc.		
7.33.1	Red sand stone	sqm	3,668.80
7.33.2	White sand stone	sqm	3,694.40
7.34	Extra for laying stone work in or under water and/or liquid mud including cost of pumping or bailing out water and removing slush etc. complete.	cum/ mtr depth	180.75
7.35	Extra for laying stone work in or under foul position.	cum	69.65
7.36	Wall lining butch work upto 10m height with red/ white sand stone 40 mm thick rough facing on the exposed surface with stone strips of minimum length 300 mm and required width including embedding every tenth layer and bottom most layer in masonry or concrete after making necessary chases of	sqm	802.15

Code No	Description	Unit	Rate Rs.
	size 75x75mm and by providing layer of 75mm thick strips i/c 12mm thick bed of cement mortar 1:3 (1 Cement : 3 coarse sand) i/c ruled pointing in cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment to match the shade of stone complete as per direction of Engineer-in-charge.		
7.37	Stone work ( machine cut edges) for wall lining upto 10 m height etc. (Veneer work) backing filled with a grout of 12mm thick cement mortar 1:3 (1 Cement : 3 coarse sand) and jointed with Cement mortar 1:2 (1 cement : 2 stone dust) including rubbing and polishing complete. (To be secured to the backing by means of cramps which shall be paid for separately)		
7.37.1	Kota stone slabs exposed face dressed and rubbed.		
7.37.1.1	25 mm thick.	sqm	724.95
7.38	Stone tile work for wall lining upto 10 m height with special adhesive over 12mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) including pointing in white cement with an admixture of pigment to match the stone shade.		
7.38.1	8mm thick (mirror polished and machine cut edge)		
7.38.1.1	Granite stone of any colour and shade.	sqm	1,043.75
7.38.1.2	Raj Nagar plain white marble/ Udaipur green marble/ Zebra black marble.	sqm	894.95
7.39	Extra for stone work for wall lining on exterior walls of height more than 10 m from ground level for every additional height of 3 m or part there of.	sqm	40.75
<b>STONE WORK IN DRY CLADDING</b>			
7.40	Providing and fixing dry cladding upto 10 metre heights with 30mm thick gang saw cut stone with (machine cut edges) of uniform colour and size upto 1mx1m, fixed to structural steel frame work and/ or with the help of cramps, pins etc. and sealing the joints with approved weather sealant as per Architectural drawing and direction of Engineer-in-charge. (The steel frame work, stainless steel cramps and pins etc. shall be paid for separately.)		
7.40.1	Red sand stone.	sqm	1,323.40
7.40.2	White sand stone	sqm	1,382.35
7.41	Providing and fixing structural steel frame (for dry cladding with 30 mm thick gang saw cut with machine cut edges sand stone) on walls at all heights using M.S. square/ rectangular tube in the required pattern as per architectural drawing including cost of cutting, bending, welding etc. The frame work shall be supported in wall with the help of MS brackets/	kilogram	75.40

Code No	Description	Unit	Rate Rs.
	lugs of angle iron/ flats etc. which shall be welded to the frame and embedded in brick wall with cement concrete block 1:2:4 (1 cement :2 coarse sand :4 graded stone aggregate 20mm nominal size) of size 300x230x300mm including cost of necessary centring and shuttering and with approved expansion hold fasteners on CC/RCC surface including drilling necessary holes. Approved cramps/ pins etc. shall be welded to the frame work to support stone cladding the steel work will be given a priming coat of Zinc primer as approved by Engineer-in-charge and painted with two or more coats of epoxy paint (Shop drawings shall be submitted by the contractor to the Engineer-in-charge for approval before execution). The frame work shall be fixed in true horizontal & vertical lines/planes. (Only structural steel frame work shall be measured for the purpose of payment, stainless steel cramps shall be paid for separately and nothing extra shall be paid.)		
7.42	Providing and fixing adjustable stainless steel cramps of approved quality and of required shape and size adjustable with stainless steel nuts bolts and washer (total weight not less than 260 gms) for dry stone cladding fixed on frame work at suitable location including making necessary recesses in stone slab, drilling required holes etc complete as per direction of the Engineer-in-charge.	each	272.50

**SUB HEAD : 8.0**

**MARBLE WORK**

### BASIC RATES (SH: 8.0 MARBLE WORK)

Code No	Description	Unit	Rate Rs.
0013	Machine for rubbing of floors	Day	200.00
0019	Hand Grinder For mirror polish	Day	100.00
0100	Bandhani	Day	138.45
0101	Bhisti	Day	138.45
0102	Blacksmith 1st class	Day	151.50
0114	Beldar	Day	135.25
0115	Coolie	Day	135.25
0116	Fitter (grade 1)	Day	151.50
0123	Mason (brick layer) 1st class	Day	151.50
0126	Mason (for ornamental stone work) 1st class	Day	151.50
0128	Mate	Day	138.45
0367	Portland Cement	tonne	4,500.00
1034	Bolts and nuts up to 300 mm in length	quintal	4,300.00
2216	Carriage of Stone blocks white & red sand stone & kota stone slab	tonne	47.29
2750	8 mm thick granite stone tiles (mirror polished of all shades)	sqm	555.00
2751	8 mm thick marble tiles (polished) Raj Nagar	sqm	294.00
7244	Table rubbed polished stone 18 mm thick (75x50cm) Agaria Marble stone - 18 mm thick	sqm	1,440.00
7245	Table rubbed polished stone 18mm thick (75x50cm) Granite stone - 18mm thick	sqm	1,670.00
7295	Granite Black marble, 18 mm thick slab, above 0.2 sqm up to 0.5 sqm (area wise)	sqm	1,500.00
7297	Granite Black marble, 18 mm thick slab, above 1.0 sqm up to 2.0 sqm (area wise)	sqm	1,615.00
7338	Gun metal cramp	kilogram	270.00
7339	Stainless steel cramp	kilogram	280.00
7430	Wedge expansion hold fastener 1/4" or 6 mm	each	10.00
7431	Wedge expansion hold fastener 3/8" or 10 mm	each	12.00
7432	Wedge expansion hold fastener 1/2" or 12 mm	each	23.00
7452	Raj nagar plain white marble (table rubbed and polished) 18 mm thick above 0.10 sqm up to 0.20 sqm	sqm	540.00
7453	Raj nagar plain white marble (table rubbed and polished) 18 mm thick above 0.20 sqm up to 0.50 sqm	sqm	580.00
9999	Sundries	L.S.	2.60

## 8.0 MARBLE WORK

Code No	Description	Unit	Rate Rs.
8.1	Marble work gang saw cut (polished and machine cut) of thickness 18mm for wall lining (veneer work) in cement mortar 1:3 (1 cement : 3 coarse sand) including pointing with white cement mortar 1:2 (1 white cement : 2 marble dust) with an admixture of pigment to match the marble shade: (To be secured to the backing by means of cramps, which shall be paid for separately).		
8.1.1	Raj Nagar Plain white marble/ Udaipur green marble/ Zebra black marble.		
8.1.1.1	Area of slab upto 0.50 sqm	sqm	1,511.60
8.1.1.2	Area of slab over 0.50 sqm	sqm	1,562.50
8.2	Providing and fixing 18mm thick gang saw cut mirror polished premoulded and prepolished) machine cut for kitchen platforms, vanity counters, window sills , facias and similar locations of required size of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 coarse sand) with joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edge to give high gloss finish etc. complete at all levels.		
8.2.1	Raj Nagar Plain white marble/ Udaipur green marble/ Zebra black marble.		
8.2.1.1	Area of slab upto 0.50 sqm.	sqm	1,309.40
8.2.1.2	Area of slab over 0.50 sqm.	sqm	1358.15
8.2.2	Granite of any colour and shade		
8.2.2.1	Area of slab upto 0.50 sqm	sqm	2,480.20
8.2.2.2	Area of slab over 0.50 sqm.	sqm	2,543.65
8.3	Extra for providing edge moulding to 18mm thick marble stone counters, Vanities etc. including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge.		
8.3.1	Marble work	metre	57.90
8.3.2	Granite work.	metre	97.60
8.4	Extra for fixing marble /granite stone over and above corresponding basic item, in facia and drops of width upto 150 mm with epoxy resin based adhesive including cleaning etc. complete.	metre	106.80
8.5	Extra for providing opening of required size & shape for wash basins/ kitchen sink in kitchen platform, vanity counters and similar location in marble/Granite/stone work including necessary holes for pillar taps etc. including rubbing and polishing of cut edges etc. complete.	each	151.00
8.6	Mirror polishing on marble work/Granite work/stone work where ever required to give high gloss finish complete.	sqm	94.20

Code No	Description	Unit	Rate Rs.
8.7	Providing and fixing cramps of required size & shape in RCC/ CC backing with cement mortar 1:2 ( 1 cement :2 coarse sand) including drilling necessary hole in stones and embedding the cramp in the hole (fastener to be paid separately).		
8.7.1	Gunmetal cramps.	kg	500.65
8.7.2	Stainless steel cramps.	kg	529.50
8.8	Providing and fixing expansion hold fasteners on C.C. /R.C.C. surface backing including drilling necessary holes and the cost of bolt etc complete.		
8.8.1	Wedge expansion type		
8.8.1.1	Fastener with threaded dia 6 mm.	each	16.40
8.8.1.2	Fastener with threaded dia 10 mm.	each	18.95
8.8.1.3	Fastener with threaded dia 12 mm.	each	32.00
8.9	Stone tile (polished) work for wall lining over 12mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and cement slurry @ 3.3 kg/sqm including pointing in white cement complete.		
8.9.1	8mm thick.		
8.9.1.1	Raj nagar plain white marble/ Udaipur green marble/ Zebra black marble.	sqm	805.55
8.9.1.2	Granite of any colour and shade.	sqm	1,116.30
8.10	Providing and fixing stone slab table rubbed, edges rounded and polished of size 75x50 cm deep and 1.8 cm thick fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6 mm nominal size) as per direction of Engineer-in-charge and finished smooth.		
8.10.1	White Agaria Marble Stone.	sqm	2,274.45
8.10.2	Granite Stone of approved shade.	sqm	2,595.00



**SUB HEAD : 9.0**

**WOOD WORK  
&  
PVC WORK**

## BASIC RATES (SH: 9.0 WOOD WORK AND P.V.C. WORK)

Code No	Description	Unit	Rate Rs.
0100	Bandhani	Day	138.45
0102	Blacksmith 1st class	Day	151.50
0103	Blacksmith 2nd class	Day	141.60
0111	Carpenter 1st class	Day	151.50
0112	Carpenter 2nd class	Day	141.60
0114	Beldar	Day	135.25
0119	Glazier	Day	141.60
0123	Mason (brick layer) 1st class	Day	151.50
0124	Mason (brick layer) 2nd class	Day	141.60
0130	Mistry	Day	151.50
0131	Painter	Day	141.60
0156	Carpenter (average)	Day	146.55
0237	Non - Asbestos multi purpose fibre cement board 8mm thick.	sqm	239.00
0305	Bamboo 25 mm dia 2.5 metre long	score	192.00
0341	Flat pressed 3 layer particle board (medium density) Grade I :12 mm thick	sqm	258.00
0346	Extra for veneered particle board with : Teak veneering on one side and commercial veneered on other side	sqm	198.00
0347	Extra for veneered particle board with : Commercial veneering on both sides	sqm	102.00
0348	Extra for veneered particle board with : Teak veneering on both sides	sqm	366.00
0378	Brass butt hinges (light/ordinary type) : 125x70x4 mm	10 Nos	450.00
0379	Brass butt hinges (light/ordinary type) : 100x70x4 mm	10 Nos	300.00
0380	Brass butt hinges (light/ordinary type) : 75x40x2.5 mm	10 Nos	160.00
0381	Brass butt hinges (light/ordinary type) : 50x40x2.5 mm	10 Nos	90.00
0382	Brass butt hinges (heavy type) : 125x85x5.5 mm(.70)kg	10 Nos	1,500.00
0383	Brass butt hinges (heavy type) : 100x85x5.5 mm(.56)kg	10 Nos	1,300.00
0384	Brass butt hinges (heavy type) :75x65x4.0 mm(.20)kg	10 Nos	450.00
0385	Brass parliamentary hinges 150x125x27x5 mm	10 Nos	1,650.00
0386	Brass parliamentary hinges 125x125x27x5 mm	10 Nos	1,450.00
0387	Brass parliamentary hinges 100x125x27x5 mm	10 Nos	1,175.00
0388	Brass parliamentary hinges75x100x20x3.2 mm	10 Nos	888.00
0400	Brass tower bolt (barrel type) 250x10 mm	each	123.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
0401	Brass tower bolt (barrel type) 200x10 mm	each	100.00
0402	Brass tower bolt (barrel type) 150x10 mm	each	75.00
0403	Brass tower bolt (barrel type) 100x10 mm	each	51.00
0408	Brass handles 125 mm with plate 175x32 mm	each	85.00
0409	Brass handles 100 mm with plate 150x32 mm	each	75.00
0410	Brass handles 75 mm with plate 125x32 mm	each	55.00
0411	Brass door latch 300x16x5 mm (0.380 kg)	each	85.00
0412	Brass door latch 250x16x5 mm (0.350 kg)	each	82.00
0413	Brass mortice latch and lock 100x65 mm with 6 levers and a pair of brass lever handles	each	257.00
0414	Brass mortice latch 100x65mm with a pair of brass lever handles	each	235.00
0423	Brass casement window fastener	Each	26.00
0424	Brass casement stays (straight peg type ) 300 mm weighing not less than 0.33 kg	each	66.00
0425	Brass casement stays (straight peg type ) 250 mm weighing not less than 0.28 kg	Each	55.00
0426	Brass casement stays (straight peg type ) 200 mm weighing not less than 0.24 kg	each	46.00
0431	Brass hasps and staples (safety type) 300 mm	10 Nos	458.00
0432	Brass hasps and staples (safety type) 115 mm	10 Nos	378.00
0433	Brass hasps and staples (safety type) 90 mm	10 Nos	300.00
0438	Brass Night latch	each	338.00
0447	Brass cupboard knob or ward robe knob 50 mm	each	18.00
0449	Brass screws 50 mm	100 Nos	107.00
0450	Brass screws 40 mm	100 Nos	96.00
0451	Brass screws 30 mm	100 Nos	86.00
0452	Brass screws 25 mm	100 Nos	76.00
0453	Brass screws 20 mm	100 Nos	53.00
0555	Chromium plated Brass handles 125 mm with plate 175 x32 mm	Each	92.00
0556	Chromium plated Brass handles 100 mm with plate 150 x 32 mm	Each	79.00
0557	Chromium plated Brass handles 75mm with plate 125x32 mm	Each	68.00
0558	Chromium plated Brass mortice latch and lock 100x65 mm with 6 levers and a pair of brass lever handles	each	323.00
0568	Chromium plated brass casement window fastener	each	55.00
0569	Chromium plated Brass casement stays (straight peg type ) 300 mm weighing not less than 0.33 kg	each	73.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
0570	Chromium plated Brass casement stays (straight peg type ) 250 mm weighing not less than 0.28 kg	each	67.00
0571	Chromium plated Brass casement stays (straight peg type ) 200 mm weighing not less than 0.24 kg	each	56.00
0583	Chromium plated Brass Night latch	each	383.00
0584	Chromium plated Brass Wardrobe Knob 50 mm	each	25.00
0585	Chromium plated Brass screws 50 mm	100 Nos	123.00
0586	Chromium plated Brass screws 40 mm	100 Nos	150.00
0587	Chromium plated Brass screws 30 mm	100 Nos	90.00
0588	Chromium plated Brass screws 25 mm	100 Nos	83.00
0589	Chromium plated Brass screws 20 mm	100 Nos	63.00
0590	Chromium plated Brass curtain rod 12 mm dia 1.25mm thick	metre	122.00
0591	Chromium plated Brass curtain rod 20 mm dia 1.25mm thick	metre	143.00
0592	Chromium plated Brass curtain rod 25 mm dia 1.25mm thick	metre	239.00
0594	Bright finished or black enamelled mild steel butt hinges 125x65x2.12 mm	10 Nos	78.00
0595	Bright finished or black enamelled mild steel butt hinges 100x58x1.90 mm	10 Nos	54.00
0596	Bright finished or black enamelled mild steel butt hinges 75x47x1.70 mm	10 Nos	34.00
0597	Bright finished or black enamelled mild steel butt hinges 50x37x1.50 mm	10 Nos	28.00
0608	Nickel plated mild steel piano hinges 1 mm thick 35 mm wide	metre	21.00
0635	Bright finished or black enamelled mild steel screws 50 mm	100 Nos	40.00
0637	Bright finished or black enamelled mild steel screws 40 mm	100 Nos	30.00
0638	Bright finished or black enamelled mild steel screws 30 mm	100 Nos	24.00
0639	Bright finished or black enamelled mild steel screws 25 mm	100 Nos	15.00
0640	Bright finished or black enamelled mild steel screws 20 mm	100 Nos	15.00
0641	Bright finished or black enamelled mild steel bolts and nuts 50x6 mm	each	4.00
0642	Oxidised mild steel butt hinges 125x65x2.12 mm	10 Nos	92.00
0643	Oxidised mild steel butt hinges 100x58x1.90 mm	10 Nos	53.00
0644	Oxidised mild steel butt hinges 75x47x1.70 mm	10 Nos	32.00
0645	Oxidised mild steel butt hinges 50x37x1.50 mm	10 Nos	27.00
0646	Oxidised mild steel parliamentary hinges 150x125x27x2.8 mm	10 Nos	255.00
0647	Oxidised mild steel parliamentary hinges 125x125x27x2.8 mm	10 Nos	205.00
0648	Oxidised mild steel parliamentary hinges 100x125x27x2.8 mm	10 Nos	165.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
0649	Oxidised mild steel parliamentary hinges 75x100x20x2.24 mm	10 Nos	122.00
0650	Oxidised mild steel single acting spring hinges 150 mm	each	71.00
0651	Oxidised mild steel single acting spring hinges 125 mm	each	66.00
0652	Oxidised mild steel single acting spring hinges 100 mm	each	51.00
0653	Oxidised mild steel double acting spring hinges 150 mm	each	73.00
0654	Oxidised mild steel double acting spring hinges 125 mm	each	63.00
0655	Oxidised mild steel double acting spring hinges 100 mm	each	47.00
0656	Nickel plated mild steel piano hinges 1 mm thick 35 mm wide	metre	24.00
0660	Oxidised mild steel sliding door bolt 300x16 mm	each	45.00
0661	Oxidised mild steel sliding door bolt 250x16 mm	each	37.00
0662	Oxidised mild steel door latch 300x20x6 mm	each	25.00
0663	Oxidised mild steel door latch 250x20x6 mm	each	25.00
0664	Oxidised mild steel tower bolt (barrel type) 250x10 mm	each	25.00
0665	Oxidised mild steel tower bolt (barrel type) 200x10 mm	each	21.00
0666	Oxidised mild steel tower bolt (barrel type) 150x10 mm	each	17.00
0667	Oxidised mild steel tower bolt (barrel type) 100x10 mm	each	12.00
0668	Oxidised mild steel handles 125 mm	each	7.00
0669	Oxidised mild steel handles 100 mm	each	5.00
0670	Oxidised mild steel handles 75 mm	each	3.00
0679	Oxidised mild steel hasps and staples(safety type) 150 mm	10 Nos	79.00
0680	Oxidised mild steel hasps and staples(safety type) 115 mm	10 Nos	70.00
0681	Oxidised mild steel hasps and staples(safety type) 90 mm	10 Nos	52.00
0682	Oxidised mild steel screws 50 mm	10 Nos	40.00
0683	Oxidised mild steel screws 40 mm	100 Nos	35.00
0684	Oxidised mild steel screws 30 mm	100 Nos	24.00
0685	Oxidised mild steel screws 25 mm	100 Nos	16.00
0686	Oxidised mild steel screws 20 mm	100 Nos	15.00
0687	Anodised Aluminium butt hinges 125x75x4 mm	10 Nos	478.00
0688	Anodised Aluminium butt hinges 125x63x4 mm	10 Nos	447.00
0689	Anodised Aluminium butt hinges 100x75x4 mm	10 Nos	416.00
0690	Anodised Aluminium butt hinges 100x63x3.2 mm	10 Nos	390.00
0691	Anodised Aluminium butt hinges 100x63x4 mm	10 Nos	354.00
0692	Anodised Aluminium butt hinges 75x63x4 mm	10 Nos	281.00
0693	Anodised Aluminium butt hinges 75x63x3.2 mm	10 Nos	215.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
0694	Anodised Aluminium butt hinges 75x45x3.2 mm	10 Nos	98.00
0696	Anodised Aluminium sliding door bolt 300x16 mm	each	125.00
0697	Anodised Aluminium sliding door bolt 250x16 mm	each	104.00
0698	Anodised Aluminium tower bolt (barrel type)300x10 mm	10 Nos	520.00
0699	Anodised Aluminium tower bolt (barrel type)250x10 mm	10 Nos	440.00
0700	Anodised Aluminium tower bolt (barrel type)200x10 mm	10 Nos	354.00
0701	Anodised Aluminium tower bolt (barrel type)150x10 mm	10 Nos	281.00
0702	Anodised Aluminium tower bolt (barrel type)100x10 mm	10 Nos	208.00
0703	Anodised Aluminium handles 125 mm with plate 175 x 32 mm	10 Nos	375.00
0704	Anodised Aluminium handles 100 mm with plate 150 x 32 mm	10 Nos	260.00
0705	Anodised Aluminium handles 75mm with plate 125 x 32 mm	10 Nos	208.00
0706	Anodised Aluminium kicking plate 50 cm long100x3.15 mm	each	94.00
0713	Block board construction flush door with teak wood ply on both faces 35 mm thick	sqm	1,100.00
0714	Block board construction flush door with teak wood ply on both faces 30 mm thick	sqm	1,050.00
0715	Block board construction flush door with teak wood ply on both faces 25 mm thick	sqm	1,000.00
0717	Block board construction flush door with commercial ply on both faces 35 mm thick	sqm	632.00
0718	Block board construction flush door with commercial ply on both faces 30 mm thick	sqm	610.00
0719	Block board construction flush door with commercial ply on both faces 25 mm thick	sqm	600.00
0752	Block board construction flush door lipping	sqm of door area	245.00
0753	Square vision panel in Block board construction flush door	sqm of door area	86.00
0754	Circular vision panel in Block board construction flush door	Sqm of door area	118.00
0755	Decorative type Louvers in Block board construction flush door	sqm of door area	210.00
0757	Rebate cutting in Block board construction flush door	sqm of door area	57.00
0759	Decorative plywood 4 mm	sqm	250.00
0763	Glue	kilogram	50.00
0834	Synthetic enamel paint in all shades except black or chocolate shade	litre	120.00
0869	Plaster of Paris	kilogram	2.50

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
1003	Mild steel round bar above 12 mm dia	quintal	3,050.00
1008	Flats up to 10 mm in thickness	quintal	2,900.00
1015	Mild steel expanded metal 20x60 mm strands	sqm	200.00
1021	Hard drawn steel wire fabric	sqm	310.00
1022	Galvanised steel bolts & nuts 6 mm dia and 25 mm long round head with slots	10 Nos	9.00
1189	Second class teak wood in scantling	10 cudm	394.00
1190	Second class teak wood in planks	10 cudm	410.00
1199	Sal wood in scantling	10 cudm	218.00
1211	G.I. plain washer for seam bolts	100 Nos	21.00
1231	Extra for selected planks of second class teakwood	10 cudm	72.00
1238	Extra for selected planks of first class teakwood	10 cudm	80.00
2204	Carriage of Timber	cum	60.81
2205	Carriage of Steel	tonne	47.29
2406	Float glass sheet of nominal thickness 4 mm (weight not less than 10kg/sqm).	sqm	248.00
2407	Float glass sheet of nominal thickness 5.5 mm.(weight not less than 13.50 kg/sqm).	sqm	340.00
2412	Ply wood 5 ply with commercial ply on both faces 6 mm thick	sqm	282.00
2449	Oxidised mild steel pull bolt lock (locking bolt) of size 85 mm x 42 mm with screws, bolts, nuts and washers complete	each	27.00
2451	Brass cupboard lock 6 levers (best make of approved quality) 40 mm size	each	36.00
2452	Brass cupboard lock 6 levers (best make of approved quality) 50 mm size	each	43.00
2453	Brass cupboard lock 6 levers (best make of approved quality) 65 mm size	each	55.00
2454	Brass cupboard lock 6 levers (best make of approved quality) 75 mm size	each	70.00
2455	Brass hanging type door stopper 150 mm	each	46.00
2456	Hydraulic door closer bottle type M.S. body with necessary accessories and screws complete	each	506.00
2459	Anodised Aluminium hanging type door stopper	each	14.00
2464	Anodised Aluminium pull bolt lock (locking bolt) of size 85 mmx42 mm with screws, bolts, nuts and washers complete	each	34.00
2465	Anodised Aluminium Casement stay 250 mm	each	36.00
2466	Hollock wood in scantling	10 cudm	217.00
2468	Nickeled Chromium Brass cupboard lock 40 mm size	each	38.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
2469	Nickeled Chromium Brass cupboard lock 50 mm size	each	53.00
2470	Nickeled Chromium Brass cupboard lock 65 mm size	each	64.00
2471	Nickeled Chromium Brass cupboard lock 75 mm size	each	75.00
2480	Ply wood 5 ply with teak ply on both faces 9 mm thick	sqm	693.00
2481	Ply wood 5 ply with teak ply on one face and commercial ply on another face 9 mm thick	sqm	550.00
2483	Ply wood 7 ply with teak ply on one face and commercial ply on another face 9 mm thick	sqm	585.00
2504	Kiln seasoning of timber	cum	539.00
2505	Hollock wood in planks	10 cudm	230.00
7001	Brass 100mm mortice latch and lock with 6 levers without pair of handles	each	150.00
7003	Pair of Anodised Aluminium lever handles for 100mm mortice latch and lock	each	195.00
7018	Joint tape roll	roll	120.00
7019	Dash fastener	each	8.00
7020	All drive screws ( for gypsum board)	100 Nos	40.00
7021	Primer ( for gypsum board)	litre	76.00
7023	Chromium plated brackets ( curtain rods)	each	5.00
7029	Galvanised wire mesh of average width of aperture 1.4 mm and nominal dia. of wire 0.63 mm	sqm	142.00
7032	Frosted glass sheet of nominal thickness 4 mm (weighing not less than 10 kg/sqm)	sqm	257.00
7034	Nickel plated M.S. pipe 20 mm dia.	metre	54.00
7035	Nickel plated M.S. Brackets for curtain rod 20 mm	each	3.00
7036	Nickel plated M.S. Brackets for curtain rod 25 mm	each	4.00
7040	Oxidised mild steel screws 35 mm	100 Nos	28.00
7042	Mild steel conduit pipe (heavy type) ISI marked-20 mm dia.	metre	44.00
7043	Mild steel conduit pipe (heavy type) ISI marked-25 mm dia.	metre	49.00
7048	Rawl plug 50 mm (designation 10 no.)	each	7.00
7049	Teak wood lipping of size 25x3 mm in pelmets	metre	16.00
7055	Flat pressed 3 layer and graded particle board (medium density) Grade 1 conforming to IS : 3087 - 18 mm thick	sqm	301.00
7056	Aluminium tee channel (heavy duty) with rollers and stop end	metre	35.00
7059	Aluminium hanging floor door stopper with twin rubber & stopper	each	44.00
7060	Hydraulic door closer tubular type Aluminium section body	each	765.00
7063	Oxidised M.S. casement stay (straight peg type) 300 mm not less	each	14.00



Code No	Description	Unit	Rate Rs.
	than 0.33 kg		
7064	Oxidised M.S. casement stay (straight peg type) 250 mm not less than 0.28 kg	each	12.00
7065	Oxidised M.S. casement stay (straight peg type) 200 mm not less than 0.24 kg	each	11.00
7137	Factory made 35 mm thick shutters with laminated veneer lumber styles rails as per TADS IS:1995 and panels of 12 mm thick plain type-I, medium density flat pressed three layer, graded particle board (FPT-I) as per IS:3087-1985 bonded with BWP type synthetic resin adhesive, as per IS:848-1974	sqm	1,500.00
7139	Factory made 35 mm thick shutters with laminated veneer lumber styles rails as per TADS IS:1995 and panels of 12 mm thick both sides pre laminated type-I, medium density flat pressed three layer, graded particle board (FPT-I) as per IS:3087-1985 bonded with BWP type synthetic resin adhesive, as per IS:848-1974	sqm	1,618.00
7143	Factory made 35 mm thick shutters with laminated veneer lumber styles rails as per TADS IS:1995 and panels of 12 mm thick one side pre laminated type-I, and other side balancing lamination, medium density flat pressed three layer, graded particle board (FPT-I) as per IS:3087-1985 bonded with BWP type synthetic resin adhesive, as per IS:848-1974	sqm	1,572.00
7151	Factory made 30 mm thick shutters with laminated veneer lumber styles rails as per TADS IS:1995 and panels of sheet glass using 10 kg/ sqm glass panes	sqm	1,290.00
7154	Factory made 35 mm thick shutters with laminated veneer lumber styles rails as per TADS IS:1995 and panels of galvanised wire gauge with average width of aperture 1.4 mm on both directions with wire of dia 0.63 mm	sqm	1,328.00
7155	Factory made 30 mm thick shutters with laminated veneer lumber styles rails as per TADS IS:1995 and panels of galvanised wire gauge with average width of aperture 1.4 mm on both directions with wire of dia 0.63 mm	sqm	1,150.00
7157	Laminated veneer lumber confirming to TADSS IS:1995 manufactured in factory in frames of doors, windows	10 cudm	540.00
7184	Oxidised M.S. safety chain (weighing not less than 450 gms) for door	each	43.00
7269	25 mm thick particle board	sqm	390.00
7271	IInd class teak wood lipping 25 mm wide x 12 mm thick	metre	28.00
7272	25 mm thick melamine faced prelaminated three layer particle board	sqm	708.00
7307	For flush door shutters Extra for providing teak veneering on one side instead of commercial veneering	sqm	225.00
7312	Expandable fastener with plastic sleeve and M.S. screws. 25 mm long	each	6.00
7313	Expandable fastener with plastic sleeve and M.S. screws. 32 mm	each	7.00

Code No	Description	Unit	Rate Rs.
	long		
7314	Expandable fastener with plastic sleeve and M.S. screws 40 mm long	each	9.00
7315	Expandable fastener with plastic sleeve and M.S. screws 50 mm long	each	11.00
7349	12 mm M.S. 'U' beading	metre	9.00
7366	Glass reinforced Gyp sum ( GRG) board 8.5 mm thick	sqm	190.00
7367	Galvanised M.S. sheet 0.5 mm thick pressed channel section of size 50x32 mm	metre	48.00
7369	Galvanised M.S. sheet 0.50 mm thick pressed stud. 48x34x36 mm	metre	55.00
7443	Aluminium single cleat of size 30x32x3	each	10.00
7444	Aluminium grip strip of size 50x12x2	each	7.00
7445	25 mm prelaminated flush door both side decorative	sqm	650.00
7449	Aluminium U beading	kilogram	195.00
7451	Glass sheet (Pin headed) 4 mm thick	sqm	160.00
7468	Veneered particle board with commercial veneering on both sides 12 mm thick	sqm	418.00
7477	Prelaminated particle board with one side decorative and other side balancing lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade)12 mm thick	sqm	595.00
7478	Prelaminated particle board with one side decorative and other side balancing lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade)18 mm thick	sqm	716.00
7479	Prelaminated particle board with one side decorative and other side balancing lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade)25 mm thick	sqm	775.00
7480	Prelaminated particle board with both sides decorative lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade)12 mm thick	sqm	625.00
7485	Oxidised M. S. hinges finished with nickel plating 50 mm (Over all width)	metre	29.00
7486	Oxidised M. S. hinges finished with nickel plating 65 mm (Over all width)	metre	34.00
7512	PTMT handle 125x34x24mm	Each	27.00
7513	PTMT handle 150x34x24mm	Each	30.00
7514	PTMT butt hinges 75x60x10mm	Each	36.00
7515	PTMT butt hinges 100x75x10mm	Each	48.00
7516	PTMT Tower bolt 152x42x18mm	Each	60.00
7517	PTMT Tower bolt 202x42x18mm	Each	72.00
7518	PTMT door catcher 72x42mm	Each	24.00

Code No	Description	Unit	Rate Rs.
7552	Coir veneered board 4mm thick	sqm	235.00
7553	Coir veneered board 6mm thick	sqm	308.00
7555	Coir veneered board 12mm thick	sqm	548.00
7556	Coir veneered board 18mm thick	sqm	820.00
8001	24 mm thick Factory made shutters with frame, rails and panels of PVC extruded sections in white, grey or wooden finish	sqm	1,830.00
8002	30 mm thick Factory made shutters with frame, rails and panels of PVC extruded sections in white, grey or wooden finish	sqm	1,900.00
8003	Factory made PVC rigid foam panelled shutter i/c carriage	sqm	1,743.00
8004	Factory made PVC rigid foam panelled shutter as per IS : 4020 i/c carriage	sqm	2,148.00
8006	Factory made PVC rigid foam sheet 1mm thick	sqm	145.00
8010	48mmX40mmX1.5mm thick Factory made door frame of PVC extruded sections in white, grey or wooden finish	metre	112.00
8011	Factory made door frame PVC extruded sheet i/c carriage	metre	294.00
8100	Powder coated M.S. butt hinges 100mm X58mmX1.9mm	10 Nos	66.00
8210	Stainless steel screws 50 mm	100 Nos	213.00
8211	Stainless steel screws 40 mm	100 Nos	157.00
8212	Stainless steel screws 30 mm	100 Nos	98.00
8214	Stainless steel screws 20 mm	100 Nos	63.00
8215	Stainless steel butt hinges 125x64x1.9 mm IS : 12817 marked	10 Nos	200.00
8216	Stainless steel butt hinges 100x58x1.9 mm IS : 12817 marked	10 Nos	143.00
8217	Stainless steel butt hinges 75x47x1.8 mm IS : 12817 marked	10 Nos	112.00
8218	Stainless steel butt hinges 50x37x1.5 mm IS : 12817 marked	10 Nos	90.00
8219	Stainless steel butt hinges (heavy weight) 125x64x2.5 mm IS : 12817 marked	10 Nos	261.00
8220	Stainless steel butt hinges (heavy weight) 100x60x2.5 mm IS : 12817 marked	10 Nos	185.00
8221	Stainless steel butt hinges (heavy weight) 75x50x2.5 mm IS : 12817 marked	10 Nos	155.00
8222	M.S. heavy weight but hinges 125x90x4.0mm IS : 1341 marked.	10 Nos	256.00
8223	M.S. heavy weight butt hinges 100x75x3.5 mm IS: 1341 marked	10 Nos.	133.00
8224	M.S. heavy weight butt hinges 75x60x3.1 mm IS: 1341 marked	10 Nos	67.00
8225	M.S. heavy weight butt hinges 50x40x2.5 mm IS : 1341 marked	10 Nos	52.00
8678	1mm thick 35mm wide bright finished stainless steel piano hinges .	metre	30.00
8699	8 mm thick tapered edge calcium silicate board .	sqm	194.00
8700	10 mm thick calcium silicate board.	sqm	323.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
8703	Telescopic drawer channels 300mm long .	set	92.00
8704	Stainless steel roller for sliding arrangement in racks/ cupboards/ cabinets shutter .	each	5.00
8705	50mmX42mmX2mm thick Factory made door frame of PVC extruded sections in white, grey or wooden finish	metre	117.00
8706	25mm thick factory made PVC flush door shutter i/c carriage.	sqm	1,975.00
8707	Factory made glass reinforced plastic door frame 90x45 mm i/c carriage.	metre	333.00
8708	30 mm thick factory made glass fiber reinforced plastic panel door shutter i/c carriage.	sqm	1,100.00
8710	Factory made solid PVC door frame 60 x 30mm i/c carriage.	metre	223.00
8711	28mm factory made solid PVC panel door shutter i/c carriage.	sqm	1,975.00
8713	Fiber glass reinforced plastic chajja.	sqm	3,520.00
8714	Magnetic catcher triple strip vertical type.	each	13.50
8715	Magnetic catcher double strip horizontal type.	each	10.00
8716	100 mm mort ice lock with 6 levers for aluminium door.	each	152.50
8717	12.5 mm thick Glass fiber reinforced Gypsum board .	sqm	130.00
8719	2nd class teak wood lipping/ moulded beading or Taj beading of size 18X5mm	metre	19.00
8720	Ceiling sections 0.55 mm thick having a knurled web of 51.55mm and two flanges of 26mm each with lips of 10.55mm.	metre	34.00
8721	Perimeter channel having one flange of 20mm and another flange of 30mm with thickness of 0.55mm and web of length 27mm.	metre	20.00
8722	Nylon sleeves & wooden screws (40mm)	each	1.50
8723	Counter sunk ribbed head screw 25mm.	100 Nos	60.00
8724	12mm thick marine plywood conforming to IS:710	sqm	740.00
8725	12mm thick fire retardant plywood conforming to IS: 5509.	sqm	690.00
8726	1.5mm thick decorative laminated sheet	sqm	405.00
8727	1.0mm thick decorative laminated sheet	sqm	330.00
8730	30 mm thick factory made glass fiber reinforced plastic flush door shutter i/c carriage.	sqm	1,960.00
9999	Sundries	L.S.	2.60

## 9.0 WOOD AND P. V. C. WORK

Code No	Description	Unit	Rate Rs.
	<b>Note :- Wood work items may be substituted with available species of wood as per direction of Engineer-in-charge for which rates shall be derived from the relevant items.</b>		
	<b>FRAMES AND TRUSSES</b>		
9.1	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position :		
9.1.1	Second class teak wood	cum	52,090.00
9.1.2	Sal wood	cum	30,511.90
9.1.3	Kiln seasoned and chemically treated Hollock wood.	cum	31,339.40
9.2	Providing laminated veneer lumber conforming to IS:14616 and TAD -15: 2001( Part B) in factory made frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position as per directions of Engineer-in-charge.	cum	69,044.20
9.3	Providing wood work in frames of false ceiling, partitions etc. sawn and put up in position :		
9.3.1	Sal wood	cum	29,107.80
9.3.2	Kiln seasoned and chemically treated Hollock wood.	cum	29,777.30
9.4	Extra for additional labour for circular works, such as in frames of fan light :		
9.4.1	Second class teak wood	cum	5,208.90
9.4.2	Sal wood	cum	3,051.40
9.4.3	Kiln seasoned and chemically treated Hollock wood.	cum	3,134.15
9.5	Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows including ISI marked black enamelled M.S butt hinges with necessary screws excluding, panelling which will be paid for separately.		
9.5.1	Second class teak wood		
9.5.1.1	35 mm thick shutters	sqm	1,373.65
9.5.1.2	30 mm thick shutters	sqm	1,219.10
9.5.2	Kiln seasoned and chemically treated Hollock wood.		
9.5.2.1	35 mm thick shutters	sqm	899.70
9.5.2.2	30 mm thick shutters	sqm	810.90
9.6	Providing and fixing 35 mm thick factory made laminated veneer lumber door shutter conforming to IS : 14616 and TADS 15:2001 (Part B) including ISI marked black enameled M.S. butt hinges with necessary screws as per directions of Engineer-in-charge and panelling with panels of:		

Code No	Description	Unit	Rate Rs.
9.6.1	12mm thick plain grade - 1, medium density flat pressed three layer particle board FPT - I or graded wood particle board FPT - I IS : 3087 marked bonded with BWP type synthetic resin adhesive as per IS : 848 :	sqm	1,877.20
9.6.2	12 mm thick pre-laminated particle board (decorative lamination on both sides) grade - 1, medium density flat pressed, three layer particle board FPT - I or graded wood particle board FPT - I, conforming to IS : 3087 bonded with BWP type synthetic resin adhesive as per IS : 848 and pre-laminated conforming to IS : 12823 Grade 1, Type - II marked:	sqm	2,014.25
9.6.3	12 mm thick one side Pre-laminated particle board (decorative lamination on one side and other sides balancing lamination) grade - 1 medium density flat pressed, three layer particle board FPT - I or graded wood particle board FPT-1 conforming to IS : 3087 bonded with BWP type synthetic resin adhesive as per IS : 848 and pre-laminated conforming to IS : 12823 Grade -1, Type II marked:	sqm	1,960.80
9.7	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick :		
9.7.1	Second class teak wood	sqm	1,075.60
9.7.2	Kiln seasoned and chemically treated Hollock wood	sqm	711.25
9.7.3	Ply wood 5 ply, 9 mm thick :		
9.7.3.1	Decorative plywood both side decorative veneer (Type - I) conforming to IS 1328 BWR type.	sqm	1,121.60
9.7.3.2	Decorative plywood one side decorative veneer and commercial veneer on other face (Type 1) conforming to IS 1328 BWR Type	sqm	923.30
9.7.4	Ply wood 7 ply, 9 mm thick :		
9.7.4.1	Decorative plywood one side decorative veneer and commercial veneer on other face (Type 1) conforming to IS 1328 BWR Type	sqm	971.85
9.7.5	Particle Board 12 mm thick		
9.7.5.1	Plain particle board flat pressed, 3 layer or graded wood particle board medium density Grade I, IS : 3087 marked.	sqm	518.35
9.7.5.2	Veneered flat pressed three layer or graded wood particle board with commercial veneering on both sides conforming to IS:3097, grade I.	sqm	740.20
9.5.7.3	Pre-laminated particle board with decorative lamination on one side and balancing lamination on other side, Grade I, Type II IS: 12823 marked.	sqm	985.70

Code No	Description	Unit	Rate Rs.
	9.7.5.4 Pre-laminated particle board with decorative lamination on both sides, Grade I, Type II, IS:12823 marked.	sqm	1,027.30
9.8	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick. Coir veneer board (conforming to IS : 14842-2000) :		
	9.8.1 12 mm thick	sqm	920.50
9.9	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes including black enamelled ISI marked M.S butt hinges with necessary screws.		
	9.9.1 Second class teak wood		
	9.9.1.1 35 mm thick	sqm	1,718.30
	9.9.1.2 30 mm thick	sqm	1,541.65
	9.9.2 Kiln seasoned and chemically treated Hollock wood		
	9.9.2.1 35 mm thick	sqm	1,178.60
	9.9.2.2 30 mm thick	sqm	1,077.50
9.10	Providing and fixing factory made laminated veneer lumber glazed shutter conforming to IS: 14616 and TADS 15:2001 (Part B) , using 4mm thick float glass panes for doors, windows and clerestory windows including ISI marked black enamelled M.S butt hinges with necessary screws as per directions of Engineer-in-charge		
	9.10.1 30 mm thick shutters	sqm	1,633.25
9.11	Extra for providing heavy sheet float glass panes instead of ordinary float glass in glazed doors, windows and clerestory window shutters. (Area of opening for glass panes excluding portion inside rebate shall be measured)		
	9.11.1 5.5 mm thick instead of 4 mm thick.	sqm	106.85
9.12	Extra for providing frosted glass panes 4 mm thick instead of ordinary float glass panes 4 mm thick in doors, windows and clerestory window shutters. (Area of opening for glass panes excluding portion inside rebate shall be measured).	sqm	10.45
9.13	Deduct for providing pin headed glass panes instead of ordinary float glass panes weighing 4 mm thick in doors, windows and clerestory windows, shutters (Area of opening for glass panes excluding portion inside rebate shall be measured).	sqm	102.20
9.14	Extra for providing ISI marked Stainless Steel butt hinges instead of black enamelled M.S. butt hinges with necessary screws. (Shutter area to be measured).	sqm	83.80
9.15	Deduct if fixed shutters (without hinges) are provided instead of openable shutters for doors, windows or clerestory windows with :		

Code No	Description	Unit	Rate Rs.
9.15.1	Stainless steel butt hinges with stainless steel screws :		
9.15.1.1	For 2nd class teak wood and other inferior class of wood shutters.	sqm	112.60
9.15.2	Black enamelled M.S. butt hinges with necessary screws.		
9.15.2.1	For 2nd class teak wood and other inferior class of wood shutters.	sqm	28.80
9.16	Providing and fixing 25 mm thick shutters for cup board etc. :		
9.16.1	Panelled or panelled & glazed shutters :		
9.16.1.1	Second class teak wood including ISI marked anodised aluminium butt hinges with necessary screws.	sqm	1,372.50
9.16.2	Glazed shutters :		
9.16.2.1	Second class teak wood including ISI marked anodised aluminium butt hinges with necessary screws.	sqm	1,368.90
9.17	Providing and fixing flat pressed 3 layer particle board medium density exterior grade (Grade I) or graded wood particle board IS : 3087 marked to frame, backing or studding with screws etc. complete (Frames, backing or studding to be paid separately) :		
9.17.1	12 mm thick	sqm	364.95
9.17.2	18 mm thick	sqm	418.40
9.18	Providing and fixing Pre-laminated flat pressed 3 layer (medium density) particle board or graded wood particle board IS : 3087 marked with one side decorative and other side balancing lamination Grade I, Type II exterior grade IS : 12823 marked in shelves with screws and fittings wherever required, edges to be painted with polyurethane primer (fittings to be paid separately).		
9.18.1	18 mm thick	sqm	935.95
9.18.2	25 mm thick	sqm	1,009.70
9.19	Providing and fixing 25 mm thick shutters for cupboards etc. including ISI marked black enamelled M.S. butt hinges with necessary screws :		
9.19.1	Panelled or panelled and glazed shutters		
9.19.1.1	Second class teak wood	sqm	1,312.95
9.19.2	Glazed shutters		
9.19.2.1	Second class teak wood	sqm	1,387.10
9.20	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.		
9.20.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	sqm	1,473.50
9.20.2	30 mm thick including ISI marked Stainless Steel butt hinges	sqm	1,415.45



Code No	Description	Unit	Rate Rs.
	with necessary screws.		
9.20.3	25 mm thick (for cupboard) including ISI marked nickel plated bright finished M.S. Piano hinges IS : 3818 marked with necessary screws.	sqm	1,317.65
9.21	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters :		
9.21.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	sqm	929.95
9.21.2	30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	sqm	904.40
9.21.3	25mm thick (for cupboard) including ISI marked nickel plated bright finished M.S. piano hinges with necessary screws.	sqm	853.05
9.22	Extra for Providing and fixing flush doors with decorative veneering		
9.22.1	On one side in item no. 9.21	sqm	261.35
9.23	Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of shutters (over all area of door shutter to be measured) Over item no. 9.20 and 9.21.	sqm	284.55
9.24	Extra for providing vision panel not exceeding 0.1 sqm in all type of flush doors (cost of glass excluded) (overall area of door shutter to be measured) :		
9.24.1	Rectangular or square.	sqm	99.90
9.24.2	Circular.	sqm	137.05
9.25	Extra if louvers (not exceeding 0.2 sqm) are provided in flush door shutters (overall area of door shutters to be measured).		
9.25.1	Decorative type door.	sqm	243.90
9.26	Extra for cutting rebate in flush door shutters (Total area of the shutter to be measured).	sqm	66.20
9.27	Providing and fixing 35mm thick wire gauze shutters using galvanised M.S. wire gauze of average width of aperture 1.4mm with wire of dia. 0.63 mm for doors, windows and clerestory windows including ISI marked bright finished or/and black enamelled M.S. butt hinges with necessary screws :		
9.27.1	Second class teak wood.	sqm	1,548.90
9.27.2	Kiln seasoned and chemically treated Hollock wood.	sqm	1,071.10
9.28	Providing and fixing 35mm thick wire gauze shutters using galvanised M.S. wire gauze of average width of aperture 1.4mm with wire of dia. 0.63 mm for doors, windows and clerestory windows including ISI marked stainless steel butt hinges with necessary screws :		
9.28.1	Second class teak wood.	sqm	1,632.70

Code No	Description	Unit	Rate Rs.
	9.28.2 Kiln seasoned and chemically treated Hollock wood.	sqm	1,154.90
9.29	Providing and fixing 30mm thick wire gauge shutters using galvanised M.S. wire gauge of average width of aperture 1.4mm with wire of dia. 0.63 mm for doors, windows and clerestory windows including ISI marked Stainless Steel butt hinges with necessary screws :		
	9.29.1 Second class teak wood.	sqm	1,422.15
	9.29.2 Kiln seasoned and chemically treated Hollock wood.	sqm	1,013.85
9.30	Providing and fixing 30mm thick wire gauze shutters using galvanised M.S. wire gauze of average width of aperture 1.4mm with wire of dia 0.63 mm for doors, windows and clerestory windows including ISI marked bright finished or /and black enamelled M.S. butt hinges with necessary screws :		
	9.30.1 Second class teak wood.	sqm	1,365.70
	9.30.2 Kiln seasoned and chemically treated Hollock wood.	sqm	957.50
9.31	Providing and fixing wire gauze laminated veneer lumber shutters conforming to IS : 14616, and as per TADS 15 :2001 (Part B) using galvanised wire gauze with average width of aperture 1.4mm in both directions with wire of dia 0.63mm as per IS :1568 for doors, windows and clerestory windows including ISI marked bright finished or/ and black enamelled M.S. butt hinges with necessary screws as per directions of Engineer-in-charge:		
	9.31.1 35 mm thick shutters	sqm	1.677.40
	9.31.2 30 mm thick shutters	sqm	1,470.65
<b>MISCELLANEOUS – WOOD WORK</b>			
9.32	Providing 50x50x50mm 2nd class teak wood plugs including cutting brick work and fixing in cement mortar 1:3 (1 cement : 3 fine sand) and making good the walls etc.	each	10.15
9.33	Providing and fixing expandable fasteners of specified size with necessary plastic sleeves and galvanised M.S. screws including drilling holes in masonry work /CC/ R.C.C. and making good etc. complete.		
	9.33.1 25 mm long	each	9.40
	9.33.2 32 mm long	each	11.15
	9.33.3 40 mm long	each	13.45
	9.33.4 50 mm long	each	15.80
9.34	Providing and fixing 2nd class teak wood plain lining tongued and grooved on and including wooden plugs complete with necessary screws and priming coat on unexposed surface.		
	9.34.1 40 mm thick.	sqm	2,649.20
	9.34.2 25 mm thick.	sqm	1,708.95
	9.34.3 20 mm thick	sqm	1,360.95

Code No	Description	Unit	Rate Rs.
	9.34.4 12 mm thick	sqm	867.70
9.35	Providing and fixing in wall lining flat pressed three layer (medium density) particle board or graded wood Pre-laminated one side decorative lamination on other side balancing lamination Grade I, Type II, IS : 12823 marked including priming coat on unexposed surface, with necessary fixing arrangement and screws etc. complete :		
	9.35.1 12 mm thick	sqm	869.70
	9.35.2 18 mm thick	sqm	1,024.30
	9.35.3 25 mm thick	sqm	1,099.65
9.36	Providing and fixing specified wood frame work consisting of battens 50x25mm fixed with rawl plug and drilling necessary holes for rawl plug etc. including priming coat complete.		
	9.36.1 Hollock wood.	cum	54,377.30
9.37	Providing and fixing plywood 4 mm thick one side decorative veneer conforming to IS: 1328 (type-1) for plain lining / cladding with necessary screws, priming coat on unexposed surface with:		
	9.37.1 Decorative veneer facings of approved manufacture.	sqm	577.40
9.38	Providing and fixing 4mm thick coir veneer board, ISI marked IS : 14842 - 2000, plain lining with necessary screws, priming coat on unexposed surface etc., complete.	sqm	556.50
9.39	Providing and fixing skirting of Pre-laminated with (one side decorative and other side balancing lamination) flat pressed, 3 layer or graded particle board (medium density) Grade I, Type II, IS :12823 marked, with necessary fixing arrangements and screws including drilling necessary holes for rawl plugs etc. and priming coat on unexposed surface complete :		
	9.39.1 18 mm thick	sqm	1,150.35
	9.39.2 25 mm thick	sqm	1,225.70
9.40	Providing and fixing wooden moulded beading to door and window frames with iron screws, plugs and priming coat on unexposed surface etc. complete :		
	9.40.1 2nd class teak wood		
	9.40.1.1 50x12 mm	metre	53.85
	9.40.1.2 50 x 20 mm	metre	75.10
	9.40.2 Hollock wood		
	9.40.2.1 50x12 mm	metre	40.05
	9.40.2.2 50x20 mm	metre	52.10
9.41	Providing and fixing plain jaffri of 35x10 mm laths placed 35 mm apart (frames to be paid separately) including fixing 50x12 mm beading complete with :		

Code No	Description	Unit	Rate Rs.
	9.41.1 Second class teak wood.	sqm	890.00
9.42	Providing and fixing 18 mm thick, 150 mm wide pelmet of flat pressed 3 layer or graded wood particle board medium density grade I, IS : 3087 marked including top cover of 6 mm commercial ply wood conforming to IS: 303 BWR grade, nickel plated M.S. pipe 20 mm dia ( heavy type ) curtain rod with nickel plated brackets including fixing with 25x3 mm M.S. flat 10 cm long and rawl plugs 50 mm long (designation 10 no.) etc all complete	metre	208.70
9.43	Providing and fixing 18 mm thick, 150 mm wide pelmet of coir veneer board ISI marked IS : 14842 - 2000, including top cover of 6 mm coir veneer board, nickle plated M.S. Pipe 20 mm dia. (heavy type) curtain rod with nickel plated brackets including fixing with 25x3 mm M.S. Flat 10 cm long and rawl plug 50 mm long (designation 10 No.) etc., all complete	metre	309.20
9.44	Extra for using veneered particle board conforming to IS 3097 Grade I, in item of pelmet 18mm thick 150mm wide.		
	9.44.1 Non decorative veneer on both sides.	metre	18.95
	9.44.2 Particle board with decorative veneering on both sides.	metre	68.00
9.45	Providing and fixing teak wood lipping of size 25x3 mm in pelmet.	metre	26.60
9.46	Providing and fixing curtain rods of 1.25 mm thick chromium plated brass plate, with two chromium plated brass brackets fixed with C.P. brass screws and wooden plugs, etc., wherever necessary complete :		
	9.46.1 12 mm dia.	metre	163.40
	9.46.2 20 mm dia.	metre	187.80
	9.46.3 25 mm dia.	metre	299.30
9.47	Providing and fixing nickel plated M.S. pipe curtain rods with nickel plated brackets :		
	9.47.1 20 mm dia (heavy type)	metre	65.00
	9.47.2 25 mm dia (heavy type)	metre	72.00
9.48	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. all complete.		
	9.48.1 Fixed to steel windows by welding.	kg	59.25
	9.48.2 Fixed to openings /wooden frames with rawl plugs screws etc.	kg	64.40
9.49	Providing and fixing expanded metal 20x60mm strands 3.25mm wide and 1.6mm thick for windows etc. including 62x19mm beading of IInd class teak wood.	sqm	523.15
9.50	Providing and fixing hard drawn steel wire fabric 75x25 mm mesh of weight not less than 7.75 Kg per sqm to window frames etc. including 62x19 mm beading of second class teak wood.	sqm	657.95
9.51	Providing and fixing fly proof galvanised M.S. wire gauze to windows and clerestory windows using galvanised M.S. wire gage with average width of		

Code No	Description	Unit	Rate Rs.
	aperture 1.4 mm in both directions with wire of dia. 0.63 mm.		
9.51.1	With 2nd class teak wood beading 62X19 mm.	sqm	443.80
9.51.2	With 12 mm mild steel U beading.	sqm	291.95
9.52	Deduct for fixing 75x25 mm hard drawn steel wire fabric of weight not less than 7.75 Kg. per sqm in panelled and glazed door and window shutter instead of glass sheet 4 mm thick.	sqm	72.00
9.53	Providing 40x5 mm flat iron hold fast 40 cm long including fixing to frame with 10 mm diameter bolts, nuts and wooden plugs and embeddings in cement concrete block 30x10x15cm 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size)	each	61.50
9.54	Providing beams including hoisting, fixing in position and applying wood preservative for the unexposed surfaces, etc. complete with :		
9.54.1	Sal wood.	cum	28,335.90
9.54.2	Hollock wood.	cum	28,217.40
	<b>BRIGHT FINISHED M.S. FITTINGS</b>		
9.55	Providing and fixing ISI marked M.S. pressed butt hinges bright finished with necessary screws etc. complete :		
9.55.1	125x65x2.12 mm	each	16.80
9.55.2	100x58x1.90 mm	each	13.10
9.55.3	75x47x1.70 mm	each	9.55
9.55.4	50x37x1.50 mm	each	5.35
9.56	Providing and fixing IS : 1341 marked M.S. heavy weight butt hinges with necessary screws etc. complete :		
9.56.1	125x90x4.00 mm	each	37.50
9.56.2	100x75x3.50 mm	each	22.25
9.56.3	75x60x3.10 mm	each	13.40
9.56.4	50x40x2.50 mm	each	8.15
	<b>Note:</b> - In coastal areas, M.S. heavy weight butt hinges or stainless steel hinges shall be used.		
	<b>COPER OXIDISED MILD STEEL FITTINGS (COPPER OXIDISED AS PER IS: 1378)</b>		
9.57	Providing and fixing ISI marked oxidised M.S. pressed butt hinges with necessary screws etc. complete.		
9.57.1	125x65x2.12 mm	each	18.55
9.57.2	100x58x1.90 mm	each	13.45
9.57.3	75x47x1.70 mm	each	9.30
9.57.4	50x37x1.50 mm	each	5.25
9.58	Providing and fixing ISI marked oxidised M.S. pressed Parliamentary		

Code No	Description	Unit	Rate Rs.
	hinges with necessary screws etc. complete :		
9.58.1	150x125x27x2.50 mm	each	37.70
9.58.2	125x125x27x2.50 mm	each	31.90
9.58.3	100x125x27x2.50 mm	each	27.25
9.58.4	75x100x20x2.24 mm	each	20.65
9.59	Providing and fixing ISI marked oxidised M.S. single acting spring hinges with necessary screws etc. complete :		
9.59.1	150 mm	each	96.20
9.59.2	125 mm	each	90.40
9.59.3	100 mm	each	72.55
9.60	Providing and fixing oxidised M.S. double acting spring hinges with necessary screws etc. complete.		
9.60.1	150 mm	each	98.55
9.60.2	125 mm	each	86.95
9.60.3	100 mm	each	67.90
9.61	Providing M.S. Piano hinges ISI marked IS : 3818 finished with nickel plating and fixing with necessary screws etc., complete.		
9.61.1	Overall width 35 mm.	metre	72.35
9.61.2	Overall width 50 mm.	metre	78.20
9.61.3	Overall width 65 mm.	metre	84.00
9.62	Providing and fixing ISI marked oxidised M.S. sliding door bolts with nuts and screws etc. complete :		
9.62.1	300x16 mm	each	79.60
9.62.2	250x16 mm	each	69.65
9.63	Providing and fixing ISI marked oxidised M.S. tower bolt black finish, (Barrel type) with necessary screws etc. complete :		
9.63.1	250x10 mm	each	33.90
9.63.2	200x10 mm	each	28.60
9.63.3	150x10 mm	each	23.40
9.63.4	100x10 mm	each	17.25
9.64	Providing and fixing ISI marked 85x42mm oxidised M.S. pull bolt lock conforming to IS : 7534 with necessary screws bolts, nut and washers etc. complete.	each	36.20
9.65	Providing and fixing ISI marked oxidised M.S. door latches conforming to IS:5930 with screws etc. complete :		
9.65.1	300x20x6 mm	each	33.10
9.65.2	250x20x6 mm	each	33.10

Code No	Description	Unit	Rate Rs.
9.66	Providing and fixing ISI marked oxidised M.S. handles conforming to IS:4992 with necessary screws etc. complete :		
9.66.1	125 mm	each	10.20
9.66.2	100 mm	each	7.75
9.66.3	75 mm	each	5.45
9.67	Providing and fixing oxidised M.S. hasp and staple (safety type) conforming to IS : 363 with necessary screws etc. complete :		
9.67.1	150 mm	each	12.20
9.67.2	115 mm	each	10.95
9.67.3	90 mm	each	8.85
9.68	Providing and fixing oxidised M.S. casement stays (straight peg type) with necessary screws etc. complete.		
9.68.1	300 mm weighing not less than 200 gms.	each	19.15
9.68.2	250 mm weighing not less than 150 gms.	each	16.45
9.68.3	200 mm weighing not less than 120 gms.	each	15.25
9.69	Providing and fixing oxidised M.S. Safety chain with necessary fixtures for doors. (Weighting not less than 450 gms.)	each	52.80
<b>STAINLESS STEEL FITTINGS</b>			
9.70	Providing and fixing IS : 12817 marked stainless steel butt hinges with stainless steel screws etc. complete :		
9.70.1	125x64x1.90 mm	each	47.05
9.70.2	100X58X1.90 mm	each	35.25
9.70.3	75x47x1.80 mm	each	23.75
9.70.4	50x37x1.50 mm	each	14.80
9.71	Providing and fixing IS : 12817 marked stainless steel butt hinges (heavy weight) with stainless steel screws etc. complete :		
9.71.1	125x64x2.50 mm	each	54.15
9.71.2	100x60x2.50 mm	each	40.10
9.71.3	75x50x2.50 mm	each	28.75
<b>BRASS FITTINGS</b>			
9.72	Providing and fixing bright finished brass butt hinges with necessary screws etc. complete :		
9.72.1	125x85x5.5 mm (heavy type)	each	191.10
9.72.2	125x70x4 mm (ordinary type)	each	69.15
9.72.3	100x85x5.5 mm (heavy type)	each	164.25
9.72.4	100x70x4 mm (ordinary type)	each	48.10
9.72.5	75x65x4 mm (heavy type)	each	62.60

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
	9.72.6      75x40x2.5 mm (ordinary type)	each	28.95
	9.72.7      50x40x2.5 mm (ordinary type)	each	14.55
9.73	Providing and fixing bright finished brass parliamentary hinges with necessary screws etc. complete :		
	9.73.1      150x125x27x5 mm	each	205.55
	9.73.2      125x125x27x5 mm	each	182.30
	9.73.3      100x125x27x5 mm	each	150.40
	9.73.4      75x100x20x3.2 mm	each	114.10
9.74	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete :		
	9.74.1      250x10 mm	each	155.15
	9.74.2      200x10 mm	each	126.20
	9.74.3      150x10 mm	each	97.20
	9.74.4      100x10 mm	each	67.30
9.75	Providing and fixing bright finished brass door latch with necessary screws etc. complete :		
	9.75.1      300x16x5 mm	each	109.20
	9.75.2      250x16x5 mm	each	105.70
9.76	Providing and fixing bright finished brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles with necessary screws etc. complete (best make of approved quality).	each	332.65
9.77	Providing and fixing bright finished brass 100 mm mortice latch with one dead bolt and a pair of lever handles with necessary screws etc. complete (best make of approved quality).	each	307.10
9.78	Providing and fixing bright finished brass night latch including necessary screws etc. complete (best make of approved quality).	each	426.75
9.79	Providing and fixing special quality bright finished brass cupboard or ward robe locks with four levers including necessary screws etc. complete (best make of approved quality) :		
	9.79.1      40 mm	each	75.95
	9.79.2      50 mm	each	84.10
	9.79.3      65 mm	each	98.05
	9.79.4      75 mm	each	115.45
9.80	Providing and fixing 50 mm bright finished brass cup board or wardrobe knob with necessary screws (best make of approved quality)	each	23.70
9.81	Providing and fixing bright finished brass handles with screws etc. complete :		
	9.81.1      125 mm	each	103.65



<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
	9.81.2      100 mm	each	91.80
	9.81.3      75 mm	each	68.55
9.82	Providing and fixing bright finished brass hanging type floor door stopper with necessary screws, etc. complete.	each	56.05
9.83	Providing and fixing IS : 3564 marked Aluminium die cast body tubular type universal hydraulic door closer with necessary accessories and screws etc. complete.	each	610.60
9.84	Providing and fixing IS : 3564 marked aluminium extruded section body tubular type universal hydraulic door closer with double speed adjustment with necessary accessories and screws etc. complete.	each	911.10
9.85	Providing and fixing bright finished brass casement window fastener with necessary screws etc. complete.	each	35.60
9.86	Providing and fixing bright finished brass casement stays (straight peg type) with necessary screws etc. complete :		
	9.86.1      300 mm weighing not less than 330 gms	each	82.50
	9.86.2      250 mm weighing not less than 280 gms	each	69.30
	9.86.3      200 mm weighing not less than 240 gms	each	58.80
9.87	Providing and fixing bright finished brass hasp and staple (safety type) with necessary screws etc. complete:		
	9.87.1      150 mm	each	61.90
	9.87.2      115 mm	each	49.85
	9.87.3      90 mm	each	40.75
<b>CHROMIUM PLATED BRASS FITTINGS</b>			
9.88	Providing and fixing chromium plated brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles with necessary screws etc. complete (best make of approved quality).	each	409.30
9.89	Providing and fixing chromium plated brass night latch including necessary screws etc. complete (Best make of approved quality).	each	479.00
9.90	Providing and fixing special quality chromium plated brass cupboard locks with six levers including necessary screws etc. complete (Best make of approved quality) of :		
	9.90.1      Size 40 mm	each	78.30
	9.90.2      Size 50 mm	each	95.70
	9.90.3      Size 65 mm	each	108.50
	9.90.4      Size 75 mm	each	121.25
9.91	Providing and fixing chromium plated brass 50 mm cupboard or wardrobe knobs with nuts complete.	each	31.80
9.92	Providing and fixing chromium plated brass handles with necessary screws etc. complete:		

Code No	Description	Unit	Rate Rs.
	9.92.1 125 mm	each	111.75
	9.92.2 100 mm	each	96.45
	9.92.3 75 mm	each	83.65
9.93	Providing and fixing chromium plated brass casement window fastener with necessary screws etc. complete.	each	69.60
9.94	Providing and fixing chromium plated brass casement stays (straight peg type) with necessary screws etc. complete :		
	9.94.1 300 mm weighing not less than 330 gms	each	90.50
	9.94.2 250 mm weighing not less than 280 gms	each	83.55
	9.94.3 200 mm weighing not less than 240 gms	each	70.75
	<b>ANODISED ALUMINIUM FITTINGS (ALL FITTINGS SHALL BE ISI MARKED)</b>		
9.95	Providing and fixing ISI marked aluminium butt hinges ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete:		
	9.95.1 125x75x4 mm	each	74.10
	9.95.2 125x63x4 mm	each	70.50
	9.95.3 100x75x4 mm	each	66.45
	9.95.4 100x63x4 mm	each	59.25
	9.95.5 100x63x3.2 mm	each	63.45
	9.95.6 75x63x4 mm	each	43.00
	9.95.7 75x63x3.2 mm	each	35.35
	9.95.8 75x45x3.2 mm	each	21.75
	<b>Note :- Aluminum hinges shall not be used in wooden shutters, stainless steel hinges shall be preferred.</b>		
9.96	Providing and fixing aluminium sliding door bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with nuts and screws etc. complete :		
	9.96.1 300x16 mm	each	158.50
	9.96.2 250x16 mm	each	134.10
9.97	Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868 ) transparent or dyed to required colour or shade with necessary screws etc. complete :		
	9.97.1 300x10 mm	each	71.45
	9.97.2 250x10 mm	each	62.20
	9.97.3 200x10 mm	each	52.00
	9.97.4 150x10 mm	each	42.75

Code No	Description	Unit	Rate Rs.
	9.97.5      100x10 mm	each	32.15
9.98	Providing and fixing aluminium pull bolt lock anodised ISI marked (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade with necessary screws bolts, nut and washers etc. complete.	each	44.35
9.99	Providing and fixing 50cm long aluminium kicking plate 100x3.15 mm anodised (anodic coating not less than grade AC 10 as per IS :1868) transparent or dyed to required colour or shade with necessary screws etc. complete.	each	115.70
9.100	Providing and fixing aluminium handles ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete :		
	9.100.1      125 mm	each	48.80
	9.100.2      100 mm	each	35.30
	9.100.3      75 mm	each	28.35
9.101	Providing and fixing aluminium hanging floor door stopper ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade with necessary screws etc. complete.		
	9.101.1      Single rubber stopper	each	19.05
	9.101.2      Twin rubber stopper	each	53.90
9.102	Providing and fixing aluminium casement stays ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade with necessary screws etc. complete.	each	47.55
9.103	Providing and fixing bright finished brass 100 mm mortice latch and lock ISI marked with six levers and a pair of anodised (anodic coating not less than grade AC 10 as per IS : 1868) aluminium lever handles with necessary screws etc. complete (Best make of approved quality).	each	435.90
9.104	Providing and fixing aluminium tee channels (heavy duty) with rollers, stop end in pelmets as curtain rod.	metre	43.05
<b>GYPSUM BOARD PARTITIONS</b>			
9.105	Providing and fixing partition upto ceiling height consisting of G.I. frame and required board including providing and fixing of frame work made of special section power pressed/ roll form G.I. sheet with zinc coating of grade 175 in consisting of floor and ceiling channel 50mm wide having equal flanges of 32mm and 0.5mm thick fixed to the floor and ceiling at the spacing of 610mm centre to centre with dash fastener of 12.5mm dia meter 40mm length and the studs 48mm wide having one flange of 34mm and other flange 36mm and 0.50mm thick fixed vertically within flanges of floor and ceiling channel and placed at a spacing of 610mm centre to centre by 6mm dia bolts and nuts at both ends of partition fixed flush to wall with rawl plugs at spacing of 450mm centre to centre and fixing of boards to either side of frame work by 20mm long drive wall screws on studs, floor and ceiling channels at the spacing of 300mm centre to		

Code No	Description	Unit	Rate Rs.
	centre, including jointing and finishing to a flush finish with recommended jointing compound, jointing tape, joint finisher and two coats of primer suitable for board as per manufacture's specification all complete.		
9.105.1	67mm overall thickness partition with 8.5mm thick double skin glass reinforced Gypsum (GRG) board conforming to IS: 2095: part III.	sqm	813.80
9.105.2	75mm overall thickness partition with 12.5mm thick double skin plain Gypsum board conforming to IS: 2095: part I	sqm	674.45
9.105.3	66mm overall thickness Partition with 8mm thick double skin Calcium Silicate Board made with Calcareous & Siliceous materials reinforced with cellulose fiber manufactured through autoclaving process with Compressive Strength 225 kg/sq.cm, Bending Strength 100 kg/ sg.cm.	sqm	823.10
9.105.4	66mm overall thickness partition using 8mm thick double skin non- asbestos multipurpose cement board reinforced with cellulose fibre manufactured through autoclaving process (High pressure steam cured) as per IS: 14862 with suitable fibre cement screw.	sqm	927.65
9.106	Providing and fixing PTMT handles with necessary screws etc. complete.		
9.106.1	125x34x24 mm weighing not less than 23 gms.	each	33.35
9.106.2	150x34x24 mm weighing not less than 26 gms.	each	36.85
9.107	Providing and fixing PTMT Butt hinges with necessary screws etc. complete.		
9.107.1	75x60x10 mm fitted with 5.5 mm dia M.S. Bright Bar Rod weighing not less than 34 gms.	each	47.40
9.107.2	100x75x10 mm fitted with 5.5 mm dia MS Bright Bar Rod weighing not less than 53 gms.	each	62.55
9.108	Providing and fixing PTMT Tower Bolts with 12 mm one piece rod inside and necessary screws etc., complete.		
9.108.1	152x42x18 mm weighing not less than 60 gms.	each	73.00
9.108.2	202x42x18 mm weighing not less than 78 gms.	each	87.80
9.109	Providing and fixing PTMT door catcher of length 72 mm and dia. of 42 mm with suitable washers weighing not less than 33 gms.	each	29.05
<b>NEW ITEMS/ MODIFIED ITEMS</b>			
9.110	Providing and fixing Bamboo jaffery/ fencing consisting of superior quality 25mm dia (Average) half cut bamboo placed vertically and fixed together with three numbers horizontal running members of hollock wood in scantling of section 50X25mm fixed with nails and G.I wire to existing surface complete as per direction of Engineer-in-charge.	sqm	207.70
9.111	Providing and fixing wooden moulded corner beading of triangular shape to the junction of panelling etc. with iron screws, plugs and priming coat on unexposed surface etc. complete 2nd class teak wood.		

Code No	Description	Unit	Rate Rs.
	9.111.1 50x50mm (base and height).	metre	94.10
9.112	Providing and fixing 2nd class teak wood lipping/ moulded beading or taj beading of size 18X5mm fixed with wooden adhesive of approved quality and screws/ nails on the edges of the Pre-laminated particle board as per direction of Engineer-in-charge.	metre	30.10
9.113	Providing and fixing bright finished 100mm mortice lock with 6 levers without pair of handles for aluminium door with necessary screws etc complete (Best make of approved quality) as per direction of Engineer-in-charge.	each	203.05
9.114	Providing and fixing magnetic catcher in cupboard / ward robe shutters including fixing with necessary screws etc. complete (Best make of approved quality).		
	9.114.1 Triple strip vertical type.	each	18.70
	9.114.2 Double strip (horizontal type).	each	14.65
9.115	Providing and fixing powder coated telescopic drawer channels 300mm long with necessary screws etc. complete as per directions of Engineer-in-charge.	each	120.75
9.116	Providing and fixing sliding arrangement in racks/ cupboards/cabinets shutter by P/F stainless steel rollers to run inside C or E aluminium channel section (The payment of C or E channel shall be made separately)	each	7.00
9.117	Providing and fixing factory made UPVC door frame made of UPVC extruded section having an overall dimension as below (tolerance $\pm 1$ mm) with wall thickness 2.0mm $\pm$ 0.2mm, corners of the door frame to be mitred and welded of plastic, galvanized brackets and stainless steel screws. The hinge side vertical of the frames reinforced by galvanized M.S. tube of size 19 X 19mm and 1mm $\pm$ 0.1mm wall thickness and 3 nos. stainless steel hinges fixed to the frame complete as per manufacturers specification and direction of Engineer-in-charge		
	9.117.1 Extruded section profile size 48x40 mm.	metre	141.00
	9.117.2 Extruded section profile size 42x50 mm.	metre	146.80
9.118	Providing and fixing to existing door frames.		
	9.118.1 24 mm thick factory made PVC door shutters made of styles and rails of a UPVC hollow section of size 59x24 mm and wall thickness 2 mm $\pm$ 0.2 mm with inbuilt edging on both sides. The styles and rails mitred and joined at the corners by means of M.S. galvanised/plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 20x20 mm and 1 mm $\pm$ 0.1 mm wall thickness. The lock rail made up of 'H' section, a UPVC hollow section of size 100x24 mm and 2 mm $\pm$ 0.2 mm wall thickness fixed to the shutter styles by means of plastic/galvanised M.S. 'U' cleats. The shutter frame filled with a UPVC multi-chambered single panel of size not less	sqm	2,190.50

Code No	Description	Unit	Rate Rs.
	than 620 mm, having over all thickness of 20 mm and 1 mm $\pm$ 0.1 mm wall thickness. The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge. (For W.C. and bathroom door shutter).		
9.118.2	30 mm thick factory made Polyvinyl Chloride (PVC) door shutter made of styles and rails of a UPVC hollow section of size 60x30 mm and wall thickness 2 mm $\pm$ 0.2 mm with inbuilt decorative moulding edging on one side. The styles and rails mitred and joined at the corners by means of M.S. galvanised/plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 25x20 mm and 1 mm $\pm$ 0.1 mm wall thickness. The lock rail made up of 'H' section, a UPVC hollow section of size 100x30 mm and 2 mm $\pm$ 0.2 mm wall thickness fixed to the shutter styles by means of plastic/ galvanised M.S. 'U' cleats. The shutter frame filled with a UPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm $\pm$ 0.1 mm wall thickness . The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge.	sqm	2,271.80
9.118.3	25mm thick PVC flush door shutters made out of a one piece Multi chamber extruded PVC section of the size of 762mm X 25mm or less as per requirement with an average wall thickness of 1mm $\pm$ 0.3mm. PVC foam end cap of size 23x10mm are provided on both vertical edges to ensure the overall thickness of 25mm. An M.S. tube having dimensions 19mm x 19mm is inserted along the hinge side of the door. Core of the door shutter should be filled with High Density Polyurethane foam. The Top & Bottom edges of the shutter are covered with an end-cap of the size 25MM X 11MM. Door shutter shall be reinforced with special polymeric reinforcements as per manufactures' specification and direction of Engineer-in-charge to take up necessary hardware and fixtures. Stickers indicating the locations of hardware will be pasted at appropriate places	sqm	2,358.90
9.119	Providing and fixing factory made P.V.C. door frame of size 50x47mm with a wall thickness of 5mm, made out of extruded 5mm rigid PVC foam sheet mitred at corners and joined with 2 Nos. of 150mm long brackets of 15x15mm M.S. square tube, the vertical door profiles to be reinforced with 19x19mm M.S. square tube of 19 gauge, EPDM rubber gasket weather seal to be provided through out the frame. The door frame to be fixed to the wall using M.S. screws of 65/100mm size complete as per manufacturers specification and direction of Engineer-in-Charge.	metre	353.10

Code No	Description	Unit	Rate Rs.
9.120	Providing and fixing to existing door frames.		
9.120.1	30mm thick factory made panel PVC door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19mm x 19mm for styles and 15x15mm for top & bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacture . M.S. frame covered with 5mm thick heat moulded PVC 'C' channel of size 30mm thickness, 70mm width out of which 50mm shall be flat and 20mm shall be tapered in 45degree angle on either side forming styles; and 5mm thick, 95mm wide PVC sheet out of which 75mm shall be flat and 20mm shall be tapered in 45 degree on the inner side to form top and bottom rail and 115mm wide PVC sheet out of which 75mm shall be flat and 20mm shall be tapered on both sides to form lock rail. Top, bottom and lock rails shall be provided either side of the panel. 10mm (5mm x 2 ) thick, 20mm wide cross PVC sheet be provided as gap insert for top rail & bottom rail. paneling of 5mm thick both side PVC sheet to be fitted in the M.S. frame welded/ sealed to the styles & rails with 7mm (5mm+2mm) thick x 15mm wide PVC sheet beading on inner side, and joined together with solvent cement adhesive. An additional 5mm thick PVC strip of 20mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent adhesive etc. complete as per direction of Engineer-in-charge. Manufacturer's specification & drawing (for W.C. and bathroom door shutter).	sqm	2,109.95
9.120.2	30mm thick factory made solid both side Pre-laminated panel PVC door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19mm x 19mm for styles and 15x15mm for top & bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacture . M.S. frame covered with 5mm thick heat moulded Pre-laminated PVC 'C' channel of size 30mm thickness, 70mm width out of which 50mm shall be flat and 20mm shall be tapered in 45degree angle on either side forming styles; and 5mm thick, 95mm wide PVC sheet out of which 75mm shall be flat and 20mm shall be tapered in 45 degree on the inner side to form top and bottom rail and 115mm wide PVC sheet out of which 75mm shall be flat and 20mm shall be tapered on both sides to form lock rail. Top, bottom and lock rails shall be provided either side of the panel. 10mm (5mm x 2 ) thick, 20mm wide cross PVC sheet be provided as gap insert for top rail & bottom rail. paneling of 5mm thick both side Pre-laminated PVC sheet to be fitted in the M.S. frame welded/ sealed to the styles & rails with 7mm (5mm+2mm) thick x 15mm wide PVC sheet beading on inner side, and joined together with solvent cement adhesive. An additional 5mm thick PVC strip of 20mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent adhesive etc. complete as per direction of Engineer-in-charge.	sqm	2,580.35

Code No	Description	Unit	Rate Rs.
	Manufacturer's specification & drawing (for W.C. and bathroom door shutter).		
9.121	Providing and fixing of Fiber Glass Reinforced plastic (FRP) Door Frames of three legged of cross-section 90mm x 45mm having single rebate of 32mm x 15mm to receive shutter of 30mm thickness .The laminate doorframe molded with fire resistant grade unsaturated polyester resin and chopped mat .Doorframe laminate shall be 2mm thick and shall be filled with suitable wooden block in all the three legs. The frame shall be covered with fiberglass from all sides. M.S. stay shall be provided at the bottom to steady the frame.	metre	398.40
9.122	Providing and fixing to existing door frames.		
9.122.1	30 mm thick Glass Fibre Reinforced Plastic (FRP) panelled door shutter of required colour and approved brand and manufacture, made with fire - retardant grade unsaturated polyester resin, moulded to 3 mm thick FRP laminate for forming hollow rails and styles, with wooden frame and suitable blocks of seasoned wood inside at required places for fixing of fittings, cast monolithically with 5mm thick FRP laminate for panels and conforming to IS: 14856 - 2000 including fixing to frames.	sqm	1,363.10
9.122.2	30mm thick fiberglass reinforced plastic (F.R.P.) flush door shutter in different plain and wood finish made with fire retardant grade unsaturated polyester resin, moulded to 3mm thick FRP laminate all around, with suitable wooden blocks inside at required places for fixing of fittings and polyurethane foam (PUF) / Polystyrene foam to be used as filler material throughout the hollow panel, casted monolithically with testing parameters of F.R.P. laminate conforming to table - 3 of IS: 14856 : 2000, complete as per direction of Engineer-in-charge.	sqm	2,362.00
9.123	Providing and fixing factory made door frame (single rebate) made of solid PVC foam profile with homogenous fine cellular structure having smooth outer integral skin having 60mm width & 30mm thickness and shall be fixed to wall as per instructions of engineer-in-charge using 100x8 sheet metal CSK screws.	metre	270.65
9.124	Providing and fixing 28 mm thick door shutter made of solid PVC foam profile with homogenous fine cellular structure having smooth outer integral skin having 71mm width & 28mm thick as styles and rails. Joints are made using solvent adhesive and GI 'C' sections (39mm x 19mm x 0.6mm thick) or M S pipe (40mm x 20mm ) stiffener frame insert & telescopic polymeric 'L' corners .The panel shall be filled with 3mm thick high - pressure compact laminate as per manufacturer's specifications and direction of Engineer-in-charge, cover moulding shall be provided for covering fixing screws and elegant look.( for W.C. and bathroom door shutter).	sqm	2,379.40
9.125	Providing and fixing PVC rigid foam sheet 1mm thick on existing door shutters (bathroom and W.C. doors) using synthetic rubber based	sqm	419.35



Code No	Description	Unit	Rate Rs.
	adhesive.		
9.126	Providing and fixing 12mm thick panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25mm to 40mm thick.		
9.126.1	Marine plywood of lamination / painting quality and conforming to IS: 710	sqm	1,186.80
9.126.2	Fire retardant plywood of lamination / painting quality conforming to IS: 5509.	sqm	1,117.45
9.127	Providing & Fixing decorative high pressure laminated sheet of plain / wood grain in gloss / matt / suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S including cost of adhesive of approved quality		
9.127.1	1.5 mm thick.	sqm	608.15
9.127.2	1.0 mm thick.	sqm	512.30
9.128	Providing and fixing factory made Fiberglass Reinforced plastics (F.R.P.) chajja 4mm thick of required colour, size and design made by Resin Transfer Moulding (RTM) Machine Technology, resulting in void free compact laminate in single piece, having smooth gradual slope curvature for easy drainage of water and duly reinforced by 2nos. vertically and 1nos. horizontally 50x2mm thick M.S. flat with 12mm in built hole for grouting on the existing wall along with the 50mm flanges duly inserted and sealed in the wall complete in one single piece casted monolithically, including all necessary fittings . The FRP Chajja should be manufactured using unsaturated Polyester resin as per IS: 6746 duly reinforced with fibre glass chopped strand mat (CSM) as per IS: 11551 complete with protective Gel coat U/V coating on Top for complete resistance from the extreme of temperature, weather & sunlight,	sqm	4,452.00
9.129	Providing and fixing cup board shutters 25mm thick, with Pre-laminated flat pressed three layer particle board or graded wood particle board IS: 12823 marked exterior grade (Grade I Type II) having one side decorative lamination and other side balancing lamination including IInd class teak wood lipping of 25mm wide x12 mm thick with necessary screws and bright finished stainless steel piano hinges complete as per direction of the Engineer-in-Charge	sqm	1,103.00
9.130	Providing and fixing cup board shutters with 25mm thick veneered particle board IS : 3097 marked exterior grade (Grade I) of approved make including IInd class teak wood lipping of 25mm wide x 12 mm thick with necessary screws and bright finished stainless steel piano hinges complete as per direction of Engineer-in-Charge.		
9.130.1	With decorative veneering on one side and commercial veering on other side.	sqm	963.65
9.130.2	With non decorative veneering on both sides.	sqm	852.10
9.131	Providing and fixing factory made Pre-laminated particle board flat		

Code No	Description	Unit	Rate Rs.
	pressed three layer or graded wood particle board with one side decorative finish and other side balancing lamination conforming to IS: 12823 Grade I Type II, of approved design, and edges sealed with water resistant paint and lipped with aluminium 'U' type edge beading all-round the shutter, including fixing with angle cleat, grip strip, cadmium plated steel screws including fixing of aluminium hinges 100x63x4 mm etc. complete as per architectural drawing and direction of Engineer-in-Charge (Cost of 'U' beading and hinges will be paid for separately).		
9.131.1	25 mm thick.	sqm	1,335.05
9.132	Providing and fixing aluminum U beading of required size to Pre-laminated /flush door shutter including fixing etc. complete as per direction of Engineer-in-charge.	kg	339.75
9.133	Providing and fixing, in position concealed G.I. section for wall paneling using board of required thickness fixed on the 'W' profile (0.55mm thick ) having a knurled web of 51.55mm and two flanges of 26mm each with lips of 10.55 mm placed @ 610mm C/C in perimeter channel having one flange of 20mm and another flange of 30mm with thickness of 0.55mm and web of length 27mm. Perimeter channel is fixed on the floor and the ceiling with the nylon sleeves @ 610mm C/C with fully threaded self-tapping drywall screws. Board is fixed to the 'W' profile with 25 mm countersunk ribbed head screws @ 200mm C/C., all complete as per the drawing & directions of engineer-in-charge the joints of the boards are finished with specially formulated jointing compound and 48mm wide jointing tape to provide seamless finish.		
9.133.1	Tapered edge calcium silicate board made with calcareous & siliceous materials reinforced with cellulose fiber manufactured through autoclaving process to give stable crystalline structure with compressive strength 225 kg/sq.cm, Bending strength 100 kg/sq.cm.		
9.133.1.1	10mm thick.	sqm	597.30
9.133.2	Non -asbestos multipurpose cement board reinforced with cellulose fibre manufactured through autoclaving process (high pressure steam cured ) as per IS 14862 with suitable fibre cement screw.		
9.133.2.1	8 mm thick.	sqm	499.75
9.133.3	Gypsum board conforming to IS: 2095 - 1996: Part - I .		
9.133.3.1	12.5 mm thick.	sqm	373.15

**SUB HEAD : 10.0**

**STEEL WORK**

### BASIC RATES (10.0 STEEL WORK)

Code No	Description	Unit	Rate Rs.
0100	Bandhani	Day	138.45
0102	Blacksmith 1st class	Day	151.50
0103	Blacksmith 2nd class	Day	141.60
0114	Beldar	Day	135.25
0116	Fitter (grade 1)	Day	151.50
0119	Glazier	Day	141.60
0123	Mason (brick layer) 1st class	Day	151.50
0124	Mason (brick layer) 2nd class	Day	141.60
0139	Skilled Beldar (for floor rubbing etc.)	Day	138.45
0423	Brass casement window fastener	Each	26.00
0428	Brass fanlight catch	10 Nos	109.00
0595	Bright finished or black enamelled mild steel butt hinges 100x58x1.90 mm	10 Nos	54.00
0969	Pulley 25 mm dia	each	18.00
0973	Rolling shutter made of 80x1.25 mm machine rolled laths	sqm	767.00
0974	Top cover for rolling shutters	metre	400.00
0975	27.5 cm long wire spring grade no 2 for rolling shutters	each	170.00
0976	Ball bearing for rolling shutters	each	280.00
0977	Extra for mechanical devices chain and cranked operation for operating rolling shutters : exceeding 10.00 sq.m and up to 16.80 sq.m area of door	sqm	400.00
0978	Extra for mechanical devices chain and cranked operation for operating rolling shutters : exceeding 16.80 sq.m area of door	sqm	450.00
1002	Mild steel round bar 12 mm dia and below	quintal	3,100.00
1003	Mild steel round bar above 12 mm dia	quintal	3,050.00
1007	Structural steel such as tees, angles channels and R.S. joists	quintal	3,100.00
1008	Flats up to 10 mm in thickness	quintal	2,900.00
1009	Flats exceeding 10 mm in thickness	quintal	2,875.00
1010	Mild steel plates	quintal	3,400.00
1013	Mild steel sheets for tanks	quintal	3,475.00
1019	Mild steel hooks	each	22.00
1020	Mild steel rivets	quintal	3,500.00
1034	Bolts and nuts up to 300 mm in length	quintal	4,300.00
1035	Bolts and nuts above 300 mm in length	quintal	4,300.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
1036	Iron pintels including welded pin	each	28.00
1214	Welding by gas plant	cm	1.00
1215	Welding by electric plant	cm	1.00
1221	20 mm dia holding down bolts	quintal	3,800.00
1222	Mild steel sheets with bolts and nuts to rest on pintels	each	75.00
1549	G.I. pipes 40 mm dia	metre	160.00
2205	Carriage of Steel	tonne	47.29
2271	Carriage of G.I. pipes below 100 mm dia	tonne	47.29
2406	Float glass sheet of nominal thickness 4 mm (weight not less than 10kg/sqm).	sqm	248.00
4006	Pressed steel door frames (mild steel sheet 1.25mm) Profile "B"	metre	170.00
4007	Pressed steel door frames (mild steel sheet 1.25mm) Profile "C"	metre	187.00
4008	Pressed steel door frames (mild steel sheet 1.25mm) Profile "E"	metre	214.00
4009	Mild steel tubes hot finished welded type	kilogram	38.00
4010	Mild steel tubes hot finished seamless type	kilogram	66.00
4011	Mild steel tubes electric resistant or induction butt welded	kilogram	77.00
4012	Circular C.I. Box for ceiling fan	each	35.00
4013	Pulley 40 mm dia	each	19.00
4014	Ready made steel door with necessary hinges, lugs and glazing clips excluding other fittings & their fixing	sqm	1,406.00
7027	M.S. Butt hinges 125x90x4 mm	10 Nos	80.00
7044	Rolling shutters of 80x0.90 mm laths	sqm	576.00
7045	Rolling shutters of 80x1.2 mm laths	sqm	615.00
7046	Top cover of Rolling shutters 0.90 mm thick	metre	205.00
7047	Top cover of Rolling shutters 1.20 mm thick	metre	228.00
7068	Extra for providing grilled rolling shutters with 8 mm dia M.S. rod	sqm	185.00
9999	Sundries	L.S.	2.60

## 10.0 STEEL WORK

Code No	Description	Unit	Rate Rs.
10.1	Structural steel work in single section fixed with or without connecting plate including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	kg	42.15
10.2	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete:	kg	46.35
10.3	Providing and fixing in position collapsible steel shutters with vertical channels 20x10x2mm and braced with flat iron diagonals 20x5mm size with top and bottom rail of T-iron 40x40x6mm with 40mm dia, steel pulleys complete with bolts, nuts, locking arrangement, stoppers, handles, including applying a priming coat of approved steel primer.	sqm	2,592.70
10.4	Providing and fixing 1mm thick M.S. sheet sliding-shutters with frame and diagonal braces of 40x40x6mm angle iron, 3mm M.S. gusset plates at the junction and corners 25mm dia pulley, 40x40x6mm angle and T-iron guide at the top and bottom respectively including applying a priming coat of approved steel primer.	sqm	2,018.70
10.5	Providing and fixing 1mm thick M.S. sheet door with frame of 40x40x6mm angle iron and 3mm M.S. gusset plates at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer.		
10.5.1	Using M.S. angels 40x40x6 mm for diagonal braces.	sqm	1,695.40
10.5.2	Using flats 30x6mm for diagonal braces and central cross piece.	sqm	1,600.10
10.6	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths interlocked together through their entire length and jointed together at the end by end locks mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete including the cost of providing and fixing necessary 27.5cm long wire springs grade No.2 and M.S. top cover of required thickness for rolling shutters.		
10.6.1	80x1.25mm M.S. laths with 1.25 mm thick top cover.	sqm	1,208.45
10.6.2	80x1.20 mm M.S. laths with 1.20 mm thick top cover.	sqm	965.35
10.6.3	80x0.90 mm M.S. laths with 0.90 mm thick top cover.	sqm	911.10
10.7	Providing and fixing ball bearing for rolling shutters.	each	356.50
10.8	Extra for providing mechanical device chain and crank operation for operating rolling shutters.		
10.8.1	Exceeding 10.00 sqm and upto 16.80 sqm in the area.	sqm	480.30
10.8.2	Exceeding 16.80 sqm in area.	sqm	538.40
10.9	Extra for providing grilled rolling shutters manufactured out of 8 mm dia. M.S. bar instead of laths as per design approved by Engineer-in-	sqm	214.90

Code No	Description	Unit	Rate Rs.
	charge.(area of grill to be measured).		
10.10	Fixing standard steel glazed doors, windows and ventilators in walls with 15x3mm lugs 10 cm long embedded in cement concrete blocks 15x10x10cm of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required, including fixing of float glass panes with glazing clips and special metal-sash putty of approved make, or metal beading with screws (only steel windows with lugs, glass panes cut to size and glazing clips or metal beading with screws, shall be supplied by department free of cost.)	kg	23.20
10.11	Providing and fixing factory made ISI marked steel glazed doors, windows and ventilators side /top /centre hung with beading and all members such as K11 B and K12 B etc. complete of standard rolled steel sections, joints mitred and flash butt welded and sash bars tenoned and riveted with 15x3mm lugs, 10cm long, embedded in cement concrete blocks 15x10x10cm of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required, including providing and fixing of hinges, pivots, float glass panes with glazing clips and special metal sash putty of approved make and a priming coat of approved steel primer excluding the cost of metal beading and other fittings except necessary hinges or pivots complete as per approved design.	kg	178.90
10.12	Extra for providing and fixing steel beading of approved shape and section with screw instead of glazing clips and metal sash putty in steel doors, windows, ventilators and composite units.	metre	20.84
10.13	Providing and fixing T-iron frames for doors, windows and ventilators of mild steel Tee-sections, joints mitred and welded with 15x3 mm lugs 10cm long embedded in cement concrete blocks 15x10x10 cm of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with dash fastener or with fixing clips or with bolts and nuts as require including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer.	kg	51.15
10.14	Providing and fixing pressed steel door frames confirming to IS: 4351manufactured from commercial mild steel sheet of 1.25 mm thickness including hinges jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25mm, or base ties of 1.25mm pressed mild steel welded or rigidly fixed together by mechanical means, adjustable lugs with split end tail to each jamb including steel butt hinges 2.5mm thick with mortar guards, lock strike-plate and shock absorbers as specified and applying a coat of approved steel primer after pre-treatment of the surface as directed by Engineer-in-charge:		
10.14.1	Profile B	metre	251.90
10.14.2	Profile C	metre	271.65

Code No	Description	Unit	Rate Rs.
	10.14.3 Profile E	metre	303.00
10.15	Providing and fixing M.S. Tubular frames for doors, windows, ventilators and cupboard with L-Type section made of 1.60mm thick M.S. Sheet, joints mitred and welded and grinded finish profiles required size with 15x3mm lugs 10cm long embedded in cement concrete blocks 15x10x10cm of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primers.	kg	121.55
10.16	Steel work in built up tubular trusses including cutting, hoisting fixing in position and applying a priming coat of approved steel primer, welded and bolted including special shaped washers etc. complete.		
	10.16.1 Hot finished welded type tubes.	kg	61.50
	10.16.2 Hot finished seamless type tubes.	kg	95.65
	10.16.3 Electric resistance or induction butt welded tubes.	kg	109.05
10.17	Providing and fixing M.S. fan clamp type I or II of 16 mm dia M.S. bar bent to shape with hooked ends in R.C.C. slabs, beams during laying including painting the exposed portion of loop, all as per standard design complete.	each	75.20
10.18	Providing and fixing circular/ Hexagonal cast iron or M.S. sheet box for ceiling fan clamp of internal dia 140mm, 73mm height, top lid of 1.5mm thick M.S. sheet with its top surface hacked for proper bonding, top lid shall be screwed into the cast iron/ M.S. sheet box by means of 3.3mm dia. round headed screws, one lock at the corners. Clamp shall be made of 12mm dia M.S. bar bent to shape as per standard drawing.	each	81.20
10.19	Providing and fixing M.S. round holding down bolts with nuts and washer plates complete.	kg	52.05
10.20	Providing and fixing bolts including nuts and washers complete.	kg	62.75
10.21	Providing and fixing M.S. rivets of sizes in position.	kg	69.90
10.22	Welding by gas or electric plant including transportation of plant at site etc. complete.	cm	1.45
10.23	Providing and fixing bright finished brass casement window fasteners or peg stays to windows/ ventilators with necessary welding and machine screws etc. complete.	kg	226.05
10.24	Providing and fixing 14 mm bright finished brass spring catch to steel centre hung ventilators with necessary welding and machine screws etc. complete.	each	27.65
10.25	Steel work welded in built up sections/ framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.		
	10.25.1 In stringers, treads, landings etc. of stair cases including use of chequered plate wherever required, all complete.	kg	48.95



<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
	10.25.2 In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works.	kg	51.20
10.26	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing and staircase railing including applying a priming coat of approved steel primer.		
	10.26.1 M.S. tube.	kg	60.15
	10.26.2 E.R.W. tubes.	kg	111.50
	10.26.3 G.I. pipes.	kg	68.00

**SUB HEAD : 11.0**

**FLOORING**

### BASIC RATES (SH: 11.0 FLOORING)

Code No	Description	Unit	Rate Rs.
0002	Hire charges of Concrete Mixer 0.14 cubic metre	Day	400.00
0013	Machine for rubbing of floors	Day	200.00
0100	Bandhani	Day	138.45
0101	Bhisti	Day	138.45
0103	Blacksmith 2nd class	Day	141.60
0111	Carpenter 1st class	Day	151.50
0114	Beldar	Day	135.25
0115	Coolie	Day	135.25
0123	Mason (brick layer) 1st class	Day	151.50
0124	Mason (brick layer) 2nd class	Day	141.60
0126	Mason (for ornamental stone work) 1st class	Day	151.50
0127	Driver (for Road Roller, Concrete Mixer, Truck etc.)	Day	151.50
0130	Mistry	Day	151.50
0139	Skilled Beldar (for floor rubbing etc.)	Day	138.45
0295	Stone Aggregate (Single size) : 20 mm nominal size	cum	700.00
0296	Stone Aggregate (Single size) : 12.5 mm nominal size	cum	700.00
0297	Stone Aggregate (Single size) : 10 mm nominal size	cum	700.00
0298	Stone Aggregate (Single size) : 06 mm nominal size	cum	750.00
0313	Blown type petroleum bitumen of penetration 85/25 of approved quality	tonne	25,000.00
0367	Portland Cement	tonne	4,500.00
0368	White Cement	tonne	9,700.00
0682	Oxidised mild steel screws 50 mm	100 Nos	40.00
0784	Marble dust/ powder	cum	800.00
0785	Marble chips up to 4mm and downsize White & black	quintal	115.00
0788	Marble chips large size above 4 mm White & black	quintal	115.00
0874	Black colour dark shade pigment	kilogram	42.00
0875	Red, chocolate, orange, buff or yellow (red oxide of iron) light shade pigment	kilogram	65.00
0876	Green or blue medium shade pigment	kilogram	45.00
0982	Coarse sand (zone III)	cum	600.00
0983	Fine sand (zone IV)	cum	320.00
1007	Structural steel such as tees ,angles channels and R.S. joists	quintal	3,100.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
1008	Flats up to 10 mm in thickness	quintal	2,900.00
1149	Glass strip 4 mm thick 40 mm deep	metre	6.00
1168	Kota stone slab 20 mm to 25 mm thick (semi-polished)	sqm	239.00
1187	First class teak wood in scantling	10 cudm	492.00
1190	Second class teak wood in planks	10 cudm	410.00
1194	Second class deodar wood in planks	10 cudm	335.00
1201	Precast terrazo tiles 22 mm thick (light shade)	sqm	198.00
1202	Precast terrazo tiles 22 mm thick (medium shade)	sqm	175.00
1203	Precast terrazo tiles 22 mm thick (dark shade)	sqm	170.00
1215	Welding by electric plant	cm	1.00
1227	Chequered terrazo tiles 22 mm thick (light shade)	sqm	230.00
1228	Chequered terrazo tiles 22 mm thick (medium shade)	sqm	200.00
1229	Chequered terrazo tiles 22 mm thick (dark shade)	sqm	170.00
1231	Extra for selected planks of second class teakwood	cudm	72.00
2201	Carriage of Bricks	1000 Nos	141.88
2202	Carriage of Stone aggregate below 40 mm nominal size	cum	53.21
2203	Carriage of Coarse sand	cum	53.21
2204	Carriage of Timber	cum	60.81
2205	Carriage of Steel	tonne	47.29
2209	Carriage of Cement	tonne	47.29
2211	Carriage of Tar bitumen	tonne	53.21
2216	Carriage of Stone blocks white & red sand stone & kota stone slab	tonne	47.29
2261	Carriage of Fine sand (1 part badarpur sand : 2 parts jamuna sand)	cum	53.21
2268	Carriage of Marble dust and marble chips	cum	53.21
2500	Extra for selected planks of second class deodar wood	10 cudm	59.00
2602	F.P.S. bricks class designation 75	1000 Nos	1,900.00
2710	White marble makrana second quality plain veined stone pieces for crazy flooring	quintal	105.00
2751	8 mm thick marble tiles (polished) Raj Nagar	sqm	294.00
6001	White marble slab Makrana second quality plain veined 18 mm thick	sqm	1,722.00
6007	Pink marble slab plain 18mm thick	sqm	546.00
6010	Udaipur green marble slab plain 18mm thick	sqm	580.00
6019	Black Zebra marble slab plain 18mm thick	sqm	415.00
7024	Acid Proof cement	tonne	7,400.00
7070	Chequered precast cement concrete tiles 22mm thick using marble	sqm	415.00

Code No	Description	Unit	Rate Rs.
	chips of size 6mm - Light shade using white		
7071	White marble Raj Nagar plain 20 mm thick (slab area 0.10 sqm to 0.20 sqm)	sqm	415.00
7077	Acid and alkali resistant tiles 300x300 mm size, 10 mm thick	10 Nos	460.00
7236	Precast chequered cement tiles 22 mm thick Dark shade using ordinary cement	sqm	193.00
7254	Hard crete	litre	29.00
7800	Ceramic Glazed Tiles Ist quality minimum thickness 5mm in all colours shades and designs except burgundy, bottle green, black	Sq.m.	268.00
7801	Ceramic Glazed Tiles Ist quality 300 x 300mm in all shades and designs of White, Ivory, grey, Fume Red brown etc.	Sq.m.	320.00
7802	Ceramic Glazed Tiles Ist quality 300 x 300 in all shades designs except White, Ivory, Grey, Fume Red Brown etc.	Sq.m.	347.00
7803	Ceramic Glazed Tiles Ist quality 400 x 400 in all shades designs White, Ivory, Grey, Fume Red Brown etc.	Sq.m.	462.00
7804	Ceramic Glazed Tiles Ist quality 400 x 400 in all shades designs except White, Ivory, Grey, Fume Red Brown etc.	Sq.m.	496.00
7850	Agaria White marble slab plain 18mm thick	sqm	1000.00
8620	Polished porcelain floor tile 50x50 cm	sqm	932.00
8621	Polished porcelain floor tile 60x60 cm	sqm	1,050.00
8622	Polished porcelain floor tile 80x80 cm	sqm	1,553.00
8623	Polished porcelain floor tile 100x100 cm	sqm	2,149.00
8731	High polymer modified quickset tile adhesive.	per kg	13.75
9999	Sundries	L.S.	2.60

## 11.0 FLOORING

Code No	Description	Unit	Rate Rs.
11.1	Brick on edge flooring with bricks of class designation 75 including cement slurry etc. complete in cement mortar with F.P.S. bricks:		
11.1.1	1:4 (1 cement : 4 coarse sand)	sqm	326.00
11.1.2	1:6 (1cement : 6 coarse sand)	sqm	296.20
11.2	Dry brick on edge flooring in required pattern with bricks of class designation 75 on a bed of 12 mm mud mortar including filling joints with Jamuna sand (with F.P.S. bricks) complete.	sqm	208.90
11.3	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement including cement slurry, but excluding the cost of nosing of steps etc. complete.		
11.3.1	40mm thick with 20mm nominal size stone aggregate.	sqm	192.95
11.4	52 mm thick cement concrete flooring with concrete hardener topping under layer 40 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6 mm nominal size) by volume .hardening compound is mixed @ 2 litre per 50kg of cement or as per manufacturers specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete.	sqm	286.55
11.5	62 mm thick cement concrete flooring with concrete hardener topping under layer 50 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) and top layer 12mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6mm nominal size) by volume. Hardening compound is mixed @ 2 litre per 50kg of cement or as per manufactures specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete.	sqm	318.65
11.6	Cement plaster skirting (up to 30 cm height) with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement.		
11.6.1	18 mm thick.	sqm	168.50
11.7	Cement concrete pavement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including finishing complete.	cum	3,695.95
11.8	Extra for making chequers of approved pattern on cement concrete floors, steps, landing, pavements etc.	sqm	13.15
<b>TERRAZO FLOORING</b>			
11.9	40 mm thick marble chips flooring rubbed and polished to granolithic finish, under layer 34 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size) and top layer 6mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from 1mm to 4mm nominal size laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in		

Code No	Description	Unit	Rate Rs.
	proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume including cement slurry etc. complete :		
11.9.1	Dark shade pigment with ordinary cement.	sqm	305.75
11.9.2	Light shade pigment with white cement.	sqm	407.85
11.9.3	Medium shade pigment with 50% white cement and 50% ordinary cement.	sqm	367.95
11.9.4	White cement without any pigment.	sqm	317.10
11.9.5	Light shade pigment with ordinary cement.	sqm	341.05
11.9.6	Ordinary cement without any pigment.	sqm	291.05
11.10	40 mm thick marble chips flooring, rubbed and polished to granolithic finish, under layer 31mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size) and top layer 9mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from 4mm to 7mm nominal size laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder : 7 marble chips) by volume including cement slurry etc. complete.		
11.10.1	Dark shade pigment with Ordinary cement.	sqm	303.60
11.10.2	Light shade pigment with white cement.	sqm	449.25
11.10.3	Medium shade pigment with 50% white cement and 50% ordinary cement.	sqm	392.20
11.10.4	White cement without any pigment.	sqm	335.85
11.10.5	Light shade pigment with ordinary cement.	sqm	338.90
11.10.6	Ordinary cement without any pigment.	sqm	297.85
11.11	40 mm thick marble chips flooring, rubbed and polished to granolithic finish, under layer 28 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size) and top layer 12mm thick with white, black, chocolate, grey yellow or green marble chips of sizes from 7mm to 10mm nominal size laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 2:3 (2 cement marble powder mix : 3 marble chips) by volume including cement slurry etc. complete :		
11.11.1	Dark shade pigment with ordinary cement.	sqm	336.55
11.11.2	Light shade pigment with white cement.	sqm	400.60
11.11.3	Medium shade pigment with 50% white cement and 50% ordinary cement.	sqm	363.00
11.11.4	White cement without any pigment.	sqm	357.10
11.11.5	Light shade pigment with ordinary cement.	sqm	351.70
11.11.6	Ordinary cement without any pigment.	sqm	308.15
11.12	Marble chips skirting (up to 30 cm height) rubbed and polished to granolithic finish, top layer 6 mm thick with white, black, chocolate,		

Code No	Description	Unit	Rate Rs.
	grey, yellow or green marble chips of sizes from smallest to 4 mm nominal size laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume :		
11.12.1	18 mm thick with under layer 12 mm thick in cement plaster 1:3 (1 cement : 3 coarse sand) :		
11.12.1.1	Dark shade pigment with ordinary cement.	sqm	360.90
11.12.1.2	Light shade pigment with white cement.	sqm	392.95
11.12.1.3	Medium shade pigment with 50% white cement and 50% ordinary cement.	sqm	374.15
11.12.1.4	White cement without any pigment.	sqm	372.25
11.12.1.5	Light shade pigment with ordinary cement.	sqm	368.50
11.12.1.6	Ordinary cement without any pigment.	sqm	346.20
11.13	Providing and fixing glass strips in joints of terrazo/ cement concrete floors.		
11.13.1	40 mm wide and 4 mm thick.	metre	17.60
11.14	Extra for laying terrazo flooring on staircase treads not exceeding 30 cm in width including cost of forming, nosing etc.	sqm	14.35
11.15	Crazy marble stone flooring including filling the gaps with light shade pigment with white cement marble powder mixture (3 parts of white cement : 1 part of marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 white, black or white and black marble chips of sizes from 1mm to 4mm nominal size by volume) and under layer 25mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm nominal size) rubbing, polishing and cement slurry etc. complete :		
11.15.1	18 mm thick crazy marble stone white, black or as specified.	sqm	482.45
<b>TILE FLOORING</b>			
11.16	Precast terrazo tiles 22mm thick with graded marble chips of size upto 12mm laid in floors, and landings, jointed with neat cement slurry mixed with pigment to match the shade of the tiles including rubbing and polishing complete with precast tiles on 20mm thick bed of cement mortar 1:4 (1 cement :4 coarse sand) :		
11.16.1	Light shade using white cement.	sqm	566.95
11.16.2	Medium shade using 50%white cement and 50% ordinary cement.	sqm	517.10
11.16.3	Dark shade using ordinary cement.	sqm	496.35
11.16.4	Ordinary cement without any pigment.	sqm	467.50
11.17	Extra if terrazo tiles are laid in treads of steps not exceeding 30 cm in width.	sqm	17.55



Code No	Description	Unit	Rate Rs.
11.18	Precast terrazo tiles 22 mm thick with graded marble chips of sizes upto 12 mm in skirting and risers of steps not exceeding 30 cm in height on 12 mm thick cement plaster 1:3 (1 cement : 3 coarse sand) jointed with neat cement slurry mixed with pigment to match the shade of the tiles, including rubbing and polishing complete with tiles of :		
11.18.1	Light shade using white cement.	sqm	665.75
11.18.2	Medium shades using 50% white cement and 50% ordinary cement.	sqm	605.70
11.18.3	Dark shade using ordinary cement.	sqm	577.80
11.18.4	Ordinary cement without any pigment.	sqm	548.90
11.19	Chequered terrazo tiles 22 mm thick with graded marble chips of size up to 6 mm in floors jointed with neat cement slurry mixed with pigment to match the shade of the tiles including rubbing and polishing complete on 20 mm thick bed of cement mortar 1:4 (1 cement :4 coarse sand) :		
11.19.1	Light shade using white cement.	sqm	607.80
11.19.2	Medium shade using 50% white cement, 50% ordinary cement.	sqm	549.05
11.19.3	Dark shade using ordinary cement.	sqm	496.35
11.19.4	Ordinary cement without any pigment.	sqm	467.55
11.20	Chequerred precast cement concrete tiles 22 mm thick in footpath & courtyard jointed with neat cement slurry mixed with pigment to match the shade of tiles including rubbing and cleaning etc. complete on 20 mm thick bed of cement mortar 1:4 (1 cement: 4 coarse sand).		
11.20.1	Light shade using white cement.	sqm	775.45
11.20.2	Medium shade using 50% white cement 50% Grey cement.	sqm	973.15
11.20.3	Dark shade using ordinary cement.	sqm	480.95
11.20.4	Ordinary cement without any pigment.	sqm	452.10
11.21	Providing and fixing 10mm thick acid and or alkali resistant tiles of approved make and colour using acid and or alkali resisting mortar bedding and joints filled with acid and or alkali resisting cement as per IS : 4457 complete as per the direction of Engineer-in- Charge.		
11.21.1	In flooring on a bed of 10 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand).		
11.21.1.1	Acid and alkali resistant tile.	sqm	873.00
11.21.2	In dado/skirting on 12 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand).		
11.21.2.1	Acid and alkali resistant tile.	sqm	909.15
11.22	Tile work in skirting, risers of steps and dado (up to 2 m height) over 12 mm thick bed of cement mortar 1:3 (1 cement :3 coarse sand) and jointed with grey cement slurry @ 3.3 kg/sqm including pointing in white		

Code No	Description	Unit	Rate Rs.
	cement mixed with pigment of matching shade complete.		
11.22.1	Marble tiles (polished) Raj Nagar.		
11.22.1.1	8 mm thick.	sqm	570.40
	<b>STONE FLOORING</b>		
11.23	Marble stone flooring with 18mm thick marble stone (sample of marble shall be approved by Engineer-in-charge) over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with grey cement slurry including rubbing and polishing complete with :		
11.23.1	Makrana white second quality.	sqm	2,637.95
11.23.2	Raj Nagar plain.	sqm	892.15
11.23.3	Agaria White	sqm	1,673.55
11.23.4	Black Zebra.	sqm	892.15
11.23.5	Udaipur green marble	sqm	1,112.55
11.23.6	Pink plain marble.	sqm	1,067.15
11.24	Extra for pre finished nosing to treads of steps of marble stone.	metre	105.20
11.25	Extra for marble stone flooring in treads of steps and risers using single length up to 2.00 metre .	sqm	122.35
	<b>KOTA STONE FLOORING</b>		
11.26	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :		
11.26.1	25 mm thick.	sqm	694.40
11.27	Kota stone slabs 25 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.	sqm	676.75
	<b>SAND STONE FLOORING</b>		
11.28	40 mm thick fine dressed stone flooring over 20 mm (average) thick base of cement mortar 1:5 ( 1cement : 5 coarse sand) with joints finished flush.		
11.28.1	Red sand stone	sqm	116.90
11.28.2	White sand stone	sqm	116.90
11.29	40 mm thick fine dressed stone flooring over 20 mm (average)thick base of cement mortar 1:5 (1 cement : 5 coarse sand) including pointing with cement mortar 1:2 (1 cement : 2 stone dust) with an admixture of pigment to match the shade of stone.		
11.29.1	Red sand stone	sqm	161.30
11.29.2	White sand stone	sqm	161.30

Code No	Description	Unit	Rate Rs.
11.30	40 mm thick rubbed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement :5 coarse sand) with joints 3mm thick, side buttered with cement mortar 1:2 (1 cement : 2 stone dust) admixed with pigment to match the shade of stone and pointing with same mortar		
11.30.1	Red sand stone	sqm	194.20
11.30.2	White sand stone	sqm	194.20
11.31	Extra for pre finished nosing in treads of steps of Kota stone/ sand stone slab.	metre	26.40
11.32	Extra for Kota stone/ sand stone in treads of steps and risers using single length up to 1.05 metre .	sqm	6.45
<b>WOODEN FLOORING</b>			
11.33	25mm wooden planking, tongued and grooved in flooring including fixing with iron screws complete with :		
11.33.1	Second class teak wood	sqm	1,752.50
11.33.2	Second class deodar wood	sqm	1,433.70
11.34	38mm thick wood block flooring of first class teak wood laid over 25mm thick leveling layer of cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 10mm nominal size) to be paid separately coated with a thin layer of hot bitumen (blown type) @ 2.45 kg per sqm. including fixing blocks in position after dipping in hot bitumen (blown type) up to half depth, planed, levelled smooth and finished complete.	sqm	3,528.10
11.35	Providing and fixing M.S. angle 50x50x5 mm to act as nosing with lugs of M.S. flat 10x5 mm 10cm long forked at end 60cm apart (minimum three lugs to be provided) including necessary welding and applying a priming coat of approved primer on exposed surface etc. complete.	kilogram	48.05
<b>CERAMIC GLAZED TILES</b>			
11.36	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacture ) of approved make in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge in skirting, risers of steps and dados over 12 mm thick bed of cement Mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete.	sqm	556.60
11.37	Providing and laying Ceramic glazed floor tiles 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick Cement Mortar 1:4 (1 Cement : 4 Coarse sand) including pointing the joints with white cement and matching pigment etc., complete.	sqm	598.65

Code No	Description	Unit	Rate Rs.
11.38	Providing and laying Ceramic glazed floor tiles 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in all colours, shades, except White, Ivory, Grey, Fume Red Brown laid on 20mm thick bed of Cement Mortar 1:4 (1 Cement : 4 Coarse sand) including pointing the joints with white cement and matching pigments etc., complete.	sqm	630.80
11.39	Providing and laying rectified Glazed Ceramic floor tiles 300x300 mm or more (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours White, Ivory, Grey, Fume Red Brown, laid on 20mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand) including grouting the joints with white cement and matching pigments etc., complete.	sqm	759.90
11.40	Providing and laying rectified Glazed Ceramic floor tiles 300x300 mm or more (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick Cement Mortar 1:4 (1 Cement : 4 Coarse sand) including pointing the joints with white cement and matching pigments etc., complete.	sqm	800.40
<b>VITRIFIED FLOOR TILES</b>			
11.41	Providing and laying polished vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption's less than 0.08% and conforming to IS : 15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including grouting the joints with white cement and matching pigments etc., complete.		
11.41.1	Size of Tile 50x50 cm	sqm	1,308.05
11.41.2	Size of Tile 60x60 cm	sqm	1,448.55
11.41.3	Size of Tile 80x80 cm	sqm	2,046.15
11.41.4	Size of Tile 100x100 cm	sqm	2,755.70
11.42	Deduct for not using 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) bedding in laying of floor tiles.	sqm	233.95
11.43	Fixing glazed/ Ceramic/ Vitrified floor tiles with cement based high polymer modified quick-set tile adhesive (Water based) conforming to IS: 15477 , using 5kg. adhesive per sqm of tile area, in average 3mm thickness.	sqm	224.70

**SUB HEAD : 12.0**

**ROOFING**

## BASIC RATES (SH: 12.0 ROOFING)

Code No	Description	Unit	Rate Rs.
0100	Bandhani	Day	138.45
0101	Bhisti	Day	138.45
0102	Blacksmith 1st class	Day	151.50
0103	Blacksmith 2nd class	Day	141.60
0111	Carpenter 1st class	Day	151.50
0112	Carpenter 2nd class	Day	141.60
0114	Beldar	Day	135.25
0115	Coolie	Day	135.25
0116	Fitter (grade 1)	Day	151.50
0117	Assistant Fitter or 2nd class Fitter	Day	141.60
0122	Mason (for plaster of paris work) 1st class	Day	151.50
0123	Mason (brick layer) 1st class	Day	151.50
0124	Mason (brick layer) 2nd class	Day	141.60
0128	Mate	Day	138.45
0130	Mistry	Day	151.50
0131	Painter	Day	141.60
0155	Mason (average)	Day	146.55
0222	Seam bolts and nuts 6 mm dia and 25 mm long	10 Nos	30.00
0223	Non - Asbestos fibre cement corrugated sheet 6mm thick.	sqm	205.00
0224	Non - Asbestos fibre cement close fitting adjustable ridge.	metre	203.00
0225	Non - Asbestos fibre cement corrugate serrated adjustable ridge.	metre	174.00
0226	Non - Asbestos fibre cement plain wing adjustable ridge.	metre	188.00
0227	Non - Asbestos fibre cement unserrated adjustable ridge for hips.	metre	195.00
0228	Non - Asbestos fibre cement corrugated apron piece.	metre	126.00
0229	Non - Asbestos fibre cement eaves filler piece.	each	93.00
0230	Non - Asbestos fibre cement north light curves.	metre	197.00
0231	Non - Asbestos fibre cement ventilator curves.	each	267.00
0232	Non - Asbestos fibre cement barge boards 6 mm thick.	metre	232.00
0233	Non - Asbestos fibre cement ridge finial .	pair	84.00
0234	Non - Asbestos fibre cement special north light curves.	each	275.00
0235	Non - Asbestos fibre cement S type louvers.	each	161.00
0236	Non - Asbestos multi purpose fibre cement board 6mm thick.	sqm	180.00
0295	Stone Aggregate (Single size) : 20 mm nominal size	cum	700.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
0297	Stone Aggregate (Single size) : 10 mm nominal size	cum	700.00
0308	Bhusa	quintal	200.00
0309	Paving bitumen S-90 of approved quality	tonne	22,500.00
0314	Bitumen hot sealing compound : grade A	kilogram	20.00
0328	White face insulating board:12 mm thick	sqm	239.00
0332	Natural colour insulating board:12 mm thick	sqm	175.00
0336	Flame retardant face insulating board: 12 mm thick	sqm	208.00
0341	Flat pressed 3 layer particle board (medium density) Grade I :12 mm thick	sqm	258.00
0367	Portland Cement	tonne	4,500.00
0370	Coal (steam)	quintal	300.00
0452	Brass screws 25 mm	100 Nos	76.00
0637	Bright finished or black enamelled mild steel screws 40 mm	100 Nos	30.00
0765	Hessian cloth	sqm	10.00
0771	Kerosene oil	litre	19.00
0811	Mud (dry)	cum	20.00
0845	Roofing paint for iron sheets in red colour	litre	95.00
0865	Pig lead	kilogram	58.00
0869	Plaster of Paris	kilogram	2.50
0870	Plug	each	6.00
0886	Standard holder bat clamps for sand cast iron or cast iron pipes 150 mm dia	each	20.00
0966	Sand Cast iron plain shoe 150 mm dia	each	222.00
0982	Coarse sand (zone III)	cum	600.00
0992	Galvanised steel plain sheets	quintal	3,450.00
0994	Standard quality hard board sheet 3 mm thick	sqm	103.00
0996	Standard quality hard board sheet 4.5 mm thick	sqm	120.00
1001	Spun yarn	kilogram	30.00
1008	Flats up to 10 mm in thickness	quintal	2,900.00
1015	Mild steel expanded metal 20x60 mm strands	sqm	200.00
1022	Galvanised steel bolts & nuts 6 mm dia and 25 mm long round head with slots	10 Nos	9.00
1023	Galvanised steel J or L hooks 8 mm dia	10 Nos	58.00
1024	Galvanised steel bolts & nuts 10 mm dia and 125 mm long round head with slots	each	7.00
1025	Mild steel bolts 6 mm dia and 25 mm long with hexagonal head	10 Nos	18.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
1031	Galvanised steel bolts & nuts 10 mm dia and 27 cm long both sides threaded with 4 galvanised steel nuts	each	13.00
1032	Galvanised steel bolts 10 mm dia and 7 cm long with nuts	each	9.00
1174	Red sand stone slab 45 mm and 50 mm thick (un-dressed)	sqm	145.00
1175	White sand stone slab 45 mm and 50 mm thick (un-dressed)	sqm	160.00
1190	Second class teak wood in planks	10 cudm	410.00
1196	First class kail wood in planks	10 cudm	186.00
1207	G.I. Limpet washer	100 Nos	20.00
1208	Bitumen washer	100 Nos	18.00
1209	G.I. plain washer thick	100 Nos	27.00
1210	G.I. plain washer thin	100 Nos	20.00
1211	G.I. plain washer for seam bolts	100 Nos	21.00
1213	Water proofing materials	kilogram	20.00
1219	Wire nails	kilogram	40.00
1220	Wire mesh (rabbit)	sqm	38.00
1331	M.S. Holder bat clamp of approved design for 100 mm S.C.I. pipe	each	13.00
1984	F.P.S. bricks tile class designation 100	1000 Nos	1,950.00
2202	Carriage of Stone aggregate below 40 mm nominal size	cum	53.21
2203	Carriage of Coarse sand	cum	53.21
2204	Carriage of Timber	cum	60.81
2205	Carriage of Steel	tonne	47.29
2207	Carriage of Brick tiles	1000 Nos	85.13
2209	Carriage of Cement	tonne	47.29
2211	Carriage of Tar bitumen	tonne	53.21
2216	Carriage of Stone blocks white & red sand stone & kota stone slab	tonne	47.29
2273	Carriage of A.C. sheet and accessories	tonne	47.29
2302	Carriage of G.I. sheet and accessories	tonne	47.29
2308	Carriage of Plaster of paris	tonne	47.29
3002	Poly vinyle chloride sheet 400 micron thick	sqm	26.00
3004	Stone ware spouts 100 mm dia 60 cm long	each	28.00
3050	Galvanised steel corrugated sheets	quintal	3,650.00
4009	Mild steel tubes hot finished welded type	kilogram	38.00
4202	Red oxide Zinc chromate primer	litre	58.00
7009	Gypsum board	sqm	140.00
7010	Ceiling sections	metre	36.00



<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
7011	Peri metre channel	metre	23.00
7012	Intermediate channel	metre	38.00
7013	Ceiling angle	metre	16.00
7014	Connecting clips	each	5.00
7015	Soffit cleat	each	3.00
7016	Joint filler	kilogram	19.00
7017	Joint finisher	kilogram	22.00
7018	Joint tape roll	roll	120.00
7019	Dash fastener	each	8.00
7020	All drive screws ( for gypsum board)	Nos	40.00
7021	Primer ( for gypsum board)	litre	76.00
7090	Expanded polystyrene type N- Normal	sqm	108.00
7091	Expanded polystyrene type - SE	sqm	131.00
7187	C.I. grating 150 mm dia. (Weighing not less than 440 gm)	each	16.00
7188	U-PVC pipes (working pressure 4 kg / cm <sup>2</sup> ) Single socketed pipe 75 mm dia.	metre	58.00
7189	U-PVC pipes (working pressure 4 kg / cm <sup>2</sup> ) Single socketed pipe 110 mm dia.	metre	112.00
7190	U-PVC pipes (working pressure 4 kg / cm <sup>2</sup> ) Rubber (Seal) Ring 75 mm dia.	metre	14.00
7191	U-PVC pipes (working pressure 4 kg / cm <sup>2</sup> ) Rubber (Seal) Ring 110 mm dia.	metre	17.00
7192	UPVC coupler for UPVC drainage pipes 75 mm	each	30.00
7193	UPVC coupler for UPVC drainage pipes 110 mm	each	40.00
7194	UPVC push fit coupler (single) 75 mm thick	each	47.00
7195	UPVC push fit coupler (single) 110 mm thick	each	72.00
7196	UPVC single equal Tee (with door) 75x75x75 mm	each	83.00
7197	UPVC single equal Tee (with door) 110x110x110 mm	each	115.00
7198	UPVC single equal Tee (with door) 75x75x75 mm	each	100.00
7199	UPVC single equal Tee (with door) 110x110x110 mm	each	160.00
7208	UPVC bend 87.5o 75 mm bend	each	50.00
7209	UPVC bend 87.5o 110 mm bend	each	85.00
7212	UPVC plain shoe 75 mm bend	each	105.00
7213	UPVC plain shoe 110 mm bend	each	196.00
7214	UPVC pipe clip 75 mm bend	each	15.00
7215	UPVC pipe clip 110 mm bend	each	30.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
7231	Resin Bonded Glass wool 16 kg/m³ 50 mm thick	sqm	114.00
7232	Resin Bonded Glass wool 24 kg/m³ 50 mm thick	sqm	163.00
7266	Pressed clay tiles	Nos	8,900.00
7267	Plain ceiling tiles (BWP type phenol formaldehyde synthetic resin bonded) (600x600x12 mm)	each	90.00
7268	Semi perforated ceiling tiles (600x600x12 mm)	each	90.00
7385	3 mm thick translucent white acrylic plastic sheet	sqm	515.00
7386	12 thick particle board ceiling tile	sqm	225.00
7857	P.T.M.T. Grating square slit 150mm	each	70.00
7904	Machine moulded tile bricks of class designation 125	1000 Nos	2,717.00
8611	Main T ceiling sections 24x38x0.3 mm (3 metre long)	each	162.00
8612	Perimeter wall angle 21x21 mm (3 metre long)	each	102.00
8613	Intermediate cross channel (1.2 mtrs)	each	62.00
8614	Intermediate cross channel (1.6 mtrs)	each	29.00
8615	Hanger rod 0.5 mm thick	each	5.00
8616	Adjustment clip	each	4.40
8617	Soffit cleat	each	2.30
8618	Dash fastener 6 mm dia 50 mm long	each	8.00
8667	UV stabilised 2 mm thick plain FRP sheet .	sqm	474.00
8668	UV stabilised 2 mm thick corrugated FRP sheet .	sqm	474.00
8669	Mangalore ridge tiles 20mm thick.	each	25.00
8670	Manglore tiles 20mm thick.	each	9.50
8671	Pre coated galvanised iron profile sheet 0.50 mm TCT	sqm	325.00
8672	Pre coated galvanised steel plain ridges.	metre	330.00
8673	Pre coated galvanised steel flashings/aprons.	metre	330.00
8674	Pre coated galvanised steel gutter	metre	360.00
8675	Pre coated galvanised steel north light curves.	metre	360.00
8676	Pre coated galvanised steel barge board.	metre	330.00
8677	Pre coated galvanised steel crimp curve	sqm	420.00
9999	Sundries	L.S.	2.60

## 12.0 ROOFING

Code No	Description	Unit	Rate Rs.
12.1	Providing corrugated G.S. sheet roofing including vertical/curved surface fixed with polymer coated J or L hooks, bolts and nuts 8 mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead and including a coat of approved steel primer and two coats of approved paint on overlapping of sheets complete (up to any pitch in horizontal/ vertical or curved surfaces) excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.		
12.1.1	1.00mm thick with zinc coating not less than 275gm/m <sup>2</sup>	sqm	612.85
12.1.2	0.80mm thick with zinc coating not less than 275gm/m <sup>2</sup>	sqm	515.30
12.1.3	0.63 mm thick with zinc coating not less than 275gm/ m <sup>2</sup>	sqm	432.25
12.2	Extra for straight cutting in C.G.S. sheet roofing for making opening of area exceeding 40 sq. decimeter for chimney stacks, sky light etc. :		
12.2.1	1.00 mm thick	metre	16.65
12.2.2	0.80 mm thick	metre	13.30
12.2.3	0.63 mm thick	metre	13.30
12.3	Extra for circular cutting in C.G.S. sheet roofing for making opening of area exceeding 40 square decimeter :		
12.3.1	1.00 mm thick	metre	97.65
12.3.2	0.80 mm thick	metre	78.00
12.3.3	0.63 mm thick	metre	78.00
12.4	Providing ridges or hips of width 60 cm over all width plain G.S. sheet fixed with polymer coated J. or L hooks, bolts and nuts 8 mm dia. G.I. limpet and bitumen washers complete.		
12.4.1	0.80mm thick with zinc coating not less than 275gm/m <sup>2</sup>	metre	313.60
12.4.2	0.63mm thick with zinc coating not less than 275gm/m <sup>2</sup>	metre	270.95
12.5	Providing valleys of 90cm wide overall in plain G.S. sheet fixed with polymer coated J, or L hooks, bolts and nuts 8mm dia.. G.I. limpet and bitumen washers complete :		
12.5.1	1.60mm thick with zinc coating not less than 350gm/m <sup>2</sup>	metre	617.45
12.6	Providing flashing of 40 cm over all width in plain, G.S. sheet fixed with polymer coated J, or L hooks, bolts and nuts, G.I. limpet and bitumen washer complete, bent to shape and fixed in wall with cement mortar 1:3 (1cement : 3 coarse sand).		
12.6.1	1.00mm thick with zinc coating not less than 275gm/m <sup>2</sup>	metre	223.55

Code No	Description	Unit	Rate Rs.
12.7	Providing and fixing 15 cm wide 45 cm over all semi circular plain G.S. sheet gutter with iron brackets 40x3mm size, bolts, nuts and washers etc. including making necessary connections with rain water pipes complete.		
12.7.1	0.80mm thick with zinc coating not less than 275gm/m <sup>2</sup>	metre	283.70
12.7.2	0.63mm thick with zinc coating not less than 275gm/m <sup>2</sup>	metre	248.20

#### NON AC SHEET ROOFING

12.8	Providing non-asbestos high impact Polypropylene reinforced cement 6mm thick corrugated sheets (as per IS: 14871) roofing up to any pitch and fixing with polymer coated J, or L hooks, bolts and nuts 8mm dia. G.I. plain and bitumen washers or with self drilling fastener and EPDM washers etc. complete excluding the cost of purlins, rafters and trusses: corrugated sheets and including cutting to size and shape wherever required.	sqm	294.95
12.9	Extra for straight cutting in non- asbestos polypropylene reinforced cement corrugated, semi-corrugated 6 mm thick sheet roofing for making openings of area exceeding 40 square decimeter for chimney stacks, skylights etc.	metre	13.30
12.10	Extra for circular cutting in non-asbestos polypropylene reinforced cement corrugated/semi-corrugated 6 mm thick sheet roofing for making openings of area exceeding 40 square decimeter.	metre	36.80
12.11	Extra for providing and fixing wind ties of 40x 6mm flat iron section.	metre	73.65
12.12	Providing and fixing ridges and hips in non-asbestos fibre cement high impact polypropylene reinforced roofing with suitable fixing accessories or self drilling fastener and EPDM washer etc. complete.		
12.12.1	Corrugated serrated adjustable ridges	metre	263.15
12.12.2	Plain wing adjustable ridges	metre	282.70
12.12.3	Close fitting adjustable ridges	metre	348.75
12.12.4	Unserrated adjustable hips	metre	292.10

#### NON AC ACCESSORIES

12.13	Providing and fixing non-asbestos fibre cement high impact polypropylene reinforced roofing accessories in all colours with polymer coated J or L hooks, bolts and nuts and or G.I. seam bolts and nuts, G.I. plain and bitumen washers or with self drilling fastener and EPDM washer etc. complete:		
12.13.1	Corrugated apron pieces	metre	180.05

Code No	Description	Unit	Rate Rs.
	12.13.2 Eave's filler pieces	metre	121.95
	12.13.3 North light curves	metre	268.10
	12.13.4 ventilator curves	metre	353.95
	12.13.5 Barge boards	metre	358.30
	12.13.6 Ridge finials	pair	115.00
	12.13.7 Special north light curves	each	362.05
	12.13.8 S type louvers	metre	175.35
12.14	Providing flat iron brackets 50x3mm size with necessary bolts, nuts and washers etc. for fixing asbestos cement/G.S. sheets gutters with purlins.	metre	22.45
12.15	Painting top of roofs with bitumen of approved quality at 17kg per 10 sqm impregnated with a coat of coarse sand at 60 cudm per 10sqm including cleaning the slab surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil complete :		
	12.15.1 With residual type petroleum bitumen of penetration 80/100	sqm	63.00
12.16	10 cm thick (average) mud phaska of damped brick earth on roofs laid to slope consolidated and plastered with 25 mm thick mud mortar mixed with bhusha at 35 kg per cum of earth and gobri leaping with mix 1:1 (1 clay : 1 cow dung) and covered with flat tile bricks of class designation 100 grouted with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% of integral water proofing compound by weight of cement and finished neat :		
	12.16.1 With F.P.S. brick tiles	sqm	220.85
12.17	10cm thick (average) mud phaska of damped brick earth on roofs laid to slope consolidated and plastered with 25mm thick mud mortar with bhusha at 35kg per cum of earth and gobri leaping with mix 1:1 (1 clay : 1 cow-dung) and covered with machine moulded tile bricks of class designation 125 conforming to IS : 2690 (Part I) -1992 grouted with cement mortar 1:3 ( 1 cement : 3 fine sand ) mixed with 2% of integral water proofing compound by weight of cement and finished neat.		
	12.17.1 With machine moulded F.P.S. brick tiles	sqm	254.70
12.18	Extra for every additional 1 cm thickness of mud phaska	sqm	5.15
12.19	Providing and laying brick tiles of class designation 100 over mumty roofs grouted with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% of integral water proofing compound by weight of cement, over a 12 mm layer of cement mortar 1:3 (1 cement : 3 fine sand) and finished neat :		
	12.19.1 With F.P.S. brick tiles	sqm	184.35
12.20	Providing and laying pressed clay tiles (as per approved pattern 20 mm nominal thickness and of approved size) on roofs jointed with cement mortar 1:4 (1 cement : 4 coarse sand) mixed with 2% integral water	sqm	390.60

Code No	Description	Unit	Rate Rs.
	proofing compound laid over a bed of 20 mm thick cement mortar 1:4 (1 cement : 4 coarse sand) and finished neat complete.		
12.21	Providing gola 75x75 mm in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 stone aggregate 10mm and down gauge) including finishing with cement mortar 1:3 (1 cement : 3 fine sand) as per standard design :		
12.21.1	In 75x75mm deep chase	metre	67.35
12.22	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1mx1mx400micron, finished with 12mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement rounding the edge sand making and finishing the outlet complete.	each	108.00
12.23	Providing sand stone slab for roofing and laying them in cement mortar 1 : 4 (1 cement : 4 coarse sand) over wooden karries or R.C.C. battens (Karries and battens to be paid separately) including pointing the ceiling joints with cement mortar 1:3 (1 cement : 3 fine sand ) complete :		
12.23.1	Red sand stone slab		
12.23.1.1	40 to 50 mm thick	sqm	283.30
12.23.2	White sand stone slab :		
12.23.2.1	40 to 50 mm thick	sqm	302.45
<b>CEILING</b>			
12.24	Providing and fixing insulating board ceiling of approved quality with necessary nails etc. complete (frame work to be paid separately) :		
12.24.1	Natural colour insulating board		
12.24.1.1	12 mm thick	sqm	311.40
12.24.2	White face insulating board		
12.24.2.1	12 mm thick	sqm	393.15
12.24.3	Flame retardant face insulating board		
12.24.3.1	12 mm thick	sqm	353.55
12.25	Providing and fixing flat pressed 3 layer medium density particle board or graded particle board (Grade I) IS: 3087 marked in ceiling with necessary nails etc. complete (frame work to be paid separately) :		
12.25.1	12 mm thick	sqm	417.10
12.26	Providing and fixing plain Multipurpose Cement board ( High Pressure steam cured ) as per IS : 14862 : 2000 ) with suitable fibre cement		

Code No	Description	Unit	Rate Rs.
	screw in ceiling etc. complete (frame work to be paid separately) :		
12.26.1	6 mm thick cement board	sqm	317.45
12.27	Extra for Circular cutting and waste in ceiling with:		
12.27.1	2nd class teak wood planks 20 mm thick	metre	186.40
12.27.2	Natural colour insulating board		
12.27.2.1	12 mm thick	metre	92.55
12.27.3	White face insulating board:		
12.27.3.1	12 mm thick	metre	102.75
12.27.4	Flame retardant face insulating board:		
12.27.4.1	12 mm thick	metre	97.80
12.27.5	Standard quality hard board sheet:		
12.27.5.1	3 mm thick	metre	81.05
12.27.5.2	4.5 mm thick	metre	83.75
12.28	Extra for providing and fixing ceiling to curved surfaces in narrow widths	sqm	65.45
12.29	Providing and fixing false ceiling with 12 mm thick plain/ semi perforated or with design ceiling tiles of BWP type phenol formaldehyde synthetic resin bonded pressed particle board conforming to IS:3087 finished with a coat of aluminium primer on both sides & edges and two coats of synthetic enamel paint of approved quality on exposed face fixed to a grid made out of anodised aluminium(with 15 micron anodic coating) T-sections 35 x15x1.5 mm size main runners and cross runners 23.5x19x1.5 mm fixed to main runners placed 600 mm centre to centre both ways so as to form a grid of 600 mm square. The frame work shall be suspended from ceiling by level adjusting hangers of 6 mm dia M.S rod fixed to roof slab by means of ceiling cleats. The suspenders shall be placed 600x 1200 mm centre to centre including fixing to the frame with C.P brace screws and applying a priming coat of zinc chromate yellow primer (aluminium frame work shall be paid separately).	sqm	202.45
12.30	Extra for providing 3 mm thick translucent white acrylic plastic sheets of approved quality in false ceiling instead of 12 mm thick plain/or with design particle board ceiling tiles in item above.	sqm	336.85
12.31	Providing 10 mm thick plaster of Paris (gypsum anhydrous) ceiling up to a height of 5 m above floor level over first class kail wood strips 25x6 mm with 10 mm gap in between and reinforced with rabbit wire mesh fixed to wooden frame (frame work to be paid separately) :		
12.32.1	Flat surfaces	sqm	402.40
12.32.2	Curved surfaces	sqm	452.35
12.32	Extra for any sunk or raised mouldings in the plaster of Paris (Gypsum anhydrous) ceiling	sqm	104.70

Code No	Description	Unit	Rate Rs.
12.33	Extra for providing plaster of Paris (Gypsum anhydrous) ceiling above 5metres height from floor level.	sqm per metre height	38.90
12.34	Providing and fixing thermal insulation of ceiling (under deck insulation) with Resin Bonded Fibre glass wool conforming to IS : 8193 density 24kg/m <sup>3</sup> , 50mm thick, wrapped in 200 G Virgin Polythene bags fixed to ceiling with metallic cleats (50x50x3 mm) @ 60 cm and wire mesh of 12.5mm x 24g wire and mesh, for top most ceiling of building.	sqm	310.10
12.35	Providing and fixing thermal insulation with Resin Bonded Fibre glass wool conforming to IS: 8193. Density 16kg/m <sup>3</sup> , 50mm thick, wrapped in 200G Virgin Polythene bags placed over existing false ceiling and held in position by criss-crossing GI wire.	sqm.	168.35
12.36	Thermal Insulation of roofing with Expanded polystyrene fixed with suitable adhesive to the false ceiling as per the directions of the Engineer-in-charge :		
12.35.1	With Type N - Normal 50 mm thick	sqm	156.75
12.35.2	With Type SE - Self Extinguishing type 50 mm thick	sqm	186.10

#### RAIN WATER SPOUT AND PIPE

12.36	Providing and fixing 100 mm diameter and 60 cm long rain water spout in cement mortar 1:4 (1 cement : 4 fine sand).		
12.36.1	Stone ware spout	each	36.15
12.37.	Providing and fixing M.S. holder bat clamps of approved design to C.I. or S.C.I. rain water pipes embedded in and including cement concrete blocks 10x10x10cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and cost of cutting holes and making good the walls etc. :		
12.37.1	100 mm diameter	each	65.35
12.37.2	150 mm diameter	each	73.45
12.38	Providing lead caulked joints to sand cast iron rain water pipes and fittings :		
12.38.1	100 mm dia. Pipe	each	126.50
12.38.2	150 mm dia. Pipe	each	175.30
12.39	Providing, fixing and embedding sand cast iron accessories for rain water pipes in the masonry surrounded with 12 mm thick cement mortar of the same mix, as that of masonry (lead caulking will be paid for separately) :		
12.39.1	Sand cast iron plain shoes :		
12.39.1.1	150 mm diameter	each	278.25



Code No	Description	Unit	Rate Rs.
12.40	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion.(i) Single socketed pipes.		
12.40.1	75 mm diameter	metre	95.00
12.40.2	110 mm diameter	metre	163.40
12.42	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion.		
12.42.1	Coupler		
12.42.1.1	75 mm	each	81.40
12.42.1.2	110 mm	each	101.65
12.42.2	Single pushfit Coupler :		
12.42.2.1	75 mm	each	101.15
12.42.2.2	110 mm	each	138.85
12.42.3	Single tee with door		
12.42.3.1	75x75x75 mm	each	177.45
12.42.3.2	110x110x110 mm	each	260.70
12.42.4	Single tee without door		
12.42.4.1	75x75x75 mm	each	157.70
12.42.4.2	110x110x110 mm	each	208.45
12.42.5	Bend 87.5°		
12.42.5.1	75 mm bend	each	88.40
12.42.5.2	110 mm bend	each	134.20
12.42.6	Shoe (Plain)		
12.42.6.1	75 mm Shoe	each	152.25
12.42.6.2	110 mm Shoe	each	263.10
12.43	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50mm hard wood plugs, screwed with M.S. screws of required length including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.		
12.43.1	75 mm	each	79.50
12.43.2	110 mm	each	96.90
12.44	Providing and fixing to the inlet mouth of rain water pipe cast iron grating 15 cm diameter and weighing not less than 440 grams.	each	23.40

Code No	Description	Unit	Rate Rs.
12.45	Providing and fixing at all height false ceiling including providing and fixing of frame work made of special sections power pressed from M.S. sheet and galvanised in accordance with zinc coating of grade 350 as per IS : 277 and consisting of angle cleats of size 25mm wide x 1.6mm thick with flanges of 22mm and 37mm at 1200mm centre to centre one flange fixed to the ceiling with dash fastener 12.5mm diax40mm long with 6mm dia bolts to the angle hangers of 25x25x0.55mm of required length, and other end of angle hanger being fixed with nut and bolts to G.I. channels 45x15x0.9mm running at the rate of 1200mm centre to centre to which the ceiling section 0.5mm thick button wedge of 80mm with tapered flanges of 26mm each having clips of 10.5mm at 450mm centre to centre shall be fixed in a direction perpendicular to G.I. channel with connecting clips made out of 2.64mm diax230mm long G.I. wire at every junction including fixing the gypsum board with ceiling section and perimeter channels 0.5mm thick 27mm high having flanges of 20mm and 30mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450mm centre to centre with 25mm long drive-all screws @ 230mm interval including jointing and fixing to a flush finish of tapered and square edges of the board with recommended filler, jointing tapes, finisher and two coats of primer suitable for board as per manufactures specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed all complete as per drawing and specification and direction of the Engineer in Charge but excluding the cost of painting with :		
12.49.1	12.5 mm thick tapered edge gypsum board conforming to IS: 2095- Part I.	sqm	502.10
12.46	Providing and fixing to the inlet mouth of rain water pipe PTMT (an Engineering Thermoplastic) grating square (Slit) 150 mm square with a height of 8 mm and weighing not less than 100 gms.	each	86.15

#### NEW ITEMS

12.47	Providing & fixing UV stabilised fiberglass reinforced plastic sheet roofing up to any pitch including fixing with polymer coated 'J' or 'L' hooks, bolts & nuts 8mm dia. G.I plain/bitumen washers complete but excluding the cost of purlins, rafters, trusses etc. The sheets shall be manufactured out of 2400 TEX panel rovigs incorporating minimum 0.3% Ultra-violet stabiliser in resin system under approximately 2400 psi and hot cured. They shall be of uniform pigmentation and thickness without air pockets and shall conform to IS 10192 and IS 12866.The sheets shall be opaque or translucent, clear or pigmented, textured or smooth as specified.		
12.47.1	2mm thick corrugated (2.5" or 4.2" or 6") or step-down (2" or 3" or 6" ) as specified.	sqm	795.70

Code No	Description	Unit	Rate Rs.
12.47.2	2mm thick flat.	sqm	795.70
12.48	Providing & fixing pressed clay tile (Mangalore tile) 20 mm nominal thickness and of approved size and as per approved pattern ceiling on steel frame work complete (steel frame work to be paid separately).	sqm	209.40
12.49	Providing & laying pressed clay tile ridge (Mangalore tile) of 20mm thickness of approved pattern ceiling over steel frame work complete (steel frame work to be paid separately).	sqm	105.00
12.50	Supply & installation of precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm +/- 5% total coated thickness (TCT) thick Zinc coating 120gsm as per IS: 277 in 240mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches while transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55mm) with EPDM seal or with polymer coated J or L hooks, bolts and nuts 8mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead complete upto any pitch in horizontal/ vertical or curved surfaces excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	sqm	440.65
12.51	Providing and fixing precoated galvanised steel sheet roofing accessories 0.50 mm +/- 5% total coated thickness (TCT) thick Zinc coating 120gsm as per IS: 277 in 240mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws or with polymer coated J or L hooks, bolts and nuts and or G.I. seam bolts and nuts, G.I. plain and bitumen washers complete :		
12.51.1	Ridges plain (500 - 600mm).	metre	458.15
12.51.2	Flashings/ Aprons.( Upto 600 mm)	metre	448.15
12.51.3	North light curves.	metre	504.75
12.51.4	Barge board (Upto 300 mm).	metre	416.90
12.51.5	Crimp curve	sqm	537.15
12.51.6	Gutter .(600 mm over all girth).	metre	547.80
12.52	Providing and fixing False Ceiling Tiles of approved materials of size 595x595 mm in true horizontal level suspended on inter locking metal grid of hot dipped galvanised steel sections ( galvanized @ 170 gsm/sqm.) consisting of main "T" runner suitably spaced at joints to get required length and of size 24x38mm made from 0.30mm thick (minimum) sheet spaced at 1200mm center to center and cross "T" of size 24x25mm made of 0.30mm thick (minimum) sheet, 1200mm long spaced between main "T" at 600mm center to center to form a grid of		

Code No	Description	Unit	Rate Rs.
	1200x600 mm and secondary cross "T" of length 600mm and size 24x25mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600mm panel to form grids of 600x600mm and laying false ceiling tiles of approved texture in the grid including, wherever, required, cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats fixed to ceiling with 6 mm dia and 50mm long dash fasteners, 4mm GI adjustable rods with galvanised level clips spaced at 1200m center to center along main T, bottom exposed width of 24mm of all T-sections shall be pre-painted with polyester paint, all complete at all heights as per specifications drawings and as directed by Engineer-in-Charge.(The rate is excluding cost of tiles which will be paid separately ).	sqm	358.25

**SUB HEAD : 13.0**

**FINISHING**

### BASIC RATES (SH: 13.0 FINISHING)

Code No	Description	Unit	Rate Rs.
0101	Bhisti	Day	138.45
0112	Carpenter 2nd class	Day	141.60
0114	Beldar	Day	135.25
0115	Coolie	Day	135.25
0122	Mason (for plaster of paris work) 1st class	Day	151.50
0123	Mason (brick layer) 1st class	Day	151.50
0131	Painter	Day	141.60
0141	White Washer	Day	138.45
0155	Mason (average)	Day	146.55
0324	Coal Tar	litre	16.00
0367	Portland Cement	tonne	4,500.00
0368	White Cement	tonne	9,700.00
0763	Glue	kilogram	50.00
0771	Kerosene oil	litre	19.00
0775	Dehradun white lime	quintal	295.00
0776	Satna lime	quintal	178.00
0777	Dry hydrated lime (factory made)	quintal	177.00
0815	Dry distemper	kilogram	26.00
0816	Oil bound washable distemper/ Acrylic distemper	kilogram	40.00
0818	Linseed oil (double boiled)	litre	80.00
0820	Cement primer	litre	70.00
0821	Distemper primer	litre	73.00
0823	Pink primer (for wood)	litre	72.00
0826	Aluminium paint	litre	89.00
0827	Acid proof paint (chocolate or black)	litre	93.00
0828	Anticorrosive bituminous paint (black)	litre	52.00
0829	Black Japan	litre	65.00
0830	Enamel paint	litre	115.00
0831	Floor enamel paint in all shades except green	litre	100.00
0833	Synthetic enamel paint in black or chocolate shade	litre	115.00
0834	Synthetic enamel paint in all shades except black or chocolate shade	litre	120.00
0835	Plastic emulsion paint	litre	140.00
0850	White lead	kilogram	60.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
0851	Water proofing cement paint	kilogram	36.00
0855	Wax polish (ready made)	kilogram	150.00
0856	Ordinary varnish	litre	49.00
0857	Superior copal varnish	litre	100.00
0858	Superior spar varnish	litre	105.00
0859	Oil type wood preservative	litre	60.00
0868	Premixed super white gypsum plaster.	kg	5.20
0869	Plaster of Paris	kilogram	2.50
0982	Coarse sand (zone III)	cum	600.00
0999	Shellac	kilogram	192.00
1000	Spirit	litre	37.00
1179	Crushed stone 2.36 mm to 12.5 mm size	cum	675.00
1198	Second class kail wood in planks	cudm	178.00
1213	Water proofing materials	kilogram	20.00
1216	Whiting	quintal	329.00
2202	Carriage of Stone aggregate below 40 mm nominal size	cum	53.21
2203	Carriage of Coarse sand	cum	53.21
2209	Carriage of Cement	tonne	47.29
2911	Stone chippings/ screenings 10/ 11.2 mm nominal size	cum	700.00
4201	Aluminum primer	litre	63.00
4202	Red oxide Zinc chromate primer	litre	58.00
4203	Copper acetate	kilogram	228.00
4204	Hydrochloric acid	kilogram	27.00
4205	Copper chloride	kilogram	244.00
4206	Copper nitrate	kilogram	173.00
4207	Ammonium chloride	kilogram	12.00
7239	Epoxy paint	litre	280.00
7240	Fire retardant paint	litre	318.00
8504	Multi surface paint	litre	264.00
8505	Acrylic exterior paint	litre	123.00
8506	Premium Acrylic exterior paint	litre	202.00
8507	Textured exterior paint	litre	183.00
8509	Special Primer	litre	76.00
8510	Metal Primer	litre	91.00
9999	Sundries	L.S.	2.60

### 13.0 FINISHING

Code No	Description	Unit	Rate Rs.
<b>Note :- Rates for external plaster are for height upto 10m. from ground level unless otherwise stated.</b>			
<b>CEMENT PLASTER (IN FINE SAND)</b>			
13.1	12 mm cement plaster of mix :		
13.1.1	1:4 (1 cement: 4 fine sand)	sqm	77.55
13.1.2	1:6 (1 cement: 6 fine sand)	sqm	67.65
13.2	15 mm cement plaster on the rough side of single or half brick wall of mix :		
13.2.1	1:4 (1 cement: 4 fine sand)	sqm	90.35
13.2.2	1:6 (1 cement: 6 fine sand)	sqm	78.55
13.3	20 mm cement plaster of mix :		
13.3.1	1:4 (1 cement: 4 fine sand)	sqm	110.45
13.3.2	1:6 (1 cement: 6 fine sand)	sqm	95.10
<b>CEMENT PLASTER (IN COARSE SAND)</b>			
13.4	12 mm cement plaster of mix :		
13.4.1	1:4 (1 cement: 4 coarse sand)	sqm	82.55
13.4.2	1:6 (1 cement: 6 coarse sand)	sqm	72.70
13.5	15 mm cement plaster on rough side of single or half brick wall of mix :		
13.5.1	1:4 (1 cement: 4 coarse sand)	sqm	96.35
13.5.2	1:6 (1 cement: 6 coarse sand)	sqm	84.55
13.6	20 mm cement plaster of mix :		
13.6.1	1:4 (1 cement: 4 coarse sand)	sqm	118.25
13.6.2	1:6 (1 cement: 6 coarse sand)	sqm	102.90
<b>CEMENT PLASTER WITH A FLOATING COAT OF NEAT CEMENT</b>			
13.7	12 mm cement plaster finished with a floating coat of neat cement of mix :		
13.7.1	1:3 (1 cement: 3 fine sand)	sqm	107.80
13.7.2	1:4 (1 cement: 4 fine sand)	sqm	97.90
13.8	15 mm cement plaster on rough side of single or half brick wall finished with a floating coat of neat cement of mix :		
13.8.1	1:3 (1 cement: 3 fine sand)	sqm	122.50
13.8.2	1:4 (1 cement: 4 fine sand)	sqm	110.70
13.9	12 mm cement plaster 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement.	sqm	112.80



Code No	Description	Unit	Rate Rs.
13.10	15 mm cement plaster 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement on the rough side of single or half brick wall.	sqm	128.50
<b>CEMENT PLASTER IN TWO COATS</b>			
13.11	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement: 5 coarse sand) finished with a top layer 6mm thick cement plaster 1:6 (1 cement: 6 fine sand).	sqm	111.15
13.12	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement: 5 coarse sand) and a top layer 6mm thick cement plaster 1:3 (1 cement: 3 coarse sand) finished rough with sponge.	sqm	123.50
13.13	12 mm cement plaster 1:2 (1 cement: 2 stone dust)	sqm	105.65
13.14	15 mm cement plaster 1:2 (1 cement: 2 stone dust) on the rough side of single or half brick wall.	sqm	123.90
13.15	20 mm cement plaster 1:2 (1 cement: 2 stone dust)	sqm	154.20
<b>6 MM CEMENT PLASTER</b>			
13.16	6 mm cement plaster of mix :		
	13.16.1 1:3 (1 cement: 3 fine sand)	sqm	62.15
13.17	6 mm cement plaster 1:3 (1 cement: 3 fine sand) finished with a floating coat of neat cement and thick coat of Lime wash on top of walls when dry for bearing of R.C.C. slabs and beams.	sqm	85.55
13.18	Neat cement punning	sqm	21.40
<b>ROUGH CAST PLASTER</b>			
13.19	Rough cast plaster upto 10m height above ground level with a mixture of sand and gravel or crushed stone from 6mm to 10mm nominal size dashed over and including the fresh plaster in two layers, under layer 12mm cement plaster 1:4 (1 cement: 4 coarse sand) and top layer 10mm cement plaster 1:3 (1 cement: 3 fine sand) mixed with 10% finely grounded hydrated lime by volume of cement.		
	13.19.1 Ordinary cement finish using ordinary cement	sqm	196.00
<b>PEBBLE DASH PLASTER</b>			
13.20	Pebble dash plaster upto 10m height above ground level with a mixture of washed pebble or crushed stone 6mm to 12.5mm nominal size dashed over and including fresh plaster in two layers under layer 12mm cement plaster 1:4 (1 cement: 4 coarse sand) and top layer 10mm cement plaster with cement mortar 1:3 (1 cement: 3 fine sand) mixed with 10% finely grounded hydrated lime by volume of cement.	sqm	188.20
13.21	Extra for providing and mixing water proofing material in cement plaster work in proportion recommended by the manufacturers.	Per bag of 50 kg cement used in the mix.	28.85
13.22	Extra for plastering exterior walls of height more than 10 m from ground level for every additional height of 3 m or part thereof.	sqm	16.80

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
13.23	Extra for plastering on circular work not exceeding 6 m in radius:		
13.23.1	In one coat	sqm	7.40
13.23.2	In two coats	sqm	11.35
13.24	Extra for plastering done on moulding cornices or architraves including neat finish to line and level:		
13.24.1	In one coat	sqm	103.75
13.24.2	In two coats	sqm	170.50
13.25	Extra for plastering :		
13.25.1	Spherical ceiling	sqm	27.50
13.25.2	Groined ceiling	sqm	30.15
13.25.3	Flewing soffits	sqm	17.90
13.26	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete	sqm	47.20
	<b>ARTIFICIAL STONE PLASTER</b>		
13.27	Extra for lining out plaster to imitate stone or concrete blocks walling	sqm	16.60
	<b>PLAIN CEMENT MORTAR BANDS</b>		
13.28	12 mm thick plain cement mortar bands in cement mortar 1:4 (1 cement: 4 fine sand) :		
13.28.1	Flush Band	cm per metre	1.35
13.28.2	Sunk Band	cm per metre	1.45
13.28.3	Raised Band	cm per metre	1.65
13.28.4	Moulded Band	cm per metre	2.60
13.29	18 mm thick plain cement mortar band in cement mortar 1:4 (1 cement: 4 fine sand):		
13.29.1	Flush Band	cm per metre	1.70
13.29.2	Sunk Band	cm per metre	1.85
13.29.3	Raised Band	cm per metre	2.05
13.29.4	Moulded Band	cm per metre	3.55
13.30	18 mm thick moulded cement mortar band in two coats under layer 12mm thick with cement mortar 1:5 (1 cement: 5 coarse sand) top layer 6mm thick with cement mortar 1:4 (1 cement: 4 fine sand).	cm per metre	3.55
	<b>POINTING OF BRICK WORK</b>		
13.31	Pointing on brick work or brick flooring with cement mortar 1:3 (1 cement: 3 fine sand) :		
13.31.1	Flush / Ruled/ Struck or weathered pointing.	sqm	45.40
13.31.2	Raised and cut pointing	sqm	72.90
	<b>POINTING ON TILE BRICK WORK</b>		

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
13.32	Pointing on tile brick work with cement mortar 1:3 (1 cement:3 fine sand) :		
13.32.1	Flush/ Ruled/ Struck or weathered pointing	sqm	62.60
	<b>POINTING ON STONE WORK</b>		
13.33	Pointing on stone work with cement mortar 1:3 (1 cement: 3 fine sand) :		
13.33.1	Flush/ Ruled pointing	sqm	62.50
13.33.2	Raised and cut pointing	sqm	112.00
13.34	Raised and cut pointing on stone work in white cement mortar 1:3 (1 white cement: 3 marble dust)	sqm	125.95
13.35	Pointing on stone slab ceiling with cement mortar 1:2 (1 cement: 2 fine sand):		
13.35.1	Flush/ Ruled pointing	sqm	36.45
13.36	Extra for pointing on walls on the outside at height more than 10 m from ground level for every additional height of 3 m or part there of.	sqm	3.10
	<b>INTERIOR FINISHING</b>		
13.37	White washing with lime to give an even shade:		
13.37.1	New work (three or more coats)	sqm	6.75
13.38	Satna lime wash on walls one coat	sqm	2.75
13.39	Colour washing such as green, blue or buff to give an even shade :		
13.39.1	New work (two or more coats) with a base coat of white washing with lime	sqm	9.30
13.39.2	New work (two or more coats) with a base coat of whiting	sqm	9.10
13.40	Distempering with dry distemper of approved brand and manufacture (two or more coats) and of required shade on new work, over and including priming coat of whiting to give an even shade.	sqm	26.30
13.41	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade		
13.41.1	New work (two or more coats) over and including priming coat with cement primer.	sqm	41.55
13.42	Distempering with 1st quality acrylic washable distemper (ready mixed) of approved manufacturer and of required shade and colour complete. as per manufacturer's specification.		
13.42.1	Two or more coats on new work.	sqm	23.55
13.43	Applying one coat of cement primer of approved brand and manufacture on wall surface :		
13.43.1	Cement primer.	sqm	17.20
	<b>EXTERIOR FINISHING</b>		
13.44	Finishing walls with water proofing cement paint of required shade :		
13.44.1	New work (Two or more coats applied @ 3.84 kg/10 sqm).	sqm	30.80

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
13.45	Finishing walls with textured exterior paint of required shade :		
13.45.1	New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including base coat of water proofing cement paint applied @ 2.20kg/10 sqm.	sqm	96.25
13.46	Finishing walls with Acrylic Smooth exterior paint of required shade :		
13.46.1	New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including base coat of water proofing cement paint applied @ 2.20 kg/ 10 sqm).	sqm	50.40
13.47	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade		
13.47.1	New work (Two or more coats applied @ 1.43 ltr/ 10 sqm. over and including base coat of water proofing cement paint applied @ 2.20 kg/ 10 sqm).	sqm	60.10
13.48	Finishing walls with Deluxe Multi surface paint system for interiors and exteriors using Primer as per manufacturers specifications :		
13.48.1	Two or more coats applied @ 1.25 ltr/10 sqm. over and including one coat of Special primer applied @ 0.75 ltr / 10 sqm.	sqm	62.25
13.48.2	Painting wood work with Deluxe Multi Surface Paint of required shade. Two or more coat applied @0.90 ltr/10 sqm over an under coat of primer applied @0.75 ltr/ 10 sqm of approved brand or manufacture	sqm	51.55
13.48.3	Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two or more coat applied @0.90 ltr/10 sqm over an under coat of primer applied @ 0.80 ltr/ 10 sqm of approved brand or manufacture	sqm	53.35
13.49	Extra for applying water proofing cement paint as primer applied @ 2.2 kg/ 10 sqm instead of primer for exterior finishing in Item No. 13.48.1	sqm	2.60
13.50	Applying priming coat :		
13.50.1	With ready mixed pink or Grey primer of approved brand and manufacture on wood work (hard and soft wood)	sqm	16.55
13.50.2	With ready mixed aluminium primer of approved brand and manufacture on resinous wood and plywood	sqm	15.75
13.50.3	With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron/steel works	sqm	12.65
13.50.4	With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel work (second coat)	sqm	7.15
13.51	Painting one thin coat with white lead of approved brand and manufacture on wet or patchy portion of plastered surfaces	sqm	22.60
13.52	Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate		

Code No	Description	Unit	Rate Rs.
	priming coat, preparation of surface, etc. complete.		
	13.52.1 On steel work	sqm	75.25
	13.52.2 On concrete work	sqm	77.75
13.53	Painting on G.S. sheet with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :		
	13.53.1 New work (two or more coats) including a coat of approved steel primer but excluding a coat of mordant solution.	sqm	37.55
13.54	Applying a coat of mordant solution on G.S. sheet :		
	13.54.1 With a solution of 38 gms of copper acetate in a litre of soft water	sqm	11.60
	13.54.2 With a solution made of 13 gms of hydrochloric acid in a solution of 13 gms each of copper chloride, copper nitrate and ammonium chloride dissolved in a litre of soft water.	sqm	11.45
13.55	Painting (two or more coats) on rain water, soil, waste and vent pipes and fittings with black anticorrosive bitumastic paint approved brand and manufacture over and including a priming of ready mixed zinc chromate yellow primer on new work :		
	13.55.1 100 mm diameter pipes	metre	15.05
	13.55.2 150 mm diameter pipes	metre	22.50
13.56	Painting (two or more coats) on rain water, soil, waste and vent pipes and fittings with synthetic enamel paint of approved brand and manufacture and required colour over a priming coat of approved steel primer on new work.		
	13.56.1 100 mm diameter pipes	metre	16.35
	13.56.2 150 mm diameter pipes	metre	24.35
13.57	Painting with oil type wood preservative of approved brand and manufacture:		
	13.57.1 New work (two or more coats)	sqm	12.80
13.58	Providing and applying two coats of fire retardant paint unthinned on cleaned wood/ply surface @ 3.5 sqm per litre per coat including preparation of base surface as per recommendations of manufacturer to make the surface fire retardant.	sqm	229.80
13.59	Coal tarring two coats on new work using 0.16 and 0.12 litre coal tar per sqm in the first coat and second coat respectively.	sqm	14.65
13.60	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade:		
	13.60.1 Two or more coats on new work	sqm	40.05
13.61	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :		
	13.61.1 Two or more coats on new work	sqm	33.25
13.62	Painting with synthetic enamel paint of approved brand and		

Code No	Description	Unit	Rate Rs.
	manufacture of required colour to give an even shade:		
13.62.1	Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture.	sqm	51.30
13.63	Painting with aluminium paint of approved brand and manufacture to give an even shade .		
13.63.1	Two or more coats on new work	sqm	28.60
13.64	Painting with acid proof paint of approved brand and manufacture of required colour to give an even shade:		
13.64.1	Two or more coats on new work.	sqm	32.40
13.65	Painting with black anti-corrosive bitumastic paint of approved brand and manufacture to give an even shade:		
13.65.1	Two or more coats on new work.	sqm	24.80
13.66	Floor painting with floor enamel paint of approved brand and manufacture of required colour to give an even shade:		
13.66.1	Two or more coats on new work.	sqm	37.05
13.67	Varnishing with varnish of approved brand and manufacture:		
13.67.1	Two or more coats of glue sizing with copal varnish over an under coat of flatting varnish.	sqm	49.20
13.67.2	Two or more coats glue sizing with spar varnish or an under coat of flatting varnish.	sqm	50.80
13.68	French spirit polishing :		
13.68.1	Two or more coats on new works including a coat of wood filler.	sqm	75.60
13.69	Polishing on wood work with ready mixed wax polish of approved brand and manufacture :		
13.69.1	New work	sqm	35.80
13.70	Floor polishing on masonry or concrete floors with wax polish of approved brand and manufacture.	sqm	16.15
13.71	Lettering with black Japan paint of approved brand and manufacture	per letter per cm height	0.90
13.72	Washed stone grit plaster on exterior walls of height upto 10 M. above level in two layers, under layer 12mm cement plaster 1:4 (1 cement: 4 coarse sand ) furrowing the under layer with scratching tool, applying cement slurry on the under layer @ 2 Kg of cement per square metre, top layer 15mm cement plaster 1:1/2:2 (1 cement: 1/2 coarse sand : 2 stone chipping 10mm nominal size) in panels with groove all around as per approved pattern including scrubbing and washing, the top layer with brushes and water to expose the stone chippings ,complete as per specification and direction of Engineer-in- charge (Payment for providing grooves shall be made separately).	sqm	262.20
13.73	Forming groove of uniform size in the top layer of washed stone grit		

Code No	Description	Unit	Rate Rs.
	plaster as per approved pattern using wooden battens, nailed to the under layer including removal of wooden battens, repair to the edges of panels and finishing the groove complete as per specifications and direction of the Engineer-in-charge :		
	13.73.1 15 mm wide and 15 mm deep groove	metre	13.30
	13.73.2 20 mm wide and 15 mm deep groove	metre	13.65
13.74	Extra for washed grit plaster on exterior walls of height more than 10m from ground level for every additional height of 3 m or part thereof.	sqm	40.75
13.75	Extra for washed stone grit plaster on circular work not exceeding 6m in radius (in two coats).	sqm	22.90
13.76	Forming groove of uniform size from 12x12mm and upto 25x15mm in plastered surface as per approved pattern using wooden battens, nailed to the under layer including removal of wooden battens, repairs to the edges of plaster panel and finishing the groove complete as per specifications and direction of the Engineer-in-Charge.	metre	13.30
13.77	Extra for using white cement in place of ordinary cement in the top layer of the item of washed stone grit plaster.	sqm	60.40
13.78	Providing and applying 12 mm thick (average) premixed formulated one coat gypsum lightweight plaster having additives and light weight aggregates as vermiculite/ perlite respectively conforming to IS: 2547 (Part - 1 & II) 1976, applied on hacked / uneven background such as bare brick/ block/ RCC work on walls & ceiling at all floors and locations, finished in smooth line and level etc. complete.	sqm	143.10

**SUB HEAD : 14.0**

**REPAIRS TO BUILDING**



### BASIC RATES (SH: 14.0 REPAIRS TO BUILDING)

Code No	Description	Unit	Rate Rs.
0006	Hire charges of Spraying machine including electric charges	Day	173.00
0011	Hire charges of Pump set of capacity 4000 litres/hour.	Day	300.00
0100	Bandhani	Day	138.45
0101	Bhisti	Day	138.45
0102	Blacksmith 1st class	Day	151.50
0103	Blacksmith 2nd class	Day	141.60
0111	Carpenter 1st class	Day	151.50
0112	Carpenter 2nd class	Day	141.60
0114	Beldar	Day	135.25
0115	Coolie	Day	135.25
0119	Glazier	Day	141.60
0123	Mason (brick layer) 1st class	Day	151.50
0124	Mason (brick layer) 2nd class	Day	141.60
0128	Mate	Day	138.45
0130	Mistry	Day	151.50
0131	Painter	Day	141.60
0141	White Washer	Day	138.45
0155	Mason (average)	Day	146.55
0156	Carpenter (average)	Day	146.55
0295	Stone Aggregate (Single size) : 20 mm nominal size	cum	700.00
0297	Stone Aggregate (Single size) : 10 mm nominal size	cum	700.00
0302	Safeda ballies 125 mm diameter	metre	29.00
0308	Bhusa	quintal	200.00
0367	Portland Cement	tonne	4,500.00
0389	Brass single acting spring hinges 150 mm	each	200.00
0390	Brass single acting spring hinges 125 mm	each	158.00
0391	Brass single acting spring hinges 100 mm	each	106.00
0392	Brass double acting spring hinges 150 mm	each	317.00
0393	Brass double acting spring hinges 125 mm	each	216.00
0394	Brass double acting spring hinges 100 mm	each	173.00
0404	Brass flush bolt 250 mm	each	84.00
0405	Brass flush bolt 150 mm	each	65.00
0406	Brass flush bolt 100 mm	each	44.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
0417	Brass 150 mm floor door stopper (0.357kg)	each	104.00
0418	Brass hard drawn hooks and eyes 300 mm	10 Nos	457.00
0419	Brass hard drawn hooks and eyes 250 mm	10 Nos	423.00
0420	Brass hard drawn hooks and eyes 200 mm	10 Nos	390.00
0421	Brass hard drawn hooks and eyes 150 mm	10 Nos	364.00
0422	Brass hard drawn hooks and eyes 100 mm	10 Nos	300.00
0427	Brass quadrant stays 300 mm	each	73.00
0429	Brass fanlight pivot	10 Nos	128.00
0430	Brass chain with hook for fan light catch	each	13.00
0442	Brass helical spring 150 mm	each	185.00
0444	Brass curtain rod 20 mm dia 1.25 mm thick	metre	63.00
0445	Brass curtain rod 25 mm dia 1.25 mm thick	metre	79.00
0446	Brass brackets (curtain rods) 20 mm	each	24.00
0449	Brass screws 50 mm	100 Nos	107.00
0450	Brass screws 40 mm	100 Nos	96.00
0452	Brass screws 25 mm	100 Nos	76.00
0524	Chromium plated Brass butt hinges (heavy) type 75x65x4 .0 mm (200gms)	10 Nos	430.00
0525	Chromium plated Brass butt hinges (light/ordinary) type 125x70x4 mm	10 Nos	433.00
0526	Chromium plated Brass butt hinges (light/ordinary) type 100x70x4 mm	10 Nos	385.00
0527	Chromium plated Brass butt hinges (light/ordinary) type 75x40x2.5 mm	10 Nos	135.00
0528	Chromium plated Brass butt hinges (light/ordinary) type 50x40x2.5 mm	10 Nos	105.00
0585	Chromium plated Brass screws 50 mm	100 Nos	123.00
0586	Chromium plated Brass screws 40 mm	100 Nos	150.00
0587	Chromium plated Brass screws 30 mm	100 Nos	90.00
0589	Chromium plated Brass screws 20 mm	100 Nos	63.00
0595	Bright finished or black enamelled mild steel butt hinges 100x58x1.90 mm	10 Nos	54.00
0597	Bright finished or black enamelled mild steel butt hinges 50x37x1.50 mm	10 Nos	28.00
0608	Nickel plated mild steel piano hinges 1 mm thick 35 mm wide	metre	21.00
0637	Bright finished or black enamelled mild steel screws 40 mm	100 Nos	30.00
0639	Bright finished or black enamelled mild steel screws 25 mm	100 Nos	15.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
0640	Bright finished or black enamelled mild steel screws 20 mm	100 Nos	15.00
0775	Dehradun white lime	quintal	295.00
0811	Mud (dry)	cum	20.00
0815	Dry distemper	kilogram	26.00
0816	Oil bound washable distemper/ Acrylic distemper	kilogram	40.00
0826	Aluminium paint	litre	89.00
0827	Acid proof paint (chocolate or black)	litre	93.00
0828	Anticorrosive bituminous paint (black)	litre	52.00
0829	Black Japan	litre	65.00
0833	Synthetic enamel paint in black or chocolate shade	litre	115.00
0835	Plastic emulsion paint	litre	140.00
0845	Roofing paint for iron sheets in red colour	litre	95.00
0851	Water proofing cement paint	kilogram	36.00
0855	Wax polish (ready made)	kilogram	150.00
0856	Ordinary varnish	litre	49.00
0857	Superior copal varnish	litre	100.00
0858	Superior spar varnish	litre	105.00
0859	Oil type wood preservative	litre	60.00
0863	Putty for wood work	kilogram	24.00
0982	Coarse sand (zone III)	cum	600.00
0999	Shellac	kilogram	192.00
1000	Spirit	litre	37.00
1003	Mild steel round bar above 12 mm dia	quintal	3,050.00
1007	Structural steel such as tees, angles channels and R.S. joists	quintal	3,100.00
1008	Flats up to 10 mm in thickness	quintal	2,900.00
1023	Galvanised steel J or L hooks 8 mm dia	10 Nos	58.00
1034	Bolts and nuts up to 300 mm in length	quintal	4,300.00
1174	Red sand stone slab 45 mm and 50 mm thick (un-dressed)	sqm	145.00
1186	Superior class teak wood such as Dandeli, Balarshah or Malabar in planks	10 cudm	895.00
1188	First class teak wood in planks	10 cudm	506.00
1189	Second class teak wood in scantling	10 cudm	394.00
1190	Second class teak wood in planks	10 cudm	410.00
1194	Second class deodar wood in planks	10 cudm	335.00
1196	First class kail wood in planks	10 cudm	186.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
1199	Sal wood in scantling	10 cudm	218.00
1208	Bitumen washer	100 Nos	18.00
1209	G.I. plain washer thick	100 Nos	27.00
1213	Water proofing materials	kilogram	20.00
1215	Welding by electric plant	cm	1.00
1314	C.P. brass chain with 32 mm dia rubber plug	each	21.00
1315	C.P. brass chain with 40 mm dia rubber plug	each	22.00
2201	Carriage of Bricks	1000 Nos	141.88
2202	Carriage of Stone aggregate below 40 mm nominal size	cum	53.21
2203	Carriage of Coarse sand	cum	53.21
2204	Carriage of Timber	cum	60.81
2205	Carriage of Steel	tonne	47.29
2209	Carriage of Cement	tonne	47.29
2216	Carriage of Stone blocks white & red sand stone & Kota stone slab	tonne	47.29
2264	Carriage of Rubbish	cum	53.21
2406	Float glass sheet of nominal thickness 4 mm (weight not less than 10kg/sqm).	sqm	248.00
2407	Float glass sheet of nominal thickness 5.5 mm.(weight not less than 13.50 kg/sqm).	sqm	340.00
2466	Hollock wood in scantling	10 cudm	217.00
2467	Chromium plated Brass pull bolt lock (locking bolt) of size 85 mmx42 mm with screws, bolts, nuts and washers complete	each	130.00
2602	F.P.S. bricks class designation75	1000 Nos	1,900.00
4009	Mild steel tubes hot finished welded type	kilogram	38.00
4202	Red oxide Zinc chromate primer	litre	58.00
7019	Dash fastener	each	8.00
7241	Melamine polish	litre	228.00
7340	Stainless steel pin .	kg	130.00
7442	Wheel 75 mm dia. 40 mm wide	each	52.00
8505	Acrylic exterior paint	litre	123.00
8506	Premium Acrylic exterior paint	litre	202.00
8507	Textured exterior paint	litre	183.00
8508	Primer for cement paint	litre	52.00
9999	Sundries	L.S.	2.60

## 14.0 REPAIRS TO BUILDING

Code No	Description	Unit	Rate Rs.
14.1	Repairs to plaster of thickness 12mm to 20mm in patches of area 2.5 sq. meters and under including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete including disposal of rubbish to the dumping ground within 50metres lead :		
14.1.1	With cement mortar 1:4 (1 cement : 4 fine sand)	sqm	114.35
14.1.2	With cement mortar 1:4 (1cement: 4 coarse sand).	sqm	120.70
14.2	Fixing chowkhats in existing opening including embedding chowkhats in floors or walls cutting masonry for holdfasts embedding hold fasts in cement concrete blocks with cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) painting two coats of approved wood preservative to sides of chowkhats and making good the damages to walls and floors as required complete including disposal of rubbish to the dumping ground within 50 meters lead :		
14.2.1	Door chowkhats	each	354.45
14.2.2	Window chowkhats	each	214.20
14.2.3	Clerestory window chowkhats	each	154.60
14.3	Fixing chowkhat in existing opening in brick / RCC wall with dash fasteners of appropriate size/ chemical fastener (3nos on each vertical member of door chowkhat and 2 nos. on each vertical member of window 1.20 metre height as per CPWD specification including Cost of dash fasteners/ chemical fastener.	each	81.05
14.4	Making the opening in brick masonry including dismantling in floor or walls by cutting masonry and making good the damages to walls, flooring and jambs complete to match existing surface i/c disposal of mulba/ rubbish to the nearest municipal dumping ground.		
14.4.1	For door/ window/ clerestory window.	sqm	208.15
14.5	Renewing glass panes, with putty and nails wherever necessary:		
14.5.1	Float glass panes of thickness 4 mm	sqm	427.60
14.5.2	Float glass panes of thickness 5.5 mm	sqm	545.15
14.6	Renewing glass panes, with wooden fillets wherever necessary:		
14.6.1	Float glass panes of thickness 4 mm	sqm	498.55
14.6.2	Float glass panes of thickness 5.5 mm	sqm	616.10
14.7	Renewing glass panes and refixing existing wooden fillets:		
14.7.1	Float glass panes of thickness 4 mm	sqm	435.80
14.7.2	Float glass panes of thickness 5.5 mm	sqm	553.35
14.8	Supplying and fixing new wooden fillets wherever necessary:		

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
	14.8.1 2nd class teak wood fillets	metre	16.95
	14.8.2 Hollock wood fillets.	metre	14.40
14.9	Renewal of old putty of glass panes (length)	metre	9.90
14.10	Refixing old glass panes with putty and nails	sqm	128.55
14.11	Fixing old glass panes with wooden fillets (excluding cost of fillets)	sqm	102.65
14.12	Providing and fixing 16 mm M.S. Fan clamps of standard shape and size in existing R.C.C. slab including cutting chase and making good and painting exposed portion of the clamps complete.	each	113.85
14.13	Regrading terracing of mud phaska covered with tiles or brick, in cement by dismantling tiles or bricks, removing mud plaster preparing the surface of mud phaska to proper slope relaying mud plaster gobri leaping and tiles or bricks, grouted in cement mortar 1:3 (1 cement : 3 fine sand) including replacing unserviceable tiles or bricks with new ones and disposal of unserviceable material to the dumping ground (the cost of the new tiles or brick excluded) within 50 metres lead.	sqm	116.05
14.14	Replacing sand stone slabs in roofing laid in cement mortar 1:4 (1 cement : 4 coarse sand) including necessary repairs and cement pointing with same mortar complete including disposal of rubbish to dumping ground within 50 metres of lead :		
	14.14.1 Red/ white sand stone slabs 30 to 50 mm thick.	sqm	322.00
14.15	Renewing wooden battens in roofs, including making good the holes in wall and painting with oil type wood preservative of approved brand and manufacture complete including removal of rubbish to the dumping ground within 50 metres lead :		
	14.15.1 Sal wood battens.	cum	28,074.55
14.16	Renewing wooden beams in roofs including making good the holes in walls and painting with oil type wood preservative of approved brand and manufacture complete including removal of rubbish to the dumping ground within 50 metres lead :		
	14.16.1 Not exceeding 4.00 metres in length.		
	14.16.1.1 Sal wood beams	cum	28,950.90
	14.16.1.2 Hollock wood beams	cum	28,831.20
	14.16.2 Above 4.00 metres and upto 5.00 metres length.		
	14.16.2.1 Sal wood beams	cum	29,400.30
	14.16.2.2 Hollock wood beams	cum	29,278.20
14.17	Raking out joints in lime or cement mortar and preparing the surface for re-pointing or replastering including disposal of rubbish to the dumping ground within 50 metres lead.	sqm	10.85
14.18	Flush pointing with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% of integral water proofing compound by weight of cement for flat tile bricks on top of mud phaska :		
	14.18.1 With F.P.S. brick tiles	sqm	24.90

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
	14.18.2 With modular brick tiles	sqm	25.60
14.19	Taking out wind ties from roof including cutting out rusted bolts, nuts etc. and removing materials to any distance within compound and stacking.	kg	0.80
14.20	Fixing of old wind tie with new fittings including painting two or more coats with anticorrosive bitumastic paint of approved brand & manufacturer over and including priming coat of ready mixed zinc chromate yellow primer of approved brand.	metre	34.35
14.21	Renewing bottom rail and/or top rubber of collapsible gate including making good all damages and applying priming coat of zinc chromate yellow primer of approved brand and manufacturer.	kg	77.90
14.22	Renewing Wrought iron or M.S. Wheel or roller of steel door or gate and fitting and fixing the same with necessary clamps, nuts and bolts/welding and erection etc. complete.		
	14.22.1 Wheel 50 mm dia. and below.	per wheel	88.15
	14.22.2 Wheel above 50 mm dia.	per wheel	127.50
<b>EARTH WORK</b>			
14.23	Pumping out water caused by springs, tidal or river seepage, broken water mains or drains and the like.	kilo litre	40.75
14.24	Mud mortar	cum	156.85
<b>BRICK WORK</b>			
14.25	Brick work with bricks of class designation 75 in mud mortar	cum	1,590.25
<b>WOOD WORK</b>			
14.26	Providing and fixing 25 mm thick shutters for cup board etc. :		
	14.26.1 Panelled or panelled & glazed shutters :		
	14.26.1.1 Superior class teak wood including nickel plated bright finished M.S. piano hinges with necessary screws.	sqm	2,400.25
	14.26.1.2 Ist class teak wood including nickel plated bright finished M.S. piano hinges with necessary screws.	sqm	1,563.50
	14.26.2 Glazed shutters :		
	14.26.2.1 Superior class teak wood including nickel plated bright finished M.S. piano hinges with necessary screws.	sqm	2,538.20
	14.26.2.2 Ist class teak wood including nickel plated bright finished M.S. piano hinges with necessary screws.	sqm	1,638.75
14.27	Providing and fixing plain jaffri door and window shutters including bright or/and black enamelled M.S. butt hinges with necessary screws 35x10mm laths placed 35mm apart (frames to be paid separately) including fixing 50x12mm beading complete with		
	14.27.1 Second class teak wood.	sqm	1,532.40
14.28	Providing and fixing curtain rods of 1.25mm thick brass plates with two brass brackets fixed with brass screws and wooden plugs etc. wherever		

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
	necessary complete.		
	14.28.1      20 mm diameter.	metre	116.20
	14.28.2      25 mm diameter.	metre	134.75
14.29	Providing and fixing M.S. round or square bars with M.S. flats at required spacing in wooden frames of windows and clerestory windows.	kg	44.40
14.30	Providing joists (karries) including hoisting fixing in position and applying wood preservative on unexposed surface etc. complete with:		
	14.30.1      Sal wood.	cum	27,555.70
	14.30.2      Hollock wood.	cum	27,437.30
14.31	Providing and fixing bright finished brass single acting spring hinges with necessary screws etc. complete :		
	14.31.1      150 mm	each	252.85
	14.31.2      125 mm	each	204.05
	14.31.3      100 mm	each	142.65
14.32	Providing and fixing bright finished brass double acting spring hinges with necessary screws etc. complete :		
	14.32.1      150 mm	each	388.75
	14.32.2      125 mm	each	271.45
	14.32.3      100 mm	each	220.45
14.33	Providing and fixing bright finished brass flush bolts with necessary screws etc. complete :		
	14.33.1      250 mm	each	106.80
	14.33.2      150 mm	each	84.10
	14.33.3      100 mm	each	59.70
14.34	Providing and fixing 150 mm bright finished floor brass door stopper with rubber cushion, screws etc. to suit shutter thickness complete	each	127.55
14.35	Providing and fixing bright finished brass hard drawn hooks and eyes :		
	14.35.1      300 mm	each	54.25
	14.35.2      250 mm	each	50.30
	14.35.3      200 mm	each	46.45
	14.35.4      150 mm	each	43.45
	14.35.5      100 mm	each	36.00
14.36	Providing and fixing bright finished brass fan light pivot with necessary screws etc. complete.	each	20.85
14.37	Providing and fixing 300 mm long bright finished brass chain with hook for fan light including necessary screws etc. complete.	each	20.50
14.38	Providing and fixing bright finished brass quadrant stay 300mm long with necessary screws etc. complete.	each	90.20



<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
14.39	Providing and fixing bright finished brass helical door spring (superior quality).	each	231.80
14.40	Providing and fixing chromium plated brass butt hinges with necessary screws etc. complete.		
14.40.1	125x70x4 mm (ordinary type)	each	69.05
14.40.2	100x70x4 mm (ordinary type)	each	66.60
14.40.3	75x65x4 mm (heavy type)	each	60.45
14.40.4	75x40x2.5 mm (ordinary type)	each	26.20
14.40.5	50x40x2.5 mm (ordinary type)	each	16.65
14.41	Providing and fixing 85x42mm chromium plated brass pull bolt lock with necessary screws, nuts, bolts and washers etc. complete.	each	155.85
<b>FINISHING</b>			
14.42	White washing with lime to give an even shade :		
14.42.1	Old work (two or more coats)	sqm	4.10
14.42.2	Old work (one or more coats)	sqm	2.55
14.43	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	sqm	3.20
14.44	Distempering with dry distemper of approved brand and manufacture (one or more coats) and of required shade on old work to give an even shade.	sqm	12.35
14.45	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade :		
14.45.1	Old work (one or more coats)	sqm	14.90
14.46	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	sqm	4.25
14.47	Painting on G.S. sheet with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :		
14.47.1	Old work (one or more coats)	sqm	18.45
14.48	Painting (two or more coats) on rain water, soil, waste and vent pipes and fittings with black anticorrosive bitumastic paint of approved brand and manufacture over and including a priming coat of ready mixed zinc chromate yellow primer on new work :		
14.48.1	75 mm diameter pipes	metre	11.20
14.49	Painting (one or more coats) on rain water, soil, waste and vent pipes and fittings with black anticorrosive bitumastic paint of approved brand and manufacture on old work :		
14.49.1	75 mm diameter pipes	metre	5.40
14.50	Painting (two or more coats) on rain water, soil, waste and vent pipes and fittings with aluminium paint of approved brand and manufacture		

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
	over a priming coat of ready mixed zinc chromate yellow primer on new work :		
14.51	14.50.1        75 mm diameter pipes	metre	12.15
	Painting (one or more coats) on rain water, soil, waste and vent pipes and fittings with synthetic enamel paint of approved brand and manufacture and required colour on old work :		
	14.51.1        75 mm diameter pipes	metre	5.90
	14.51.2        100 mm diameter pipes	metre	7.60
	14.51.3        150 mm diameter pipes	metre	10.80
14.52	Painting with oil type wood preservative of approved brand and manufacture :		
	14.52.1        Old work (one or more coats)	sqm	9.90
14.53	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade :		
	14.53.1        One or more coats on old work.	sqm	25.85
14.54	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :		
	14.54.1        One or more coats on old work.	sqm	22.85
14.55	Painting with aluminium paint of approved brand and manufacture to give an even shade :		
	14.55.1        One or more coats on old work.	sqm	18.25
14.56	Painting with acid proof paint of approved brand and manufacture of required colour to give an even shade :		
	14.56.1        One or more coats on old work.	sqm	21.05
14.57	Painting with black anti-corrosive bitumastic paint of approved brand and manufacture to give an even shade :		
	14.57.1        One or more coats on old work.	sqm	16.65
14.58	French spirit polishing :		
	14.58.1        One or more coats on old work.	sqm	38.40
14.59	Polishing on wood work with ready made wax polish of approved brand and manufacture :		
	14.59.1        Old work	sqm	18.25
14.60	Re-lettering with black Japan paint of approved brand and manufacture.	Per letter per cm height	0.55
14.61	Painting (one or more coats) with black Japan paint of approved brand and manufacture to give an even shade.	Sqm	18.80
14.62	Providing and fixing C.P. brass chain and rubber plug complete for sink or wash basin :		

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
	14.62.1 32 mm dia	each	33.75
	14.62.2 40 mm dia	each	34.90
14.63	Distempering with 1st quality acrylic washable distemper (ready made) of approved manufacturer and of required shade and colour complete. as per manufacturer's specification.		
	14.63.1 One or more coats on old work.	sqm	13.85
14.64	Finishing walls with water proofing cement paint of required shade :		
	14.64.1 Old work (one or more coats applied @ 2.20 kg/10 sqm) over priming coat of primer applied @ 0.80 litres/10 sqm complete including cost of Priming coat.	sqm	27.95
14.65	Finishing walls with textured exterior paint of required shade :		
	14.65.1 Old work (Two or more coats on existing cement paint surface applied @ 3.28 ltr/10 sqm.	sqm	82.85
	14.65.2 Old work (One or more coats) applied @ 1.82 ltr/10 sqm.	sqm	48.60
14.66	Finishing walls with Acrylic Smooth exterior paint of required shade :		
	14.66.1 Old work (Two or more coat applied @ 1.67 ltr/ 10 sqm) on existing cement paint surface).	sqm	36.30
	14.66.2 Old work (One or more coat applied @ 0.90 ltr/10 sqm).	sqm	22.80
14.67	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade		
	14.67.1 Old work (Two or more coats applied @ 1.43 ltr/ 10 sqm) over existing cement paint surface.	sqm	46.60
	14.67.2 Old work (one or more coats applied @ 0.83 ltr/10 sqm).	sqm	29.45
14.68	Painting (one or more coats) on rain water, soil, waste and vent pipes and fittings with black anticorrosive bitumastic paint approved brand and manufacture on old work :		
	14.68.1 100 mm diameter pipes	sqm	7.05
	14.68.2 150 mm diameter pipes	sqm	10.05
14.69	Varnishing with varnish of approved brand and manufacture:		
	14.69.1 One or more coats with copal varnish.	sqm	21.00
	14.69.2 One or more coats with spar varnish.	sqm	21.90
14.70	Melamine polishing on wood work (one or more coat).	sqm	45.15
14.71	Varnishing with flattening varnish of approved brand and manufacture one or more coats on old work.	sqm	18.90

Code No	Description	Unit	Rate Rs.
14.72	<p>Providing and fixing double scaffolding system (cup lock type) on the exterior side, up to seven story height made with 40mm dia. M.S. tube 1.5 m centre to centre horizontal &amp; vertical tubes joining with cup &amp; lock system with M.S. tubes, M.S. tube chollies, M.S. clamps and M.S. staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for the required duration as approved and removing it there after .The scaffolding system shall be stiffened with bracings, runners, connection with the building etc wherever required for inspection of work at required locations with essential safety features for the workmen etc. complete as per directions and approval of Engineer-in-charge .The lavational area of the scaffolding shall be measured for payment purpose .The payment will be made once irrespective of duration of scaffolding.</p> <p><b>Note:</b> - This item to be used for maintenance work judicially, necessary deduction for scaffolding in the existing item to be done.</p>	sqm	82.70

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**SUB HEAD : 15.0**

**DISMANTLING  
AND  
DEMOLISHING**

## BASIC RATES (SH:15.0 DISMANTLING AND DEMOLISHING)

Code No	Description	Unit	Rate Rs.
0038	Tractor with ripper attachment.	per day	1,000.00
0039	Tractor with trolley	per day	1,000.00
0040	Air compressor 250 cfm with two leads for pneumatic cutters/ hammers.	day	1,600.00
0041	Joint cutting machine with 2-3 blades	per day	800.00
0100	Bandhani	Day	138.45
0101	Bhisti	Day	138.45
0103	Blacksmith 2nd class	Day	141.60
0112	Carpenter 2nd class	Day	141.60
0114	Beldar	Day	135.25
0115	Coolie	Day	135.25
0116	Fitter (grade 1)	Day	151.50
0117	Assistant Fitter or 2nd class Fitter	Day	141.60
0123	Mason (brick layer) 1st class	Day	151.50
0124	Mason (brick layer) 2nd class	Day	141.60
0128	Mate	Day	138.45
0130	Mistry	Day	151.50
0139	Skilled Beldar (for floor rubbing etc.)	Day	138.45
0761	Fuel wood	quintal	265.00
0771	Kerosene oil	litre	19.00
9999	Sundries	L.S.	2.60

## 15.0 DISMANTLING AND DEMOLISHING

Code No	Description	Unit	Rate Rs.
15.1	Demolishing lime concrete manually/ by mechanical means and disposal of material within 50 metres lead as per direction of Engineer in charge.	cum	128.45
15.2	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.		
15.2.1	1:3:6 or richer mix	cum	368.45
15.2.2	1:4:8 or leaner mix	cum	226.90
15.3	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in- charge.	cum	537.55
15.4	Demolishing R.B. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in- charge.	cum	479.85
15.5	Extra for cutting reinforcement bars manually/ by mechanical means in R.C.C. or R.B. work (Payment shall be made on the cross sectional area of R.C.C. or R.B. work) as per direction of Engineer - in -charge.	sqm	176.35
15.6	Extra for scrapping, cleaning and straightening reinforcement from R.C.C. or R.B. work	kg	1.45
15.7	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.		
15.7.1	In mud mortar	cum	106.45
15.7.2	In lime mortar with old mughal bricks	cum	268.25
15.7.3	In lime mortar	cum	128.45
15.7.4	In cement mortar	cum	310.75
15.8	Removing mortar from bricks and cleaning bricks including stacking within a lead of 50 m (stacks of cleaned bricks shall be measured) :		
15.8.1	From brick work in mud mortar	1000 nos	696.25
15.8.2	From brick work in lime mortar	1000 nos	801.80
15.8.3	From brick work in cement mortar	1000 nos	998.80
15.9	Demolishing stone rubble masonry manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge:		
15.9.1	In lime mortar	cum	175.05
15.9.2	In cement mortar	cum	370.75
15.10	Dismantling dressed stone work ashlar face stone work, marble work or precast concrete work manually/ by mechanical means including		

Code No	Description	Unit	Rate Rs.
	stacking of serviceable and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge:		
	15.10.1 In lime mortar	cum	221.55
	15.10.2 In cement mortar	cum	433.60
15.11	Removing mortar from and cleaning stones and concrete articles (net quantity of stacks of cleaned materials will be measured) :		
	15.11.1 In lime mortar	cum	71.65
	15.11.2 In cement mortar	cum	103.55
15.12	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead :		
	15.12.1 Of area 3 sq. metres and below	each	54.60
	15.12.2 Of area beyond 3 sq. metres	each	75.35
15.13	Taking out doors, windows and clerestory window shutters (steel or wood) including stacking within 50 metres lead:		
	15.13.1 Of area 3 sq. metres and below	each	21.40
	15.13.2 Of area beyond 3 sq. metres	each	28.25
15.14	Dismantling wood work in frames, trusses, purlins and rafters up to 10 metres span and 5 metres height including stacking the material within 50 metres lead:		
	15.14.1 Of sectional area 40 square centimetres and above.	cum	658.65
	15.14.2 Of sectional area below 40 square centimetres.	metre	2.65
15.15	Extra for dismantling trusses, rafters, purlins etc. of wood work for every additional span of one metre or part thereof beyond 10 metres :		
	15.15.1 Of sectional area 40 square centimetres and above.	Cum per metre span	95.55
	15.15.2 Of sectional area below 40 square centimetres.	Metre per metre span	0.25
15.16	Extra for dismantling trusses, rafters, purlins etc. of wood work for every additional height of one metre or part thereof beyond 5 metres :		
	15.16.1 Of sectional area 40 square centimetres and above.	Cum per metre height	135.20
	15.16.2 Of sectional area below 40 square centimetres.	Metre per metre height	0.50
15.17	Dismantling steel work in single sections including dismembering and stacking within 50 metres lead in:		
	15.17.1 R.S. Joists	kg	0.50
	15.17.2 Channels, angles, tees and flats	kg	0.35



<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
15.18	Dismantling steel work in built up sections in angles, tees, flats and channels including all gusset plates, bolts, nuts, cutting rivets, welding etc. including dismembering and stacking within 50metres lead.	kg	0.85
15.19	Dismantling steel work manually/ by mechanical means in built up sections without dismembering and stacking within 50 metres lead as per direction of Engineer-in-charge.	kg	0.60
15.20	Extra for dismantling trusses, rafters, purlins etc. of steel work for every additional span of one metre or part thereof beyond 10 metres	Kg per metre span	0.15
15.21	Extra for dismantling trusses, rafters, purlins etc. of steel work for every additional height of one metre or part thereof beyond 5 metres.	Kg per metre span	0.15
15.22	Extra for marking of structural steel work required to be re-erected.	kg	0.65
15.23	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead.		
15.23.1	For thickness of tiles 10 mm to 25 mm	sqm	10.90
15.23.2	For thickness of tiles above 25 mm and up to 40 mm	sqm	16.60
15.24	Demolishing dry brick pitching in floors, drains etc. including stacking serviceable material and disposal of unserviceable material within 50 metres lead :	cum	199.55
15.25	Dismantling stone slab flooring laid in cement mortar including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	sqm	40.50
15.26	Demolishing brick tile covering in terracing including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	sqm	15.45
15.27	Demolishing mud phaska in terracing and disposal of material within 50 metres lead.	cum	137.90
15.28	Dismantling roofing including ridges, hips valleys and gutters etc., and stacking the material within 50 metres lead of:		
15.28.1	G.S. Sheet	sqm	24.70
15.28.2	Asbestos sheet	sqm	11.75
15.29	Dismantling stone slab roofing over wooden karries or R.C.C. battens (dismantling karries and battens to be paid for separately) including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	cum	405.25
15.30	Dismantling jack arch roofing and floors including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	sqm	38.65
15.31	Dismantling tiled roofing with battens boarding etc. complete including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	sqm	32.05
15.32	Demolishing thatch roofing including mats, bamboo, jaffari etc. complete including stacking of serviceable material and disposal of	sqm	8.90

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
	unserviceable material within 50 metres lead.		
15.33	Dismantling wooden ballies in posts and struts including stacking within 50 metres lead.	metre	3.15
15.34	Dismantling and stacking within 50 metres lead, fencing posts or struts including all earth work and dismantling of concrete etc. in base of :		
15.34.1	T' or 'L' iron or pipe	each	44.85
15.34.2	R.C.C.	each	53.05
15.35	Cutting ballies or wooden posts of fencing at the point of projection above the concrete or ground and stacking the same within 50 metres lead.	each	4.85
15.36	Dismantling barbed wire or flexible wire rope in fencing including making rolls and stacking within 50 metres lead.	kg	5.55
15.37	Dismantling wooden trellis work excluding frames but including stacking the serviceable material within 50 metres lead.	sqm	9.80
15.38	Dismantling expanded metal or I.R.C. fabrics with necessary battens and beading including stacking the serviceable material within 50 metres lead.	sqm	11.55
15.39	Dismantling wooden boardings in lining of walls and partitions, excluding supporting members but including stacking within 50 metres lead :		
15.39.1	Up to 10 mm thick	sqm	9.35
15.39.2	Thickness above 10 mm up to 25 mm	sqm	11.95
15.39.3	Thickness above 25 mm up to 40 mm	sqm	14.25
15.40	Dismantling precast concrete or stone slabs in walls, partition walls etc. including stacking within 50 metres lead:		
15.40.1	Thickness up to 40 mm	sqm	44.10
15.40.2	Thickness above 40 mm up to 75 mm	sqm	66.05
15.41	Dismantling cement asbestos or other hard board ceiling or partition walls including stacking of serviceable materials and disposal of unserviceable materials within 50 metres lead.	sqm	8.60
15.42	Dismantling C.I. or asbestos rain water pipe with fittings and clamps including stacking the material within 50 metres lead :		
15.42.1	75 to 80 mm dia pipe.	metre	11.40
15.42.2	100 mm dia pipe	metre	11.80
15.42.3	150 mm dia pipe	metre	12.20
15.43	Dismantling manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50metres lead as per direction of Engineer-in-charge :		
15.43.1	Water bound macadam road	sqm	34.30
15.43.2	bituminous road	sqm	66.30

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
15.44	Dismantling G.I. pipes (external work) including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means including stacking of pipes within 50 metres lead as per direction of Engineer-in-charge :		
15.44.1	15 mm to 40 mm nominal bore	metre	24.90
15.44.2	Above 40 mm nominal bore	metre	29.05
15.45	Dismantling C.I. pipes including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes, lead at site within 50 metre lead as per direction of Engineer-in-charge:		
15.45.1	Up to 150 mm diameter	metre	63.45
15.45.2	Above 150 mm dia up to 300 mm dia.	metre	86.00
15.45.3	Above 300 mm diameter	metre	113.20
15.46	Dismantling steel cylinder R.C. pipes including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes, lead at site within 50 metres lead as per direction of Engineer-in-charge:		
15.46.1	Up to 600 mm diameter	metre	113.20
15.46.2	Above 600 mm diameter	metre	279.20
15.47	Dismantling asbestos cement pressure pipes including excavation and refilling trenches after taking out the pipes manually/ by mechanical means and stacking the pipes within 50 metres lead as per direction of Engineer-in-charge:		
15.47.1	Up to 150 mm diameter	metre	49.85
15.47.2	Above 150 mm diameter	metre	60.65
15.48	Taking out C.I. cover with frame from R.C.C. top slab of manholes of various sizes including demolishing of R.C.C. work manually/ by mechanical means and stacking of useful materials near the site and disposal of unserviceable materials into municipal dumps within 50 metres lead as per direction of Engineer-in-charge.	each	110.35
15.49	Taking out C.I. cover with frame from R.C.C. top slab of inspection chambers of various sizes including demolishing of R.C.C. work manually/ by mechanical means and stacking of useful materials near the site and disposal of unserviceable materials into municipal dumps within 50 metres lead as per direction of Engineer-in-charge.	each	65.05
15.50	Dismantling of R.C.C. spun vent shaft including excavating the cement concrete pit completely, taking out the shaft, refilling the excavated gap, stacking the useful materials near the site and disposal of unserviceable materials within 50 metres lead.	each	711.50
15.51	Dismantling of road gully chamber of various sizes including C.I. grating with frame including stacking of useful materials near the site and disposal of unserviceable materials into municipal dumps within 50	each	149.50

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
	metres lead including refilling the excavated gap.		
15.52	Dismantling of flushing cistern of any size including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead.	each	143.35
15.53	Dismantling of C.I. sluice valve including stacking of useful materials within a lead of 50 metres		
15.53.1	Up to 150 mm diameter	each	52.70
15.53.2	Above 150 mm diameter	each	178.50
15.54	Dismantling of spindle fire hydrant including stacking of useful materials within 50 metres lead.	each	105.70
15.55	Dismantling of cement concrete platform along with curtain walls and base concrete etc. including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead :		
15.55.1	120 x 120 cm (outside to outside)	each	166.60
15.55.2	210 x 120 cm (outside to outside)	each	255.65
15.55.3	320 x 120 cm (outside to outside)	each	361.65
15.56	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	sqm	8.20
15.57	Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable surplus material and stacking of serviceable material with in 50 meters lead as directed by Engineer-in-charge.	sqm	8.65
15.58	Demolishing C.C. /R.C.C. work by mechanical means and stockpiling at designated locations and disposal of dismantled materials up to a lead of 1000m, stacking serviceable and unserviceable material separately including cutting reinforcement bars.	cum	731.05
15.59	Dismantling of flexible pavement (bituminous courses) by mechanical means and disposal of dismantled material up to a lead of 1000 metres, as per direction of Engineer-in-charge.	cum	106.20

**SUB HEAD : 16.0**

**ROAD WORK**

### BASIC RATES (SH: 16.0 ROAD WORK)

Code No	Description	Unit	Rate Rs.
0001	Hire charges of Coaltar Boiler 900 to 1400 litres	Day	595.00
0002	Hire charges of Concrete Mixer 0.14 cubic metre	Day	400.00
0003	Hire charges of Diesel Road Roller - 8 to 10 tonne	Day	1,000.00
0005	Hire charges of Diesel Truck - 9 tonne	Day	1,008.00
0007	Hire charges of Coaltar Sprayer	Day	250.00
0008	Hire charges of Barber green, drying, mixing and Asphalt Plant, with accessories, capacity 30/45 tonne	Day	7,050.00
0013	Machine for rubbing of floors	Day	200.00
0014	Front end loader	Day	6,000.00
0016	Mastic Cooker	Day	515.00
0017	Hire and running charges of tipper	Day	1,030.00
0018	Hire and running charges of loader.	Day	800.00
0021	Pin vibrator	Day	288.00
0022	Surface Vibrator	Day	330.00
0029	Carriage of concrete by transit mixer.	km/ cum	18.00
0030	Generator 250 KVA.	per day	1,600.00
0033	Paint applicator.	per day	680.00
0038	Tractor with ripper attachment.	per day	1,000.00
0042	C.C .batch mix plant.	day	88,000.00
0043	Road sweeper	day	480.00
0045	Slip form paver with sensor.	day	12,000.00
0046	Water tanker.	day	800.00
0047	Concrete joint cutting machine.	day	800.00
0048	Texturing machine.	day	800.00
0100	Bandhani	Day	138.45
0101	Bhisti	Day	138.45
0102	Blacksmith 1st class	Day	151.50
0103	Blacksmith 2nd class	Day	141.60
0113	Chowkidar	Day	135.25
0114	Beldar	Day	135.25
0115	Coolie	Day	135.25
0123	Mason (brick layer) 1st class	Day	151.50
0124	Mason (brick layer) 2nd class	Day	141.60

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
0126	Mason (for ornamental stone work) 1st class	Day	151.50
0128	Mate	Day	138.45
0130	Mistry	Day	151.50
0131	Painter	Day	141.60
0138	Sprayer (for bitumen, tar etc.)	Day	138.45
0139	Skilled Beldar (for floor rubbing etc.)	Day	138.45
0155	Mason (average)	Day	146.55
0157	Operator (Pile/ Special machine)	Day	166.00
0286	Brick Aggregate (Single size) : 50 mm nominal size	cum	355.00
0287	Brick Aggregate (Single size) : 40 mm nominal size	cum	360.00
0291	Stone Aggregate (Single size) : 63 mm nominal size	cum	600.00
0292	Stone Aggregate (Single size) : 50 mm nominal size	cum	625.00
0293	Stone Aggregate (Single size) : 40 mm nominal size	cum	650.00
0294	Stone Aggregate (Single size) : 25 mm nominal size	cum	675.00
0295	Stone Aggregate (Single size) : 20 mm nominal size	cum	700.00
0296	Stone Aggregate (Single size) : 12.5 mm nominal size	cum	700.00
0297	Stone Aggregate (Single size) : 10 mm nominal size	cum	700.00
0298	Stone Aggregate (Single size) : 06 mm nominal size	cum	750.00
0304	Bajri	cum	510.00
0309	Paving bitumen S-90 of approved quality	tonne	22,500.00
0310	Bitumen emulsion	tonne	19,500.00
0312	Bitumen grade PMB - 40	M.T.	30,000.00
0313	Blown type petroleum bitumen of penetration 85/25 of approved quality	tonne	25,000.00
0314	Bitumen hot sealing compound : grade A	kilogram	20.00
0317	Premoulded joint filler 12 mm thick	sqm	300.00
0364	Wire brush	each	15.00
0365	Soft brush	each	12.00
0367	Portland Cement	tonne	4,500.00
0370	Coal (steam)	quintal	300.00
0588	Chromium plated Brass screws 25 mm	100 Nos	83.00
0777	Dry hydrated lime (factory made)	quintal	177.00
0784	Marble dust/ powder	cum	800.00
0810	Moorum	cum	310.00
0979	Royalty for good earth	cum	11.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
0982	Coarse sand (zone III)	cum	600.00
0983	Fine sand (zone IV)	cum	320.00
1007	Structural steel such as tees, angles channels and R.S. joists	quintal	3,100.00
1021	Hard drawn steel wire fabric	sqm	310.00
1028	Straining bolts	each	50.00
1029	Galvanised steel barbed wire	quintal	4,400.00
1030	Galvanised steel turn buckles	each	9.00
1151	Boundary stone top chisel dressed 15x15x90 cm	each	46.00
1158	Stone for pitching 15 cm x 22.5 cm	cum	332.00
1159	Stone dust	cum	700.00
1235	Diesel oil	litre	30.25
1241	Commercial LPG in cylinder.	kg	35.00
1980	Fly ash	cum	6.00
2200	Carriage of steam coal	tonne	60.81
2201	Carriage of Bricks	Nos	141.88
2202	Carriage of Stone aggregate below 40 mm nominal size	cum	53.21
2203	Carriage of Coarse sand	cum	53.21
2205	Carriage of Steel	tonne	47.29
2206	Carriage of Stone aggregate 40 mm nominal size and above	cum	57.83
2208	Carriage of Lime	cum	53.21
2209	Carriage of Cement	tonne	47.29
2211	Carriage of Tar bitumen	tonne	53.21
2215	Carriage of Soling stone & masonry stone	cum	62.60
2216	Carriage of Stone blocks white & red sand stone & Kota stone slab	tonne	47.29
2241	Carriage of Good earth	cum	66.51
2260	Carriage of Brick aggregate	cum	57.83
2261	Carriage of Fine sand (1 part badarpur sand : 2 parts jamuna sand)	cum	53.21
2265	Carriage of Moorum	cum	53.21
2267	Carriage of Stone dust	cum	53.21
2302	Carriage of G.I. sheet and accessories	tonne	47.29
2311	Carriage of Red bajri	cum	53.21
2314	Carriage of Barbed wire	tonne	47.29
2335	Carriage of Jamuna sand	cum	53.21
2342	Carriage of solvent/ Diesel.	quintal	5.32



<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
2602	F.P.S. bricks class designation 75	Nos	1,900.00
2704	Aluminium Strip 40 mm wide and 2 mm thick	kilogram	195.00
2901	Stone Aggregate (Single size) : 100 mm nominal size	cum	575.00
2902	Stone Aggregate (Single size) : 80 mm nominal size	cum	575.00
2903	Stone chippings/ screenings 4.75 mm nominal size	cum	800.00
2904	Stone chippings/ screenings 150 micron nominal size	cum	800.00
2908	Over burnt (Jhama) Brick Aggregate: 120 mm to 40 mm size	cum	285.00
2909	Over burnt (Jhama) Brick Aggregate: 90 mm to 40 mm size	cum	320.00
2910	Stone chippings/ screenings 12.5/ 13.2 mm nominal size	cum	700.00
2911	Stone chippings/ screenings 10/ 11.2 mm nominal size	cum	700.00
2914	Solvent	kilogram	18.00
2916	Paving Asphalt 80/100 penetration	tonne	22,500.00
5001	Mobil oil	litre	95.00
6501	Sand zone V (Jamuna)	cum	175.00
7254	Hard crete	litre	29.00
7255	Road marking paint (spirit based)	litre	97.00
7256	Superior quality road marking paint	litre	148.00
7309	Paving Asphalt 60/70 penetration	tonne	23,200.00
7318	Plasticizer / super plasticizer	kilogram	30.00
7382	Bitumen emulsion rapid setting (R.S.) confirming to IS : 8887-1995	tonne	32,000.00
7426	Cat's eye	each	450.00
7739	Modified Bitumen Refinery produced CRMB - 55	Tonne	26,000.00
7741	Modified Bitumen Refinery produced CRMB - 60	tonne	26,300.00
7742	Bitumen emulsion medium setting (M.S.) confirming to IS : 8887-1995	tonne	19,500.00
8685	Delineator	each	560.00
8686	Precast C.C. Kerb stone M - 25	cum	3,500.00
8687	Thermoplastic paint	kg	67.22
8688	Glass beads	kg	68.00
8689	Interlocking C.C. paver block ( 60 mm thick, M-30 )	sqm	225.00
8690	High intensity retro - reflective sheet.	sqm	1,400.00
8691	Punched tape concertina coil 600 m dia. 10m openable length (Total length 90m)	bundle	650.00
8692	RBT reinforced barbed wire.	metre	7.50
8693	Turn buckle and strengthening bolt.	each set	35.00
8694	Precast pavement slab 450 x 450 x 50mm (M - 30).	each	40.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
8695	Chain link fabric fencing mesh of size 50x50mm made of G.I. wire of dia. 4mm.	sqm	225.00
8696	Chain link fabric fencing mesh of size 50x50mm made of G.I. wire of dia. 4mm, PVC coated to outer dia. 5mm.	sqm	250.00
8697	Chain link fabric fencing mesh of size 25x25mm made of G.I. wire of dia. 3mm.	sqm	300.00
9999	Sundries	L.S.	2.60

## 16.0 ROAD WORK

Code No	Description	Unit	Rate Rs.
<b>ROADS</b>			
16.1	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm. depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earth lead upto 50 metres.	sqm	33.90
16.2	Extra for compaction of earth work in embankment under optimum moisture conditions to give at least 95% of the maximum dry density (proctor density).	cum	4.50
16.3	Supplying and stacking at site.		
16.3.1	90 mm to 45 mm size stone aggregate.	cum	742.30
16.3.2	63 mm to 45 mm size stone aggregate.	cum	768.45
16.3.3	53 mm to 22.4 mm size stone aggregate.	cum	810.55
16.3.4	Over burnt (Jhama) brick aggregate 120 mm to 40 mm.	cum	398.20
16.3.5	Over burnt (Jhama) brick aggregate 90 mm to 45 mm.	cum	438.85
16.3.6	Stone screening 13.2 mm nominal size (Type A).	cum	892.25
16.3.7	Stone screening 11.2 mm nominal size (Type B).	cum	979.40
16.3.8	Red bajri	cum	654.15
16.3.9	Good earth.	cum	144.05
16.3.10	Moorum.	cum	421.85
16.4	Laying spreading and compacting stone aggregate of specified sizes to WBM specifications including spreading in uniform thickness, hand picking , rolling with 3 wheeled road / vibratory roller 8-10 tonne in stages to proper grade and camber, applying and brooming requisite type of screening / binding material to fill up interstices of coarse aggregate watering and compacting to the required density .	cum	192.55
16.5	Laying water bound macadam sub-base with brick aggregate and blinding material, earth etc. including screening, sorting and spreading to template and consolidation with light power road-roller etc. complete.(payment for brick aggregate and moorum etc. to be made separately)		
16.5.1	Over burnt (Jhama) brick aggregate 120 mm to 40 mm.	cum	136.20
16.5.2	Over burnt (Jhama) brick aggregate 90 mm to 45 mm.	cum	136.20
16.6	Supplying, stacking and Spreading 6 mm thick red bajri, watering and rolling complete including preparation of the surface and rolling.		
16.6.1	With road roller/ hand roller.	sqm	6.70
16.7	Brick edging in full brick width and half brick depth including excavation, refilling and disposal of surplus earth lead upto 50 metres.		

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
16.7.1	With F.P.S. bricks of class designation 75	metre	52.35
16.8	Brick edging laid lengthwise with half brick depth including excavation, refilling and disposal of surplus earth lead upto 50 metres :		
16.8.1	With F.P.S. bricks of class designation 75	metre	14.90
16.9	Scarifying metalled (water-bound) road surface including disposal of rubbish lead upto 50m and consolidation of the aggregate received from scarifying with power road roller of 8 to 10tonne capacity.	sqm	6.45
16.10	Making bajri path including preparation of subgrade, supplying and laying brick aggregate of 50mm nominal size 7.5 cm deep with blinding material consisting of 12 mm moorum and 12 mm red bajri consolidated with road roller.	sqm	69.95
16.11	Dry stone pitching 22.5 cm thick including supply of stones and preparing surface complete.	sqm	211.10
16.12	Dry brick pitching half brick thick in drains including supply of bricks and preparing the surface complete :		
16.12.1	With F.P.S. bricks of class designation 75	sqm	183.55
16.13	Cutting road and making good the same including supply of extra quantities of materials i.e. aggregate, moorum screening, red bajri and labour required.		
16.13.1	bituminous portion	cum	1,081.80
16.13.2	Water bound macadam.	cum	572.45
16.14	Cutting bajri paths and making good the same including supply of extra quantities of brick aggregate, moorum and red bajri required.	sqm	53.25
<b>FENCING</b>			
16.15	Supplying at site :		
16.15.1	R.C.C. Standards post/ struts/rails/ pales of mix 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 12.5 mm nominal size) with wooden plugs or 6mm bar nibs wherever required as per direction of Engineer-in-charge including fixing (cost of earth works in excavation, concrete works in foundation to be paid separately).	cum	12,473.10
16.15.2	Welded steel wire fabric of required width rectangular mesh painted with two or more coats of enamel paint of approved shade over a coat of primer (Painting to be paid for separately).	kg	46.50
16.16	Supplying and fixing turn buckles and straining bolts for barbed wire fencing.	each set	88.15
16.17	Fencing with R.C.C. post placed at required distance, embedded in cement concrete blocks, every 15th post, last but one end post and corner post shall be strutted on both sides and end post one side only, provided with horizontal lines and two diagonals of barbed wire 9.38 kg per 100 metres (min) between the two posts fitted and fixed with G.I.		

Code No	Description	Unit	Rate Rs.
	staples on wooden plugs or G.I. binding wire tied to 6 mm bar nibs fixed while casting the post (cost of R.C.C. posts, struts, earth work and concrete to be paid for separately) :- Payment to be made per metre cost of total length of barbed wire used.		
16.17.1	With G.I. barbed wire	metre	5.85
16.18	Fencing with angle iron post placed at required distance embedded in cement concrete blocks, every 15th post, last but one end post and corner post shall be strutted on both sides and end post on one side only and provided with horizontal lines and two diagonals interwoven with horizontal wires, of barbed wire 9.38 kg per 100 m (minimum) between the two posts fitted and fixed with G.I. staples, turn buckles etc. complete. (Cost of posts, struts, earth work and concrete work to be paid for separately) :- Payment to be made per metre cost of total length of barbed wire used.		
16.18.1	With G.I. barbed wire	metre	8.45
16.19	Supplying at site Angle iron post & strut of required size including bottom to be split and bent at right angle in opposite direction for 10 cm length and drilling holes upto 10 mm dia. etc. complete.	Kg.	43.35
16.20	Welded steel wire fabric fencing with posts of specified material and of standard design placed and embedded in cement concrete blocks 45x45x60cm of mix 1:5:10 (1 cement:5 fine sand : 10 graded stone aggregate 40mm nominal size) every 15th post, last but one end post and corner post shall be strutted on both sides and end post on one side only and struts embedded in cement concrete blocks 70x45x50cm of the same mix, provided with welded steel wire fabric fixed between the posts fitted and fixed with G.I. staples on wooden plugs or tied to 6 mm bar nibs with G.I. binding wire (cost of posts, welded steel wire fabric, painting, earth work in excavation and concrete to be paid for separately) :	sqm	11.50
<b>ROAD SIGNS</b>			
16.21	Engraving letters in hard stone	per cm height per letter	1.55
16.22	Providing and fixing 15x15x90cm boundary stone of hard stone with top 30 cm chisel dressed on all four sides and on top (cost of excavation, refilling and concrete etc. to be paid for separately).	each	77.10
16.23	Providing and fixing 15cm dia at top 20cm at bottom and 90cm high precast reinforced cement concrete 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20mm nominal size) boundary stone as per standard design including finishing smooth with cement mortar 1:3 (1 cement : 3 fine sand) (cost of excavation, refilling and concreting to be paid for separately).	each	258.15
16.24	Providing and fixing precast reinforced cement concrete 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20mm nominal size) kilometre stone as per standard design including finishing smooth in 1:3 cement mortar (1 cement : 3 fine sand) but excluding the cost of earth work, concrete in foundation, painting and lettering etc. which shall be		

Code No	Description	Unit	Rate Rs.
	paid for separately.		
16.24.1	35x111x25 cm size.	each	1,094.45
16.24.2	50x152.5x25 cm size.	each	1,565.50
16.24.3	35x93.5x18 cm size.	each	740.20
<b>SURFACE DRESSING</b>			
16.25	Surface dressing on new surface with paving bitumen of grade A-90/S-90 of approved quality using 2.25 kg of bitumen per sqm with 1.65 cum of stone chippings 13.2 mm nominal size per 100 sqm of road surface including consolidation with road roller of 6 to 8 tonne capacity etc. complete:	sqm	89.40
16.26	Surface dressing on new surface in two coats with bitumen of grade A-90/S-90 of approved quality using 1.8kg.of bitumen per sqm with 1.5cum of stone chippings 13.2mm nominal size per 100 sqm of road surface for first coat and 1.1kg. of bitumen per sqm. with 1.00 cu. metre of stone chippings 11.2mm nominal size per 100 sqm. of road surface for second coat including consolidation of each coat separately with road roller of 6 to 8 tonne capacity etc. complete.	sqm	121.15
16.27	Surface dressing on old surface with hot bitumen of grade A-90/ S-90 of approved quality using 1.95 kg of bitumen per sqm. with 1.50 cum of stone chippings 11.2 mm nominal size per 100 sqm of road surface including consolidation with road roller of 6 to 8 tonne capacity, etc. complete.	sqm	74.05
16.28	Surface dressing one coat on new surface with bitumen of specified grade at a rate of 1.95 kg/sqm. of surface area with 1.5 cum. of stone chippings 13.2 mm nominal size per 100 sqm. of road surface including consolidation with road roller of 6 to 8 tonne capacity , etc. complete :		
16.28.1	Using bitumen emulsion (minimum 50% bitumen content - RS grade conforming to IS : 8887).	sqm	70.10
16.29	Surface dressing one coat on old surface with bitumen of specified grade at the rate of 1.22 kg/ sqm of surface area with 1.10 cum of stone chippings 11.2 mm nominal size per 100 sqm. of road surface including consolidation with road roller of 6 to 8 tonne capacity etc. complete :		
16.29.1	Using bitumen emulsion (minimum 50% bitumen content - RS grade conforming to IS : 8887).	sqm	44.85
<b>PREMIX CARPET</b>			
16.30	Providing and applying tack coat using hot straight run bitumen of grade 80/ 100 including heating the bitumen, spraying the bitumen with mechanically operated spray unit fitted on bitumen boiler, cleaning and preparing the existing road surface as per specifications :		
16.30.1	On W.B.M. @ 0.75 Kg / sqm.	sqm	23.90
16.30.2	On bituminous surface @ 0.50 Kg / sqm.	sqm	17.15
16.31	Providing and applying tack coat using bitumen emulsion (Rapid Setting) complying with IS 8887-1995, spraying the bitumen emulsion with		

Code No	Description	Unit	Rate Rs.
	mechanically operated spray unit, cleaning and preparing the existing road surface as per specifications :		
16.31.1	On W.B.M @ 0.4kg/sqm.	sqm	18.00
16.31.2	On bituminous surface @ 0.25kg/sqm.	sqm	12.35
	<b>Note : Use of this item shall be restricted only for sites at sub zero temperature or for emergency applications.</b>		
16.32	2 cm premix carpet surfacing with 1.8 cum and 0.90 cum of stone chippings of 13.2 mm size and 11.2 mm size respectively per 100 sqm. and 52 kg. and 56 kg. of hot bitumen per cum of stone chippings of 13.2 mm and 11.2 mm size respectively including a tack coat with hot straight run bitumen including consolidation with road roller of 6 to 9 tonne capacity etc. complete: (tack coat to be paid for separately).		
16.32.1	With paving Asphalt 80 /100 heated and then mixed with solvent at the rate of 70 grams per kg of asphalt.	sqm	81.95
16.32.2	With paving Asphalt 60/70 with no solvent	sqm	81.00
16.32.3	With Refinery Modified Bitumen CRMB 55 conforming to IRC : SP : 53-1999.	sqm	87.80
16.33	2.5 cm premix carpet surfacing with 2.25 cum and 1.12 cum of stone chippings of 13.2mm and 11.2mm size respectively per 100 sqm. and 52 kg. and 56 kg. of hot bitumen per cum of stone chippings of 13.2 mm and 11.2 mm size respectively including a tack coat with hot straight run bitumen including consolidation with road roller of 6 to 9 tonne capacity etc. complete. (tack coat to be paid for separately) :		
16.33.1	With paving Asphalt 80/100 heated and then mixed with solvent at the rate of 70 grams per kg of asphalt.	sqm	100.35
16.33.2	With paving Asphalt 60/70 with no solvent	sqm	99.15
16.33.3	With Refinery Modified Bitumen CRMB 55 conforming to IRC: SP: 53-1999.	sqm	107.65
16.34	2 cm premix carpet surfacing with 2.4cum of stone chippings 11.2 mm nominal size per 100 sqm and bitumen emulsion (medium setting min. 65% bitumen content) complying with IS : 8887-1995 using 96kg per cum of chipping including consolidation with road roller of 6 to 9 tonne capacity etc. complete (tack coat to be paid for separately).	sqm	86.45
16.35	2.5 cm premix carpet surfacing with 3 cum of stone chippings 10 mm nominal size per 100 sqm and bitumen emulsion (medium setting min. 65% bitumen contents) complying with IS : 8887-1995 using 96 kg per cum of chippings of road surface including consolidation with road roller etc complete (tack coat to be paid for separately) :	sqm	105.70
16.36	Providing and laying Bitumen Penetration Macadam with hard stone aggregate of quality, size and grading as specified, with bitumen of suitable penetration grade including required key aggregate as specified, spreading coarse aggregate with the help of self propelled / tipper tail mounted aggregate spreader and applying bitumen by a pressure distributor and then spreading key aggregate with the help of aggregate		

Code No	Description	Unit	Rate Rs.
	spreader complete including consolidation with road roller of minimum 8 to 10 tonne capacity to achieve specified values of compaction and surface accuracy :		
16.36.1	For 50mm compacted thickness using coarse aggregate of size 50-20 mm graded @ 0.60 cum per 10 sqm key aggregate of size 12.5 mm graded @ 0.15 cum per 10 sqm. With paving asphalt 80/100 @ 50 kg/10 sqm.	sqm	219.75
16.36.2	For 75 mm compacted thickness in two layers using stone aggregate of size 63-41 mm graded @ 0.90 cum per 10 sqm key aggregate of size 20.0 mm graded @ 0.18 cum per 10 sqm. With paving asphalt 80/100 @ 68 kg/10 sqm.	sqm	311.60
<b>MASTIC AND BITUMASTIC WEARING COURSE</b>			
16.37	Providing and laying bitumen mastic wearing course (as per specifications) with industrial bitumen of grade 85/25 conforming to IS : 702 prepared by using mastic cooker and laid to required level and slope including providing antiskid surface with bitumen precoated fine grained hard stone chipping of approved size at the rate of 0.005 cum per 10 sqm and at approximates spacing of 10cm centre to centre in both directions, pressed into surface protruding 1mm to 4mm over mastic surface, including cleaning the surface, removal of debris etc. all complete. ( Considering bitumen using 10.2% as per MORTH specification . )		
16.37.1	25mm thick.	sqm	493.45
16.37.2	40 mm thick	sqm	789.50
16.38	2.5 cm thick bitumastic sheet with hot bitumen of approved quality using stone chippings (60% 12.5 mm nominal size and 40% 10 mm nominal size) @ 1.65 cum per 100 sqm and coarse sand at 1.65 cum per 100 sqm of road surface and with bitumen @ 56 kg/cum of stone chippings and @ 128 kg/cum. of sand over a tack coat with hot straight run bitumen including consolidation with road roller of 8 to 10 tonne etc. complete. (tack coat to be paid separately) :		
16.38.1	With paving Asphalt 80/100 heated and then mixed with solvent at the rate of 70 grams per kg of asphalt.	sqm	134.45
16.38.2	With paving Asphalt 60/70.	sqm	132.50
16.38.3	With Refinery Modified Bitumen CRMB 55 conforming to IRC: SP : 53-1999.	sqm	146.80
16.39	4 cm thick bitumastic sheet with hot bitumen of approved quality using stone chippings (60% 12.5mm nominal size and 40% 10mm nominal size) @ 2.60cum per 100 sqm and coarse sand at 2.60cum per 100 sqm of road surface and with bitumen @ 56 kg/cum. of stone chippings and at 128 kg/cum of sand over a tack coat with hot straight run bitumen including consolidation with road roller of 8 to 10 tonne etc. complete. (tack coat to be paid separately) :		
16.39.1	With paving Asphalt 80/100 heated and then mixed with solvent at the rate of 70 grams per kg of asphalt.	sqm	208.10



Code No	Description	Unit	Rate Rs.
16.39.2	With paving asphalt 60/70 with no solvent	sqm	205.00
16.39.3	With Refinery Modified Bitumen CRMB 55 conforming to IRC: SP : 53-1999.	sqm	227.60
<b>SEAL COAT</b>			
16.40	Providing and laying seal coat of premixed fine aggregate ( passing 2.36 mm and retained on 180 micron sieve) with bitumen using 128 kg of bitumen of grade 80 / 100 bitumen per cum of fine aggregate and 0.60 cum of fine aggregate per 100 sqm of road surface including rolling and finishing with road roller all complete.	sqm	36.85
16.41	Providing and laying seal coat over prepared surface of road with bitumen heated in bitumen boiler fitted with the spray set spraying using 98 kg of bitumen of grade 80/100 and blinding surface with 0.90cum of stone aggregate of 6.7 mm size (Passing 11.2mm sieve and retained on 2.36mm sieve) per 100 sqm of road surface including rolling and finishing with power road roller all complete.	sqm	50.00
<b>Note : Seal coat items to be operated only with the prior approval of Chief Engineer concerned.</b>			
<b>CONCRETE PAVEMENT</b>			
16.42	Cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size) in pavements, laid to required slope and camber in panels as required including consolidation finishing and tamping complete.	cum	3,638.55
16.43	Providing and laying design mix cement concrete in roads, taxi tracks and runways having a minimum works test beam flexural strength of 30 kg. per cm2. at 28 days using not less than 340 Kg. of cement per cum of finished concrete, coarse sand and graded stone aggregate of 40mm nominal size in appropriate proportions as per specified design criteria approved by Engineer-in-charge mechanically vibrated using needle and surface vibrators including steel form work with sturdy M. S. channel sections including curing and providing and filling construction joints and dummy joints with approved joint filler and primer including rounding of the edges and filling the grooves 10x25mm deep at top for construction joints and 10mmx50mm deep at top for dummy joints with joint sealing compound (conforming to grade B of IS : 1834) including making necessary arrangements for expansion joints etc. all complete.	cum	3,692.40
16.44	Extra for providing and mixing hard crete of approved quality as per manufacturer's specification in cement concrete.	litre	33.70
16.45	Providing and fixing in position pre-moulded joint filler in expansion joints.	Per cm depth per cm width per m length	2.00
16.46	Providing and laying in position bitumen hot sealing compound for expansion joints etc.		

Code No	Description	Unit	Rate Rs.
16.46.1	Using grade 'A' sealing compound.	Per cm depth per cm width per m length	1.10
<b>PAINTING ROAD / RUNWAY MARKING</b>			
16.47	Painting runway/taxi track/apron marking with adequate no. of coats to give uniform finish with road marking paint of superior make as approved by the Engineer-in-charge i/c cleaning the surface of all dirt, scales, oil, grease and other foreign material etc. and lining out complete.		
16.47.1	New work (Two or more coats)	sqm	70.15
16.47.2	Old work (One or more coats)	sqm	43.10
16.48	Painting road surface marking with adequate no. of coats to give uniform finish with ready mixed road marking paint conforming to IS : 164, on bituminous surface in white/yellow shade including cleaning the surface of all dirt, scales, oil, grease and foreign material etc. complete.		
16.48.1	New work (Two or more coats).	sqm	58.10
16.48.2	Old work (One or more coats)	sqm	37.40
<b>MISCELLANEOUS</b>			
16.49	Making bell mouth opening/ entrance of size 100x50x50cm for drainage pipe under footpath including providing cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) for shape of bell mouth including plastering providing and fixing precast R.C.C./ S.F.R.C. slab including plastering with cement mortar 1:3 (1 cement : 3 fine sand) of 6 mm thickness on exposed surface of the slab & bell mouth including centring, shuttering & neat cement punning inside the bell mouth etc. all complete.	each	1,043.50
16.50	Providing and fixing Glow studs of size 100x20 mm made of heavy duty body shall be moulded ASA (Acrylic styrene Acryloretite ) or HIP (High impact polystyrene) or ABS having electronically welded micro- prismatic lens with abrasion resistant coating as approved by Engineer in charge. The cats eye shall support a load of 13635 kg tested in accordance with ASTM D4280. The slope of retro- reflective surface shall be 35 +/-5 degrees to base .The reflective panels on both sides with at least 12 cm of reflective area up each side. The luminance intensity should be as per the specification and shall be tested as described in ASTM I: 809 as recommended in BS: 873 part 4 : 1973. The studs shall be fixed to the Road surface using the adhesive conforming to IS, as per procedure recommended by the manufacturer complete and as per direction of Engineer-in-charge.	each	536.60
16.51	Preparation of sub-base road pavement with commercial dry lime (slaked), fly ash stabilised soil with a mix of 3% lime, 12% fly ash and 85% local suitable soil by weight, so as to achieve minimum field C.B.R. of 20 including mixing, rolling with road roller curing etc. all complete.		

Code No	Description	Unit	Rate Rs.
	16.51.1 Minimum thickness 15 cm.	cum	323.20
16.52	Providing and fixing precast lime fly ash concrete blocks 1:2:3:6 (1lime: 2 fly ash : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) including finishing with 10mm thick cement mortar 1:3 (1 cement : 3 coarse sand) in foot paths including preparation of sub grade with a hand rammer, laying 10 mm thick leveling course of fine sand (jamuna sand) and filling the joints with fine sand.	cum	3,138.55
<b>NEW ITEMS/ MODIFIED ITEMS</b>			
16.53	Providing and fixing concertina coil fencing with required dia 610 mm(having 15 nos. round per 6 metre length) up to 3m height of wall with existing angle iron 'Y' shaped placed 2.4 m or 3.00 m apart and with 9 horizontal R.B.T. stud tied with G.I. staples and G.I. clips to retain horizontal including necessary bolts or G.I. barbed wire tied to angle iron all complete as per direction of Engineer-in-charge with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately)	metre	180.25
16.54	Providing and laying Dense Bituminous macadam on prepared surface with specified graded crushed stone aggregate for profile corrective base/ binding course including loading of aggregate with FE loader and hot mixing of stone aggregate, filler and bitumen in hot mix plant, transporting the mixed material by tippers to paver and laying the mixed material with paver finisher fitted with electronic sensing device to the required level and grade and rolling by road roller as per MORTH specifications, to achieve the desired density, but excluding the cost of primer / tack coat.		
	16.54.1 50/75mm average compacted thickness with bitumen of 60/70 grade @ 5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate).	cum	5,366.50
16.55	Providing and laying Bituminous Macadam on prepared surface with specified graded crushed stone aggregate for profile corrective base/ binder course including loading of aggregate with F.E. loader , hot mixing of stone aggregates and bitumen in hot mix plant, transporting the mixed material by tippers to paver and laying the mixed material with paver finisher fitted with electronic sensing device to the required level and grade and rolling with road rollers, as per MORTH specification to achieve the desired density and compaction but excluding the cost of primer/ tack coat.		
	16.55.1 50mm / 75mm average compacted thickness with bitumen of 60/70 grade @ 3.5% (Percentage by weight of total mix)	cum	4,242.20
16.56	Providing and laying Dense Bituminous concrete on prepared surface with specified graded stone aggregate for wearing course including loading of aggregate with F.E. loader , and hot mixing of bitumen with filler and stone aggregate in hot mix plant , transporting the mixed material by tippers to paver and laying the mixed material with mechanical paver finisher fitted with electronic sensing device to the required level and grade and rolling with road rollers, as per MORTH		

Code No	Description	Unit	Rate Rs.
	specification, to achieve the desired density and compaction but excluding cost of primer/ tack coat.		
16.56.1	40 mm/50mm compacted thickness with bitumen of grade 60/ 70 @ 5.5% and lime @3% (percentage by weight of total mix).	cum	5,856.05
16.57	Providing and laying Dense Bituminous Concrete on prepared surface with specified graded stone aggregate for wearing course including loading of aggregate with F.E. loader, and hot mixing of bitumen with filler and stone aggregate in hot mix plant, transporting the mixed material by tippers to paver and laying the mixed material with mechanical paver finisher fitted with electronic sensing device to the required level and grade and rolling with road rollers, as per MORTH specifications, to achieve the desired density and compaction but excluding cost of primer/ tack coat.		
16.57.1	40 mm/50mm compacted thickness with bitumen of grade CRMB - 60 @ 5.5% and lime @3% (percentage by weight of total mix).	cum	6,323.40
16.58	Providing and laying Dense Bituminous Concrete on prepared surface with specified graded stone aggregate for wearing course including loading of aggregate with F.E. loader, and hot mixing of bitumen with filler and stone aggregate in hot mix plant, transporting the mixed material by tippers to paver and laying the mixed material with mechanical paver finisher fitted with electronic sensing device to the required level and grade and rolling with road rollers, as per MORTH specifications, to achieve the desired density and compaction but excluding cost of primer/ tack coat.		
16.58.1	40 mm/50mm compacted thickness with bitumen of grade PMB - 40 @ 5.5% and lime @3% (percentage by weight of total mix).	cum	6,881.20
16.59	Manufacturing supplying and fixing retro reflective sign boards made up of 2mm thick aluminium sheet, face to be fully covered with high intensity encapsulated type heat activated retro reflective sheeting conforming to type - IV of ASTM-D 4956-01 in blue and silver white or other colour combination including subject matter, message (bi-lingual), symbols and borders etc. as per IRC ; 67:2001, pasted on substrate by an adhesive backing which shall be activated by applying heat and pressure conforming to class -2 of ASTM-D-4956-01 and fixing the same with suitable sized aluminium alloy rivets @ 20 cm c/c to back support frame of M.S. angle iron of size 25x25x3 mm along with theft resistant measures, mounted and fixed with 2 Nos. M.S. angles of size 35x35x5 mm to a vertical post made up to M.S. Tee section ISMT 50x50x6 mm welded with base plate of size 100x100x5 mm at the bottom end and including making holes in pipes, angles flats, providing & fixing M.S. message plate of required size steel work to be painted with two or more coats of synthetic enamel paint of required shade and of approved brand & manufacture over priming coat of zinc chromate yellow primer (vertical MS-Tee support to be painted in black and white colours).Backside of		

Code No	Description	Unit	Rate Rs.
	aluminium sheet to be painted with two or more coats of epoxy paint over and including appropriate priming coat including all leads and lifts etc. complete as per drawing , specification and direction of Engineer--in-charge.		
16.59.1	Mandatory/ Regulatory sign boards of 900mm dia - metre with part as length of 3750mm.	sqm	3,776.45
16.59.2	Cautionary /warning sign boards of equilateral triangular shape having each side of 900mm with support length of 3650mm.	sqm	2,616.55
16.60	Manufacturing supplying and fixing retro reflective overhead signage boards made up of 2mm thick aluminium sheet face to be fully covered with high intensity and encapsulated lens type heat activated retro reflective sheeting conforming to type - III of ASTM-D-4956-01 as approved by Engineer-in-charge letters, borders etc. as per IRC : 67-2001 in silver white with blue colour back ground and with high intensity grade, pasted on substrate by pressure sensitive adhesive backing which shall be activated by applying pressure conforming to class II of ASTM-D-4956-01 and fixing the same to the plate of structural frame work by means of suitable sized aluminium alloys, rivets or bolts & nuts @ 300 mm centre to centre all along the periphery as well as in two vertical rows along with theft resistant measures including the cost of painting with two or more coats of epoxy paint in grey colour on the back side of aluminium sheet including appropriate priming coat. The rate includes the cost of rounding off the corners, lowering down the structural frame work from the gantry, fixing and erecting the same in position all complete as per drawings, specification and direction of the engineer-in-charge.(Structural frame work including M.S. plate to be provided separately. Rectangular area of the sheet only shall be measured for payment).		
16.60.1	Overhead informatory road signage.	sqm	4,017.75
16.61	Providing Retro-reflective regulatory sign board of size 900mm dia meter made out of 2mm thick aluminium sheet, face to be fully covered with high intensity encapsulated lens type retro -reflective sheeting as approved by Engineer-in-charge . Letter, symbols, borders etc. will be as per IRC - 67 with required colour scheme on the boards and with the high intensity grade A. The aluminium sheet to be riveted to M.S. frame of angle iron of size 40x40x4mm The boards will be fixed to 1 No. 50x50mm square post made of M.S. angle 50x50x4m, 4m long welded to the frame with adequate anti-theft arrangement .Sheet work to be painted with two or more coats of synthetic enamel paint over an under coat (primer) and back side of aluminium sheet to be painted with two or more coats of epoxy paint including appropriate priming coat complete in all respects as per direction of Engineer-in-charge.	sqm	4,117.10
16.62	Providing and applying 2.5mm thick road marking strips (retro-reflective) of specified shade/ colour using hot thermoplastic material by fully/ semi automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour ,T&P, cleaning the road surface of all dirt, seals, oil,	sqm	497.30

Code No	Description	Unit	Rate Rs.
	grease and foreign material etc. complete as per direction of Engineer-in-charge and accordance with applicable specifications.		
16.63	Providing and laying and making kerb channel 30cm wide and 50mm thick of cement concrete 1:3:6 (1 cement: 3 coarse sand:6 graded stone aggregate 20mm nominal size) over 75mm bed of dry brick ballast 40 mm nominal size well rammed and consolidated and grouted with fine sand including finishing the top smooth etc. complete and as per direction of Engineer-in-charge.	metre	185.60
16.64	Providing and laying 75mm thick compacted bed of dry brick aggregate of 40mm thick nominal size including spreading, well ramming, consolidating and grouting with jamuna sand including finishing smooth etc. complete as per direction of Engineer-in-charge.	sqm	63.15
16.65	Providing and fixing post delineators (made of ABS body fitted with 2 nos 100mm dia ) reflective and reflectors are mounted on MS pipe of 65mm dia dully powder coated anti-rust and anti theft steel not to be installed as per direction of Engineer-in-charge.	each	786.35
16.66	Excavating holes upto 0.10 cum including getting out the excavated soil. then returning the soil as deported in layers not exceeding 20cm in depth including consolidating and deposited layer by ramming watering etc. Disposing of surplus excavated soil as directed with in a lead of 50mm and lift upto 1.5 m.		
	16.66.1 All kind of soil.	each	10.85
16.67	Providing and fixing at or near ground level factory made RCC pavement slab of M-30 grade of size 450x450x50mm (HPL or equivalent ) including reinforcement with 6mm dia M.S. bars 4 nos on each side including setting in position in footpath to the required level and line over a bed of 20mm average thick cement mortar (1 cement : 3 coarse sand ) having thickness not more than 5mm except on curve including filling of joints with same cement mortar and making grooves etc. complete as per direction of Engineer-in-charge.	sqm	345.35
16.68	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction and of approved size and design/ shape laid in required colour and pattern over and including 50mm thick compacted bed of course sand, filling the joints with coarse sand etc. all complete as per the direction of Engineer-in-charge.	sqm	345.45
16.69	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement in position to the required line, level and curvature jointed with cement mortar 1:3 (1 cement: 3 coarse sand) including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5mm) including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	cum	4,247.70
16.70	Providing and fixing G.I. chain link fabric fencing of required width in mesh size 50x50mm including strengthening with 2mm dia wire or nuts,		

Code No	Description	Unit	Rate Rs.
	bolts and washers as required complete as per the direction of Engineer-in-charge.		
16.70.1	Made of G.I. wire of dia 4mm.	sqm	373.45
16.70.2	Made of G.I. wire of dia. 4mm, PVC coated to achieve outer dia. not less than 5mm in required colour and shade.	sqm	403.95
16.71	Providing and fixing G.I. chain link fabric fencing of required width in mesh size 25x25 mm made of G.I. wire of dia. 3mm including strengthening with 2mm dia. wire or nuts, bolts and washers as required complete as per the direction of Engineer-in-charge.	sqm	464.95
16.72	Supplying and stacking of hard stone (for stone pitching) 22.5 cm thick at site.	cum	458.35
16.73	Dry stone pitching 22.5cm thick laid in courses and required profile with hammer dressed stones having no side less than 15 cm, with minimum depth of 20cm including preparing the bedding surface etc. all complete.(Payment for Stone to be made separately)	sqm	96.60
16.74	75 mm thick back filling for pitching including supplying of required materials and consolidation etc. complete with :		
16.74.1	Moorum.	sqm	34.45
16.74.2	Stone aggregate 20 mm nominal size.	sqm	69.05
16.74.3	Stone aggregate 40 mm nominal size.	sqm	65.10
16.75	Providing and laying C.C. pavement of mix M25 with ready mixed concrete from batching plant. The ready mixed concrete shall be laid and finished with screed board vibrator , vacuum dewatering process and finally finished by floating, brooming with wire brush etc. complete as per specifications and directions of Engineer-in-charge. (The panel shuttering work shall be paid for separately).	cum	4,471.25
16.76	Deduct for using of M 20 grade concrete instead of M-25 grade concrete in C.C. pavement.	cum	147.30
16.77	Scarifying the existing bituminous road surface to a depth of 50mm and disposal of scarified material within all lifts and lead upto 1000 metre (by mechanical means).	sqm	2.60

**SUB HEAD : 17.0**

**SANITARY INSTALLATIONS**



## BASIC RATES (17.0 SANITARY INSTALLATIONS)

Code No	Description	Unit	Rate Rs.
0100	Bandhani	Day	138.45
0101	Bhisti	Day	138.45
0103	Blacksmith 2nd class	Day	141.60
0112	Carpenter 2nd class	Day	141.60
0114	Beldar	Day	135.25
0115	Coolie	Day	135.25
0116	Fitter (grade 1)	Day	151.50
0117	Assistant Fitter or 2nd class Fitter	Day	141.60
0123	Mason (brick layer) 1st class	Day	151.50
0124	Mason (brick layer) 2nd class	Day	141.60
0128	Mate	Day	138.45
0131	Painter	Day	141.60
0295	Stone Aggregate (Single size) : 20 mm nominal size	cum	700.00
0297	Stone Aggregate (Single size) : 10 mm nominal size	cum	700.00
0367	Portland Cement	tonne	4,500.00
0586	Chromium plated Brass screws 40 mm	Nos	150.00
0588	Chromium plated Brass screws 25 mm	Nos	83.00
0828	Anticorrosive bituminous paint (black)	litre	52.00
0830	Enamel paint	litre	115.00
0834	Synthetic enamel paint in all shades except black or chocolate shade	litre	120.00
0982	Coarse sand (zone III)	cum	600.00
1007	Structurals such as tees,angles channels and R.S. joists	quintal	3,100.00
1309	C.I. bracket for wash basin and sinks	pair	48.00
1315	C.P.brass chain with 40 mm dia rubber plug	each	22.00
1330	Clamps and M.S. stays including bolts and nuts for 100 mm pipe	each	28.00
1331	M.S.Holder bat clamp of approved design for 100 mm S.C.I. pipe	each	13.00
1332	M.S.Holder bat clamp of approved design for 75 mm S.C.I. pipe	each	11.00
1334	Clamps and M.S. stays including bolts and nuts for 50 mm pipe	each	20.00
1335	Clamps and M.S. stays including bolts and nuts for 75 mm pipe	each	25.00
1350	Mosquito proof coupling of approved design	each	23.00
1363	Vitreous china foot rests 250x130x30 mm	pair	79.00
1369	S.C.I. gully or nahani grating 100 mm dia	each	10.00
1373	Rubber insertions for 80 mm dia pipe joints	each	9.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
1374	Rubber insertions for 100 mm dia pipe joints	each	12.00
1392	Mirror of superior make glass 60x45 cm	each	249.00
1396	Vitrous china pedestal for wash basin	each	527.00
1397	Pig lead	kilogram	58.00
1532	Flush pipe with union spreaders and clamps all in C.P. brass for single stall	each	204.00
1533	Flush pipe with union spreaders and clamps all in C.P. brass for double stall	each	333.00
1534	Flush pipe with union spreaders and clamps all in C.P. brass for range of three stall	each	415.00
1535	Flush pipe with union spreaders and clamps all in C.P. brass for range of four stall	each	465.00
1540	Flush pipe and spreaders G.I.for single set of one squatting plate urinal	each	138.00
1541	Flush pipe and spreaders G.I.for range of two squatting plates urinal	each	203.00
1542	Flush pipe and spreaders G.I.for range of three squatting plates urinal	each	255.00
1543	Flush pipe and spreaders G.I.for range of four squatting plates urinal	each	320.00
1614	G.I. inlet connection	each	50.00
1616	S.C.I. soil, waste and vent single socketed pipe 1.80 metres long: 75mm dia	each	537.00
1617	S.C.I. soil, waste and vent single socketed pipe 1.80 metres long: 100mm dia	each	610.00
1620	S.C.I. plain bend 75mm dia	each	140.00
1621	S.C.I. plain bend 100mm dia	each	178.00
1624	S.C.I. bend with access door 75mm dia	each	161.00
1625	S.C.I. bend with access door 100mm dia	each	194.00
1627	S.C.I. plain single equal junctions 75x75x75 mm dia	each	205.00
1628	S.C.I. plain single equal junctions 100x100x100 mm dia	each	265.00
1630	S.C.I. single equal junctions 75x75x75 mm dia with access door.	each	224.00
1631	S.C.I. single equal junctions 100x100x100 mm dia with access door.	each	297.00
1633	S.C.I. plain double equal junctions 75x75x75x75 mm dia	each	296.00
1634	S.C.I. plain double equal junctions 100x100x100x100 mm dia	each	394.00
1636	S.C.I. double equal junctions 75x75x75x75 mm dia with access door.	each	333.00
1637	S.C.I. double equal junctions 100x100x100x100 mm dia with access door.	each	417.00
1639	Slotted cowl (terminal guard ) 75 mm dia	each	109.00
1640	Slotted cowl (terminal guard ) 100 mm dia	each	152.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
1653	Sand cast iron S&S plain single unequal junctions : 100x100x75 mm dia	each	288.00
1656	Sand cast iron S&S single unequal junctions: 100x100x75 mm dia with access door.	each	321.00
1659	Sand cast iron S&S plain double unequal junctions : 100x100x75x75 mm dia	each	423.00
1662	Sand cast iron S&S double unequal junctions: 100x100x75x75 mm dia with access door.	each	453.00
1666	Sand cast iron heel rest bend 75mm dia	each	165.00
1667	Sand cast iron heel rest bend 100mm dia	each	197.00
1669	S.C.I. single equal invert branch of required degree 75x75x75 mm dia	each	239.00
1670	S.C.I. single equal invert branch of required degree 100x100x100 mm dia	each	321.00
1672	S.C.I. double equal invert branch of required degree 75x75x75x75 mm dia	each	314.00
1673	S.C.I. double equal invert branch of required degree 100x100x100x100 mm dia	each	422.00
1674	S.C.I. single unequal invert branch of required degree 100x100x75 mm dia	each	382.00
1677	S.C.I. double unequal invert branch of required degree 100x100x75x75 mm dia	each	458.00
1682	S.C.I. door pieces 75 mm dia	each	211.00
1683	S.C.I. door pieces 100 mm dia	each	291.00
1685	S.C.I. collar 75 mm dia	each	82.00
1686	S.C.I. collar 100 mm dia	each	110.00
1863	Fire clay kitchen sink: 600x450x250 mm	each	1,192.00
1871	White vitreous china laboratory sink 450x300x150 mm	each	664.00
1872	White vitreous china laboratory sink 600x450x200 mm	each	1,400.00
1875	White plastic seat (solid) with lid C.P.brass hinges and rubber buffers	each	275.00
1876	Black plastic seat (solid) with lid C.P.brass hinges and rubber buffers	each	250.00
1881	Spun yarn	kilogram	30.00
1885	15 mm C.P.brass tap	each	103.00
1889	C.P.brass toilet paper holder of standard size	each	70.00
1891	C.I. trap for standard urinal with vent arm with operating and other couplings in C.P.brass: 50 mm dia	each	125.00
1893	C.I. trap for standard urinal with vent arm with operating and other couplings in C.P.brass: 80 mm dia	each	158.00
1895	C.P.brass trap 40 mm dia	each	99.00

Code No	Description	Unit	Rate Rs.
1896	100 mm S.C.I. trap with vent heel	each	260.00
1897	100 mm S.C.I. trap with 100 mm inlet and 100 mm outlet	each	221.00
1898	100 mm S.C.I. trap with 100 mm inlet and 75 mm outlet	each	164.00
1913	Vitros china lipped front urinal	each	380.00
1915	Vitros china squatting plate urinal	each	610.00
1947	Vitreous china flat back wash basin 630x450 mm	each	585.00
1949	Vitreous china angle back wash basin 600x480 mm	each	540.00
1950	Vitreous china angle back wash basin 400x400 mm	each	347.00
1951	C.P. brass waste 32 mm	each	48.00
1952	C.P. brass waste 40 mm	each	53.00
1953	Vitreous china indian type w.c. pan size 580 mm	each	290.00
1954	Vitreous china orrisa type w.c. pan size 580 mm	each	700.00
1955	Vitreous china pedestal type water closet	each	554.00
1965	White vitreous china dual purpose closet (Anglo Indian W.C.) suitable for use as squatting pan or European type water closet as per manufacturer's specifications	each	796.00
1970	Vitreous china foot rests 250x125x25 mm	pair	80.00
2202	Carriage of Stone aggregate below 40 mm nominal size	cum	53.21
2203	Carriage of Coarse sand	cum	53.21
2205	Carriage of Steel	tonne	47.29
2209	Carriage of Cement	tonne	47.29
3213	Vitreous china Surgeon type wash basin of size 660x460 mm	each	810.00
3228	600x120 mm glass shelf with anodised aluminium angle frame, C.P. brass brackets and guard rail of standard size	each	95.00
3229	Vitreous china flat back wash basin 550x400 mm	each	450.00
3617			
3620	C.C.I.(spun) socketed soil, waste and vent pipe 1.80 metres long:100mm dia	each	978.00
3621	C.C.I.(spun) socketed soil, waste and vent pipe 1.80 metres long:75mm dia	each	846.00
3624	S.C.I. S&S bends with access door 100mm dia	each	225.00
3625	S.C.I. S&S bends with access door 75mm dia	each	179.00
3628	S.C.I. S&S bend 100mm dia	each	190.00
3629	S.C.I. S&S bend 75mm dia	each	143.00
3634	S.C.I. S&S heel rest sanitary bend 100mm dia	each	233.00
3635	S.C.I. S&S heel rest sanitary bend 75mm dia	each	204.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
3640	S.C.I. S&S single equal junctions100x100x100 mm	each	367.00
3641	S.C.I. S&S single equal junctions75x75x75 mm	each	276.00
3644	S.C.I. S&S single equal junctions with access door 100x100x100 mm	each	396.00
3645	S.C.I. S&S single equal junctionswith access door 75x75x75 mm	each	294.00
3650	S.C.I. S&S double equal junctions100x100x100x100 mm	each	467.00
3651	S.C.I. S&S double equal junctions75x75x75x75 mm	each	373.00
3654	S.C.I. S&S double equal junctions with access door 100x100x100x100 mm.	each	502.00
3655	S.C.I. S&S double equal junctions with access door 75x75x75x75 mm.	each	400.00
3660	S.C.I. S&S single unequal junctions100x100x75 mm	each	461.00
3664	S.C.I. S&S single unequal junctions with access door 100x100x75 mm	each	523.00
3670	S.C.I. S&S double unequal junctions100x100x75x75 mm	each	639.00
3674	S.C.I. S&S double unequal junctionswith access door 100x100x75x75 mm	each	700.00
3681	S.C.I. S&S single equal invert branch of required degree 100x100x100 mm dia	each	325.00
3682	S.C.I. S&S single equal invert branch of required degree 75x75x75 mm dia	each	247.00
3685	S.C.I. S&S double equal invert branch of required degree100x100x100x100 mm dia	each	414.00
3686	S.C.I. S&S double equal invert branch of required degree 75x75x75x75 mm dia	each	334.00
3690	S.C.I. S&S single unequal invert branch of required degree100x100x75 mm dia	each	422.00
3695	S.C.I. S&S double unequal invert branch of required degree100x100x75x75 mm dia	each	574.00
3699	S.C.I. S&S, 75 mm offset for75 mm dia pipe	each	179.00
3707	S.C.I. S&S, 150 mm offset for75 mm dia pipe	each	223.00
3708	S.C.I. S&S, 150 mm offset for100 mm dia pipe	each	306.00
3712	S.C.I. S&S, 114 mm offset for75 mm dia pipe	each	220.00
3713	S.C.I. S&S, 114 mm offset for100 mm dia pipe	each	289.00
3716	S.C.I. S&S, 152 mm offset for75 mm dia pipe	each	275.00
3717	S.C.I. S&S, 152 mm offset for100 mm dia pipe	each	361.00
3728	Centrifugally cast (spun) iron S&S door pieces 100 mm dia	each	230.00
3729	Centrifugally cast (spun) iron S&S door pieces 75 mm dia	each	176.00
3733	C.C.I.(spun)S&S, Slotted Cowl (Terminal Guard) 100 mm	each	154.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
3734	C.C.I.(spun)S&S, Slotted Cowl (Terminal Guard) 75 mm	each	142.00
3738	C.C.I.(spun)S&S, collars 100 mm	each	161.00
3739	C.C.I.(spun)S&S, collars 75 mm	each	115.00
3746	S.C.I. S&S, 76 mm offset for 75 mm dia pipe	each	126.00
3747	S.C.I. S&S, 76 mm offset for 100 mm dia pipe	each	220.00
3749	Vitreous china toilet paper holder of standard size	each	89.00
4202	Red oxide Zinc chromate primer	litre	58.00
7004	Vitreous china flat back wash basin 450x300 mm	each	360.00
7005	Vitreous china 10 litres low level cistern without fittings	each	824.00
7006	Vitreous china 10 litres low level cistern with fittings	each	1,390.00
7048	Rawl plug 50 mm (designation 10 no.)	each	7.00
7095	Stainless steel kitchen sink - with drain board bowl depth 250 mm.	each	4,900.00
7096	Stainless steel kitchen sink - with drain board 510 x 1040mm bowl depth 225 mm.	each	4,600.00
7097	Stainless steel kitchen sink - with drain board 510 x 1040mm bowl depth 200 mm.	each	4,100.00
7098	Stainless steel kitchen sink - with drain board 510x1040mm bowl depth 178 mm	each	2,600.00
7101	Stainless steel kitchen sink - without drain board 610x510mm bowl depth 200 mm	each	2,700.00
7102	Stainless steel kitchen sink - without drain board 610x460mm bowl depth 200 mm.	each	2,500.00
7103	Stainless steel kitchen sink - without drain board 470x420mm bowl depth 178 mm	each	1,600.00
7104	Coloured Orissa pattern W.C. pan 580x440 mm	each	1,043.00
7105	Coloured Pedestal type W.C. pan 580x440 mm (European type)	each	865.00
7106	Coloured Vitreous china 10 lit. low level cistern	each	1,268.00
7107	Coloured (other than black) solid P.V.C. seat in European W.C. pan	each	380.00
7112	Circular shape 450 mm dia Mirror with Plastic moulded frame	each	370.00
7113	Rectangular shape 453x357 mm Mirror with Plastic moulded frame	each	245.00
7114	Oval shape 450x350 mm (outer dimensions) Mirror with Plastic moulded frame	each	280.00
7115	Rectangular shape 1500x450 mm Mirror with Plastic moulded frame	each	635.00
7116	Hard board 6 mm thick	sqm	151.00
7117	Semi Rigid PVC waste pipe for sink and wash basin 32 mm dia with length not less than 700 mm i/c PVC waste fittings	each	16.00
7118	Semi Rigid PVC waste pipe for sink and wash basin 40 mm dia with	each	21.00

Code No	Description	Unit	Rate Rs.
	length not less than 700 mm i/c PVC waste fittings		
7119	Flexible (coil shaped) PVC waste pipe for sink and wash basin 32 mm dia with length not less than 700 mm i/c PVC waste fittings	each	20.00
7120	Flexible (coil shaped) PVC waste pipe for sink and wash basin 40 mm dia with length not less than 700 mm i/c PVC waste fittings	each	22.00
7123	Coloured High density polythylene/ poly propylene 10 lit. (full flush) capacity controlled low level flushing cistern with fittings	each	632.00
7126	White Vitreous china 10 lit. (full flush) capacity controlled low level flushing cistern with all fittings	each	858.00
7127	Coloured Vitreous china 10 lit. (full flush) capacity controlled low level flushing cistern with all fittings	each	1,277.00
7358	Flushing Cistern P.V.C. 10 lts capacity ( low level ) (White) ( with fittings, accessories and flush pipe)	each	570.00
7359	P.V.C. automatic flushing cistern 5 lts capacity	each	430.00
7361	P.V.C. automatic flushing cistern 10 lts capacity	each	465.00
7363	15 mm C.P. brass tap with elbow operation lever	each	396.00
7364	White glazed fire clay draining board 600x450x25 mm	each	390.00
7375	G.I. flush pipe and C.P. brass spreader including C.P. connecting pipe Single lipped urinal	each	352.00
7376	G.I. flush pipe and C.P. brass spreader including C.P. connecting pipe Range of two lipped urinals	each	880.00
7377	G.I. flush pipe and C.P. brass spreader including C.P. connecting pipe Range of three lipped urinals	each	1,070.00
7378	G.I. flush pipe and C.P. brass spreader including C.P. connecting pipe Range of four lipped urinals	each	1,530.00
7379	White vitreous china clay half stall urinal flat back 580x380x350 mm or angle back 450x375x350 mm with waste fittings as per IS : 2556	each	1,224.00
7491	Waste Coupling 31/32MM	Each	45.00
7492	Waste Coupling 38/40MM	Each	66.00
7493	Bottle Trap 31/32MM	Each	295.00
7494	Bottle Trap 38/40MM	Each	320.00
7503	Liquid Soap Container of 400ml capacity	Each	135.00
7504	Towel Ring 215xd200x37mm	Each	108.00
7505	Towel Rail (450MM)	Each	180.00
7506	Towel Rail (600MM)	Each	210.00
7507	Shelf 450x124x36mm	Each	245.00
7508	Urinal Spreader 15MM	Each	120.00
7805	Salem Stainless steel AISI - 304 (18/8) Orrisa pattern W.C. pan	each	3,350.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
	724mm X 578mm		
7806	Salem Stainless steel AISI - 304 (18/8) Round basin 405mm X 355mm	each	1,500.00
7807	Salem Stainless steel AISI - 304 (18/8) Wash basin 530mm X 345mm	each	1,350.00
7808	Centrifugally cast (spun) iron S&S 100 mm inlet and 100 mm outlet	each	309.00
7809	Centrifugally cast (spun) iron S&S 100 mm inlet and 75 mm outlet	each	334.00
7858	P.T.M.T. Urinal cock 15mm dia	each	90.00
9999	Sundries	L.S.	2.60



## 17.0 SANITARY INSTALLATIONS

Code No	Description	Unit	Rate Rs.
17.1	Providing and fixing water closet squatting pan (Indian type W.C. pan ) with 100mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required :		
17.1.1	White Vitreous china Orissa pattern W.C. pan of size 580x440mm with integral type foot rests.	each	2,304.65
17.1.2	Stainless Steel AISI-304(18/8) Orissa pattern W.C. pan of size 585x480 mm with flush pipe and integrated type foot rests.	each	5,382.60
17.2	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required :		
17.2.1	W.C. pan with ISI marked white solid plastic seat and lid	each	2,152.50
17.2.2	W.C. pan with ISI marked black solid plastic seat and lid	each	2,123.45
17.3	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I.brackets, 40mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete including painting of fittings and brackets, cutting and making good the walls and floors wherever required :		
17.3.1	W.C. pan with ISI marked white solid plastic seat and lid.	each	3,282.95
17.3.2	W.C. pan with ISI marked black solid plastic seat and lid.	each	3,253.95
17.4	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350mm and 340x410x265mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :		
17.4.1	One urinal basin with 5 litre white P.V.C. automatic flushing cistern.	each	2,018.70
17.4.2	Range of two urinal basins with 5 litre white P.V.C. automatic flushing cistern.	each	3,393.60
17.4.3	Range of three urinal basins with 10litre white P.V.C. automatic flushing cistern.	each	4,491.60
17.4.4	Range of four urinal basins with 10 litre white P.V.C. automatic flushing cistern.	each	6,062.20
17.5	Providing and fixing white vitreous china flat back half stall urinal of size		

Code No	Description	Unit	Rate Rs.
	580x380x350mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS : 2556, C.I. trap with outlet grating and other couplings in C.P. brass including painting of fittings and cutting and making good the walls and floors wherever required :		
17.5.1	Single half stall urinal with 5 litre P.V.C. automatic flushing cistern.	each	3,720.30
17.5.2	Range of two half stall urinals with 5 litre P.V.C. automatic flushing cistern.	each	5,960.75
17.5.3	Range of three half stall urinals with 10 litre P.V.C. automatic flushing cistern.	each	7,936.50
17.5.4	Range of four half stall urinals with 10 litre P.V.C. automatic flushing cistern.	each	9,811.40
17.6	Providing and fixing one piece construction white vitreous china squatting plate with an integral longitudinal flushing pipe, white P.V.C. automatic flushing cistern, with fittings, standard size G.I. flush pipe for back and front flush with standard spreader pipes with fittings, G.I clamps and C.P. brass coupling complete including painting of fittings and cutting and making good the walls and floors etc. wherever required :		
17.6.1	Single squatting plate with 5 litre P.V.C. automatic flushing cistern.	each	2,392.55
17.6.2	Range of two squatting plates with 5 litre P.V.C. automatic flushing cistern.	each	3,548.10
17.6.3	Range of three squatting plates with 10 litre P.V.C. automatic flushing cistern.	each	4,732.40
17.6.4	Range of four squatting plates with 10 litre P.V.C. automatic flushing cistern.	each	5,789.45
17.7	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require :		
17.7.1	White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps.	each	1,332.90
17.7.2	White Vitreous China Wash basin size 630x450 mm with a single 15 mm C.P. brass pillar tap.	each	1,201.70
17.7.3	White Vitreous China Wash basin size 550x400 mm with a pair of 15 mm C.P. brass pillar taps.	each	1,176.10
17.7.4	White Vitreous China Flat back wash basin size 550x400 mm with single 15 mm C.P. brass pillar tap.	each	1,044.90
17.7.5	White Vitreous China Angle back wash basin size 600x480 mm with single 15 mm C.P. brass pillar tap.	each	1,149.45

Code No	Description	Unit	Rate Rs.
17.7.6	White Vitreous China Angle back wash basin size 400x400 mm with single 15 mm C.P. brass pillar tap.	each	925.25
17.7.7	White Vitreous China Flat back wash basin size 450x300 mm with single 15 mm C.P. brass pillar tap.	each	940.35
17.7.8	White Vitreous China Surgeon type wash basin of size 660x460 mm with a pair of 15 mm C.P. brass pillar taps with elbow operated levers.	each	2,274.85
17.7.9	White Vitreous China Surgeon type wash basin of size 660x460 mm with single 15 mm C.P. brass pillar taps with elbow operated levers ISI marked.	each	1,803.35
17.7.10	Stainless Steel AISI-304(18/8) Round basin 405x355 mm with single 15 mm C.P. brass pillar tap.	each	2,264.45
17.7.11	Stainless Steel AISI-304(18/8) Wash basin 530x345 mm with single 15 mm C.P. brass pillar tap.	each	2,090.25
17.8	Providing and fixing white vitreous china pedestal for wash basin completely recessed at the back for the reception of pipes and fittings.	each	705.90
17.9	Providing and fixing kitchen sink with C.I. brackets, C.P. brass chain with rubber plug, 40 mm C.P. brass waste complete, including painting the fittings and brackets, cutting and making good the walls wherever required :		
17.9.1	White glazed fire clay kitchen sink of size 600x450x250 mm.	each	1,793.35
17.10	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS 13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required :		
17.10.1	Kitchen sink with drain board		
17.10.1.1	510x1040 mm bowl depth 250mm.	each	6,154.35
17.10.1.2	510x1040 mm bowl depth 225mm.	each	5,805.90
17.10.1.3	510x1040 mm bowl depth 200mm.	each	5,225.15
17.10.1.4	460x915 mm bowl depth 178mm.	each	3,482.90
17.10.2	Kitchen sink without drain board		
17.10.2.1	610x510 mm bowl depth 200 mm.	each	3,439.20
17.10.2.2	610x460 mm bowl depth 200 mm.	each	3,206.90
17.10.2.3	470x420 mm bowl depth 178 mm.	each	2,161.55
17.11	Providing and fixing white vitreous china laboratory sink with C.I. brackets, C.P. brass chain with rubber plug 40mm C.P brass waste and 40mm C.P. brass trap with necessary C.P. brass unions complete including painting of fittings and brackets, cutting and making good the wall wherever required :		

Code No	Description	Unit	Rate Rs.
	17.11.1 Size 450x300x150mm	each	1,295.10
	17.11.2 Size 600x450x200mm	each	2,149.95
17.12	Providing and fixing draining board with C.I. brackets including painting of brackets, cutting and making good the walls wherever required :		
	17.12.1 White glazed fire clay draining board of size 600x450x25mm	each	638.60
17.13	Providing and fixing white vitreous china water closet squatting pan (Indian type)		
	17.13.1 Long pattern W.C. pan of size 580 mm	each	534.60
	17.13.2 Orissa pattern W.C. pan of size 580x440 mm	each	1,010.85
17.14	Extra for using coloured W.C. pan instead of white W.C. pan		
	17.14.1 Orissa pattern W.C. pan 580x440 mm	each	398.40
17.15	Providing and fixing white vitreous china pedestal type (European type/ wash down type) water closet pan.	each	841.25
17.16	Extra for using coloured pedestal type W.C pan (European type) with low level cistern of same colour instead of white vitreous china W.C pan and cistern.	each	876.95
17.17	Providing and fixing a pair of white vitreous china foot rests of standard pattern for squatting pan water closet:		
	17.17.1 250x130x30 mm	pair	111.70
	17.17.2 250x125x25 mm	pair	112.85
17.18	Providing and fixing P.V.C. low level flushing cistern with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete.		
	17.18.1 10 litre capacity - White	each	709.75
	17.18.2 10 litre capacity - coloured	each	783.85
17.19	Providing and fixing controlled flush, low level cistern made of vitreous china with all fittings complete.		
	17.19.1 10 litre (full flush) capacity-white	each	1,178.80
	17.19.2 10 litre (full flush) capacity-coloured	each	1,665.45
17.20	Providing and fixing solid plastic seat with lid for pedestal type W.C. pan complete :		
	17.20.1 White solid plastic seat with lid	each	334.95
	17.20.2 Black solid plastic seat with lid	each	305.90
17.21	Extra for providing coloured other than black solid P.V.C. plastic seat and cover in European type W.C. pan, instead of white plastic seat and cover.	each	121.95
17.22	Providing and fixing G.I. inlet connection for flush pipe connecting with W.C. pan.	each	73.60

Code No	Description	Unit	Rate Rs.
17.23	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350mm and 340x410x265mm sizes respectively.	each	578.95
17.24	Providing and fixing white vitreous china squatting plate urinal with integral rim longitudinal flush pipe.	each	1,069.65
17.25	Providing and fixing white vitreous china wash basin including making all connections but excluding the cost of fittings :		
17.25.1	Flat back wash basin of size 630x450mm.	each	753.00
17.25.2	Flat back wash basin of size 550x400mm.	each	596.20
17.25.3	Angle back wash basin of size 600x480mm.	each	700.75
17.25.4	Angle back wash basin of size 400x400mm.	each	476.55
17.25.5	Flat back wash basin of size 450x300mm.	each	491.65
17.25.6	Surgeon type wash basin of size 660x460mm.	each	1,014.35
17.26	Providing and fixing kitchen sink including making all connections excluding cost of fittings.		
17.26.1	White glazed fire clay sink of size 600x450x250mm.	each	1,444.00
17.27	Providing and fixing white vitreous china laboratory sink including making all connections excluding cost of fittings:		
17.27.1	Size 450x300x150 mm.	each	830.75
17.27.2	Size 600x450x200 mm.	each	1,685.60
17.28	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.		
17.28.1	Semi rigid pipe		
17.28.1.1	32 mm dia	each	42.15
17.28.1.2	40 mm dia	each	47.95
17.28.2	Flexible pipe		
17.28.2.1	32 mm dia	each	46.80
17.28.2.2	40 mm dia	each	49.10
17.29	Providing and fixing 100 mm sand cast Iron grating for gully trap.	each	16.45
17.30	Providing and fixing in position 25mm diameter mosquito proof coupling of approved municipal design.	each	28.85
17.31	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	each	493.65
17.32	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing :		
17.32.1	Circular shape 450mm dia.	each	599.15

Code No	Description	Unit	Rate Rs.
	17.32.2 Rectangular shape 453x357mm	each	465.10
	17.32.3 Oval shape 450x350mm (outer dimensions)	each	504.00
	17.32.4 Rectangular shape 1500x450 mm	each	1,034.50
17.33	Providing and fixing 600x120x5mm glass shelf with edges round of supported on anodised aluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40 mm long screws, rawl plugs etc., complete.	each	218.80
17.34	Providing and fixing toilet paper holder :		
	17.34.1 C.P. brass	each	147.10
	17.34.2 Vitreous china	each	173.00
17.35	Providing and fixing soil, waste and vent pipes :		
	17.35.1 100 mm dia.		
	17.35.1.1 Sand cast iron S&S pipe as per IS: 1729.	metre	451.00
	17.35.1.2 Centrifugally cast (spun) iron socketed pipe as per IS: 3989.	metre	730.40
	17.35.2 75 mm diameter :		
	17.35.2.1 Sand cast iron S&S pipe as per IS: 1729.	metre	395.45
	17.35.2.2 Centrifugally cast (spun) iron socketed pipe as per IS: 3989.	metre	629.85
17.36	Providing and filling the joints with spun yarn cement slurry and cement mortar 1:2 ( 1 cement : 2 fine sand) in S.C.I./ C.I. Pipes :		
	17.36.1 75 mm dia pipe	each	25.30
	17.36.2 100 mm dia pipe	each	29.80
17.37	Providing and fixing M.S. holder-bat clamps of approved design to Sand Cast iron/cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) including cost of cutting holes and making good the walls etc. :		
	17.37.1 For 100 mm dia. Pipe	each	65.35
	17.37.2 For 75 mm dia. Pipe	each	63.00
17.38	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.		
	17.38.1 100 mm		
	17.38.1.1 Sand cast iron S&S as per IS - 1729	each	255.00
	17.38.1.2 Sand cast iron S&S as per IS - 3989	each	291.00
	17.38.2 75 mm dia		
	17.38.2.1 Sand cast iron S&S as per IS - 1729	each	210.00
	17.38.2.2 Sand cast iron S&S as per IS- 3989	each	230.90
17.39	Providing and fixing plain bend of required degree.		

Code No	Description	Unit	Rate Rs.
	17.39.1 100 mm		
	17.39.1.1 Sand cast iron S&S as per IS - 1729	each	222.45
	17.39.1.2 Sand cast iron S&S as per IS : 3989	each	236.40
	17.39.2 75 mm		
	17.39.2.1 Sand cast iron S&S as per IS -1729	each	175.15
	17.39.2.2 Sand cast iron S&S as per IS - 3989	each	178.65
17.40	Providing and fixing heel rest sanitary bend		
	17.40.1 100 mm dia		
	17.40.1.1 Sand cast iron S&S as per IS - 1729	each	244.50
	17.40.1.2 Sand cast iron S&S as per IS - 3989	each	286.35
	17.40.2 75 mm		
	17.40.2.1 Sand cast iron S&S as per IS - 1729	each	204.20
	17.40.2.2 Sand cast iron S&S as per IS - 3989	each	249.50
17.41	Providing and fixing double equal junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete :		
	17.41.1 100x100x100x100mm		
	17.41.1.1 Sand cast iron S&S as per IS - 1729	each	513.85
	17.41.1.2 Sand cast iron S&S as per IS - 3989	each	612.55
	17.41.2 75x75x75x75 mm		
	17.41.2.1 Sand cast iron S&S as per IS - 1729	each	409.75
	17.41.2.2 Sand cast iron S&S as per IS - 3989	each	487.60
17.42	Providing and fixing double equal plain junction of required degree.		
	17.42.1 100x100x100x100 mm		
	17.42.1.1 Sand cast iron S&S as per IS - 1729	each	473.35
	17.42.1.2 Sand cast iron S&S as per IS - 3989	each	558.15
	17.42.2 75x75x75x75 mm		
	17.42.2.1 Sand cast iron S&S as per IS - 1729	each	356.35
	17.42.2.2 Sand cast iron S&S as per IS - 3989	each	445.75
17.43	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.		
	17.43.1 100x100x100 mm		
	17.43.1.1 Sand cast iron S&S as per IS - 1729	each	374.60
	17.43.1.2 Sand cast iron S&S as per IS - 3989	each	489.60

Code No	Description	Unit	Rate Rs.
	17.43.2 75x75x75 mm		
	17.43.2.1 Sand cast iron S&S as per IS - 1729	each	283.15
	17.43.2.2 Sand cast iron S&S as per IS - 3989	each	364.45
17.44	Providing and fixing single equal plain junction of required degree :		
	17.44.1 100x100x100 mm		
	17.44.1.1 Sand cast iron S&S as per IS - 1729	each	323.50
	17.44.1.2 Sand cast iron S&S as per IS - 3989	each	442.00
	17.44.2 75x75x75 mm		
	17.44.2.1 Sand cast iron S&S as per IS - 1729	each	250.65
	17.44.2.2 Sand cast iron S&S as per IS - 3989	each	333.10
17.45	Providing and fixing double unequal junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete :		
	17.45.1 100x100x75x75 mm		
	17.45.1.1 Sand cast iron S&S as per IS - 1729	each	555.80
	17.45.1.2 Sand cast iron S&S as per IS - 3989	each	842.70
17.46	Providing and fixing double unequal plain junction of required degree:		
	17.46.1 100x100x75x75 mm		
	17.46.1.1 Sand cast iron S&S as per IS - 1729	each	507.00
	17.46.1.2 Sand cast iron S&S as per IS - 3989	each	757.90
17.47	Providing and fixing single unequal junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete :		
	17.47.1 100x100x75 mm		
	17.47.1.1 Sand cast iron S&S as per IS - 1729	each	402.50
	17.47.1.2 Sand cast iron S&S as per IS - 3989	each	637.10
17.48	Providing and fixing single unequal plain junction of required degree :		
	17.48.1 100x100x75 mm		
	17.48.1.1 Sand cast iron S&S as per IS - 1729	each	350.20
	17.48.1.2 Sand cast iron S&S as per IS - 3989	each	551.15
17.49	Providing and fixing double equal plain invert branch of required degree:		
	17.49.1 100x100x100x100 mm		
	17.49.1.1 Sand cast iron S&S as per IS - 1729	each	505.85
	17.49.1.2 Sand cast iron S&S as per IS 3989	each	496.55
	17.49.2 75x75x75x75 mm		



Code No	Description	Unit	Rate Rs.
	17.49.2.1 Sand cast iron S&S as per IS - 1729	each	377.25
	17.49.2.2 Sand cast iron S&S as per IS - 3989	each	400.50
17.50	Providing and fixing single equal plain invert branch of required degree:		
	17.50.1 100x100x100 mm		
	17.50.1.1 Sand cast iron S&S as per iron 1729	each	388.55
	17.50.1.2 Sand cast iron S&S as per IS - 3989	each	393.20
	17.50.2 75x75x75 mm		
	17.50.2.1 Sand cast iron S&S as per IS - 1729	each	290.15
	17.50.2.2 Sand cast iron S&S as per IS - 3989	each	299.45
17.51	Providing and fixing double unequal invert branch of required degree :		
	17.51.1 100x100x75x75 mm		
	17.51.1.1 Sand cast iron S&S as per IS - 1729	each	547.70
	17.51.1.2 Sand cast iron S&S as per IS - 3989	each	682.40
17.52	Providing and fixing single unequal plain invert branch of required degree :		
	17.52.1 100x100x75 mm		
	17.52.1.1 Sand cast iron S&S as per IS - 1729	each	459.40
	17.52.1.2 Sand cast iron S&S as per IS - 3989	each	505.85
17.53	Providing and fixing sand cast iron S&S off sets as per IS: 1729		
	17.53.1 76 mm off sets		
	17.53.1.1 With 75 mm dia. pipe	each	158.90
	17.53.1.2 With 100 mm dia. pipe	each	268.05
	17.53.2 114 mm off sets		
	17.53.2.1 With 75 mm dia. pipe	each	271.25
	17.53.2.2 With 100 mm dia. Pipe	each	351.40
	17.53.3 152 mm off sets		
	17.53.3.1 With 75 mm dia. Pipe	each	340.25
	17.53.3.2 With 100 mm dia. Pipe	each	440.15
17.54	Providing and fixing sand cast iron S&S off sets as per IS: 3989.		
	17.54.1 75 mm off sets		
	17.54.1.1 With 75 mm dia. pipe	each	220.45
	17.54.2 150 mm off sets		
	17.54.2.1 With 75 mm dia. pipe	each	277.75
	17.54.2.2 With 100 mm dia. Pipe	each	374.15

Code No	Description	Unit	Rate Rs.
17.55	Providing and fixing door piece, insertion rubber washer 3mm thick, bolts & nuts complete :		
17.55.1	100 mm		
17.55.1.1	Sand cast iron S&S as per IS - 1729	each	367.65
17.55.1.2	Sand cast iron S&S as per IS - 3989	each	296.80
17.55.2	75 mm		
17.55.2.1	Sand cast iron S&S as per IS - 1729	each	268.05
17.55.2.2	Sand cast iron S&S as per IS - 3989	each	227.40
17.56	Providing and fixing terminal guard:		
17.56.1	100 mm		
17.56.1.1	Sand cast iron S&S as per IS - 1729	each	192.25
17.56.1.2	Sand cast iron S&S as per IS - 3989	each	194.60
17.56.2	75 mm		
17.56.2.1	Sand cast iron S&S as per IS - 1729	each	139.15
17.56.2.2	Sand cast iron S&S as per IS - 3989	each	177.45
17.57	Providing and fixing collar:		
17.57.1	100 mm		
17.57.1.1	Sand cast iron S&S as per IS - 1729	each	143.45
17.57.1.2	Sand cast iron S&S as per IS - 3989	each	202.70
17.57.2	75 mm		
17.57.2.1	Sand cast iron S&S as per IS - 1729	each	107.80
17.57.2.2	Sand cast iron S&S as per IS- 3989	each	146.10
17.58	Providing lead caulked joints to sand cast iron/centrifugally cast (spun) iron pipes and fittings of diameter:		
17.58.1	100 mm	each	126.50
17.58.2	75 mm	each	107.80
17.58.3	50 mm	each	86.60
17.59	Providing and fixing M.S. stays and clamps for sand cast iron/centrifugally cast (spun) iron pipes of diameter :		
17.59.1	100 mm	each	48.25
17.59.2	75 mm	each	41.55
17.59.3	50 mm	each	34.25
17.60	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors :		
17.60.1	100 mm inlet and 100 mm outlet		

Code No	Description	Unit	Rate Rs.
	17.60.1.1 Sand cast iron S&S as per IS: 3989.	each	544.30
	17.60.1.2 Sand Cast Iron S&S as per IS: 1729.	each	442.10
	17.60.2 100 mm inlet and 75 mm outlet		
	17.60.2.1 Sand cast iron S&S as per IS - 3989	each	573.35
	17.60.2.2 Sand Cast Iron S&S as per IS- 1729.	each	375.90
17.61	Cutting chases in brick masonry walls for following diameter sand cast iron/ centrifugally cast (spun) iron pipes and making good the same with cement concrete 1:3:6 ( 1 cement : 3 coarse sand :6 graded stone aggregate 12.5 mm nominal size ) including necessary plaster and pointing in cement mortar 1:4 (1 cement : 4 coarse sand) :		
	17.61.1 100 mm dia.	metre	152.45
	17.61.2 75 mm dia.	metre	108.85
	17.61.3 50 mm dia.	metre	68.40
17.62	Painting C.I. cistern with bitumastic or any other anti-corrosive paint inside and white paint over a coat of zinc chromate yellow primer (of approved quality ) on the outside surface of the cistern flush pipe, other fittings, etc. complete for new work.	each	215.15
17.63	Re-painting C.I. cistern with bitumastic or any other anti-corrosive paint inside and white paint on the outside surface of the cistern, flush pipe, other fittings, etc. complete including polishing of wooden seat and lid and cleaning of W.C. pan with acid wherever necessary.	each	148.55
17.64	Repainting C.I. cistern with synthetic enamel paint of approved colour brand and manufacture on the outside surface of cistern flush pipe, other fittings etc. complete.	each	65.75
17.65	Painting sand cast iron/ centrifugally cast (spun) iron soil, waste vent pipes and fittings with paint of any colour such as chocolate grey, or buff etc. over a coat of primer (of approved quality) for new work :		
	17.65.1 100 mm diameter pipe	metre	17.85
	17.65.2 75 mm diameter pipe	metre	13.70
17.66	Repainting sand cast iron/ centrifugally cast iron (spun) iron, soil, waste, vent pipes and fittings with paint of any colour such as chocolate, grey or buff etc :		
	17.66.1 100 mm diameter pipe	metre	9.30
	17.66.2 75 mm diameter pipe	metre	7.00
17.67	Repainting bath tub of size 1700x730x430mm with enamel paint.	each	208.45
17.68	Providing and fixing vitreous china dual purpose closet suitable for use as squatting pan or European type water closet (Anglo Indian W.C pan) with seat lid with C.P. brass hinges and rubber buffers, 10 litre low level flushing cistern with fitting and brackets, 40mm flush bend 20mm over flow pipe with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings		

Code No	Description	Unit	Rate Rs.
	and brackets, cutting and making good the walls and floors wherever required :		
17.68.1	White vitreous china dual purpose WC pan with white solid plastic seat and lid with white vitreous china flushing cistern and C.P. flush bend.	each	4,142.20
17.69	Providing and fixing PTMT Waste Coupling for wash basin and sink, of approved quality and colour.		
17.69.1	Waste coupling 31mm of 79mm length and 62mm breadth weighing not less than 45gms.	each	75.80
17.69.2	Waste coupling 38mm of 83mm length and 77mm breadth, weighing not less than 60gms.	each	100.20
17.70	Providing and fixing PTMT Bottle Trap for Wash basin and sink.		
17.70.1	Bottle trap 31mm single piece moulded with height of 270mm, effective length of tail pipe 260mm from the centre of the waste coupling 77mm breadth with 25mm minimum water seal, weighing not less than 260gms.	each	366.20
17.70.2	Bottle trap 38mm single piece moulded with height of 270mm, effective length of tail pipe 260mm from the centre of the waste coupling 77mm breadth with 25mm minimum water seal, weighing not less than 263gms.	each	395.25
17.71	Providing and fixing PTMT liquid soap container 109mm wide, 125mm high and 112mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour. weighing not less than 105 gms.	each	164.65
17.72	Providing and fixing PTMT towel ring trapezoidal shape 215mm long, 200mm wide with a minimum distances of 37mm from wall face with concealed fittings arrangement of approved quality and colour. Weighing not less than 88 gms.	each	149.00
17.73	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangement of approved quality and colour.		
17.73.1	450MM long towel rail with total length of 495mm, 78mm wide and effective height of 88mm, weighing not less than 170gms.	each	294.65
17.73.2	600mm long towel rail with total length of 645mm, width 78mm and effective height of 88mm, weighing not less than 190gms.	each	329.50
17.74	Providing and fixing PTMT shelf 440 mm long, 124 mm width and 36 mm height of approved quality and colour. Weighing not less than 300 gms.	each	370.15
17.75	Providing and fixing PTMT 15 mm Urinal spreader size 95x69x100 mm with 1/2" BSP thread and shapes. Weighing not less than 60 gms.	each	147.25
17.76	Providing and fixing PTMT urinal cock of approved quality and colour.		

Code No	Description	Unit	Rate Rs.
17.76.1	15 mm nominal bore, 80mm long. 42 mm high and 30mm wide with BSP female threads weighing not less than 48 gms.	each	113.90
17.77	Providing and fixing M.S. holder bat clamp of approved design to sand cast iron/ cast iron (spun) pipes comprising of M.S. flat brackets made of 50x5mm flat of specified shape, projecting 75mm outside the wall surface and fixed on wall with 4nos, 6mm dia expansion hold fasteners including drilling necessary holes in brick wall/ CC/ RCC surface and the cost of bolts etc. The pipes shall be fixed to the already fixed brackets with the help of 30mm x1.6mm galvanised M.S. flats of specified shape and of total length 420mm and shall be fixed with M.S. nuts, bolts, & washers of size 25x6mm, one bolts on each side of the pipe.		
17.77.1	Total bracket length 580mm of approved shape and design (for single 100mm dia pipe).	each	121.70
17.77.2	Total bracket length 810mm of approved shape and design (for two 100mm dia pipes).	each	148.05
17.77.3	Total bracket length 1040mm of approved shape and design (for three 100mm dia pipes).	each	174.35

**SUB HEAD : 18.0**

**WATER SUPPLY**

### BASIC RATES (SH: 18.0 WATER SUPPLY)

Code No	Description	Unit	Rate Rs.
0010	Hire charges of Derrickmonkey rope	Day	500.00
0114	Beldar	Day	135.25
0115	Coolie	Day	135.25
0116	Fitter (grade 1)	Day	151.50
0117	Assistant Fitter or 2nd class Fitter	Day	141.60
0123	Mason (brick layer) 1st class	Day	151.50
0124	Mason (brick layer) 2nd class	Day	141.60
0761	Fuel wood	quintal	265.00
0771	Kerosene oil	litre	19.00
1301	Bleaching powder	quintal	1,550.00
1304	Surface box for stop cock	each	72.00
1305	Surface box for sluice valve	each	140.00
1307	Surface box for water meter	each	185.00
1339	Brass bib-cock 15 mm dia	each	157.00
1340	Brass bib-cock 20 mm dia	each	193.00
1342	Brass stop-cock 15 mm dia	each	157.00
1343	Brass stop-cock 20 mm dia	each	193.00
1360	C.I.mouth, brass ferrule 15 mm dia	each	80.00
1361	C.I.mouth, brass ferrule 20 mm dia	each	114.00
1362	C.I.mouth, brass ferrule 25 mm dia	each	156.00
1373	Rubber insertions for 80 mm dia pipe joints	each	9.00
1374	Rubber insertions for 100 mm dia pipe joints	each	12.00
1375	Rubber insertions for 125 mm dia pipe joints	each	13.00
1376	Rubber insertions for 150 mm dia pipe joints	each	15.00
1377	Rubber insertions for 200 mm dia pipe joints	each	20.00
1378	Rubber insertions for 250 mm dia pipe joints	each	30.00
1379	Rubber insertions for 300 mm dia pipe joints	each	38.00
1380	Rubber insertions for 350 mm dia pipe joints	each	45.00
1381	Rubber insertions for 400 mm dia pipe joints	each	66.00
1382	Rubber insertions for 450 mm dia pipe joints	each	83.00
1383	Rubber insertions for 500 mm dia pipe joints	each	106.00
1384	Rubber insertions for 600 mm dia pipe joints	each	118.00
1397	Pig lead	kilogram	58.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
1464	S & S.C.I. standard specials upto 300 mm dia (heavy class)	quintal	2,400.00
1466	S & S.C.I. standard specials over 300 mm dia (heavy class)	quintal	2,595.00
1468	Flanged C.I. standard specials upto 300 mm dia (heavy class)	quintal	4,320.00
1470	Flanged C.I. standard specials over 300 mm dia (heavy class)	quintal	4,772.00
1472	Casing pipe 100 mm dia	metre	292.00
1545	G.I. pipes 15 mm dia	metre	58.00
1546	G.I. pipes 20 mm dia	metre	77.00
1547	G.I. pipes 25 mm dia	metre	109.00
1548	G.I. pipes 32 mm dia	metre	140.00
1549	G.I. pipes 40 mm dia	metre	160.00
1550	G.I. pipes 50 mm dia	metre	211.00
1551	G.I. pipes 65 mm dia	metre	269.00
1552	G.I. pipes 80 mm dia	metre	355.00
1555	G.I. back (jam) nuts 25 mm dia	each	5.00
1559	G.I. back (jam) nuts 65 mm dia	each	15.00
1608	G.I. tees (equal) 25 mm	each	38.00
1612	G.I. tees (equal) 65 mm	each	215.00
1641	G.I. Union 15 mm nominal bore	each	32.00
1642	G.I. Union 20 mm nominal bore	each	50.00
1643	G.I. Union 25 mm nominal bore	each	59.00
1644	G.I. Union 32 mm nominal bore	each	73.00
1645	G.I. Union 40 mm nominal bore	each	108.00
1646	G.I. Union 50 mm nominal bore	each	158.00
1647	G.I. Union 65 mm nominal bore	each	324.00
1648	G.I. Union 80 mm nominal bore	each	392.00
1649	Polyethylene water storage tank with cover and suitable locking arrangement	per litre	4.00
1687	Unplasticised P.V.C. connection pipe with brass union 30 cm long 15 mm bore	each	18.00
1688	Unplasticised P.V.C. connection pipe with brass union 30 cm long 20 mm bore	each	25.00
1689	Unplasticised P.V.C. connection pipe with brass union 45 cm long 15 mm bore	each	25.00
1690	Unplasticised P.V.C. connection pipe with brass union 45 cm long 20 mm bore	each	35.00
1693	S.C.I. hand pump	each	450.00



<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
1878	Shower rose C.P.brass for 15 to 20 mm inlet 100 mm dia	each	28.00
1879	Shower rose C.P.brass for 15 to 20 mm inlet 150 mm dia	each	40.00
1881	Spun yarn	kilogram	30.00
1882	Strainer brass 40 mm dia 1.5 metre long	each	405.00
1922	H.P. or L.P. ball valve with polythene floats: 15 mm dia	each	175.00
1923	H.P. or L.P. ball valve with polythene floats: 20 mm dia	each	260.00
1924	H.P. or L.P. ball valve with polythene floats: 25 mm dia	each	300.00
1927	Brass full way valve with C.I. wheel (screwed end) 25 mm dia	each	235.00
1928	Brass full way valve with C.I. wheel (screwed end) 32 mm dia	each	296.00
1929	Brass full way valve with C.I. wheel (screwed end) 40 mm dia	each	330.00
1930	Brass full way valve with C.I. wheel (screwed end) 50 mm dia	each	483.00
1931	Brass full way valve with C.I. wheel (screwed end) 65 mm dia	each	700.00
1932	Brass full way valve with C.I. wheel (screwed end) 80 mm dia	each	1,160.00
1933	Gunmetal non-return valve-horizontal (screwed end) 25 mm dia	each	238.00
1934	Gunmetal non-return valve-horizontal (screwed end) 32 mm dia	each	305.00
1935	Gunmetal non-return valve-horizontal (screwed end) 40 mm dia	each	410.00
1936	Gunmetal non-return valve-horizontal (screwed end) 50 mm dia	each	618.00
1937	Gunmetal non-return valve-horizontal (screwed end) 65 mm dia	each	1,085.00
1938	Gunmetal non-return valve-horizontal (screwed end) 80 mm dia	each	1,540.00
1940	C.I.sluiice valve (with caps) class I : 100 mm dia	each	1,890.00
1941	C.I.sluiice valve (with caps) class I : 125 mm dia	each	2,365.00
1942	C.I.sluiice valve (with caps) class I : 150 mm dia	each	2,840.00
1943	C.I.sluiice valve (with caps) class I : 200 mm dia	each	5,405.00
1944	C.I.sluiice valve (with caps) class I : 250 mm dia	each	8,050.00
1945	C.I.sluiice valve (with caps) class I : 300 mm dia	each	9,920.00
1956	Bolts and nuts 16 mm dia 60 mm long	each	8.00
1957	Bolts and nuts 16 mm dia 65 mm long	each	8.00
1958	Bolts and nuts 20 mm dia 65 mm long	each	12.00
1959	Bolts and nuts 20 mm dia 70 mm long	each	12.00
1960	Bolts and nuts 20 mm dia 75 mm long	each	12.00
1961	Bolts and nuts 20 mm dia 80 mm long	each	13.00
1962	Bolts and nuts 24 mm dia 85 mm long	each	24.00
1963	Bolts and nuts 24 mm dia 90 mm long	each	26.00
1964	Bolts and nuts 27 mm dia 100 mm long	each	30.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
2271	Carriage of G.I. pipes below 100 mm dia	tonne	47.29
2309	Carriage of Cast iron fittings	tonne	47.29
2319	Carriage of Spun iron S & S pipes 100 mm dia	100 metre	116.30
2320	Carriage of Spun iron S & S pipes 125 mm dia	100 metre	155.35
2321	Carriage of Spun iron S & S pipes 150 mm dia	100 metre	193.83
2322	Carriage of Spun iron S & S pipes 200 mm dia	100 metre	315.30
2323	Carriage of Spun iron S & S pipes 250 mm dia	100 metre	448.05
2324	Carriage of Spun iron S & S pipes 300 mm dia	100 metre	553.80
2325	Carriage of Spun iron S & S pipes 350 mm dia	100 metre	775.32
2326	Carriage of Spun iron S & S pipes 400 mm dia	100 metre	1,057.26
2327	Carriage of Spun iron S & S pipes 450 mm dia	100 metre	1,292.20
2328	Carriage of Spun iron S & S pipes 500 mm dia	100 metre	1,292.20
2329	Carriage of Spun iron S & S pipes 600mm dia	100 metre	1,938.30
2330	Carriage of C.I. pipes 500 mm dia	100 metre	1,292.20
2331	Carriage of R.C.C. pipes 900 mm dia	100 metre	2,907.45
2332	Carriage of R.C.C. pipes 1000 mm dia	100 metre	3,876.61
2333	Carriage of R.C.C. pipes 1100 mm dia	100 metre	3,876.61
2334	Carriage of R.C.C. pipes 1200 mm dia	100 metre	3,876.61
2341	Carriage of Pig lead	tonne	47.29
2343	Carriage of ductile iron pipes (k7) 100 mm dia	100 metre	116.30
2344	Carriage of cast iron pipes 150 mm dia	100 metre	193.83
2345	Carriage of cast iron pipes 200 mm dia	100 metre	315.30
2346	Carriage of cast iron pipes 250 mm dia	100 metre	448.05
2347	Carriage of cast iron pipes 300 mm dia	100 metre	553.80
2348	Carriage of cast iron pipes 350 mm dia	100 metre	775.32
2349	Carriage of cast iron pipes 400 mm dia	100 metre	1,057.26
2350	Carriage of cast iron pipes 450 mm dia	100 metre	1,292.20
2351	Carriage of cast iron pipes 500 mm dia	100 metre	1,292.20
2352	Carriage of cast iron pipes 600 mm dia	100 metre	1,938.30
2353	Carriage of cast iron pipes 700 mm dia	100 metre	1,938.30
2355	Carriage of cast iron pipes 800 mm dia	100 metre	1,938.30
2356	Carriage of cast iron pipes 900 mm dia	100 metre	2,907.45
2357	Carriage of cast iron pipes 1000 mm dia	100 metre	3,876.61
3080	Gunmetal non-return valve-horizontal (screwed end) 25 mm dia	each	260.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
3084	Gunmetal non-return valve-horizontal (screwed end) 32 mm dia	each	385.00
3088	Gunmetal non-return valve-horizontal (screwed end) 40 mm dia	each	505.00
3092	Gunmetal non-return valve-horizontal (screwed end) 50 mm dia	each	712.00
3096	Gunmetal non-return valve-horizontal (screwed end) 65 mm dia	each	1,245.00
3300	Gunmetal non-return valve-horizontal (screwed end) 80 mm dia	each	2,038.00
3311	C.I.sluiice valve (with caps) class II : 100 mm dia	each	1,950.00
3314	C.I.sluiice valve (with caps) class II : 125 mm dia	each	2,465.00
3317	C.I.sluiice valve (with caps) class II : 150 mm dia	each	3,000.00
3320	C.I.sluiice valve (with caps) class II : 200 mm dia	each	5,800.00
3321	C.I.sluiice valve (with caps) class II : 250 mm dia	each	8,200.00
3326	C.I.sluiice valve (with caps) class II : 300 mm dia	each	10,250.00
7257	C.P. Brass bibcock 15 mm	each	258.00
7258	C.P. Brass long nose bibcock 15 mm	each	220.00
7259	C.P. Brass long body bibcock 15 mm	each	258.00
7260	C.P. Brass stop cock (concealed) 15 mm	each	258.00
7261	C.P. Brass angle valve 15 mm	each	288.00
7400	15 mm PTMT bib cock	each	96.00
7401	15 mm PTMT bib cockwith flange (fancy)	each	220.00
7402	15 mm PTMT bib cock long body with flange	each	155.00
7403	15 mm dia PTMT stop cock(male thread)	each	96.00
7405	20 mm dia. PTMT stop cock	each	120.00
7406	PTMT pillar cock	each	150.00
7407	PTMT push cock 15 mm dia.	each	90.00
7408	PTMT push cock 12 mm dia. 20 mm BSP	each	75.00
7409	PTMT grating 100 mm dia.	each	30.00
7411	125 mm grating withwaste hole	each	36.00
7412	Rectangular type with openable circular lid 150 mm size 18 mm high with 100 mm dia. (110 gm)	each	90.00
7415	Double acting air valve 50 mm	each	3,050.00
7416	Double acting air valve 80 mm	each	4,480.00
7417	Double acting air valve 100 mm	each	5,800.00
7418	Water meter (including testing charges) 80 mm	each	1,800.00
7419	Water meter (including testing charges) 100 mm	each	2,800.00
7420	Water meter (including testing charges) 150 mm	each	4,000.00
7421	Water meter (including testing charges) 200 mm	each	4,500.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
7422	Dirt box strainer 80 mm	each	2,500.00
7423	Dirt box strainer 100 mm	each	3,750.00
7424	Dirt box strainer 150 mm	each	4,850.00
7425	Dirt box strainer 200 mm	each	6,800.00
7495	Ball Cock 15mm Complete with Epoxy Coated Aluminium Road & H.D. Ball	Each	121.00
7496	Ball Cock 20mm Complete with Epoxy Coated Aluminium Road & H.D. Ball	Each	175.00
7497	Ball Cock 25mm Complete with Epoxy Coated Aluminium Road & H.D. Ball	Each	396.00
7498	Ball Cock 40mm Complete with Epoxy Coated Aluminium Road & H.D. Ball	Each	745.00
7499	Ball Cock 50mm Complete with Epoxy Coated Aluminium Road & H.D. Ball	Each	1,120.00
7500	Angle Stop cock with Flange 15mm	Each	120.00
7501	Swiveling shower 15mm	Each	81.00
7509	Soap Dish/Holder 138x102x75mm	Each	108.00
7651	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 100mm dia	Metre	658.00
7652	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 150mm dia	Metre	978.00
7653	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 200mm dia	Metre	1,348.00
7654	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 250mm dia	Metre	1,743.00
7655	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 300mm dia	Metre	2,238.00
7656	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 350mm dia	Metre	2,625.00
7657	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 400mm dia	Metre	3,763.00
7658	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 450mm dia	Metre	4,175.00
7659	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 500mm dia	Metre	5,600.00
7660	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 600mm dia	Metre	6,275.00
7661	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 700mm dia	Metre	8,538.00
7662	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 750mm dia	Metre	9,725.00
7663	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 800mm dia	Metre	10,000.00
7664	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 900mm dia	Metre	11,663.00
7665	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 1000mm dia	Metre	13,125.00
7666	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 100mm dia	Each	25.00
7668	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 150mm dia	Each	35.00
7669	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 200mm dia	Each	62.00
7670	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 250mm dia	Each	68.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
7671	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 300mm dia	Each	98.00
7672	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 350mm dia	Each	123.00
7673	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 400mm dia	Each	248.00
7674	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 450mm dia	Each	275.00
7675	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 500mm dia	Each	285.00
7676	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 600mm dia	Each	348.00
7677	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 700mm dia	Each	550.00
7678	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 750mm dia	Each	648.00
7679	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 800mm dia	Each	725.00
7680	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 900mm dia	Each	968.00
7681	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 1000mm dia	Each	1,188.00
7682	Ductile Iron K - 12 specials suitable for push on jointing upto 600mm dia	Quintal	8,938.00
7683	Ductile Iron K - 12 specials suitable for push on jointing over 600mm dia	Quintal	13,413.00
7684	Ductile Iron specials suitable for mechanical jointing as per I.S. 9523 - upto 600mm dia	Quintal	9,400.00
7685	Ductile Iron Specials suitable for mechanical jointing as per I.S. 9523 over 600mm dia	Quintal	14,239.00
7686	Ductile Iron Pipe Class K-9 flanges and welding 100mm dia	Metre	1,888.00
7687	Ductile Iron Pipe Class K-9 flanges and welding 150 dia	metre	2,613.00
7688	Ductile Iron Pipe Class K-9 flanges and welding 200mm dia	Metre	3,388.00
7689	Ductile Iron Pipe Class K-9 flanges and welding 250mm dia	Metre	4,498.00
7690	Ductile Iron Pipe Class K-9 flanges and welding 300mm dia	metre	5,788.00
7691	Ductile Iron Pipe Class K-9 flanges and welding 350mm dia	Metre	7,210.00
7692	Ductile Iron Pipe Class K-9 flanges and welding 400mm dia	Metre	8,613.00
7693	Ductile Iron Pipe Class K-9 flanges and welding 450mm dia	Metre	10,413.00
7694	Ductile Iron Pipe Class K-9 flanges and welding 500mm dia	Metre	12,625.00
7695	Ductile Iron Pipe Class K-9 flanges and welding 600mm dia	Metre	17,125.00
7696	Ductile Iron Pipe Class K-9 flanges and welding 700mm dia	Metre	21,125.00
7697	S&S Centrifugally (Spun) C.I. Pipe class LA 100mm dia	Metre	624.00
7698	S&S Centrifugally (Spun) C.I. Pipe class LA 125mm dia	metre	763.00
7699	S&S Centrifugally (Spun) C.I. Pipe class LA 150mm dia	metre	901.00
7700	S&S Centrifugally (Spun) C.I. Pipe class LA 200mm dia	Metre	1,252.00
7701	S&S Centrifugally (Spun) C.I. Pipe class LA 250mm dia	Metre	1,779.00
7702	S&S Centrifugally (Spun) C.I. Pipe class LA 300mm dia	Metre	2,366.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
7703	S&S Centrifugally (Spun) C.I. Pipe class LA 350mm dia	metre	2,918.00
7704	S&S Centrifugally (Spun) C.I. Pipe class LA 400mm dia	Metre	3,574.00
7705	S&S Centrifugally (Spun) C.I. Pipe class LA 450mm dia	Metre	4,276.00
7706	S&S Centrifugally (Spun) C.I. Pipe class LA 500mm dia	Metre	5,211.00
7707	S&S Centrifugally (Spun) C.I. Pipe class LA 600mm dia	Metre	6,884.00
7708	S&S Centrifugally (Spun) C.I. Pipe Specials as per IS 1538 suitable for lead jointing upto 300mm dia	Quintal	3,530.00
7709	S&S Centrifugally (Spun) C.I. Pipe Specials as per IS 1538 suitable for lead jointing over 300mm dia	Quintal	3,988.00
7710	S&S Centrifugally (Spun) C.I. Pipe specials suitable for mechanical joint as per I.S. 13382 upto 300mm dia	Quintal	5,338.00
7711	S&S Centrifugally (Spun) C.I. Pipe Specials suitable for mechanical joint as per IS 13382 over 300mm dia	Quintal	5,580.00
7712	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 100mm dia	Metre	977.00
7713	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 150mm dia	Metre	1,511.00
7714	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 200mm dia	Metre	2,092.00
7715	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 250mm dia	Metre	2,800.00
7716	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 300mm dia	Metre	3,559.00
7717	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 350mm dia	Metre	4,553.00
7718	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 400mm dia	metre	5,885.00
7719	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 450mm dia	Metre	7,627.00
7720	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 500mm dia	metre	9,962.00
7721	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 600mm dia	Metre	12,992.00
7722	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 100mm dia	Metre	597.00
7723	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 150mm dia	Metre	870.00
7724	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 200mm dia	Metre	1,237.00
7725	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 250mm dia	Metre	1,675.00
7726	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 300mm dia	Metre	2,369.00
7727	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 350mm dia	Metre	2,728.00

Code No	Description	Unit	Rate Rs.
7728	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 400mm dia	Metre	3,256.00
7729	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 450mm dia	Metre	3,861.00
7730	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 500mm dia	Metre	4,557.00
7731	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 600mm dia	metre	6,011.00
7732	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 700mm dia	Metre	7,463.00
7733	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 800mm dia	Metre	10,405.00
7734	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 900mm dia	metre	12,798.00
7735	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 1000mm dia	metre	15,505.00
7859	P.T.M.T. Bib cock with nozzle 15mm	each	110.00
7861	P.T.M.T. Stop cock (concealed) 15mm	each	160.00
7862	15 mm nominal bore and 30 cm length PVC connection pipe with P.T.M.T. Nuts	each	27.00
7863	15 mm nominal bore and 45 cm length PVC connection pipe with P.T.M.T. Nuts	each	32.00
7864	P.T.M.T. extension nipple 15mm	each	30.00
7865	P.T.M.T. extension nipple 20mm	each	36.00
7866	P.T.M.T. extension nipple 25mm	each	54.00
8300	1216 mm PE-AL-PE Composit pressure pipe	Metre	79.00
8301	1620 mm PE-AL-PE Composit pressure pipe	Metre	97.00
8302	2025 mm PE-AL-PE Composit pressure pipe	Metre	126.00
8303	2532 mm PE-AL-PE Composit pressure pipe	Metre	172.00
8304	3240 mm PE-AL-PE Composit pressure pipe	Metre	227.00
8305	4050 mm PE-AL-PE Composit pressure pipe	Metre	304.00
8625	Poly propylene- Random - Co - Polymer (PPR) pipes SDR 7.4 - 16 Outer dia	metre	29.00
8626	Poly propylene - Random - Co - Polymer (PPR) pipes SDR 7.4 - 20mm Outer dia.	metre	44.00
8627	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 - 25 mm outer dia.	metre	68.00
8628	Poly propylene - Random - Co - poymer (PPR) pipes SDR 7.4 - 32 mm Outer dia.	metre	111.00
8629	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 - 40mm Outer dia.	metre	176.00
8630	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 - 50mm Outer dia.	metre	257.00
8631	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 - 63mm Outer dia.	metre	400.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
8632	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 - 75mm Outer dia.	metre	575.00
8633	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 - 90mm Outer dia.	metre	917.00
8634	Poly propylene - Random - Co - polymer (PPR) pipes SDR - 11 - 110mm Outer dia.	metre	962.00
8635	Poly propylene - Random - Co - polymer (PPR) pipes SDR - 11- 160mm Outer dia.	metre	2,028.00
8636	Chlorinated Polyvinyl - chloride (CPVC) pipe 15 mm outer dia.	metre	45.00
8637	Chlorinated Polyvinyl - chloride (CPVC) pipe 20 mm outer dia.	metre	55.00
8638	Chlorinated Polyvinyl - chloride (CPVC) pipe 25 mm outer dia.	metre	78.00
8639	Chlorinated Polyvinyl - chloride (CPVC) pipe 32 mm outer dia.	metre	105.00
8640	Chlorinated Polyvinyl - chloride (CPVC) pipe 40 mm outer dia.	metre	150.00
8641	Chlorinated Polyvinyl - chloride (CPVC) pipe 50 mm outer dia.	metre	245.00
8642	Chlorinated Polyvinyl - chloride (CPVC) pipe 62.5mm inner dia.	metre	783.00
8643	Chlorinated Polyvinyl - chloride (CPVC) pipe 75 mm inner dia.	metre	1,030.00
8644	Chlorinated Polyvinyl - chloride (CPVC) pipe 100 mm inner dia.	metre	1,430.00
8645	Chlorinated Polyvinyl - chloride (CPVC) pipe 150 mm inner dia.	metre	2,490.00
9999	Sundries	L.S.	2.60



## 18.0 WATER SUPPLY

Code No	Description	Unit	Rate Rs.
<b>PE – AL – PE COMPOSITE PRESSURE PIPES</b>			
18.1	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450 U.V. stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 80° C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows, tees, reducers, couplers & connectors etc. with clamps at 1.00 metre spacing. This includes testing of joints complete as per direction of the Engineer in charge.		
	<b>Internal work – Exposed on wall</b>		
18.1.1	1216 (16 mm OD) pipe	metre	146.65
18.1.2	1620 (20 mm OD) pipe	metre	176.45
18.1.3	2025 (25 mm OD) pipe	metre	222.85
18.1.4	2532 (32 mm OD) pipe	metre	297.50
18.1.5	3240 (40 mm OD) pipe	metre	391.30
18.1.6	4050 (50 mm OD) pipe	metre	507.60
18.2	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450 U.V. stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 80° C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows, tees, reducers, couplers & connectors etc. with clamps at 1.00 metre spacing. This includes the costs of cutting chases and including testing of joints complete as per direction of the engineer in charge.		
	<b>Concealed work including cutting chases and making good the wall etc.</b>		
18.2.1	1216 (16mm OD) pipe	metre	224.25
18.2.2	1620 (20 mm OD) pipe	metre	260.85
18.2.3	2025 (25 mm OD) pipe	metre	319.80
18.2.4	2532 (32 mm OD) pipe	metre	413.30
18.3	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450 - 2004 U.V. stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 80° C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required ) e.g. elbows ,tees ,reducers, couplers & connectors etc. with trenching, refilling and testing of joints complete as per direction of the engineer in charge.		

Code No	Description	Unit	Rate Rs.
	<b>External work</b>		
18.3.1	1216 (16 mm OD) pipe	metre	143.95
18.3.2	1620 (20 mm OD ) pipe.	metre	171.10
18.3.3	2025 (25 mm OD ) pipe.	metre	214.90
18.3.4	2532 (32 mm OD ) pipe.	metre	284.35
18.3.5	3240 (40 mm OD ) pipe.	metre	371.50
18.3.6	4050 (50 mm OD ) pipe.	metre	487.75
	<b>PP- R PIPES</b>		
18.4	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes SDR 7.4 U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes testing of joints complete as per direction of Engineer in Charge.		
	<b>Internal work – Exposed on wall</b>		
18.4.1	PN - 16 Pipe, 16 mm OD	metre	71.15
18.4.2	PN - 16 Pipe, 20 mm OD	metre	96.40
18.4.3	PN - 16 Pipe, 25 mm OD	metre	135.30
18.4.4	PN - 16 Pipe, 32 mm OD	metre	205.40
18.4.5	PN - 16 Pipe, 40 mm OD	metre	314.30
18.4.6	PN - 16 Pipe, 50 mm OD	metre	436.60
18.5	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes SDR 7.4 U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge.		
	<b>Concealed work including cutting chases and making good the walls etc.,</b>		
18.5.1	PN - 16 Pipe, 16 mm OD	metre	122.65
18.5.2	PN - 16 Pipe, 20 mm OD	metre	153.10
18.5.3	PN - 16 Pipe, 25 mm OD	metre	201.90
18.5.4	PN - 16 Pipe, 32 mm OD	metre	289.30
18.6	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply including all PP - R plain & brass threaded polypropylene random fittings including trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.		

Code No	Description	Unit	Rate Rs.
	<b>External work</b>		
18.6.1	PN - 16 Pipe, 16 mm OD (SDR – 7.4)	metre	68.45
18.6.2	PN - 16 Pipe, 20 mm OD (SDR – 7.4)	metre	91.10
18.6.3	PN - 16 Pipe, 25 mm OD (SDR – 7.4)	metre	129.45
18.6.4	PN - 16 Pipe, 32 mm OD (SDR – 7.4)	metre	194.40
18.6.5	PN - 16 Pipe, 40 mm OD (SDR – 7.4)	metre	294.50
18.6.6	PN - 16 Pipe, 50 mm OD (SDR – 7.4)	metre	416.80
18.6.7	PN - 16 Pipe, 63mm OD (SDR – 7.4)	metre	639.50
18.6.8	PN - 16 Pipe, 75 mm OD (SDR – 7.4)	metre	903.70
18.6.9	PN - 16 Pipe, 90 mm OD (SDR – 7.4)	metre	1,431.50
18.6.10	PN - 10 Pipe, 110 mm OD (SDR - 11)	metre	1,499.45
18.6.11	PN - 10 Pipe, 160 mm OD (SDR - 11)	metre	3,134.30
	<b>C.P.V.C. PIPES</b>		
18.7	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.		
	<b>Internal work - Exposed on wall</b>		
18.7.1	15 mm nominal outer dia .Pipes.	metre	97.95
18.7.2	20 mm nominal outer dia .Pipes.	metre	115.65
18.7.3	25 mm nominal outer dia .Pipes.	metre	150.40
18.7.4	32 mm nominal outer dia .Pipes.	metre	196.35
18.7.5	40 mm nominal outer dia .Pipes.	metre	275.05
18.7.6	50 mm nominal outer dia .Pipes.	metre	418.50
18.8	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge.		
	<b>Concealed work including cutting chases and making good the walls etc.</b>		
18.8.1	15 mm nominal outer dia .Pipes.	metre	155.15
18.8.2	20 mm nominal outer dia .Pipes.	metre	175.50
18.8.3	25 mm nominal outer dia .Pipes.	metre	222.25

Code No	Description	Unit	Rate Rs.
18.8.4	32 mm nominal outer dia .Pipes.	metre	277.10
18.9	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement ,trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.		
	<b>External work</b>		
18.9.1	15 mm nominal outer dia .Pipes.	metre	92.60
18.9.2	20 mm nominal outer dia .Pipes.	metre	107.70
18.9.3	25 mm nominal outer dia .Pipes.	metre	144.55
18.9.4	32 mm nominal outer dia .Pipes.	metre	185.30
18.9.5	40 mm nominal outer dia .Pipes.	metre	255.25
18.9.6	50 mm nominal outer dia .Pipes.	metre	398.65
18.9.7	62.50 mm nominal inner dia Pipes.	metre	1,217.80
18.9.8	75 mm nominal inner dia .Pipes.	metre	1,590.75
18.9.9	100mm nominal inner dia .Pipes.	metre	2,206.10
18.9.10	150 mm nominal inner dia .Pipes.	metre	3,831.90
18.10	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, including cutting and making good the walls etc.		
	<b>Internal work – Exposed on wall.</b>		
18.10.1	15 mm dia. nominal bore	metre	105.85
18.10.2	20 mm dia. nominal bore	metre	133.85
18.10.3	25 mm dia. nominal bore	metre	179.65
18.10.4	32 mm dia. nominal bore	metre	226.10
18.10.5	40 mm dia. nominal bore	metre	264.05
18.10.6	50 mm dia. nominal bore	metre	342.90
18.11	Concealed pipe including painting with anti corrosive bitumastic paint, cutting chases and making good the wall		
18.11.1	15 mm dia nominal bore	metre	144.75
18.11.2	20 mm dia nominal bore	metre	170.15
18.12	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc.		
	<b>External work</b>		
18.12.1	15 mm dia. nominal bore	metre	94.05
18.12.2	20 mm dia. nominal bore	metre	116.60
18.12.3	25 mm dia. nominal bore	metre	156.85

Code No	Description	Unit	Rate Rs.
	18.12.4 32 mm dia. nominal bore	metre	193.60
	18.12.5 40 mm dia. nominal bore	metre	219.60
	18.12.6 50 mm dia. nominal bore	metre	280.10
	18.12.7 65 mm dia. nominal bore	metre	356.15
	18.12.8 80 mm dia. nominal bore	metre	458.15
18.13	Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete :		
	18.13.1 25 to 40 mm nominal bore	each	166.05
	18.13.2 50 to 80 mm nominal bore	each	423.20
18.14	Fixing water meter and stop cock in G.I. pipe line including cutting and threading the pipe and making long screws etc. complete (cost of water meter and stop cock to be paid separately).	each	121.90
	<b>BRASS FITTINGS</b>		
18.15	Providing and fixing brass bib cock of approved quality :		
	18.15.1 15 mm nominal bore	each	191.70
	18.15.2 20 mm nominal bore	each	235.20
18.16	Providing and fixing brass stop cock of approved quality :		
	18.16.1 15 mm nominal bore	each	191.70
	18.16.2 20 mm nominal bore	each	235.20
18.17	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :		
	18.17.1 25 mm nominal bore	each	285.50
	18.17.2 32 mm nominal bore.	each	358.00
	18.17.3 40 mm nominal bore	each	399.00
	18.17.4 50 mm nominal bore	each	578.20
	18.17.5 65 mm nominal bore	each	831.75
	18.17.6 80 mm nominal bore	each	1,369.25
18.18	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :		
	18.18.1 15 mm nominal bore	each	228.35
	18.18.2 20 mm nominal bore	each	333.25
	18.18.3 25 mm nominal bore	each	385.90
18.19	Providing and fixing gun metal non- return valve of approved quality (screwed end) :		
	18.19.1 25 mm nominal bore		

Code No	Description	Unit	Rate Rs.
	18.19.1.1 Horizontal	each	292.15
	18.19.1.2 Vertical	each	317.70
	18.19.2 32 mm nominal bore		
	18.19.2.1 Horizontal	each	371.45
	18.19.2.2 Vertical	each	464.40
	18.19.3 40 mm nominal bore		
	18.19.3.1 Horizontal	each	494.95
	18.19.3.2 Vertical	each	605.30
	18.19.4 50 mm nominal bore		
	18.19.4.1 Horizontal	each	738.20
	18.19.4.2 Vertical	each	847.40
	18.19.5 65 mm nominal bore		
	18.19.5.1 Horizontal	each	1,282.10
	18.19.5.2 Vertical	each	1,467.95
	18.19.6 80 mm nominal bore		
	18.19.6.1 Horizontal	each	1,812.25
	18.19.6.2 Vertical	each	2,390.70
18.20	Providing and fixing brass ferrule with C.I. mouth cover including boring and tapping the main :		
	18.20.1 15 mm nominal bore	each	139.75
	18.20.2 20 mm nominal bore	each	187.20
	18.20.3 25 mm nominal bore	each	243.70
18.21	Providing and fixing uplasticised PVC connection pipe with brass unions :		
	18.21.1 30 cm length		
	18.21.1.1 15 mm nominal bore	each	35.10
	18.21.1.2 20 mm nominal bore	each	43.25
	18.21.2 45 cm length		
	18.21.2.1 15 mm nominal bore	each	44.75
	18.21.2.2 20 mm nominal bore	each	56.35
18.22	Providing and fixing C.P. brass shower rose with 15 or 20 mm inlet :		
	18.22.1 100 mm diameter	each	40.40
	18.22.2 150 mm diameter	each	55.80
	<b>C.I/ DUCTILE IRON PIPES &amp; SPECIALS</b>		
18.23	Laying in position centrifugally cast (spun) iron S&S or flanged pipes	quintal	55.55

Code No	Description	Unit	Rate Rs.
	(excluding cost of pipe)		
18.24	Laying in position S&S or flanged C.I. special such as tees, bends, collars, tapers and caps etc.(excluding cost of specials).	quintal	100.25
18.25	Providing and laying S&S C.I. standard specials such as tees, bends, collars, tapers, caps etc. (Heavy class) :		
18.25.1	Up to 300 mm dia.	quintal	2,893.35
18.25.2	Over 300 mm dia.	quintal	3,119.85
18.26	Providing and laying flanged C.I. standard specials such as tees, bends, collars, tapers, caps etc., suitable for flanged jointing as per IS : 1538 :		
18.26.1	Up to 300 mm dia.	quintal	5,123.45
18.26.2	Over 300 mm dia.	quintal	5,648.45
18.27	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS - 1536 :		
18.27.1	100 mm dia. pipe	metre	737.15
18.27.2	125 mm dia. pipe	metre	902.35
18.27.3	150 mm dia. pipe	metre	1,066.65
18.27.4	200 mm dia. pipe	metre	1,484.00
18.27.5	250 mm dia. pipe	metre	2,106.80
18.27.6	300 mm dia. pipe	metre	2,800.00
18.27.7	350 mm dia. pipe	metre	3,455.55
18.27.8	400 mm dia. pipe	metre	4,233.20
18.27.9	450 mm dia. pipe	metre	5,065.65
18.27.10	500 mm dia. pipe	metre	6,165.95
18.27.11	600 mm dia. pipe	metre	8,149.40
18.28	Providing lead caulked joints to spun iron or C.I. pipes and specials including testing of joints but excluding the cost of pig lead :		
18.28.1	100 mm diameter pipe	each	82.25
18.28.2	125 mm diameter pipe	each	120.45
18.28.3	150 mm diameter pipe	each	123.30
18.28.4	200 mm diameter pipe	each	163.45
18.28.5	250 mm diameter pipe	each	204.20
18.28.6	300 mm diameter pipe	each	246.35
18.28.7	350 mm diameter pipe	each	256.00
18.28.8	400 mm diameter pipe	each	332.10
18.28.9	450 mm diameter pipe	each	371.60

Code No	Description	Unit	Rate Rs.
	18.28.10 500 mm diameter pipe	each	393.70
	18.28.11 600 mm diameter pipe	each	528.40
18.29	Supplying pig lead at site of work.	quintal	6,742.20
18.30	Providing flanged joints to double flanged C.I./ D.I. pipes and specials including testing of joints :		
	18.30.1 80 mm diameter pipe	each	65.60
	18.30.2 100 mm diameter pipe	each	113.00
	18.30.3 125 mm diameter pipe	each	114.15
	18.30.4 150 mm diameter pipe	each	156.90
	18.30.5 200 mm diameter pipe	each	162.70
	18.30.6 250 mm diameter pipe	each	236.75
	18.30.7 300 mm diameter pipe	each	246.05
	18.30.8 350 mm diameter pipe	each	335.05
	18.30.9 400 mm diameter pipe	each	564.20
	18.30.10 450 mm diameter pipe	each	702.00
	18.30.11 500 mm diameter pipe	each	778.45
	18.30.12 600 mm diameter pipe	each	892.00
<b>C.I. SLUICE VALVES/ FIRE HYDRANTS &amp; FIXTURES</b>			
18.31	Providing and fixing C.I. sluice valves (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pieces if required will be paid separately) :		
	18.31.1 100 mm diameter		
	18.31.1.1 Class I	each	2,468.05
	18.31.1.2 Class II	each	2,550.45
	18.31.2 125 mm diameter		
	18.31.2.1 Class I	each	3,034.75
	18.31.2.2 Class II	each	3,163.60
	18.31.3 150 mm diameter		
	18.31.3.1 Class I	each	3,689.10
	18.31.3.2 Class II	each	3,889.75
	18.31.4 200 mm diameter		
	18.31.4.1 Class I	each	6,731.80
	18.31.4.2 Class II	each	7,221.20
	18.31.5 250 mm diameter		
	18.31.5.1 Class I	each	10,013.80



Code No	Description	Unit	Rate Rs.
	18.31.5.2 Class II	each	10,240.90
	18.31.6 300 mm diameter		
	18.31.6.1 Class I	each	12,270.50
	18.31.6.2 Class II	each	12,718.30
18.32	Constructing masonry Chamber 30x30x50 cm, inside with 75 class designation brick work in cement mortar 1:4 (1 cement :4 coarse sand) for stop cock, with C. I. surface box 100x100 x75 mm (inside) with hinged cover fixed in cement concrete slab 1:2:4 mix (1 cement :2 coarse sand : 4 graded stone aggregate 20 mm nominal size ) necessary excavation foundation concrete 1:5:10 ( 1 cement :5 fine sand:10 graded stone aggregate 40mm nominal size ) and inside plastering with cement mortar 1:3 (1 cement :3 coarse sand) 12mm thick finished with a floating coat of neat cement complete as per standard design :		
	18.32.1 With F.P.S. bricks	each	599.80
18.33	Constructing masonry Chamber 60x60x75 cm, inside with 75 class designation brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100mm. top diameter, 160 mm bottom diameter and 180 mm deep ( inside) with chained lid and RCC top slab 1:2:4 mix (1 cement :2 coarse sand : 4 graded stone aggregate 20mm nominal size ) necessary excavation foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design :		
	18.33.1 With F.P.S. bricks	each	3,595.30
18.34	Constructing masonry Chamber 90x90x100 cm, inside with 75 class designation brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100 mm. top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size ) necessary excavation foundation concrete 1:5:10 (1 cement : 5 fine sand:10 graded stone aggregate 40 mm nominal size ) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design :		
	18.34.1 With F.P.S. bricks	each	6,147.95
18.35	Constructing masonry Chamber 120x120x100 cm, inside with 75 class designation brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100 mm. top diameter, 160 mm bottom diameter and 180 mm deep ( inside) with chained lid and RCC top slab 1:2:4 mix (1 cement :2 coarse sand : 4 graded stone aggregate 20 mm nominal size) necessary excavation foundation concrete 1:5:10 (1 cement : 5 fine sand:10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a		

Code No	Description	Unit	Rate Rs.
	floating coat of neat cement complete as per standard design :		
18.35.1	With F.P.S. bricks	each	8,528.75
18.36	Constructing masonry Chamber 60x60x75 cm, inside with 75 class designation brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for fire hydrants, with C.I. surface box 350x350 mm. top and 165 mm deep ( inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) necessary excavation foundation concrete 1:5:10 (1 cement : 5 fine sand:10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design :		
18.36.1	With F.P.S. bricks	each	3,388.65
18.37	Constructing masonry Chamber 60x45x50 cm, inside with 75 class designation brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for water meter complete with C.I. double flap surface box 400x200x200 mm (inside) with locking arrangement and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) necessary excavation foundation concrete 1:5:10 ( 1 cement : 5 fine sand:10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design :		
18.37.1	With F.P.S. bricks	each	3,366.00
18.38	Painting G.I. pipes and fittings with synthetic enamel white paint over a ready mixed priming coat, both of approved quality for new work :		
18.38.1	15 mm diameter pipe.	metre	4.65
18.38.2	20 mm diameter pipe.	metre	5.45
18.38.3	25 mm diameter pipe.	metre	7.20
18.38.4	32 mm diameter pipe.	metre	8.50
18.38.5	40 mm diameter pipe.	metre	10.10
18.38.6	50 mm diameter pipe.	metre	11.80
18.39	Repainting G.I. pipes and fittings with synthetic enamel white paint of approved quality :		
18.39.1	15 mm diameter pipe.	metre	2.45
18.39.2	20 mm diameter pipe.	metre	2.85
18.39.3	25 mm diameter pipe	metre	3.70
18.39.4	32 mm diameter pipe	metre	4.30
18.39.5	40 mm diameter pipe	metre	5.05
18.39.6	50 mm diameter pipe	metre	5.90
18.40	Painting G.I. pipes and fittings with two coats of anti-corrosive		

Code No	Description	Unit	Rate Rs.
	bitumastic paint of approved quality :		
18.40.1	15 mm diameter pipe	metre	2.60
18.40.2	20 mm diameter pipe	metre	3.05
18.40.3	25 mm diameter pipe	metre	3.90
18.40.4	32 mm diameter pipe	metre	4.55
18.40.5	40 mm diameter pipe	metre	5.20
18.40.6	50 mm diameter pipe	metre	6.10
18.40.7	65 mm diameter pipe	metre	7.50
18.40.8	80 mm diameter pipe	metre	8.65
18.41	Providing and filling sand of grading zone V or coarser grade all-round the G.I. pipes in external work.		
18.41.1	15 mm diameter pipe	metre	21.95
18.41.2	20 mm diameter pipe	metre	22.25
18.41.3	25 mm diameter pipe	metre	22.85
18.41.4	32 mm diameter pipe	metre	23.40
18.41.5	40 mm diameter pipe	metre	23.70
18.41.6	50 mm diameter pipe	metre	24.60
18.41.7	65 mm diameter pipe	metre	38.85
18.41.8	80 mm diameter pipe	metre	40.00
18.41.9	100 mm diameter pipe	metre	42.40
18.41.10	150 mm diameter pipe	metre	63.15
18.42	Boring with 100 mm diameter casting pipe for hand pump/ tube well in all soils except ordinary hard rocks requiring blasting including removing the casing pipe after the hand pipe/tube well is lowered and tested :		
18.42.1	Up to 6 metres depth.	metre	151.00
18.42.2	Beyond 6 m and up to 12 m depth.	metre	179.25
18.42.3	Beyond 12 m and up to 18 m depth.	metre	208.70
18.43	Providing and placing in position filters of 40 mm diameter G.I. pipe with brass strainer of approved quality.	metre	367.35
18.44	Providing and fixing to filter and lowering to proper levels 40 mm G.I. pipe for tube well including cleaning and priming the tube well.	metre	209.00
18.45	Providing and placing in position hand pump of approved quality for 40 mm diameter G.I. pipe complete with all accessories.	each	576.80
18.46	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work)		
18.46.1	15 mm nominal bore	each	75.90

Code No	Description	Unit	Rate Rs.
	18.46.2 20 mm nominal bore	each	96.80
	18.46.3 25 mm nominal bore	each	107.25
	18.46.4 32 mm nominal	each	123.55
	18.46.5 40 mm nominal bore	each	164.20
	18.46.6 50mm nominal bore	each	235.60
	18.46.7 65mm nominal bore	each	428.40
	18.46.8 80 mm nominal bore	each	507.40
18.47	Providing and fixing G.I. Union in existing G.I. pipe line, cutting and threading the pipe and making long screws including excavation, refilling the earth or cutting of wall and making good the same complete wherever required :		
	18.47.1 15 mm nominal bore.	each	149.20
	18.47.2 20 mm nominal bore.	each	170.10
	18.47.3 25 mm nominal bore.	each	180.55
	18.47.4 32 mm nominal bore.	each	196.80
	18.47.5 40 mm nominal bore.	each	237.45
	18.47.6 50 mm nominal bore.	each	335.50
	18.47.7 65 mm nominal bore.	each	528.30
	18.47.8 80 mm nominal bore.	each	607.30
18.48	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank	per litre	5.25
	<b>C.P.BRASS FITTINGS.</b>		
18.49	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931		
	18.49.1 15 mm nominal bore.	each	207.00
18.50	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms.		
	18.50.1 15 mm nominal bore.	each	262.05
18.51	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.		
	18.51.1 15 mm nominal bore	each	253.95
18.52	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931.		
	18.52.1 15 mm nominal bore.	each	262.55

Code No	Description	Unit	Rate Rs.
18.53	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 a) 15 mm nominal bore		
18.53.1	15mm nominal bore	each	347.65
	<b>PTMT FITTINGS</b>		
18.54	Providing and fixing PTMT bib cock of approved quality and colour.		
18.54.1	15mm nominal bore, 86 mm long. Weighing not less than 88 gms.	each	120.85
18.54.2	15 mm nominal bore, 122mm long. Weighing not less than 99 gms.	each	264.90
18.54.3	15 mm nominal bore, 165mm long. Weighing not less than 110 gms.	each	189.40
18.54.4	15mm nominal bore, 90mm long. Weighing not less than 93 gms.	each	137.15
18.55	Providing and fixing PTMT stop cock of approved quality and colour.		
18.55.1	15 mm nominal bore, 86mm long. Weighing not less than 88 gms.	each	120.85
18.55.2	20mm nominal bore, 89mm long. Weighing not less than 88 gms.	each	148.75
18.55.3	Concealed stop cock, 15mm nominal bore, 108mm long. Weighing not less than 108 gms.	each	195.20
18.56	Providing and fixing PTMT pillar cock of approved quality and colour .		
18.56.1	15mm nominal bore, 107mm long. Weighing not less than 110 gms.	each	185.25
18.56.2	15mm nominal bore, 125mm long foam flow. Weighing not less than 120 gms.	each	266.55
18.57	Providing and fixing PTMT, push cock of approved quality and colour.		
18.57.1	15 mm nominal bore, 98mm long. Weighing not less than 75 gms.	each	113.90
18.57.2	15 mm nominal bore, 80mm long. Weighing not less than 46 gms.	each	96.45
18.58	Providing and fixing PTMT grating of approved quality and colour.		
18.58.1	Circular type.		
18.58.1.1	100 mm nominal dia.	each	39.70
18.58.1.2	125 mm nominal dia with 25 mm waste hole.	each	46.65
18.58.2	Rectangular type with openable circular lid.		
18.58.2.1	150 mm nominal size square 100 mm diameter of the inner hinged round grating.	each	109.35

Code No	Description	Unit	Rate Rs.
<b>AIR VALVE &amp; WATER METER (BULK TYPE)</b>			
18.59	Providing and fixing C.I. double acting air valve of approved quality with bolts, nuts, rubber insertions etc. complete (The tail pieces, tapers etc if required will be paid separately) :		
18.59.1	50 mm dia	each	3,615.70
18.59.2	80 mm dia	each	5,276.65
18.59.3	100 mm dia	each	6,858.75
18.60	Providing and fixing enclosed type water meter (bulk type) conforming to IS : 2373 and tested by Municipal Board complete with bolts, nuts, rubber insertions etc. (The tail pieces if required will be paid separately) :		
18.60.1	80 mm dia nominal bore	each	2,448.40
18.60.2	100 mm dia nominal bore	each	3,719.80
18.60.3	150 mm dia nominal bore	each	5,261.80
18.60.4	200 mm dia nominal bore	each	5,914.55
18.61	Providing and fixing C.I. dirt box strainer for bulk type water meter with nuts, bolts, rubber insertions etc. complete conforming to IS : 2373 :		
18.61.1	80 mm dia	each	3,110.45
18.61.2	100 mm dia.	each	4,672.20
18.61.3	150 mm dia	each	6,067.85
18.61.4	200 mm dia	each	8,404.80
18.62	Providing and fixing PTMT Ball cock of approved quality, colour and make complete with Epoxy coated aluminium rod with L.P./ H.P.H.D. plastic ball.		
18.62.1	15 mm nominal bore, 105 mm long. Weighing not less than 138 gms.	each	165.60
18.62.2	20 mm nominal bore, 120 mm long. Weighing not less than 198 gms.	each	234.50
18.62.3	25 mm nominal bore, 152mm long. Weighing not less than 440 gms.	each	497.40
18.62.4	40mm nominal bore, 206mm long. Weighing not less than 690 gms.	each	902.75
18.62.5	50mm nominal bore, 242mm long. Weighing not less than 1240 gms.	each	1,338.30
18.63	Providing and fixing PTMT angle stop cock 15 mm nominal bore. Weighing not less than 85 gms.	each	148.75
18.64	Providing and fixing PTMT swivelling shower, 15mm nominal bore. Weighing not less than 40gms.	each	101.95

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
18.65	Providing and fixing PTMT soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with concealed fitting arrangements. Weighing not less than 106 gms.	each	133.30
18.66	Providing and laying S&S C.I. Standard specials such as tees, bends, collars tapers and caps etc, suitable for flanged jointing as per IS : 1538 :		
18.66.1	Up to 300 mm dia	quintal	4,205.85
18.66.2	Above 300 mm dia	quintal	4,737.80
18.67	Providing and laying S&S C.I. Standard specials suitable for mechanical jointing as per IS : 13382		
18.67.1	Up to 300 mm dia	quintal	6,305.85
18.67.2	Above 300 mm dia	quintal	6,586.90
18.68	Providing and laying D.I. specials of class K-12 suitable for push-on jointing as per IS : 9523		
18.68.1	Up to 600 mm dia	quintal	10,487.25
18.68.2	Above 600 mm dia	quintal	15,685.00
18.69	Providing and laying D.I. Specials of Class K - 12 suitable for mechanical jointing as per IS : 9523 :		
18.69.1	Up to 600 mm dia	quintal	11,023.85
18.69.2	Above 600 mm dia	quintal	16,644.40
18.70	Providing push-on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and including the cost of rubber gasket :		
18.70.1	100 mm dia pipes	joint	39.00
18.70.2	150 mm dia pipes	joint	60.30
18.70.3	200 mm dia pipes	joint	98.20
18.70.4	250 mm dia pipes	joint	111.70
18.70.5	300 mm dia pipes	joint	153.10
18.70.6	350 mm dia pipes	joint	182.15
18.70.7	400 mm dia pipes	joint	340.40
18.70.8	450 mm dia pipes	joint	378.35
18.70.9	500 mm dia pipes	joint	393.20
18.70.10	600 mm dia pipes	joint	489.30
18.70.11	650 mm dia pipes	joint	739.65
18.70.12	700 mm dia pipes	joint	853.45
18.70.13	800 mm di a pipes	joint	953.35
18.70.14	900 mm dia pipes	joint	1,255.25

Code No	Description	Unit	Rate Rs.
	18.70.15 1000 mm dia pipes	joint	1,523.90
18.71	Providing and laying Double Flanged (screwed/ welded) Centrifugally (Spun) Cast Iron, Class B (IS : 1536) :		
	18.71.1 100 mm dia C.I. Double Flanged Pipe	metre	1,151.15
	18.71.2 150 mm dia C.I. Double Flanged Pipe	metre	1,781.85
	18.71.3 200 mm dia C.I. Double Flanged Pipe	metre	2,468.85
	18.71.4 250 mm dia C.I. Double Flanged Pipe	metre	3,304.85
	18.71.5 300 mm dia C.I. Double Flanged Pipe	metre	4,201.30
	18.71.6 350 mm dia C.I. Double Flanged Pipe	metre	5,372.75
	18.71.7 400 mm dia C.I. Double Flanged Pipe	metre	6,940.35
	18.71.8 450 mm dia C.I. Double Flanged Pipe	metre	8,985.75
	18.71.9 500 mm dia C.I. Double Flanged Pipe	metre	11,716.30
	18.71.10 600 mm dia C.I. Double Flanged Pipe	metre	15,287.90
18.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329 :		
	18.72.1 100 mm dia Ductile Iron Class K-7 pipes	metre	703.30
	18.72.2 150 mm dia Ductile Iron Class K-7 pipes	metre	1,025.40
	18.72.3 200 mm dia Ductile Iron Class K-7 pipes	metre	1,457.15
	18.72.4 250 mm dia Ductile Iron Class K-7 pipes	metre	1,972.55
	18.72.5 300 mm dia Ductile Iron Class K-7 pipes	metre	2,784.90
	18.72.6 350 mm dia Ductile Iron Class K-7 pipes	metre	3,214.25
	18.72.7 400 mm dia Ductile Iron Class K-7 pipes	metre	3,837.60
	18.72.8 450 mm dia Ductile Iron Class K-7 pipes	metre	4,550.35
	18.72.9 500 mm dia Ductile Iron Class K-7 pipes	metre	5,367.20
	18.72.10 600 mm dia Ductile Iron Class K-7 pipes	metre	7,081.30
	18.72.11 700 mm dia Ductile Iron Class K-7 pipes	metre	8,795.70
	18.72.12 800 mm dia Ductile Iron Class K-7 pipes	metre	12,243.20
	18.72.13 900 mm dia Ductile Iron Class K-7 pipes	metre	15,055.70
	18.72.14 1000 mm dia Ductile Iron Class K-7 pipes	metre	18,247.50
	18.72.15 100 mm dia Ductile Iron Class K-9 pipes	metre	775.50
	18.72.16 150 mm dia Ductile Iron Class K-9 pipes	metre	1,152.80
	18.72.17 200 mm dia Ductile Iron Class K-9 pipes	metre	1,589.45
	18.72.18 250 mm dia Ductile Iron Class K-9 pipes	metre	2,056.35
	18.72.19 300 mm dia Ductile Iron Class K-9 pipes	metre	2,639.45
	18.72.20 350 mm dia Ductile Iron Class K-9 pipes	metre	3,102.25



Code No	Description	Unit	Rate Rs.
	18.72.21 400 mm dia Ductile Iron Class K-9 pipes	metre	4,435.65
	18.72.22 450 mm dia Ductile Iron Class K-9 pipes	metre	4,925.90
	18.72.23 500 mm dia Ductile Iron Class K-9 pipes	metre	6,591.35
	18.72.24 600 mm dia Ductile Iron Class K-9 pipes	metre	7,404.65
	18.72.25 700 mm dia Ductile Iron Class K-9 pipes	metre	10,052.75
	18.72.26 750 mm dia Ductile Iron Class K-9 pipes	metre	11,464.10
	18.72.27 800 mm dia Ductile Iron Class K-9 pipes	metre	11,808.40
	18.72.28 900 mm dia Ductile Iron Class K-9 pipes	metre	13,770.10
	18.72.29 1000 mm dia Ductile Iron Class K-9 pipes	metre	15,500.90
18.73	Providing and laying Double Flanged (Screwed/ Welded) Centrifugally (Spun) Ductile Iron Pipes of Class K - 9 conforming to IS : 8329 :		
	18.73.1 100 mm dia Ductile Iron Double Flanged	metre	2,206.35
	18.73.2 150 mm dia Ductile Iron Double Flanged	metre	3,055.35
	18.73.3 200 mm dia Ductile Iron Double Flanged	metre	3,963.40
	18.73.4 250 mm dia Ductile Iron Double Flanged	metre	5,262.65
	18.73.5 300 mm dia Ductile Iron Double Flanged	metre	6,771.65
	18.73.6 350 mm dia Ductile Iron Double Flanged	metre	8,434.20
	18.73.7 400 mm dia Ductile Iron Double Flanged	metre	10,076.25
	18.73.8 450 mm dia Ductile Iron Double Flanged	metre	12,180.70
	18.73.9 500 mm dia Ductile Iron Double Flanged	metre	14,761.20
	18.73.10 600 mm dia Ductile Iron Double Flanged	metre	20,023.70
	18.73.11 700 mm dia Ductile Iron Double Flanged	metre	24,693.40
18.74	Providing and fixing unplasticised P.V.C. connection pipe with PTMT Nuts collar and bush of approved quality and colour.		
	18.74.1 15 mm nominal bore with 30cm length.	each	45.55
	18.74.2 15 mm nominal bore with 45 cm length.	each	52.90
18.75	Providing and fixing PTMT extension nipple for water tank pipe, fittings of approved quality and colour.		
	18.75.1 15 mm nominal bore. Weighing not less than 32 gms.	each	38.75
	18.75.2 20mm nominal bore. Weighing not less than 40gms.	each	45.75
	18.75.3 25mm nominal bore. Weighing not less than 62 gms.	each	66.65
18.76	Cutting holes up to 30x30 cm in walls including making good the same:		
	18.76.1 With F.P.S. bricks	each	90.90
18.77	Cutting holes up to 15x15cm in R.C.C. floors and roofs for passing	each	82.25

Code No	Description	Unit	Rate Rs.
	drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement :2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including finishing complete so as to make it leak proof.		
18.78	Making chases up to 7.5x7.5 cm in walls including making good and finishing with matching surface after housing G.I. pipe etc.	metre	36.65
18.79	Making hole up to 20x20 cm and embedding pipes up to 150 mm diameter in masonry and filling with cement concrete 1:3:6 (1 cement : 3 coarse sand 6 graded stone aggregate 20 mm nominal size) including disposal of malba.	metre	70.05
18.80	Disinfecting C.I. water mains by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water, operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory.		
18.80.1	80 mm diameter C.I. pipe	100 metre	289.75
18.80.2	100 mm diameter C.I. pipe	100 metre	381.15
18.80.3	125 mm diameter C.I. pipe	100 metre	478.85
18.80.4	150 mm diameter C.I. pipe	100 metre	580.80
18.80.5	200 mm diameter C.I. pipe	100 metre	786.95
18.80.6	250 mm diameter C.I. pipe	100 metre	1,007.55
18.80.7	300 mm diameter C.I. pipe	100 metre	1,150.00
18.80.8	350 mm diameter C.I. pipe	100 metre	1,302.95
18.80.9	400 mm diameter C.I. pipe	100 metre	1,470.50
18.80.10	450 mm diameter C.I. pipe	100 metre	1,645.65
18.80.11	500 mm diameter C.I. pipe	100 metre	1,834.55
18.80.12	600 mm diameter C.I. pipe	100 metre	2,235.70
18.81	Extra for every operation disinfecting the C.I. main by flushing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water, including getting the samples of water tested in the municipal laboratory:		
18.81.1	80 mm diameter C.I. pipe	100 metre	106.85
18.81.2	100 mm diameter C.I. pipe	100 metre	130.05
18.81.3	125 mm diameter C.I. pipe	100 metre	159.55
18.81.4	150 mm diameter C.I. pipe	100 metre	188.25
18.81.5	200 mm diameter C.I. pipe	100 metre	283.70
18.81.6	250 mm diameter C.I. pipe	100 metre	335.95
18.81.7	300 mm diameter C.I. pipe	100 metre	388.50
18.81.8	350 mm diameter C.I. pipe	100 metre	463.95

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
	18.81.9 400 mm diameter C.I. pipe	100 metre	542.10
	18.81.10 450 mm diameter C.I. pipe	100 metre	624.90
	18.81.11 500 mm diameter C.I. pipe	100 metre	709.35
	18.81.12 600 mm diameter C.I. pipe	100 metre	887.95
18.82	Dismantling old C.I. pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes at site lead up to 50 metre:		
	18.82.1 80 mm diameter C.I. pipe	100 metre	82.65
	18.82.2 100 mm diameter C.I. pipe	100 metre	85.35
	18.82.3 125 mm diameter C.I. pipe	100 metre	87.80
	18.82.4 150 mm diameter C.I. pipe	100 metre	90.45
	18.82.5 200 mm diameter C.I. pipe	100 metre	99.95
	18.82.6 250 mm diameter C.I. pipe	100 metre	109.30
	18.82.7 300 mm diameter C.I. pipe	100 metre	117.30
	18.82.8 350 mm diameter C.I. pipe	100 metre	124.60
	18.82.9 400 mm diameter C.I. pipe	100 metre	131.15
	18.82.10 450 mm diameter C.I. pipe	100 metre	137.95
	18.82.11 500 mm diameter C.I. pipe	100 metre	145.65
	18.82.12 600 mm diameter C.I. pipe	100 metre	153.20
18.83	Labour for cutting C.I. pipe with steel saw.		
	18.83.1 80 mm diameter C.I. pipe	Each cut	22.10
	18.83.2 100 mm diameter C.I. pipe	Each cut	29.80
	18.83.3 125 mm diameter C.I. pipe	Each cut	41.75
	18.83.4 150 mm diameter C.I. pipe	Each cut	56.15
	18.83.5 200 mm diameter C.I. pipe	Each cut	74.90
	18.83.6 250 mm diameter C.I. pipe	Each cut	92.65
	18.83.7 300 mm diameter C.I. pipe	Each cut	111.40
	18.83.8 350 mm diameter C.I. pipe	Each cut	129.10
	18.83.9 400 mm diameter C.I. pipe	Each cut	147.70
	18.83.10 450 mm diameter C.I. pipe	Each cut	165.60
	18.83.11 500 mm diameter C.I. pipe	Each cut	184.20
	18.83.12 600 mm diameter C.I. pipe	Each cut	218.55

**SUB HEAD : 19.0**

**DRAINAGE**

### BASIC RATES (SH: 19.0 DRAINAGE)

Code No	Description	Unit	Rate Rs.
0101	Bhisti	Day	138.45
0103	Blacksmith 2nd class	Day	141.60
0114	Beldar	Day	135.25
0115	Coolie	Day	135.25
0123	Mason (brick layer) 1st class	Day	151.50
0124	Mason (brick layer) 2nd class	Day	141.60
0285	Brick Aggregate (Single size) : 63 mm nominal size	cum	350.00
0287	Brick Aggregate (Single size) : 40 mm nominal size	cum	360.00
0362	Brick bats	cum	253.00
0367	Portland Cement	tonne	4,500.00
0983	Fine sand (zone IV)	cum	320.00
1003	Mild steel round bar above 12 mm dia	quintal	3,050.00
1006	Mild steel square bars	quintal	3,175.00
1336	Clearing eye with chain and lid 100 mm dia	each	37.00
1337	Clearing eye with chain and lid 150 mm dia	each	41.00
1352	C.I. cover and frame 300x300 mm inside	each	265.00
1353	C.I. cover without frame 300x300mm inside i/c cover of 4.50 kg	each	170.00
1354	Rectangular cover 455x610 mm with frame (low duty)	each	1,395.00
1355	Rectangular cover 455x610mm without frame (low duty)	each	844.00
1356	500 mm dia cover with frame (medium duty)	each	4,257.00
1357	500 mm dia cover without frame (medium duty)	each	2,129.00
1364	C.I. grating 100x100 mm	each	10.00
1366	C.I. grating 150x150 mm	each	19.00
1367	C.I. grating 180x180 mm	each	23.00
1617	S.C.I. soil, waste and vent single socketed pipe 1.80 metres long: 100mm dia	each	610.00
1618	S.C.I. soil, waste and vent single socketed pipe 1.80 metres long: 150mm dia	each	1,205.00
1621	S.C.I. plain bend 100mm dia	each	178.00
1622	S.C.I. plain bend 150mm dia	each	407.00
1628	S.C.I. plain single equal junctions 100x100x100 mm dia	each	265.00
1700	R.C.C. pipes NP2 class 100 mm dia	metre	118.00
1701	R.C.C. pipes NP2 class 150 mm dia	metre	135.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
1702	R.C.C. pipes NP2 class 250 mm dia	metre	157.00
1703	R.C.C. pipes NP2 class 300 mm dia	metre	228.00
1704	R.C.C. pipes NP2 class 450 mm dia	metre	333.00
1705	R.C.C. pipes NP2 class 500 mm dia	metre	398.00
1706	R.C.C. pipes NP2 class 600 mm dia	metre	642.00
1707	R.C.C. pipes NP2 class 700 mm dia	metre	719.00
1709	R.C.C. pipes NP2 class 800 mm dia	metre	836.00
1710	R.C.C. pipes NP2 class 900 mm dia	metre	986.00
1711	R.C.C. pipes NP2 class 1000 mm dia	metre	1,243.00
1712	R.C.C. pipes NP2 class 1100 mm dia	metre	1,500.00
1713	R.C.C. pipes NP2 class 1200 mm dia	metre	1,543.00
1714	R.C.C. collarsNP2 class 100 mm dia	each	16.00
1715	R.C.C. collarsNP2 class 150 mm dia	each	21.00
1716	R.C.C. collarsNP2 class 250 mm dia	each	34.00
1717	R.C.C. collarsNP2 class 300 mm dia	each	42.00
1718	R.C.C. collarsNP2 class 450 mm dia	each	63.00
1719	R.C.C. collarsNP2 class 500 mm dia	each	73.00
1720	R.C.C. collarsNP2 class 600 mm dia	each	92.00
1721	R.C.C. collarsNP2 class 700 mm dia	each	102.00
1723	R.C.C. collarsNP2 class 800 mm dia	each	146.00
1724	R.C.C. collarsNP2 class 900 mm dia	each	178.00
1725	R.C.C. collarsNP2 class 1000 mm dia	each	210.00
1726	R.C.C. collarsNP2 class 1100 mm dia	each	241.00
1727	R.C.C. collarsNP2 class 1200 mm dia	each	280.00
1854	Stoneware pipes grade A (60 cm long) 100 mm dia	each	30.00
1855	Stoneware pipes grade A (60 cm long) 150 mm dia	each	42.00
1856	Stoneware pipes grade A (60 cm long) 200 mm dia	each	80.00
1857	Stoneware pipes grade A (60 cm long) 230 mm dia	each	85.00
1858	Stoneware pipes grade A (60 cm long) 250 mm dia	each	113.00
1859	Stoneware pipes grade A (60 cm long) 300 mm dia	each	165.00
1881	Spun yarn	kilogram	30.00
1900	S.W. gully trap P type 100x100 mm	each	55.00
1902	S.W. gully trap P type 150x100 mm	each	86.00
1904	S.W. gully trap P type 180x150 mm	each	160.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
2201	Carriage of Bricks	1000 Nos	141.88
2209	Carriage of Cement	tonne	47.29
2224	Carriage of S.W. pipes 100 mm dia	100 metre	70.94
2225	Carriage of S.W. pipes 150 mm dia	100 metre	141.88
2226	Carriage of S.W. pipes 200 mm dia	100 metre	236.47
2227	Carriage of S.W. pipes 230 mm dia	100 metre	337.82
2228	Carriage of S.W. pipes 250 mm dia	100 metre	405.38
2229	Carriage of S.W. pipes 300 mm dia	100 metre	506.73
2260	Carriage of Brick aggregate	cum	57.83
2261	Carriage of Fine sand (1 part badarpur sand : 2 parts jamuna sand)	cum	53.21
2275	Carriage of R.C.C. pipes 100 mm dia	100 metre	116.30
2281	Carriage of R.C.C. pipes 150 mm dia	100 metre	193.83
2287	Carriage of R.C.C. pipes 250 mm dia	100 metre	448.05
2290	Carriage of R.C.C. pipes 300 mm dia	100 metre	553.80
2299	Carriage of R.C.C. pipes 450 & 500 mm dia	100 metre	1,292.20
2303	Carriage of R.C.C. pipes 600, 700, 750 & 800 mm dia	100 metre	1,938.30
2331	Carriage of R.C.C. pipes 900 mm dia	100 metre	2,907.45
2332	Carriage of R.C.C. pipes 1000 mm dia	100 metre	3,876.61
2333	Carriage of R.C.C. pipes 1100 mm dia	100 metre	3,876.61
2334	Carriage of R.C.C. pipes 1200 mm dia	100 metre	3,876.61
2602	F.P.S. bricks class designation 75	1000 Nos	1,900.00
3860	560 mm dia cover with frame (Heavy duty)	each	7,634.00
3861	560 mm dia cover without frame (Heavy duty)	each	3,664.00
7087	S.C.I. Tee 150 mm	each	460.00
7128	S.W. intercepting trap 100 mm dia	each	144.00
7129	S.W. intercepting trap 150 mm dia	each	202.00
7130	Rectangular shape 600x450 mm precast R.C.C. manhole cover with frame - L.D. - 25	each	628.00
7131	Square shape 350x350 mm precast R.C.C. manhole cover with frame - L.D. - 25	each	540.00
7132	Circular shape 450 mm dia precast R.C.C. manhole cover with frame - L.D. - 25	each	474.00
7133	Rectangular shape 500x500 mm precast R.C.C. manhole cover with frame - M.D. - 10	each	575.00
7134	Circular shape 500 mm dia precast R.C.C. manhole cover with frame - M.D. - 10	each	575.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
7135	Circular shape 560 mm dia precast R.C.C. manhole cover with frame - H.D. - 20	each	838.00
7136	Circular shape 560 mm dia precast R.C.C. manhole cover with frame - E.H.D. - 35	each	935.00
7354	Plastic encapsulated M.S. foot rest 30x20x15 cm	each	93.00
7380	Precast R.C.C. grating with frame 500x450 mm horizontal grating	each	533.00
7381	Precast R.C.C. grating with frame 450x100 mm vertical grating	each	250.00
9999	Sundries	L.S.	2.60



## 19.0 DRAINAGE

Code No	Description	Unit	Rate Rs.
<p><b>NOTE :</b> - The rates given for all the items under sub-head ' Drainage' are applicable to work executed in soils above sub- soil water level. Extra allowance has to be made for work under sub- soil water level.</p> <p><b>STONE WARE PIPES AND FITTINGS</b></p>			
19.1	Providing, laying and jointing glazed stoneware pipes grade 'A' with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete :		
19.1.1	100 mm diameter	metre	105.90
19.1.2	150 mm diameter	metre	151.65
19.1.3	200 mm diameter	metre	247.15
19.1.4	230 mm diameter	metre	269.90
19.1.5	250 mm diameter	metre	342.85
19.1.6	300 mm diameter	metre	469.65
19.2	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W. pipes including bed concrete as per standard design:		
19.2.1	100 mm diameter S.W. pipe	metre	331.20
19.2.2	150 mm diameter S.W. pipe	metre	405.05
19.2.3	200 mm diameter S.W. pipe	metre	472.15
19.2.4	230 mm diameter S.W. pipe	metre	516.90
19.2.5	250 mm diameter S.W. pipe	metre	546.00
19.3	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) up to haunches of S.W. pipes including bed concrete as per standard design :		
19.3.1	100 mm diameter S.W. pipe	metre	157.40
19.3.2	150 mm diameter S.W. pipe	metre	255.10
19.3.3	200 mm diameter S.W. pipe	metre	299.85
19.3.4	230 mm diameter S.W. pipe	metre	328.95
19.3.5	250 mm diameter S.W. pipe	metre	349.10
19.3.6	300 mm diameter S.W. pipe	metre	402.80
19.4	Providing and fixing square-mouth S.W. gully trap grade 'A' complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design :		
19.4.1	100x100 mm size P type		

Code No	Description	Unit	Rate Rs.
	19.4.1.1 With F.P.S. Bricks class designation 75	each	935.15
	19.4.1.2 With Sewer bricks conforming to IS : 4885	each	1,033.35
	19.4.2 150 x 100 mm size P type.		
	19.4.2.1 With F.P.S. bricks class designation 75	each	961.95
	19.4.2.2 With sewer bricks conforming to IS : 4885	each	1,060.15
	19.4.3 180x150 mm size P type		
	19.4.3.1 With F.P.S. bricks class designation 75	each	1,036.75
	19.4.3.2 With Sewer bricks conforming to IS : 4885	each	1,134.95
19.5	Dismantling of old S.W. pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps:		
	19.5.1 100 mm diameter	metre	13.35
	19.5.2 150 mm diameter	metre	14.75
	19.5.3 200 mm diameter	metre	15.70
	19.5.4 230 mm diameter	metre	16.20
	19.5.5 250 mm diameter	metre	16.65
	19.5.6 300 mm diameter	metre	17.60
	19.5.7 350 mm diameter	metre	20.25
	19.5.8 400 mm diameter	metre	22.15
	19.5.9 450 mm diameter	metre	23.10
19.6	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete :		
	19.6.1 100 mm dia. R.C.C. pipe	metre	173.95
	19.6.2 150 mm dia. R.C.C. pipe	metre	202.85
	19.6.3 250 mm dia. R.C.C. pipe	metre	258.20
	19.6.4 300 mm dia. R.C.C. pipe	metre	338.75
	19.6.5 450 mm dia. R.C.C. pipe	metre	499.55
	19.6.6 500 mm dia. R.C.C. pipe	metre	584.85
	19.6.7 600 mm dia. R.C.C. pipe	metre	895.10
	19.6.8 700 mm dia. R.C.C. pipe	metre	1,000.90
	19.6.9 800 mm dia. R.C.C. pipe	metre	1,167.40
	19.6.10 900 mm dia. R.C.C. pipe	metre	1,413.90
	19.6.11 1000 mm dia. R.C.C. pipe	metre	1,740.95
	19.6.12 1100 mm dia. R.C.C. pipe	metre	2,093.70

Code No	Description	Unit	Rate Rs.
19.6.13	1200 mm dia. R.C.C. pipe	metre	2,208.30
19.7	Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand ) R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size) inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design :		
19.7.1	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) :		
19.7.1.1	With F.P.S. bricks with class designation 75	each	5,383.70
19.7.1.2	With Sewer bricks conforming to IS : 4885	each	5,640.50
19.7.2	Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (medium duty) 500 mm internal diameter, total weight of cover and frame to be not less than 116 kg (weight of cover 58 kg and weight of frame 58 kg) :		
19.7.2.1	With F.P.S. bricks class designation 75	each	11,882.20
19.7.2.2	With Sewer bricks conforming to IS : 4885	each	12,584.65
19.7.3	Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (heavy duty) 560 mm internal diameter, total weight of cover and frame to be not less than 208 kg (weight of cover 108 kg and weight of frame 100 kg) :		
19.7.3.1	With F.P.S. bricks class designation 75	each	15,673.85
19.7.3.2	With Sewer bricks conforming to IS : 4885	each	16,278.10
19.8	Extra for depth for manholes		
19.8.1	Size 90x80 cm		
19.8.1.1	With F.P.S. bricks class designation 75	metre	2,654.00
19.8.1.2	With Sewer bricks conforming to IS : 4885	metre	3,401.80
19.8.2	Size 120x90 cm		
19.8.2.1	With F.P.S. bricks class designation 75	metre	3,179.95
19.8.2.2	With Sewer bricks conforming to IS : 4885	metre	4,071.30
19.9	Constructing brick masonry circular type manhole 0.91m internal dia at bottom and 0.56m dia at top in cement mortar 1:4 (1 cement : 4 coarse sand), in side cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 mix (1 cement : 3 coarse sand : 6		

Code No	Description	Unit	Rate Rs.
	graded stone aggregate 40mm nominal size), and making necessary channel in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement all complete as per standard design :		
19.9.1	0.91 m deep with S.F.R.C. cover and frame (heavy duty, HD-20 grade designation) 560mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182kg., fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including centering shuttering all complete. (Excavation, foot rests and 12mm thick cement plaster at the external surface shall be paid for separately) :		
19.9.1.1	With F.P.S. bricks class designation 75	each	4,933.50
19.9.1.2	With Sewer bricks conforming to IS : 4885	each	5,347.90
19.10	Extra depth for circular type manhole 0.91m internal dia (at bottom) with beyond 0.91m to 1.67m		
19.10.1	With F.P.S. bricks class designation 75	metre	2289.75
19.10.2	With Sewer bricks conforming IS : 4885	metre	2915.90
19.11	Constructing brick masonry circular manhole 1.22m internal dia at bottom and 0.56m dia at top in cement mortar 1:4 (1 cement :4 coarse sand) inside cement plaster 12mm thick with cement mortar 1:3 (1 cement :3 coarse sand) finished with a floating coat of neat cement foundation concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size) and making necessary channel in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement all complete as per standard design :		
19.11.1	1.68 m deep with SFRC Cover and frame (heavy duty HD-20 grade designation) 560mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182kg. fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) including centering shuttering all complete. (Excavation, foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately) :		
19.11.1.1	With F.P.S. bricks class designation 75	each	8,946.25
19.11.1.2	With Sewer bricks conforming IS : 4885	each	9,934.70
19.12	Extra depth for circular type manhole 1.22m internal dia (at bottom) beyond 1.68 m to 2.29 m :		
19.12.1	With F.P.S. bricks class designation 75	metre	2954.75
19.12.2	With Sewer bricks conforming IS : 4885	metre	3772.05

Code No	Description	Unit	Rate Rs.
19.13	Constructing brick masonry circular manhole 1.52 m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement : 4 coarse sand) inside cement plaster 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size) and making necessary channel in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement all complete as per standard design :		
19.13.1	2.30m deep with SFRC Cover and frame (heavy duty HD-20 grade designation) 560mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182 kg. fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) including centering shuttering all complete. (Excavation, foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately) :		
19.13.1.1	With F.P.S. bricks class designation 75	each	18,281.60
19.13.1.2	With Sewer bricks conforming IS : 4885	each	21,089.40
19.14	Extra depth for circular type manhole 1.52 m internal dia (at bottom) beyond 2.30 m :		
19.14.1	With F.P.S. bricks class designation 75	metre	6956.05
19.14.2	With Sewer bricks conforming IS : 4885	metre	9069.45
19.15	Providing M.S. foot rests including fixing in manholes with 20x20x10 cm cement concrete blocks 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) as per standard design :		
19.15.1	With 20x20 mm square bar	each	149.85
19.15.2	With 20 mm diameter round bar	each	125.15
19.16	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910 on 12mm dia steel bar conforming to IS : 1786 having minimum cross section as 23 mmx25mm and over all minimum length 263 mm and width as 165mm with minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete as per design.	each	182.40
19.17	Replacement of M.S. foot rests in manholes including dismantling concrete blocks and fixing with 20x20x10 cm cement concrete blocks		

Code No	Description	Unit	Rate Rs.
	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) :		
	19.17.1 With 20x20 mm square bar	each	167.95
	19.17.2 With 20 mm diameter round bar	each	143.20
19.18	Supplying and fixing C.I. cover without frame for manholes :		
	19.18.1 455x610 mm rectangular C.I. cover (light duty) the weight of the cover to be not less than 23 kg.	each	1,007.45
	19.18.2 500 mm diameter C.I. cover (medium duty) the weight of the cover to be not less than 58 kg.	each	2,507.35
	19.18.3 560 mm diameter C.I. cover (heavy duty) the weight of the cover to be not less than 108 kg.	each	4,293.30
19.19	Providing and fixing in position pre-cast R.C.C. manhole cover and frame of required shape and approved quality		
	19.19.1 L D- 2.5		
	19.19.1.1 Rectangular shape 600x450mm internal dimensions	each	883.25
	19.19.1.2 Square shape 450mm internal dimensions	each	748.50
	19.19.1.3 Circular shape 450mm internal diameter	each	671.80
	19.19.2 M D - 10		
	19.19.2.1 Square shape 450mm internal dimension	each	825.35
	19.19.2.2 Circular shape 500mm internal diameter	each	792.75
	19.19.3 H D - 20		
	19.19.3.1 Circular shape 560 mm internal diameter	each	1,110.30
	19.19.4 EHD - 35		
	19.19.4.1 Circular shape 560 mm internal dia.	each	1,223.00
19.20	Supplying and fixing C.I. cover 300x300 mm without frame for gully trap (standard pattern) the weight of cover to be not less than 4.5kg.	each	205.30
19.21	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete :		
	19.21.1 For pipes 100 to 230 mm diameter	each	164.30
	19.21.2 For pipes 250 to 300 mm diameter	each	205.40
	19.21.3 For pipes 350 to 450 mm diameter	each	302.95
19.22	Providing sand cast iron drop connection externally for 60 cm drop from branch sewer line to main sewer manhole including inspection and cleaning eye with chain and lid, sand cast iron drop pipe and		

Code No	Description	Unit	Rate Rs.
	bend encased all-round with cement concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) with all centering and shuttering required, cutting holes in walls and making good with brick work in cement mortar 1:4 (1 cement : 4 coarse sand) plastered with cement mortar 1:3 (1 cement : 3 coarse sand) on inside of the manhole wall lead caulked joints between sand cast iron pipes and fittings, stiff cement mortar 1:1 (1 cement : 1 fine sand) joints between sand cast iron tee and S.W. pipe, making required channels complete as per standard design and specifications :		
	19.22.1 100 mm dia. sand cast iron drop connection	each	3,292.95
	19.22.2 150 mm dia. sand cast iron drop connection	each	5,152.95
19.23	Extra for depths beyond 60 cm of sand cast iron drop connection complete :		
	19.23.1 For 100 mm dia. sand cast iron drop connection	metre	1,306.10
	19.23.2 For 150 mm dia. sand cast iron drop connection	metre	2,113.45
19.24	Dismantling of manhole including R.C.C. top slab, C.I. cover with frame including stacking of useful materials near the site and disposal of unserviceable materials into municipal dumps within 50 m lead :		
	19.24.1 Rectangular manhole 90x80 cm and 45 cm deep	each	388.75
	19.24.2 Rectangular manhole 120x90 cm and 90 cm deep	each	680.85
	19.24.3 Rectangular arch type manhole 140x90cm and 2.45m deep	each	1,277.35
	19.24.4 Circular manhole 122 cm diameter and 1.68 m deep	each	988.45
19.25	Extra for depth of manholes dismantled:		
	19.25.1 Rectangular manhole 90x80 cm and 45 cm deep	metre	309.75
	19.25.2 Rectangular manhole 120x90 cm and 90 cm deep	metre	368.80
	19.25.3 Rectangular arch type manhole 140x90 cm and 2.45m deep (up to 4.25 m depth).	metre	298.15
	19.25.4 Circular manhole 122 cm diameter and 1.68 m deep (up to 2.29 m depth)	metre	522.65
19.26	Raising manhole cover and frame slab to required level including dismantling existing slab and making good the damage as required (Raising depth of manhole to be paid separately) :		
	19.26.1 Rectangular manhole 90x80 cm with rectangular cover 600x450 mm of grade LD - 2.5	each	824.25
	19.26.2 Rectangular manhole 120x90 cm with circular cover 500 mm dia of grade MD - 10	each	1,287.45
	19.26.3 Rectangular manhole 120x90 cm with circular cover 560 mm dia of grade HD - 20	each	1,198.10
	19.26.4 Circular manhole 140 cm dia with circular cover 600 mm dia of grade EHD - 35	each	115.25

Code No	Description	Unit	Rate Rs.
19.27	Constructing brick masonry road gully chamber 50x45x60 cm with bricks of class designation 75 in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design :		
19.27.1	With F.P.S. bricks	each	2,248.35
19.28	Constructing brick masonry road gully chamber 45x45x77.5 cm with bricks of class designation 75 in cement mortar 1:4 (1 cement : 4 coarse sand ) with pre-cast R.C.C. vertical grating complete as per standard design :		
19.28.1	With F.P.S. Bricks	each	2,358.00
19.29	Constructing brick masonry road gully chamber 110x50x77.5 cm with bricks of class designation 75 in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame and vertical grating complete as per standard design :		
19.29.1	With F.P.S. bricks	each	4,272.30
19.30	Constructing brick masonry chamber for underground C.I. inspection chamber and bends with 75 class designation bricks in cement mortar 1:4 (1 cement : 4 coarse sand) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) R.C.C. top slab with 1:2:4 mix (1 cement :2 coarse sand : 4 graded stone aggregate 20 mm nominal size) foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design :		
19.30.1	Inside dimensions 455x610 mm and 45 cm deep for single pipe line :		
19.30.1.1	With F.P.S. bricks	each	3,146.40
19.30.2	Inside dimensions 500x700 mm and 45 cm deep for pipe line with one or two inlets :		
19.30.2.1	With F.P.S. bricks	each	3,590.95
19.30.3	Inside dimensions 600x 850 mm and 45 cm deep for pipe line with three or more inlets :		
19.30.3.1	With F.P.S. bricks	each	4,068.50
19.31	Extra for depth beyond 45 cm of brick masonry chamber :		
19.31.1	For 455x610 mm size		
19.31.1.1	With F.P.S. bricks	metre	1,845.65
19.31.2	For 500x700 mm size		
19.31.2.1	With F.P.S. bricks	metre	2,013.70



Code No	Description	Unit	Rate Rs.
	19.31.3 For 600x850 mm size		
	19.31.3.1 With F.P.S. bricks	metre	2,345.30
19.32	Making soak pit 2.5 m diameter 3.0 metre deep with 45 x 45 cm dry brick honey comb shaft with bricks of class designation 75 and S.W. drain pipe 100 mm diameter, 1.8 m long complete as per standard design.		
	19.32.1 With F.P.S. bricks	each	9,938.65
19.33	Constructing soak pit 1.20x1.20x1.20m filled with brickbats including S.W. drain pipe 100 mm diameter and 1.20 m long complete as per standard design.	each	1,074.90
19.34	Providing and fixing S.W. intercepting trap in manholes with stiff mixture of cement mortar 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete :		
	19.34.1 100 mm dia	each	198.35
	19.34.2 150 mm dia	each	281.55

**SUB HEAD : 20.0**

**PILE WORK**

## BASIC RATES (SH: 20.0 PILE WORK)

Code No	Description	Unit	Rate Rs.
0017	Hire and running charges of tipper	Day	1,030.00
0018	Hire and running charges of loader.	Day	800.00
0024	Hire and running charges of hydraulic piling rig with power unit etc. including complete accessories and shifting at site.	per day	28,000.00
0025	Hire and running charges of light crane.	per day	2,000.00
0026	Hire and running charges of bentonite pump.	per day	4,000.00
0027	Hire and running charges of vibrating pile driving hammer complete with power unit and accessories .	per day	28,000.00
0028	Hire and running charges of crane 20 tonne capacity.	per day	8,000.00
0114	Beldar	Day	135.25
0130	Mistry	Day	151.50
7181	C.I. pile shoe	kilogram	40.00
7182	M.S. clamps for pile shoe	kilogram	35.00
7183	Bentonite	tonne	2,700.00
7246	Vertical load testing (INITIAL) of piles in accordance with IS : 2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification and up to 50MT capacity pile.	per test	19,500.00
7247	Vertical load testing (INITIAL) of piles in accordance with IS : 2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & above 50MT and up to 100MT.	per test	27,500.00
7248	Vertical load testing (INITIAL) of piles in accordance with IS : 2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & group of two or more up to 50MT.	per test	37,500.00
7249	Cyclic vertical load testing of piles in accordance with IS : 2911 (Part-IV) including preparation of pile head etc. for Single pile up to 50 tonne capacity	per test	11,500.00
7250	Cyclic vertical load testing of piles in accordance with IS : 2911 (Part-IV) including preparation of pile head etc. for Single pile above 50 tonne capacity pile and up to 100 tonne capacity pile	per test	18,000.00
7251	Cyclic vertical load testing of piles in accordance with IS : 2911 (Part-IV) including preparation of pile head etc. for Group of two piles upto 50 tonne capacity each	per test	23,000.00
7252	Lateral load testing of single pile in accordance with IS : 2911 part -IV for determining safe allowable lateral load on pile. Up to 50 tonne capacity	per test	11,500.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
7253	Lateral load testing of single pile in accordance with IS : 2911 part -IV for determining safe allowable lateral load on pile. Above 50 tonne capacity	per test	18,000.00
9999	Sundries	L.S.	2.60

## 20.0 PILE WORK

Code No	Description	Unit	Rate Rs.
20.1	Providing, driving and installing driven cast-in-situ reinforced cement concrete piles of specified diameter and length below the pile cap M 35 in cement concrete, to carry safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap) :		
20.1.1	400 mm dia piles	metre	1,428.85
20.1.2	450 mm dia piles	metre	1,758.75
20.1.3	500 mm dia piles	metre	2,120.00
20.1.4	550 mm dia piles	metre	2,285.95
20.1.5	750 mm dia piles.	metre	3,826.05
20.1.6	1000 mm dia piles.	metre	6,242.15
20.1.7	1200 mm dia piles.	metre	7,981.90
20.1.8	1500 mm dia piles.	metre	11,114.75
20.2	Boring, providing and installing bored cast-in-situ reinforced cement concrete pile of specified diameter and length below the pile cap M 35 in cement concrete, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with, bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc. all complete, including removal of excavated earth with all lifts and leads (Length of pile for payment shall be measured upto bottom of pile cap).		
20.2.1	300 mm dia piles	metre	1,070.50
20.2.2	400 mm dia piles	metre	1,302.00
20.2.3	450 mm dia piles	metre	1,705.95
20.2.4	500 mm dia. piles	metre	2,005.70
20.2.5	600 mm dia piles	metre	2,559.60
20.2.6	750 mm dia piles.	metre	3,786.75
20.2.7	1000 mm dia piles.	metre	6,220.05
20.2.8	1200 mm dia piles.	metre	7,993.15
20.2.9	1500 mm dia piles.	metre	11,276.10
20.3	Boring, Providing and installing cast in situ single under reamed piles of specified diameter and length below pile cap in M 35 cement concrete, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and the length of the pile to be embedded in pile cap etc. all complete. (Length of pile for payment		

Code No	Description	Unit	Rate Rs.
	shall be measured upto to the bottom of pile cap) :		
20.3.1	300 mm dia piles.	metre	1,623.00
20.3.2	400 mm dia piles	metre	1,933.55
20.3.3	450 mm dia piles	metre	2,118.25
20.3.4	550 mm dia piles	metre	2,332.70
20.4	Extra over item No. 23.3 for providing additional bulb in under reamed piles, under specified dia meter (Only the quantity of extra bulbs are to be paid).		
20.4.1	300mm dia piles.	each	1,022.90
20.4.2	400mm dia piles.	each	1,153.00
20.4.3	450 mm dia piles.	each	1,231.70
20.4.4	550 mm dia piles.	each	1,368.90
20.5	Providing, driving and installing driven Pre-cast reinforced cement concrete piles of specified diameter and length below the pile cap in M 35 cement concrete to carry safe working load not less than specified. With a central through preformed hole with M.S. black pipe of dia, 40mm for grouting with cement sand grouting of mix 1:2 (1 cement : 2 coarse sand) under sufficient positive pressure to ensure complete filling including centring, shuttering, driving and removing the steel casing pipe and lifting casing etc. complete but excluding the cost of steel reinforcement. (Length of pile for payment shall be measured from top of the shoe to the bottom of pile cap).		
20.5.1	400 mm dia piles.	metre	1,803.35
20.5.2	450 mm dia piles.	metre	1,896.05
20.5.3	500 mm dia piles.	metre	2,033.10
20.5.4	550 mm dia piles.	metre	2,682.30
20.5.5	750 mm dia piles.	metre	4,124.20
20.5.6	1000 mm dia piles.	metre	5,460.70
20.6	Vertical load testing of piles in accordance with IS 2911 (Part IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of Engineer in-charge.		
20.6.1	Single pile upto 50 tonne capacity		
20.6.1.1	Initial test.	per test	22,649.20
20.6.1.2	Routine test	per test	13,357.20
20.6.2	Single pile above 50 tonne and upto 100 tonne capacity		
20.6.2.1	Initial test	per test	31,941.20
20.6.2.2	Routine test.	per test	20,907.00
20.6.3	Group of two or more piles upto 50 tonne capacity		

Code No	Description	Unit	Rate Rs.
	20.6.3.1 Initial test	per test	43,556.20
	20.6.3.2 Routine test	per test	26,714.50
20.7	Cyclic vertical load testing of pile in accordance with IS Code of practice IS: 2911 (part IV) including preparation of pile head etc for.		
	20.7.1 Single pile.		
	20.7.1.1 Upto 50 tonne capacity pile.	per test	13,357.20
	20.7.1.2 Above 50 tonne and upto 100 tonne capacity pile.	per test	20,907.00
	20.7.2 Group of two piles.		
	20.7.2.1 Upto 50 tonne capacity each.	per test	26,714.50
20.8	Lateral load testing of single pile in accordance with IS Code of practice IS : 2911 (Part IV) for determining safe allowable lateral load on pile :		
	20.8.1 Upto 50 tonne capacity pile.	per test	13,357.20
	20.8.2 Above 50 tonne and upto 100 tonne capacity pile.	per test	20,907.00

**SUB HEAD : 21.0**

**ALUMINIUM WORK**



### BASIC RATES (SH: 21.0 ALUMINIUM WORK)

Code No	Description	Unit	Rate Rs.
0100	Bandhani	Day	138.45
0111	Carpenter 1st class	Day	151.50
0112	Carpenter 2nd class	Day	141.60
0114	Beldar	Day	135.25
0116	Fitter (grade 1)	Day	151.50
0123	Mason (brick layer) 1st class	Day	151.50
0124	Mason (brick layer) 2nd class	Day	141.60
0139	Skilled Beldar (for floor rubbing etc.)	Day	138.45
0589	Chromium plated Brass screws 20 mm	100 Nos	63.00
0689	Anodised Aluminium butt hinges 100x75x4 mm	100 Nos	416.00
0992	Galvanised steel plain sheets	quintal	3,450.00
2406	Float glass sheet of nominal thickness 4 mm (weight not less than 10kg/sqm).	sqm	248.00
2407	Float glass sheet of nominal thickness 5.5 mm.(weight not less than 13.50 kg/sqm).	sqm	340.00
2704	Aluminium Strip 40 mm wide and 2 mm thick	kilogram	195.00
7001	Brass 100mm mortice latch and lock with 6 levers without pair of handles	each	150.00
7019	Dash fastener	each	8.00
7048	Rawl plug 50 mm (designation 10 no.)	each	7.00
7306	Aluminium T or L sections	kilogram	195.00
7313	Expandable fastener with plastic sleeve and M.S. screws. 32 mm long	each	7.00
7347	Cadmium plated full threaded steel screws (30x4 mm dia.)	100 Nos	23.00
7348	Aluminium washer 2 mm thick 15 mm dia	100 Nos	7.00
7388	Dash hold fastener 12.5 mm dia, 40 mm long with 6 mm dia bolt	each	30.00
7389	Anodising 15 microns on aluminium sections	kilogram	32.00
7390	Neoprene/EPDM rubber gasket	metre	22.00
7391	Anodising 25 microns on aluminium sections	kilogram	40.00
7392	Epoxy powder coating 50 microns on aluminium sections.	kilogram	45.00
7393	Polyester powder coating 50 microns on aluminium sections	kilogram	50.00
7394	Double action hydraulic floor spring with stainless steel cover plate	each	1,400.00
7395	6 mm dia. G.I. adjustable hangers including clips (up to 1.2 m length)	each	25.00
7396	Double action hydraulic floor spring with brass cover plate	each	1,550.00

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
7477	Prelaminated particle board with one side decorative and other side balancing lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade)12 mm thick	sqm	595.00
7480	Prelaminated particle board with both sides decorative lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade)12 mm thick	sqm	625.00
8646	Silicon sealant.	cartridge	281.00
8647	Stainless steel screws 30mm x4mm.	100 Nos	25.00
8648	Hermetically sealed double glazed unit made with 6mm thick clear float glass both side having 12 mm air gap.	sqm	1,980.00
8649	Stainless steel (SS 304 grade) adjustable friction window stay. 205 x 19mm	each	145.60
8650	Stainless steel (SS 304 grade) adjustable friction window stay 255 x 19mm	each	161.20
8651	Stainless steel (SS 304 grade) adjustable friction window stay. 355 x 19mm	each	208.00
8652	Stainless steel (SS 304 grade) adjustable friction window stay. 510 x 19mm	each	390.00
8653	Stainless steel (SS 304 grade) adjustable friction window stay. 710 x 19mm	each	715.00
8654	Masking tape.	metre	1.40
8660	Aluminium casement window fastener (Anodised AC 15 )	each	30.00
8661	Aluminium casement window fastener (powder coated).	each	33.00
8662	Aluminium casement window fastener (polyester powder coated).	each	35.00
8663	Aluminium round shape handle (anodised AC 15)	each	37.00
8664	Aluminium round shape handle (powder coated)	each	41.00
8665	Aluminium round shape handle (polyester powder coated).	each	43.00
8666	Stainless steel screws 25mm x4mm	100 Nos	21.00
9999	Sundries	L.S.	2.60

## 21.0 ALUMINIUM WORK

Code No	Description	Unit	Rate Rs.
21.1	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS : 1285, fixed with rawl plugs and screws or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with required PVC/neoprene felt etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing and paneling to be paid for separately) :		
21.1.1	For fixed portion		
21.1.1.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	kg	290.45
21.1.1.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	kg	306.30
21.1.1.3	Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron)	kg	312.40
21.1.2	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of PVC / neoprene gasket required (Fittings shall be paid for separately).		
21.1.2.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	kg	310.45
21.1.2.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	kg	326.60
21.1.2.3	Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron)	kg	332.85
21.2	Providing and fixing 12mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge.		
21.2.1	Pre-laminated particle board with decorative lamination on one side and balancing lamination on other side.	sqm	776.05
21.2.2	Pre-laminated particle board with decorative lamination on both sides.	sqm	812.60

Code No	Description	Unit	Rate Rs.
21.3	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with PVC/ neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item):		
21.3.1	With float glass panes of 4.0 mm thickness	sqm	554.95
21.3.2	With float glass panes of 5.50 mm thickness	sqm	673.55
21.3.3	With float glass panes of 8 mm thickness	sqm	556.00
21.4	Providing and fixing double action hydraulic floor spring of approved brand and manufacture IS : 6315 marked, for doors including cost of cutting floors as required, embedding in floors and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge.		
21.4.1	With stainless steel cover plate	each	1,732.65
21.4.2	With brass cover plate	each	1,907.70
21.5	Providing and fixing powder coated aluminium work (minimum thickness of powder coating 50 micron) consisting of tee/ angle sections, of approved make conforming to IS : 733 in frames of false ceiling including aluminium angle cleats with necessary C.P. brass/ stainless steel sunk screws, aluminium perimeter angles fixed to wall with rawl plugs @ 450 mm centre to centre and fixing the frame work to G.I. level adjusting hangers 6 mm dia. with necessary cadmium plated machine screws all complete as per approved architectural drawings and direction of the Engineer-in-charge (level adjusting hangers, ceiling cleats and expansion hold fasteners to be paid for separately).	kg	364.45
21.6	Providing and fixing 6 mm dia. G.I. level adjusting hangers (upto 1200mm length) fixed to roof slabs by means of ceiling cleats made out of G.I. flat 40x3mm size 60mm long and expansion hold fasteners 12.5 mm dia. 40mm long complete as per direction of Engineer -in-charge.	each	71.10
21.7	Providing and fixing machine moulded aluminium covering of approved pattern & design, made out of machine cut aluminium sheet and machine holed for receiving screws, over expansion joints on vertical surfaces/ceilings with full threaded, cadmium plated steel screws 4mm dia. stem, 30mm long and aluminium washers 2mm thick, 15mm dia. at a staggered pitch of 200mm centre to centre including drilling holes in the receiving surface and providing expandable plastic sleeves in holes etc. complete.		
21.7.1	Anodised aluminium sheet 2.5mm thick (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	kg	335.85
21.7.2	Powder coated aluminium sheet 2.5mm thick (minimum thickness of powder coating 50 micron)	kg	351.70
21.8	Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of		

Code No	Description	Unit	Rate Rs.
	approved quality as per architectural drawings and direction of Engineer-in-charge complete.		
21.9	21.8.1 Upto 5mm depth and 5 mm width	metre	58.85
	Extra for applying additional anodic coating AC 25 instead of AC 15 to aluminium extruded sections.		
	21.9.1 For fixed portion	kg	884.50
	21.9.2 For shutters of doors, windows & ventilators.	kg	83.65
21.10	Providing and fixing double glazed hermetically sealed glazing in aluminium windows, ventilators and partition etc. with 6 mm thick clear float glass both side having 12 mm air gap including providing EPDM gasket, perforated aluminium spacers, desiccants, sealant (Both primary and secondary sealant) etc. as per specifications, drawings and direction of Engineer-in-charge complete.	sqm	2,808.90
21.11	Providing and fixing stainless steel (SS 304 grade) adjustable friction windows stays of approved quality with necessary stainless steel screws etc. to the side hung windows as per direction of Engineer-in-charge complete.		
	21.11.1 205 X 19 mm	each	175.10
	21.11.2 255 X 19 mm	each	193.20
	21.11.3 355 X 19 mm	each	247.55
	21.11.4 510 X 19 mm	each	458.95
	21.11.5 710 X 19 mm	each	836.45
21.12	Providing and fixing aluminium tubular handle bar 32 mm outer dia, 3.0 mm thick & 2100 mm long with SS screws etc .complete as per direction of Engineer-in-Charge.		
	21.12.1 Anodized (AC 15 ) aluminium tubular handle bar	each	433.75
	21.12.2 Powder coated minimum thickness 50 micron aluminium tubular handle bar.	each	458.45
	21.12.3 Polyester powder coated minimum thickness 50 micron aluminium tubular handle bar	each	467.95
21.13	Providing and fixing 100mm brass locks (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	each	208.35
21.14	Providing and fixing anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868. Minimum anodic coating of grade AC 15) sub frame work for windows and ventilators a with extruded built up standard tubular sections of approved make conforming to IS: 733 and IS : 1285 fixed with rawl plugs and stainless steel screws etc.	kg	303.90
21.15	Providing fixing aluminium casement windows fastener of required length for aluminium windows with necessary screws etc. complete.		

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
	21.15.1 Anodized (AC 15) aluminium	each	37.20
	21.15.2 Powder coated minimum thickness 50 micron aluminium.	each	40.70
	21.15.3 Polyester powder coated minimum thickness 50 micron aluminium.	each	43.00
21.16	Providing fixing aluminium round shape handle of outer dia 100mm with SS screws etc. complete as per direction of Engineer-in-charge		
	21.16.1 Anodized (AC 15 ) aluminium	each	45.30
	21.16.2 Powder coated minimum thickness 50 micron aluminium	each	49.95
	21.16.3 Polyester powder coated minimum thickness 50 micron aluminium.	each	52.30

**SUB HEAD : 22.0**

**WATER PROOFING**

## BASIC RATES (23.0 WATER PROOFING)

Code No	Description	Unit	Rate Rs.
0002	Hire charges of Concrete Mixer 0.14 cubic metre	Day	400.00
0012	Vibrator(Needle type 40mm)	Day	200.00
0101	Bhisti	Day	138.45
0114	Beldar	Day	135.25
0115	Coolie	Day	135.25
0123	Mason (brick layer) 1st class	Day	151.50
0124	Mason (brick layer) 2nd class	Day	141.60
0125	Mason (for plain stone work) 2nd class)	Day	141.60
0128	Mate	Day	138.45
0130	Mistry	Day	151.50
0131	Painter	Day	141.60
0155	Mason (average)	Day	146.55
0159	Skilled torch operator for laying tack	Day	151.50
0285	Brick Aggregate (Single size) : 63 mm nominal size	cum	350.00
0295	Stone Aggregate (Single size) : 20 mm nominal size	cum	700.00
0296	Stone Aggregate (Single size) : 12.5 mm nominal size	cum	700.00
0297	Stone Aggregate (Single size) : 10 mm nominal size	cum	700.00
0313	Blown type petroleum bitumen of penetration 85/25 of approved quality	tonne	25,000.00
0316	Bitumen solution primer of approved quality	litre	28.00
0318	Bitumen felt fibre base (vegetable or animal):Type 2 grade 1	sqm	45.00
0322	Bitumen felt :Type 3 grade 1	sqm	45.00
0367	Portland Cement	tonne	4,500.00
0370	Coal (steam)	quintal	300.00
0982	Coarse sand (zone III)	cum	600.00
1169	Kota stone slab 25mm thick (rough chiseled)	Sq.m.	150.00
1177	Stone grit 6 mm and down size or pea sized gravel	cum	717.00
1213	Water proofing materials	kilogram	20.00
1241	Commercial LPG in cylinder.	kg	35.00
2200	Carriage of steam coal	tonne	60.81
2202	Carriage of Stone aggregate below 40 mm nominal size	cum	53.21
2203	Carriage of Coarse sand	cum	53.21
2209	Carriage of Cement	tonne	47.29



<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Rate Rs.</b>
2211	Carriage of Tar bitumen	tonne	53.21
2216	Carriage of Stone blocks white & red sand stone & kota stone slab	tonne	47.29
2260	Carriage of Brick aggregate	cum	57.83
3002	Polyvinyl chloride sheet 400 micron thick	sqm	26.00
7233	Fibre glass tissue reinforcement Type II Grade I	sqm	55.00
7427	Water stops Serrated with central bulb (225 mm wide, 8-11 mm thick)	metre	330.00
7428	Water stops Dumb bell with central bulb	metre	306.00
7429	Kickers	metre	325.00
8200	A.P.P. modified polymeric felt (two layers) 1.5 mm thick	sqm	50.00
8201	A.P.P. modified polymeric felt (two layers) 2 mm thick	sqm	85.00
8203	A.P.P. modified 2 mm thick membrane reinforced with glass fibre matt	sqm	147.00
8204	A.P.P. modified 3 mm thick membrane reinforced with glass fibre matt	sqm	185.00
8205	A.P.P. modified 3 mm thick membrane reinforced with polyester matt	sqm	221.00
8206	Bitumen primer for bitumen membrane	litre	54.00
8207	Geotextile 120 gsm membrane	sqm	25.00
8501	Polymer modified cementation coating	kilogram	114.00
8502	Fibre glass cloth	sqm	33.00
9999	Sundries	L.S.	2.60

## 22.0 WATER PROOFING

Code No	Description	Unit	Rate Rs.
22.1	Providing and laying integral cement based treatment for water proofing on horizontal surface at all depth below ground level for under ground structures as directed by Engineer-in-Charge and consisting of : i) 1st layer of 22mm to 25mm thick approved and specified rough stone slab over a 25mm thick base of cement mortar 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound conforming to IS:2645 in the recommended proportion over the leveling course (leveling course to be paid separately). Joints sealed and grouted with cement slurry mixed with water proofing compound. ii) 2nd layer of 25mm thick cement mortar 1:3 (1 cement: 3 coarse sand) mixed with water proofing compound in recommended proportions. iii) Finishing top with stone aggregate of 10mm to 12mm nominal size spreading @ 8 cudm/sqm thoroughly embedded in the 2nd layer.		
22.1.1	Using rough kota stone.	sqm	540.30
22.2	Providing and laying integral cement based treatment for water proofing on the vertical surface by fixing specified stone slab 22 mm to 25mm thick with cement slurry mixed with water proofing compound conforming to IS:2645 in recommended proportions with a gap of 20mm (minimum) between stone slabs and the receiving surfaces and filling the gaps with neat cement slurry mixed with water proofing compound and finishing the exterior of stone slab with cement mortar 1:3 (1 cement : 3 coarse sand) 20mm thick with neat cement punning mixed with water proofing compound in recommended proportion complete at all levels and as directed by Engineer-in-charge :		
22.2.1	Using rough Kota stone	sqm	640.05
22.3	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like consisting of : i) 1st course of applying cement slurry @ 4.4 Kg/sqm mixed with water proofing compound conforming to IS 2645 in recommended proportions including rounding off junction of vertical and horizontal surface. ii) IInd course of 20mm cement plaster 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface. iii) IIIrd course of applying blown or residual bitumen applied hot at 1.7 Kg. per sqm of area. iv) IVth course of 400 micron thick PVC sheet. (Overlaps at joints of PVC sheet should be 100 mm wide and pasted to each other with bitumen @ 1.7 Kg/sqm.)	sqm	272.50

Code No	Description	Unit	Rate Rs.
22.4	Providing and Placing in position suitable PVC water stops conforming to IS:12200 for construction/ expansion joints between two RCC members and fixed to the reinforcement with binding wire before pouring concrete etc. complete :		
22.4.1	Serrated with central bulb (225mm wide, 8-11mm thick).	metre	386.75
22.4.2	Dumb bell with central bulb (180mm wide, 8mm thick).	metre	358.85
22.4.3	Kickers (320mm wide, 5mm thick).	metre	380.95
22.5	Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying : a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. This layer will be allowed to air cure for 4 hours. b) Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.	sqm	143.85
22.6	Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying: a) after surface preparation, first layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30cm on parapet wall and tucked into groove in parapet all around. d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately For the purpose of measurement the entire treated surface will be measured.	sqm	237.50
22.7	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: a) Applying a slurry coat of neat cement using 2.75 kg/sqm. of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300mm height including cleaning the surface before treatment. b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand ) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the		

Code No	Description	Unit	Rate Rs.
	adjoining walls upto 300 mm height including rounding of junctions of walls and slabs c) After two days of proper curing applying a second coat of cement slurry using 2.75kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge. d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3mm deep. e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer-in-Charge :		
22.7.1	With average thickness of 120mm and minimum thickness at khurra as 65 mm.	sqm	536.40
22.8	Providing and laying four courses water proofing treatment with bitumen felt over roofs consisting of first and third courses of blown bitumen 85/25 or 90/15 conforming to IS : 702 applied hot @ 1.45 Kg per square metre of area for each course, second course of roofing felt type 3 grade-I (hessian based self finished bitumen felt) and fourth and final course of stone grit 6mm and down size or pea-sized gravel spread at 6 cubic diameter per square metre including preparation of surface but excluding grading complete with :		
22.8.1	Bitumen felt (hessian base) type 3 grade I conforming to IS : 1322.	sqm	184.80
22.9	Providing and laying six courses water proofing treatment with bitumen felt over roofs consisting of first, third and fifth course of blown bitumen 85/25 or 90/15 conforming to IS : 702 applied hot @ 1.45, 1.20 and 1.45 Kg per square metre of area respectively, second and fourth courses of roofing felt type 3 grade I conforming to IS : 1322 (Hessian based self finished bitumen felt) conforming to IS : 1322 and sixth and final course of stone grit 6 mm and down size or pea sized gravel spread at 6 cubic dm per sqm including preparation of surface but excluding grading, complete.	sqm	292.75
22.10	Providing and laying six courses water proofing treatment with bitumen felt over roofs consisting of first, third and fifth courses of blown or / and residual bitumen applied hot at 1.45, 1.20 and 1.70 kg per square metre of area respectively, second and fourth courses of roofing felt type 2 grade I (fibre base self finished bitumen felt) six and final courses of stone grit 6mm and down size or pea sized gravel spread at 6cu.dm per sqm including preparation of surface, excluding grading, compete.	sqm	317.15
22.11	Providing and laying six courses water proofing treatment with bitumen felt over roofs consisting of first, third and fifth courses of blow or/ and residual bitumen applied hot at 1.45, 1.20 and 1.70 kg per square metre of area respectively, second and fourth courses of	sqm	317.25

Code No	Description	Unit	Rate Rs.
	roofing felt type 2 grade II (glass fibre base self finished bitumen felt) and sixth and final course of stone grit 6mm and down size or pea sized gravel spread at 6 cubic dm per sqm including preparation of surface but excluding grading, complete.		
22.12	Supplying and applying bituminous solution primer on roof and or wall surface at 0.24 litre per sqm.	sqm	15.00
22.13	Deduct for omitting in water proofing treatment final course of spreading stone grit 6mm down size or pea sized gravel :		
22.13.1	At 6 cudm per sqm.	sqm	8.65
22.13.2	at 8 cudm per sqm.	sqm	11.05
22.14	Grading roof for water proofing treatment with		
22.14.1	Cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	3,314.95
22.14.2	Cement mortar 1:3 (1 cement : 3 coarse sand)	cum	5,045.35
22.14.3	Cement mortar 1:4 (1cement : 4 coarse sand)	cum	4,357.65
22.15	Providing and laying in situ seven course water proofing treatment with APP (Atactic poly-propylene) modified Polymeric memberane over roof consisting of first coat of bitumen primer @ 0.40Kg per sqm, 2nd, 4th & 6th courses of bonding material @ 1.20 Kg/sqm, which shall consist of blown type bitumen of grade 85/25 conforming to IS : 702, 3rd and 5th layers of roofing membrane APP modified Polymeric membrane 1.5mm thick of 2.25 Kg/sqm weight consisting of five layers prefabricated with centre core as 20micron HMHDPE film sandwiched on both sides with polymeric mix and the polymeric mix is protected on both side with 20micron HMHDPE film. 7th, the top most layer shall be finished with brick tiles of class designation 100 grouted with cement mortar 1:3 (1cement:3 fine sand) mixed with 2% integral water proofing compound by weight of cement over a 12mm layer of cement mortar 1:3 (1 cement : 3 fine sand) and finished neat which shall be paid for separately.	sqm	283.25
22.16	Providing and laying in situ five course water proofing treatment with APP (Atactic Polypropylene) modified Polymeric memberane over roof consisting of first coat of bitumen primer @ 0.40Kg per sqm, 2nd & 4th courses of bonding material @ 1.20 Kg/sqm, which shall consist of blown type bitumen of grade 85/25 conforming to IS : 702, 3rd layer of roofing membrane APP modified Polymeric membrane 2.0mm thick of 3.00 Kg/sqm weight consisting of five layers prefabricated with centre core as 100micron HMHDPE film sandwiched on both sides with polymeric mix and the polymeric mix is protected on both side with 20micron HMHDPE film. 5th, the top most layer shall be finished with brick tiles of class designation 100 grouted with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% integral water proofing compound by weight of cement over a 12mm layer of cement mortar 1:3 (1 cement : 3 fine sand) and finished neat which shall be paid for separately.	sqm	221.15

Code No	Description	Unit	Rate Rs.
22.17	Providing and laying in situ seven course water proofing treatment with APP (Atactic Polypropylene) modified Polymeric memberane over roof consisting of first coat of bitumen primer @ 0.40Kg per sqm, 2nd, 4th & 6th courses of bonding material @ 1.20 Kg/sqm, which shall consist of blown type bitumen of grade 85/25 conforming to IS : 702, 3rd and 5th layers of roofing membrane APP modified Polymeric membrane 2.0mm thick of 3.00 Kg/sqm weight consisting of five layers prefabricated with centre core as 100micron HMHDPE film sandwiched on both sides with polymeric mix and the polymeric mix is protected on both side with 20micron HMHDPE film. 7th, the top most layer shall be finished with brick tiles of class designation 100 grouted with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% integral water proofing compound by weight of cement over a 12 mm layer of cement mortar 1:3 ( 1 cement : 3 fine sand) and finished neat which shall be paid for separately.	sqm	372.70
22.18	Providing and fixing APP (Atactic Polypropylene Polymer) modified prefabricated five layer 2mm thick water proofing membrance, black finished reinforced with glass fibre matt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 ltr/sq. mtr. by the same membrance manufacture of density at 25°C, 0.87 - 0.89 kg/ ltr and viscocity 70 - 160 cps. Over the primer coat the layer of membrane shall be laid using Butane torch and sealing all joints etc., and preparing the surface complete. The vital physical and chemical parameters of the membrane shall be as under : Joint strength in longitudinal and transverse direction at 23°C as 350/300 N/ 5cm. Tear strength in longitudinal and transverse direction as 60/80N. Softening point of membrane not less than 150°C. Cold flexibility shall be upto -2°C when tested in accordance with ASTM, D - 5147. The laying of membrane shall be got done through the authorised applicator of the manufacture of membrane.		
	22.18.1 2mm (for corrugated roof sheets)	sqm	247.25
22.19	Providing and laying APP (Atactic Polypropylene Polymer) modified prefabricated five layer, 3mm thick water proofing membrane, black finished reinforced with glass fibre matt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 ltr/sqm. by the same membrane manufactured of density at 25°C, 0.87 - 0.89 kg/ltr and viscocity 70 - 160 cps. Over the primer coat the layer of membrane shall be laid using butane torch and sealing all joints etc., and preparing the surface complete. The vital physical and chemical parameters of the membrane shall be as under : Joint strength in longitudinal and transverse direction at 23°C as 350/300 N/5cm. Tear strength in longitudinal and transverse direction as 60/80N. Softening point of membrane not less than 150°C. Cold flexibility shall be upto - 2°C when tested in accordance with ASTM, D - 5147. The laying of membrane shall be got done through the authorised applicator of the manufacturer of membrane :		
	22.19.1 3 mm thick	sqm	295.80

Code No	Description	Unit	Rate Rs.
22.20	Providing and laying APP (Atactic Polypropylene Polymer) modified prefabricated five layer 3mm thick water proofing membrane, black finished reinforced with non-woven polyester matt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 ltr/sqm. by the same membrane manufacture of density at 25°C, 0.87-0.89 kg/ltr and viscosity 70-160 cps. Over the primer coat the layer of membrane shall be laid using Butane Torch and sealing all joints etc., and preparing the surface complete. The vital physical and chemical parameters of the membrane shall be as under : Joint strength in longitudinal and transverse direction at 23°C as 650/450N/5cm. Tear strength in longitudinal and transverse direction as 300/250N. Softening point of membrane not less than 150°C. Cold flexibility shall be upto -2°C when tested in accordance with ASTM, D - 5147. The laying of membrane shall be got done through the authorised applicator of the manufacturer of membrane :		
	22.20.1 3 mm thick	sqm	341.80
22.21	Extra for covering top of membrane with Geotextile, 120gsm non woven, 100% polyester of thickness 1 to 1.25mm bonded to the membrane with intermittent touch by heating the membrane by Butane Torch as per manufactures recommendation [for Item No. 25.19 to 25.21].	sqm	38.75

**SUB HEAD : 23.0**

**HORTICULTURE  
AND  
LAND SCAPING**



## BASIC RATES (SH: 23.0 HORTICULTURE & LANDSCAPING)

Code No	Description	Unit	Rate Rs.
0103	Blacksmith 2nd class	Day	141.60
0114	Beldar	Day	135.25
0115	Coolie	Day	135.25
0124	Mason (brick layer) 2nd class	Day	141.60
0979	Royalty for good earth	cum	11.00
0980	Royalty for sludge	cum	60.00
1008	Flats up to 10 mm in thickness	quintal	2,900.00
2201	Carriage of Bricks	1000 Nos	141.88
2205	Carriage of Steel	tonne	47.29
2241	Carriage of Good earth	cum	66.51
2242	Carriage of Dump manure	cum	57.83
2317	Carriage of Sludge	cum	57.83
2602	F.P.S. bricks class designation75	1000 Nos	1,900.00
2603	F.P.S. bricks class designation50	1000 Nos	1,700.00
9999	Sundries	L.S.	2.60

## 23.0 HORTICULTURE & LANDSCAPING

Code No	Description	Unit	Rate Rs.
23.1	Trenching in ordinary soil up to a depth of 60cm including removal and stacking of serviceable materials and then disposing of by spreading and neatly levelling with in a lead of 50m and making up the trenched area to proper levels by filling with earth or earth mixed with sludge or/and manure before and after flooding trench with water (excluding cost of imported earth, sludge or manure).	cum	16.95
23.2	Supplying and stacking of good earth at site including royalty and carriage up to 1 km (earth measured in stacks will be reduced by 20% for payment).	cum	144.05
23.3	Supplying and stacking sludge at site including royalty and carriage up to 1 km (sludge measured in stacks will be reduced by 8% for payment).	cum	136.85
23.4	Supplying and stacking at site dump manure from approved source, including carriage up to 1 km (manure measured in stacks will be reduced by 8% for payment) :		
23.4.1	Screened through sieve of I.S. designation 20mm	cum	82.90
23.4.2	Screened through sieve of I.S. designation 16mm	cum	90.75
23.4.3	Screened through sieve of I.S. designation 4.75mm	cum	97.05
23.5	Rough dressing the trenched ground including breaking clods.	100sqm	33.05
23.6	Uprooting weeds from the trenched area after 10 to 15 days of its flooding with water including disposal of uprooted vegetation.	100sqm	106.85
23.7	Fine dressing the ground	100sqm	80.20
23.8	Spreading of sludge, dump manure or/and good earth in required thickness (Cost of sludge, dump manure or/ and good earth to be paid separately).	cum	11.60
23.9	Mixing earth and sludge or manure in proportion specified or directed.	cum	7.85
23.10	Grassing with 'Doob' grass including watering and maintenance of the lawn for 30 days or more till the grass forms a thick lawn free from weeds and fit for mowing including supplying good earth if needed (the good earth shall be paid for separately).		
23.10.1	In rows 15 cm apart in either direction.	100sqm	121.00
23.10.2	In rows 7.5 cm apart in either direction.	100sqm	251.25
23.10.3	In rows 5 cm apart in either direction.	100sqm	384.85
23.11	Renovating lawns including weeding, cheeling the grass, forking the ground, top dressing with sludge or manure, mixing the same with forked soil, watering and maintaining the lawn for 30 days or more till the grass forms a thick lawn free from weeds and fit for mowing and disposal of rubbish as directed, including supplying good earth if needed but excluding the cost of sludge or manure (the good earth	100sqm	741.50

Code No	Description	Unit	Rate Rs.
	shall be paid for separately).		
23.12	Uprooting rank vegetation and weeds by digging the area to a depth of 60cm removing all weeds and other growth with roots by forking repeatedly, breaking clods, rough dressing, flooding with water, uprooting fresh growths after 10 to 15 days and then fine dressing for planting new grass, including disposal of all rubbish with all leads and lifts.	100sqm	1,318.20
23.13	Preparation of beds for hedging and shrubbery by excavating 60cm deep and trenching the excavated base to a further depth of 30cm, refilling the excavated earth after breaking clods and mixing with sludge or manure in the ratio of 8:1 (8 parts of stacked volume of earth after reduction by 20% : one part of stacked volume of sludge or manure after reduction by 8%), flooding with water, filling with earth if necessary, watering and finally fine dressing, leveling etc. including stacking and disposal of materials declared unserviceable and surplus earth by spreading and leveling as directed, within a lead of 50m lift up to 1.5 m complete (cost of sludge, manure or extra earth to be paid for separately).	cum	47.90
23.14	Digging holes in ordinary soil and refilling the same with the excavated earth mixed with manure or sludge in the ratio of 2:1 by volume (2 parts of stacked volume of earth after reduction by 20% : 1 part of stacked volume of manure after reduction by 8%) flooding with water, dressing including removal of rubbish and surplus earth, if any with all leads and lifts (cost of manure, sludge or extra good earth if needed to be paid for separately) :		
23.14.1	Holes 1.2 m dia and 1.2 m deep.	each	146.65
23.14.2	Holes 60 cm dia, and 60 cm deep.	each	19.25
23.15	Half brick circular tree guard in 50 class designation bricks, internal diameter 1.25 metre and height 1.2 metre above ground and 0.20 m below ground bottom two courses laid dry and top three courses in cement mortar 1:6 (1 cement : 6 fine sand) and the intermediate courses being in dry honey comb masonry as per design complete:		
23.15.1	With F.P.S. Bricks	each	595.70
23.16	Providing and fixing M.S. flat iron tree guard 60cm dia. and 2m height above ground level formed of 4 nos. 25x6mm and 8 nos. 25x3mm vertical M.S. flats rivetted to 3 nos. 25x6mm M.S. flat iron rings in two halves, bolted together with 8mm dia. and 30mm long bolts including painting two coats with paint of approved brand and manufacture over a coat of priming, complete in all respects.	each	1,592.10
23.17	Making tree guard 53 cm dia. and 1.3 m high as per design from empty coal tar drums supplied free by the department including providing and fixing 2 nos. M.S. sheet rings 50 x 0.5 mm with rivets complete in all respects including painting inside and outside of tree guard with :		
23.17.1	A coat of coal tar.	each	104.00

Code No	Description	Unit	Rate Rs.
	23.17.2 Two or more coats of synthetic enamel paint of approved quality shade over a priming coat.	each	187.15
23.18	Making tree guard 53 cm dia. and 2 m high as per design from empty coal tar drums supplied free by the department including providing and fixing four legs 40 cm long of 30 x 3 mm M.S. flat riveted to tree guard and providing and fixing 2 nos. M.S. sheet rings 50 x 0.5 mm with rivets complete in all respects including painting inside and outside of tree guard with :		
	23.28.1 A coat of coal tar.	each	220.15
	23.28.2 Two or more coats of synthetic enamel paint of approved quality and shade over a priming coat.	each	348.85
23.19	Edging with bricks laid dry length wise including excavation, refilling, consolidating with hand packing and spreading neatly surplus earth within a lead of 50 m :		
	23.19.1 75 class designation.		
	23.19.1.1 F.P.S. Bricks	metre	15.05
	23.19.2 50 class designation.		
	23.19.2.1 F.P.S. bricks.	metre	13.85
23.20	Filling mixture of earth and sludge or manure in the desired proportion in trenches, flooding with water and leveling (cost of supplying earth and sludge or manure and mixing excluded).	cum	3.95
23.21	Excavation in dumped stones or malba including stacking of serviceable and unserviceable material separately and disposal of unserviceable material lead up to 50 m and lift up to 1.5 m disposed material to be neatly dressed.	cum	109.95
23.22	Excavation in bajri path including stacking of serviceable and unserviceable material lead up to 50 m and lift up to 1.5 m disposed material to be neatly dressed.	cum	122.55
23.23	Excavation in water bound macadam road including stacking the serviceable and unserviceable material separately and disposal of unserviceable material lead up to 50 m and lift up to 1.5 m disposed material to be neatly dressed.	cum	150.80
23.24	Flooding the ground with water including making kiaries and dismantling the same.	100sqm	68.40

# **COEFFICIENTS FOR CEMENT CONSUMPTION**

# 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

## 3.0 MORTAR

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals)
3.1	Cement Mortar 1:1 (1 cement : 1 fine sand)	cum	10.20
3.2	Cement mortar 1:2 (1 cement : 2 fine sand).	cum	6.80
3.3	Cement mortar 1:3 (1 cement : 3 fine sand).	cum	5.10
3.4	Cement mortar 1:4 (1 cement : 4 fine sand).	cum	3.80
3.5	Cement mortar 1:5 (1 cement : 5 fine sand).	cum	3.10
3.6	Cement mortar 1:6 (1 cement : 6 fine sand).	cum	2.50
3.7	Cement mortar 1:2 (1 cement : 2 coarse sand).	cum	6.80
3.8	Cement mortar 1:3 (1 cement : 3 coarse sand).	cum	5.10
3.9	Cement mortar 1:4 (1 cement : 4 coarse sand).	cum	3.80
3.10	Cement mortar 1:5 (1 cement : 5 coarse sand).	cum	3.10
3.11	Cement mortar 1:6 (1 cement : 6 coarse sand).	cum	2.50
3.12	Cement mortar 1:2 (1 cement : 2 stone dust).	cum	6.80
3.13	Cement mortar 1:2 (1 cement : 2 marble dust).	cum	6.80
3.14	Cement mortar 1:5 (1 cement : 5 marble dust).	cum	3.10
3.15	White cement mortar 1:2 (1 white cement : 2 marble dust).	cum	6.80*
3.16	White cement mortar 1:3 (1 white cement : 3 marble dust).	cum	5.10*
3.17	White cement mortar 1:5 (1 white cement : 5 marble dust).	cum	3.10*

\* denotes the White Cement.

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 4.0 CONCRETE WORK

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals)
<b>CEMENT CONCRETE (CAST – IN- SITU)</b>			
4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering - All work upto plinth level :		
4.1.1	1:1:2 (1 Cement : 1 coarse sand : 2 graded stone aggregate 20 mm nominal size)	cum	6.10
4.1.2	1:1½:3 (1 Cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size).	cum	4.00
4.1.3	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	3.20
4.1.4	1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size).	cum	3.20
4.1.5	1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size).	cum	2.20
4.1.6	1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size).	cum	2.20
4.1.7	1:3:6 (1 Cement : 3 fine sand : 6 graded stone aggregate 40 mm nominal size).	cum	2.20
4.1.8	1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size).	cum	1.70
4.1.9	1:4:8 (1 cement : 4 fine sand : 8 graded stone aggregate 40 mm nominal size)	cum	1.70
4.1.10	1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size)	cum	1.30
4.1.11	1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size)	cum	1.30
4.1.12	1:2:3½:9 (1 ordinary portland cement : 2 Fly ash : 3½ coarse sand : 9 graded stone aggregate 40 mm nominal size).	cum	1.70
4.1.13	1:2½:4:11 (1 ordinary portland cement : 2½ fly ash : 4 coarse sand : 11 graded stone aggregate 40 mm nominal size)	cum	1.30
4.2	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers,		

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals)
	abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets etc. upto floor five level, excluding the cost of centring, shuttering and finishing :		
4.2.1	1:1:2 (1 cement : 1 coarse sand : 2 graded stone aggregate 20 mm nominal size)	cum	6.10
4.2.2	1:1½:3 (1 cement:1½ coarse sand:3 graded stone aggregate 20 mm nominal size).	cum	4.00
4.2.3	1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	3.20
4.2.4	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size).	cum	3.20
4.2.5	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size).	cum	2.20
4.2.6	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size).	cum	2.20
4.2.7	1:3:6 (1 cement : 3 fine sand : 6 graded stone aggregate 40 mm nominal size).	cum	2.20
4.4	Providing and laying cement concrete in kerbs, steps and the like at or near ground level excluding the cost of centring, shuttering and finishing.		
4.4.1	1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	3.20
4.4.2	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size).	cum	2.20
<b>CEMENT CONCRETE (PRE-CAST)</b>			
4.5	Providing and fixing upto floor five level precast cement concrete string or lacing courses, copings, bed plates, anchor blocks, plain window sills, shelves, louvers, steps, stair cases, etc. including hoisting and setting in position with cement mortar 1:3 (1 Cement : 3 coarse sand), cost of required centring, shuttering and finishing smooth with 6mm thick cement plaster 1:3 (1 Cement : 3 fine sand) on exposed surfaces complete.		
4.5.1	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size).	cum	3.80
4.5.2	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size).	cum	2.80



Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals)
4.6	Providing and fixing at or near ground level precast cement concrete in kerbs, edgings etc. as per approved pattern and setting in position with cement mortar 1:3 (1 Cement : 3 coarse sand) including the cost of required centring, shuttering and finishing smooth with 6mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces complete.		
4.6.1	1:2:4 ( 1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size).	cum	3.62
4.7	Providing and fixing upto floor five level precast cement concrete solid block including hoisting and setting in position with cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centring, shuttering and finishing smooth with 6mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces complete :		
4.7.1	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size).	cum	4.13
4.7.2	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size).	cum	3.13
4.8	Providing and fixing upto floor five level precast cement concrete hollow block including hoisting and setting in position with cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centring, shuttering and finishing smooth with 6mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces complete :		
4.8.1	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size).	cum	2.466
4.8.2	1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size).	cum	2.006
4.9	Precasting and placing in position 125 mm dia Bollards 600 mm high of required shape including providing M.S. Pipe Sleeve 50 mm dia 300 mm long in the Bollard and M.S. Pipes 40 mm dia and 450 mm long with 150x150x6mm M.S. plate welded at bottom and embedded 150mm in cement concrete 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) including necessary excavation of size 250x250x450mm deep for the same in bitumen/concrete pavement at specified spacing.	each	0.097
<b>DAMP- PROOF COURSE</b>			
4.10	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size).	sqm	0.13

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals)
4.11	Providing and laying damp-proof course 50mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size).	sqm	0.16
<b>MISCELLANEOUS</b>			
4.17	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) over 75mm bed by dry brick ballast 40mm nominal size well rammed and consolidated and grouted with fine sand including finishing the top smooth	sqm	0.11

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 5.0 REINFORCED CEMENT CONCRETE

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals)
<b>CAST-IN-SITU</b>			
5.1	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centring, shuttering, finishing and reinforcement - All work up to plinth level :		
5.1.1	1:1:2 (1 cement : 1 coarse sand : 2 graded stone aggregate 20 mm nominal size).	cum	6.10
5.1.2	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	cum	4.00
5.1.3	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	3.20
5.2	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. up to floor five level excluding cost of centring, shuttering, finishing and reinforcement :		
5.2.1	1:1:2 (1 cement : 1 coarse sand : 2 graded stone aggregate 20 mm nominal size)	cum	6.10
5.2.2	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	cum	4.00
5.2.3	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	3.20
5.3	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases up to floor five level excluding the cost of centring, shuttering, finishing and reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	3.20
5.4	Providing and laying up to floor five level reinforced cement concrete in kerbs, steps and the like excluding the cost of centring, shuttering, finishing and reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	3.20
5.5	Reinforced cement concrete work in arches, archribs, domes, vaults, shells, folded plate and roofs having slope more than 15° up to floor five level excluding the cost of centring, shuttering, finishing and reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	3.20

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals)
5.6	Reinforced cement concrete work in chimneys, shafts, up to floor five level excluding the cost of centring, shuttering, finishing and reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	3.20
5.7	Reinforced cement concrete work in well-steining excluding the cost of centring, shuttering, finishing and reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	3.20
5.8	Reinforced cement concrete work in vertical and horizontal fins individually or forming box louvers, facias and eaves boards up to floor five level excluding the cost of centring, shuttering, finishing and reinforcement with 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20mm nominal size).	cum	4.00
<b>PRE – CAST R.C.C.</b>			
5.12	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete work in string courses, bands, copings, bed plates, anchor blocks, plain window sills and the like including the cost of required centring, shuttering, finishing smooth with 6 mm thick cement plaster 1:3 (1 cement: 3 fine sand) on exposed surfaces complete but excluding cost of reinforcement with 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size).	cum	3.80
5.13	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in small lintels not exceeding 1.5m clear span up to floor five level including the cost of required centring, shuttering and finishing smooth with 6 mm thick cement plaster 1:3 (1 cement: 3 fine sand) on exposed surfaces but excluding the cost of reinforcement with 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size).	cum	3.77
5.14	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in mouldings as in cornices, windows sills etc. including setting in cement mortar 1:3 (1 cement : 3 coarse sand) cost of required centring, shuttering and finishing smooth with 6 mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces complete but excluding the cost of reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	3.80
5.15	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in lintels, beams and bressumers including setting in cement mortar 1:3 (1 cement: 3 coarse sand), cost of required centring and shuttering and finishing smooth with 6 mm thick cement plaster 1:3 (1 cement: 3 fine sand) on exposed surfaces but excluding the cost of	cum	3.49

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals)
	reinforcement with 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size).		
5.16	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in shelves including setting in cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centring, shuttering and finishing with neat cement punning on exposed surfaces but excluding the cost of reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size).	cum	3.80
5.17	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in vertical & horizontal fins individually or forming box louvers setting in cement mortar 1:2 (1 cement : 2 coarse sand) including the cost of required centring, shuttering and finishing smooth with 6mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces complete but excluding the cost of reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	4.73
5.18	Providing precast cement concrete Jali 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6mm nominal size) reinforced with 1.6 mm dia mild steel wire including centring and shuttering, roughening cleaning, fixing and finishing in cement mortar 1:3 (1 cement: 3 fine sand) etc. complete excluding plastering of the jambs, sills and soffits.		
5.18.1	50 mm thick	sqm	1.64*
5.18.2	40 mm thick	sqm	1.64*
5.18.3	25 mm thick	sqm	1.64*
	* Cement for fixing only.		
<b>ENCASING ROLLED STEEL SECTION</b>			
5.19	Encasing rolled steel sections, in beams and columns, with cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 12.5mm nominal size) including centring and shuttering complete but excluding cost of reinforcement.	cum	3.20
5.20	Encasing rolled steel section in grillages with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size) including centring and shuttering but excluding cost of expanded metal and hangers.	cum	3.20
<b>MISCELLANEOUS</b>			
5.23	Deduct for omitting in R.C.C. work smooth finishing of the exposed surface with 6mm thick cement mortar 1:3 (1 Cement : 3 fine sand)	100 sqm	3.67

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals)
5.24	Extra for rendering smooth the top of suspended floors, landings and staircases (treads and risers) with cement mortar 1:2 (1 cement : 2 coarse sand) including a floating coat of neat cement and protecting the surface with a layer of 7.5 cm of earth laid over 15 mm of fine sand in case of suspended floor and bricks laid in mud mortar in case of landings and steps including subsequent removal and cleaning of the same.	100sqm	4.17
5.27	Providing and filling in position bitumen mix filler of Proportion 80 kg. of hot bitumen, 1 kg. of cement and 0.25 cubic metre of coarse sand for expansion joints.	per cm depth per cm width per 100m	0.00032
<b>DESIGN MIX CONCRETE</b>			
5.33	Providing and laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of specified grade for reinforced cement concrete work including pumping of concrete to site of laying but excluding the cost of centring, shuttering, finishing and reinforcement. including Admixtures in recommended proportions as per IS 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge. M-25 grade reinforced cement concrete by using 410kg. of cement per cum of concrete. All work up to floor V level.	cum	4.10*
5.34	Add or deduct for providing richer or leaner mixes respectively at all floor levels.		
5.34.1	Providing M-30 grade concrete by using 420kg of cement per cum of concrete instead of M-25 grade B.M.C/ R.M.C..	cum	0.10*
5.34.2	Providing M-35 grade concrete by using 428kg of cement per cum of concrete instead of M-25 grade B.M.C/ R.M.C...	cum	0.18*
5.34.3	Providing M-40 grade concrete by using 435kg of cement per cum of concrete instead of M-25 grade B.M.C/ R.M.C..	cum	0.25*
5.36	Providing and placing in position precast reinforced cement concrete waffle units square or rectangular as per design and shape for floors and roofs in 1:1½:3 (1 Cement : 1½ coarse sand : 3 graded stone aggregate 10mm nominal size) including flush or deep ruled pointing at joints in Cement mortar 1:2 (1 Cement : 2 Fine sand), making necessary holes of required sizes for carrying through service lines etc., providing steel hooks for lifting etc, form work in precasting, handling, hoisting, centering and erection complete for all floor levels but excluding	cum	4.16*

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals)
	the cost of reinforcement.		
5.37	Providing and laying in position ready mixed concrete manufactured in fully automatic batching plant and transported to site of work in transit mixer for a lead up to 10kms having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work including pumping of R.M.C. from transit mixer to site of laying , excluding the cost of centering, shuttering finishing and reinforcement including cost of admixtures in recommended proportions as per IS : 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. M-25 grade Reinforced cement concrete by using 410kg of cement per cum of concrete. All works up to floor V level.	cum	4.10*

\* Actual weight for design mix will be worked out taking into consideration the cement requirement as per particular mix design.

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 6.0 BRICK WORK

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals)
6.1	Brick work with F.P.S. bricks of class designation 75 in foundation and plinth in:		
6.1.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	0.95
6.1.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	0.625
6.2	Brick work with modular bricks of class designation 75 in foundation and plinth in:		
6.2.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	0.95
6.2.2	Cement Mortar 1:6 (1 cement : 6 coarse sand).	cum	0.625
6.3	Brick work with machine moulded perforated bricks of class designation 125 conforming to IS: 2222 -1991 in superstructure above plinth level up to floor five level in cement mortar 1:6 (1 cement : 6 coarse sand) :		
6.3.1	With F.P.S. bricks.	cum	0.625
6.3.2	With Modular bricks.	cum	0.625
6.4	Brick work with F.P.S. bricks of class designation 75 in superstructure above plinth level up to floor V level in all shapes and sizes in :		
6.4.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	0.95
6.4.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	0.625
6.7	Providing half brick masonry with F.P.S. bricks of class designation 75 in cement mortar 1:3 (1 Cement : 3 coarse sand) in superstructure for closing cavity 5 to 7.5 cm wide in cavity wall complete with 10 cm / 11.4 cm wide bitumen felt type 3 grade 1.	100 metre	3.86
6.8	Brick work 7 cm thick with F.P.S. brick of class designation 75 in cement mortar 1:3 (1 cement : 3 coarse sand) in superstructure.	100 sqm	9.23
6.9	Brick work in plain arches in superstructure including centering and shuttering complete for span up to 6 metres with F.P.S. brick of class designation 75 in cement mortar 1:3 (1 cement : 3 coarse sand).	cum	1.28
6.10	Brick work in gauged arches in superstructure in cement mortar 1:3 (1 cement : 3 coarse sand) including centering and shuttering complete, for span up to 6 meters with F.P.S. brick of class designation 75.	cum	1.28

#### HALF BRICK MASONRY



Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals)
6.12	Half brick masonry with F.P.S. brick of class designation 75 in foundations and plinth in.		
6.12.1	Cement mortar 1:3 (1 cement : 3 coarse sand)	100 sqm	14.28
6.12.2	cement mortar 1:4 (1 cement : 4 coarse sand)	100 sqm	10.64
6.13	Half brick masonry with F.P.S. bricks of class designation 75 in superstructure above plinth level up to floor V level.		
6.13.1	Cement mortar 1:3 (1 cement :3 coarse sand)	100 sqm	14.28
6.13.2	Cement mortar 1:4 (1 cement :4 coarse sand)	100 sqm	10.64
<b>BRICK TILE WORK</b>			
6.16	Tile brick masonry with tile bricks of class designation 100 in foundation and plinth in:		
6.16.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	1.52
6.16.2	Cement mortar 1:6 (1 cement : 6 coarse sand).	cum	1.00
6.17	Tile brick masonry with machine moulded tile bricks of class designation 125 conforming to IS : 2690 (Part I) - 1993 in foundation and plinth in cement mortar 1:6 (1 cement : 6 coarse sand).	cum	1.00
6.18	Tile brick masonry with tile brick of class designation 100 in superstructure above Plinth level up to floor V level.	cum	1.00
6.20	Tile brick masonry with tile bricks of class designation 100 in plain arch work in superstructure in cement mortar 1:4 (1 cement : 4 coarse sand) including centering and shuttering complete.	cum	1.33
6.21	Tile brick masonry with tile bricks of class designation 100 in gauged arch work in superstructure in cement mortar 1:4 (1 cement : 4 coarse sand) including centring and shuttering complete.	cum	1.33
6.22	Tile brick masonry work 5 cm thick with tile bricks of class designation 100 in cement mortar 1:3 (1 cement : 3 coarse sand) in superstructure.	100 sqm	7.65
<b>HONEY COMB WORK</b>			
6.23	Honey-comb brick work 10/11.4 cm thick with bricks of class designation 75 in cement mortar 1:4 (1 cement : 4 coarse sand).	100 sqm	6.56
<b>EXPOSED BRICK WORK</b>			
6.26	Brick work with selected F.P.S. bricks of class designation 75 in exposed brick work including making horizontal and vertical grooves 10mm wide 12mm deep complete from ground level up to plinth level in cement mortar 1:6 (1 cement : 6 coarse sand)	cum	0.625
6.27	Brick work with modular bricks of class designation 75 in	cum	0.55

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals)
	exposed brick work including making horizontal and vertical grooves 10mm wide 12mm deep complete from ground level up to plinth level in cement mortar 1:6 (1 cement : 6 coarse sand).		
6.28	Brick work with machine moulded modular bricks of class designation 125 in exposed brick work including making horizontal and vertical grooves 10mm wide 12mm deep complete from ground level up to plinth level in cement mortar 1:6 (1 cement : 6 coarse sand).	cum	0.55
6.29	Brick work with machine moulded F.P.S. bricks of class designation 125 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12mm deep complete from ground level up to plinth level in cement mortar 1:6 (1 cement : 6 coarse sand)	cum	0.625
6.30	Brick work with machine moulded perforated F.P.S. bricks of class designation 125 conforming IS : 2222-1991 in exposed brick work including making horizontal and vertical grooves 10mm wide 12 mm deep complete from ground level up to plinth level in cement mortar 1:6 (1 cement : 6 coarse sand).	cum	0.625
6.31	Brick work with machine moulded perforated modular bricks of class designation 125 conforming to IS : 2222 -1991 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12mm deep complete from ground level up to plinth level in cement mortar 1:6 (1 cement : 6 coarse sand).	cum	0.55
6.32	Brick work with clay flyash F.P.S. brick of class designation 75 in superstructure above plinth level up to floor five level in :		
	6.32.1 Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	0.95
	6.32.2 Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	0.625
6.34	Brick work with modular fly ash lime bricks (FALG Bricks) conforming to IS:12894-2002, class designation 100 average compressive strength in super structure above plinth level up to floor V level in :		
	6.34.1 Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	0.836
	6.34.2 Cement mortar 1:6 (1 cement : 6 Coarse sand)	cum	0..55
6.35	Brick work with modular calcium silicate bricks machine moulded conforming to IS:4139-1989, class designation 100 average compressive strength in super structure above plinth level up to floor V level in :		
	6.35.1 Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	0.836
	6.35.3 Cement mortar 1:6 (1 cement : 6 Coarse sand)	cum	0.55
6.36	Brick work with modular extruded burnt fly ash clay sewer bricks		

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals)
	(Conforming to IS: 4885 - 1988) in foundation and plinth :		
	6.36.1 Cement Mortar 1:4 ( 1 cement : 4 coarse sand)	cum	0.836
6.37	Brick work with modular extruded burnt fly ash clay sewer bricks (conforming to IS : 4885-1988) in arches in foundation and plinth in cement mortar 1:3 ( 1 cement : 3 fine sand).	cum	1.275
6.38	Providing and laying autoclaved aerated cement blocks masonry with 100mm thick AAC blocks in super structure above plinth level up to floor V level in cement mortar 1:4 (1 cement : 4 coarse sand ) The rate includes providing and placing in position 2 Nos. 6 mm dia M.S. bars at every third course of masonry work.	cum	0.57
6.42	Brick work with mechanized autoclaved flyash lime bricks conforming to IS: 12894 :2002 of class designation 100 in superstructure above plinth level up to floor V level in.		
	6.42.1 Cement mortar 1:4 (1 cement :4 coarse sand)	cum	0.95
	6.42.2 Cement mortar 1:6 (1 cement :6 coarse sand).	cum	0.625

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 7.0 STONE WORK

Code No	Description	Unit	Quantity of cement to used per unit quantity of work (quintals)
<b>RANDOM RUBBLE MASONRY</b>			
7.1	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20mm nominal size) at plinth level with :		
7.1.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	0.825
<b>COURSED RUBBLE MASONRY</b>			
7.6	Coursed rubble masonry (first sort) with hard stone in foundation and plinth with :		
7.6.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	0.750
7.7	Coursed rubble masonry (second sort) with hard stone in foundation & plinth with :		
7.7.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	0.750
<b>ASHLAR MASONRY</b>			
7.12	Stone work in plain ashlar in super structure upto floor five level in cement mortar 1:6 (1 cement : 6 coarse sand) including pointing with cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade :		
7.12.1	One face dressed.		
7.12.1.1	Red sand stone	cum	0.54
7.12.1.2	White sand stone	cum	0.54
7.12.2	Both face dressed.		
7.12.2.1	Red sand stone.	cum	0.54
7.12.2.2	White sand stone	cum	0.54
7.13	Stone work plain ashlar in arches in cement mortar 1:3 (1 cement : 3 coarse sand) including centring, shuttering and pointing with white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade.		
7.13.1	Red sand stone	cum	1.07
7.13.2	White sand stone	cum	1.07

Code No	Description	Unit	Quantity of cement to used per unit quantity of work (quintals)
7.14	Stone work plain ashlar in domes in cement mortar 1:3 (1 cement : 3 coarse sand) including centring, shuttering and pointing with white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade.		
7.14.1	Red sand stone	cum	1.07
7.14.2	White sand stone	cum	1.07
7.15	Stone work ashlar punched (ordinary) in superstructure upto floor five level in cement mortar 1:6 (1 white cement : 6 coarse sand) including pointing with cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade.		
7.15.1	Red sand stone.		
7.15.1.1	One faced punched.	cum	0.54
7.15.1.2	Double faced punched.	cum	0.54
7.15.2	White sand stone.		
7.15.2.1	Single face punched.	cum	0.54
7.15.2.2	Double faced punched.	cum	0.54
<b>SUNK, MOULDED, CARVED ASHLAR MASONRY</b>			
7.20	Stone work sunk or moulded or sunk and moulded upto floor five level in cement mortar 1:6 (1 cement : 6 coarse sand) including pointing with white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade :		
7.20.1	Red sand stone	cum	0.54
7.20.2	White sand stone	cum	0.54
<b>MISCELLANEOUS STONE WORK</b>			
7.23	Stone work (machine cut edges) for wall lining etc. (veneer work) backing filled with a grout of 12mm thick cement mortar 1:3 (1 cement : 3 coarse sand) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade : (To be secured to the backing by means of cramps which shall be paid for separately) :		
7.23.1	Red sand stone - exposed face fine dressed with rough backing.		
7.23.1.1	70 mm thick.	100sqm	9.18 + 1.56*

Code No	Description	Unit	Quantity of cement to used per unit quantity of work (quintals)
7.23.1.2	60 mm thick.	100sqm	9.18 + 1.56*
7.23.1.3	50 mm thick.	100sqm	9.18 + 1.56*
7.23.1.4	40 mm thick.	100sqm	9.18 + 1.56*
7.23.1.5	30 mm thick.	100sqm	9.18 + 1.56*
7.23.2	Red sand stone - Exposed face machine cut and table rubbed with rough backing.		
7.23.2.1	70 mm thick	100sqm	9.18 + 1.56*
7.23.2.2	60 mm thick	100sqm	9.18 + 1.56*
7.23.2.3	50 mm thick	100sqm	9.18 + 1.56*
7.23.2.4	40 mm thick	100sqm	9.18 + 1.56*
7.23.2.5	30 mm thick	100sqm	9.18 + 1.56*
7.23.3	White sand stone - exposed face fine dressed with rough backing .		
7.23.3.1	70 mm thick.	100sqm	9.18 + 1.56*
7.23.3.2	60 mm thick.	100sqm	9.18 + 1.56*
7.23.3.3	50 mm thick.	100sqm	9.18 + 1.56*
7.23.3.4	40 mm thick.	100sqm	9.18 + 1.56*
7.23.3.5	30 mm thick.	100sqm	9.18 + 1.56*
7.23.4	White sand stone - Exposed face machine cut and table rubbed with rough backing.		
7.23.4.1	70 mm thick.	100sqm	9.18 + 1.56*
7.23.4.2	60 mm thick.	100sqm	9.18 + 1.56*
7.23.4.3	50 mm thick.	100sqm	9.18 + 1.56*
7.23.4.4	40 mm thick.	100sqm	9.18 + 1.56*
7.23.4.5	30 mm thick.	100sqm	9.18 + 1.56*
7.25	Providing and fixing stainless steel cramps of required size and shape for anchoring stone wall lining to the backing or securing adjacent stones in stone wall lining in cement mortar 1:2 (1 cement : 2 coarse sand) including making the necessary chases in stone and holes in walls wherever required.	kg	0.07
7.26	Providing and fixing stone dowels 10x5x2.50 cm cut to double wedge shape as per design in cement mortar 1:2 (1 cement : 2 coarse sand) including making the necessary	each	0.007

Code No	Description	Unit	Quantity of cement to used per unit quantity of work (quintals)
	chases.		
7.27	Providing and fixing copper pins 7.5 cm long 6 mm diameter for securing adjacent stones in stone wall lining in cement mortar 1:2 (1 cement : 2 coarse sand) including making the necessary chases.	each	0.007
7.28	Providing and fixing sloping chajja of stone 40 mm thick and upto 80 cm wide beyond the wall as measured along the slope in cement mortar 1:4 (1 cement : 4 coarse sand) with 12mm diameter anchoring steel bar 45 cm long fixed in each stone and supported on and including with bricks cove of class designation 75 in cement mortar 1:4 (1 cement : 4 coarse sand) including pointing in cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade:		
7.28.1	Red sand stone:		
7.28.1.1	With F.P.S Bricks	100sqm	5.59
7.28.2	White sand stone:		
7.28.2.1	With F.P.S. bricks	100sqm	5.59
7.29	Providing and fixing horizontal chajja of stone 40 mm thick and upto 80 cm projection in cement mortar 1:4 (1 cement : 4 coarse sand) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade: :		
7.29.1	Red sand stone	100sqm	4.94 + 0.03*
7.29.2	White sand stone	100sqm	4.94 + 0.03*
7.30	30mm red sand stone sun-shade (chisel-dressed) supported on red sand stone brackets, fixed in walls with cement mortar 1:4 (1 cement : 4 coarse sand) including finishing complete.	100sqm	2.19
7.31	Providing and fixing red sand stone brackets 55x22.5x45cm sunk and moulded including providing and fixing with 4 Nos. gun metal cramp 25x6mm 30 cm long and dowel bars 7.5 cm long 6 mm dia as per design.	100nos	3.02
7.32	Stone work, plain in copings, cornices, string courses and plinth courses, upto 75 mm thick in Cement mortar 1:6 (1 cement : 6 coarse sand) including pointing with white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade.		
7.32.1	Red sand stone	cum	0.54
7.32.2	White sand stone	cum	0.54

Code No	Description	Unit	Quantity of cement to used per unit quantity of work (quintals)
7.36	Wall lining butch work upto 10m height with red/ white sand stone 40 mm thick rough facing on the exposed surface with stone strips of minimum length 300 mm and required width including embedding every tenth layer and bottom most layer in masonry or concrete after making necessary chases of size 75x75mm and by providing layer of 75mm thick strips i/c 12mm thick bed of cement mortar 1:3 (1 Cement : 3 coarse sand) i/c ruled pointing in cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment to match the shade of stone complete as per direction of Engineer-in-charge.	100sqm	15.50 + 1.70*
7.37	Stone work ( machine cut edges) for wall lining upto 10 m height etc. (Veneer work) backing filled with a grout of 12mm thick cement mortar 1:3 (1 Cement : 3 coarse sand) and jointed with Cement mortar 1:2 (1 cement : 2 stone dust) including rubbing and polishing complete. (To be secured to the backing by means of cramps which shall be paid for separately)		
7.37.1	Kota stone slabs exposed face dressed and rubbed.		
7.37.1.1	25 mm thick.	100sqm	13.744
7.38	Stone tile work for wall lining upto 10 m height with special adhesive over 12mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) including pointing in white cement with an admixture of pigment to match the stone shade.		
7.38.1	8mm thick (mirror polished and machine cut edge)		
7.38.1.1	Granite stone of any colour and shade.	sqm	10.44 +1.70*
7.38.1.2	Raj Nagar plain white marble/ Udaipur green marble/ Zebra black marble.	sqm	10.44 +1.70*
<b>STONE WORK IN DRY CLADDING</b>			
7.41	Providing and fixing structural steel frame (for dry cladding with 30 mm thick gang saw cut with machine cut edges sand stone) on walls at all heights using M.S. square/ rectangular tube in the required pattern as per architectural drawing including cost of cutting, bending, welding etc. The frame work shall be supported in wall with the help of MS brackets/ lugs of angle iron/ flats etc. which shall be welded to the frame and embedded in brick wall with cement concrete block 1:2:4 (1 cement :2 coarse sand :4 graded stone aggregate 20mm nominal size) of size 300x230x300mm	100kg	0.16



Code No	Description	Unit	Quantity of cement to used per unit quantity of work (quintals)
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including cost of necessary centring and shuttering and with approved expansion hold fasteners on CC/RCC surface including drilling necessary holes. Approved cramps/ pins etc. shall be welded to the frame work to support stone cladding the steel work will be given a priming coat of Zinc primer as approved by Engineer-in-charge and painted with two or more coats of epoxy paint (Shop drawings shall be submitted by the contractor to the Engineer-in-charge for approval before execution). The frame work shall be fixed in true horizontal & vertical lines/planes. (Only structural steel frame work shall be measured for the purpose of payment, stainless steel cramps shall be paid for separately and nothing extra shall be paid.)

\* White cement

# 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

## 8.0 MARBLE WORK

Code No	Description	Unit	Quantity of cement to used per unit quantity of work (quintals)
8.1	Marble work gang saw cut (polished and machine cut) of thickness 18mm for wall lining (veneer work) in cement mortar 1:3 (1 cement : 3 coarse sand) including pointing with white cement mortar 1:2 (1 white cement : 2 marble dust) with an admixture of pigment to match the marble shade: (To be secured to the backing by means of cramps, which shall be paid for separately).		
8.1.1	Raj Nagar Plain white marble/ Udaipur green marble/ Zebra black marble.		
8.1.1.1	Area of slab upto 0.50 sqm	100sqm	8.67 + 1.70*
8.1.1.2	Area of slab over 0.50 sqm	100sqm	8.67 + 1.70*
8.2	Providing and fixing 18mm thick gang saw cut mirror polished premoulded and prepolished) machine cut for kitchen platforms, vanity counters, window sills , facias and similar locations of required size of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 coarse sand) with joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edge to give high gloss finish etc. complete at all levels.		
8.2.1	Raj Nagar Plain white marble/ Udaipur green marble/ Zebra black marble.		
8.2.1.1	Area of slab upto 0.50 sqm.	100sqm	5.70
8.2.1.2	Area of slab over 0.50 sqm.	100sqm	5.70
8.2.2	Granite of any colour and shade		
8.2.2.1	Area of slab upto 0.50 sqm	100sqm	5.70
8.2.2.2	Area of slab over 0.50 sqm.	100sqm	5.70
8.4	Extra for fixing marble /granite stone over and above corresponding basic item, in facia and drops of width upto 150 mm with epoxy resin based adhesive including cleaning etc. complete.	100metre	1.27
8.7	Providing and fixing cramps of required size & shape in RCC/ CC backing with cement mortar 1:2 ( 1 cement :2 coarse sand) including drilling necessary hole in stones and embedding the cramp in the hole (fastener to be paid separately).		
8.7.1	Gunmetal cramps.	kg	0.0635

Code No	Description	Unit	Quantity of cement to used per unit quantity of work (quintals)
	8.7.2 Stainless steel cramps.	kg	0.0701
8.9	Stone tile (polished) work for wall lining over 12mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and cement slurry @ 3.3 kg/sqm including pointing in white cement complete.		
	8.9.1 8mm thick.		
	8.9.1.1 Raj nagar plain white marble/ Udaipur green marble/ Zebra black marble.	100sqm	10.44 + 1.90*
	8.9.1.2 Granite of any colour and shade.	100sqm	10.44 + 1.90*
	* White cement		

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 9.0 WOOD AND P.V.C. WORK

Code No	Description	Unit	Quantity of cement to used per unit quantity of work (quintals)
<b>MISCELLANEOUS – WOOD WORK</b>			
9.32	Providing 50x50x50mm 2nd class teak wood plugs including cutting brick work and fixing in cement mortar 1:3 (1 cement : 3 fine sand) and making good the walls etc.	100nos	0.01
9.34	Providing and fixing 2nd class teak wood plain lining tongued and grooved on and including wooden plugs complete with necessary screws and priming coat on unexposed surface.		
9.34.1	40 mm thick.	100sqm	0.055
9.34.2	25 mm thick.	100sqm	0.055
9.34.3	20 mm thick	100sqm	0.055
9.34.4	12 mm thick	100sqm	0.055
9.42	Providing and fixing 18 mm thick, 150 mm wide pelmet of flat pressed 3 layer or graded wood particle board medium density grade I, IS : 3087 marked including top cover of 6 mm commercial ply wood conforming to IS: 303 BWR grade, nickel plated M.S. pipe 20 mm dia ( heavy type ) curtain rod with nickel plated brackets including fixing with 25x3 mm M.S. flat 10 cm long and rawl plugs 50 mm long (designation 10 no.) etc all complete	100metre	0.01
9.43	Providing and fixing 18 mm thick, 150 mm wide pelmet of coir veneer board ISI marked IS : 14842 - 2000, including top cover of 6 mm coir veneer board, nickle plated M.S. Pipe 20 mm dia (heavy type) curtain rod with nickle plated brackets including fixing with 25x3 mm M.S. Flat 10 cm long and rawl plug 50 mm long (designation 10 No.) etc., all complete	100metre	0.01
9.46	Providing and fixing curtain rods of 1.25 mm thick chromium plated brass plate, with two chromium plated brass brackets fixed with C.P. brass screws and wooden plugs, etc., wherever necessary complete :		
9.46.1	12 mm dia.	100metre	0.01
9.46.2	20 mm dia.	100metre	0.01
9.46.3	25 mm dia.	100metre	0.01
9.47	Providing and fixing nickel plated M.S. pipe curtain rods with nickel plated brackets :		
9.47.1	20 mm dia (heavy type)	100metre	0.01
9.47.2	25 mm dia (heavy type)	100metre	0.01
9.53	Providing 40x5 mm flat iron hold fast 40 cm long including fixing to frame with 10 mm diameter bolts, nuts and wooden plugs and embeddings in	100nos	1.10

Code No	Description	Unit	Quantity of cement to used per unit quantity of work (quintals)
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cement concrete block 30x10x15cm 1:3:6 mix (1 cement : 3 coarse sand :  
6 graded stone aggregate 20mm nominal size)

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 10.0 STEEL WORK

Code No	Description	Unit	Quantity of cement to used per unit quantity of work (quintals)
10.4	Providing and fixing 1mm thick M.S. sheet sliding-shutters with frame and diagonal braces of 40x40x6mm angle iron, 3mm M.S. gusset plates at the junction and corners 25mm dia pulley, 40x40x6mm angle and T-iron guide at the top and bottom respectively including applying a priming coat of approved steel primer.	100sqm	0.35
10.5	Providing and fixing 1mm thick M.S. sheet door with frame of 40x40x6mm angle iron and 3mm M.S. gusset plates at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer.		
10.5.1	Using M.S. angels 40x40x6 mm for diagonal braces.	100sqm	0.35
10.5.2	Using flats 30x6mm for diagonal braces and central cross piece.	100sqm	0.35
10.6	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths interlocked together through their entire length and jointed together at the end by end locks mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete including the cost of providing and fixing necessary 27.5cm long wire springs grade No.2 and M.S. top cover of required thickness for rolling shutters.		
10.6.1	80x1.25mm M.S. laths with 1.25 mm thick top cover.	100sqm	0.35
10.6.2	80x1.20 mm M.S. laths with 1.20 mm thick top cover.	100sqm	0.35
10.6.3	80x0.90 mm M.S. laths with 0.90 mm thick top cover.	100sqm	0.35
10.10	Fixing standard steel glazed doors, windows and ventilators in walls with 15x3mm lugs 10 cm long embedded in cement concrete blocks 15x10x10cm of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required, including fixing of float glass panes with glazing clips and special metal-sash putty of approved make, or metal beading with screws (only steel windows with lugs, glass panes cut to size and glazing clips or metal beading with screws, shall be supplied by department free of cost.)	100kg	0.13
10.11	Providing and fixing factory made ISI marked steel glazed doors, windows and ventilators side /top /centre hung with beading and all members such as K11 B and K12 B etc. complete of standard rolled steel sections, joints mitred and flash butt welded and sash bars	100kg	0.13

Code No	Description	Unit	Quantity of cement to used per unit quantity of work (quintals)
	tenoned and riveted with 15x3mm lugs, 10cm long, embedded in cement concrete blocks 15x10x10cm of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required, including providing and fixing of hinges, pivots, float glass panes with glazing clips and special metal sash putty of approved make and a priming coat of approved steel primer excluding the cost of metal beading and other fittings except necessary hinges or pivots complete as per approved design.		
10.13	Providing and fixing T-iron frames for doors, windows and ventilators of mild steel Tee-sections, joints mitred and welded with 15x3 mm lugs 10cm long embedded in cement concrete blocks 15x10x10 cm of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with dash fastener or with fixing clips or with bolts and nuts as require including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer.	100kg	0.11
10.15	Providing and fixing M.S. Tubular frames for doors, windows, ventilators and cupboard with L-Type section made of 1.60mm thick M.S. Sheet, joints mitred and welded and grinded finish profiles required size with 15x3mm lugs 10cm long embedded in cement concrete blocks 15x10x10cm of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primers.	100kg	0.28

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 11.0 FLOORING

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals).
11.1	Brick on edge flooring with bricks of class designation 75 including cement slurry etc. complete in cement mortar with F.P.S. bricks:		
11.1.1	1:4 (1 cement : 4 coarse sand)	sqm	0.1850
11.1.2	1:6 (1cement : 6 coarse sand)	sqm	0.1285
11.3	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement including cement slurry, but excluding the cost of nosing of steps etc. complete.		
11.3.1	40mm thick with 20mm nominal size stone aggregate.	sqm	0.17
11.4	52 mm thick cement concrete flooring with concrete hardener topping under layer 40 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6 mm nominal size) by volume .hardening compound is mixed @ 2 litre per 50kg of cement or as per manufacturers specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete.	sqm	0.231
11.5	62 mm thick cement concrete flooring with concrete hardener topping under layer 50 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) and top layer 12mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6mm nominal size) by volume. Hardening compound is mixed @ 2 litre per 50kg of cement or as per manufactures specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete.	sqm	0.263
11.6	Cement plaster skirting (upto 30 cm height) with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement.		
11.6.1	18 mm thick.	sqm	0.14
11.7	Cement concrete pavement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including finishing complete.	cum	3.20

#### TERRAZO FLOORING

11.9	40 mm thick marble chips flooring rubbed and polished to granolithic finish, under layer 34 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size) and top layer 6mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from 1mm to 4mm nominal size laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by		
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Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals).
	volume including cement slurry etc. complete :		
11.9.1	Dark shade pigment with ordinary cement.	sqm	0.1695
11.9.2	Light shade pigment with white cement .		0.129
		sqm	0.0405*
11.9.3	Medium shade pigment with 50% white cement and 50% ordinary cement.		0.1492
		sqm	0.0202*
11.9.4	White cement without any pigment.		0.129
		sqm	0.0202*
11.9.5	Light shade pigment with ordinary cement.	sqm	0.1695
11.9.6	Ordinary cement without any pigment.	sqm	0.1695
11.10	40 mm thick marble chips flooring, rubbed and polished to granolithic finish, under layer 31mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size) and top layer 9mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from 4mm to 7mm nominal size laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder : 7 marble chips) by volume including cement slurry etc. complete.		
11.10.1	Dark shade pigment with Ordinary cement.	sqm	0.1783
11.10.2	Light shade pigment with white cement.		0.1205
		sqm	0.0578*
11.10.3	Medium shade pigment with 50% white cement and 50% ordinary cement.		0.1494
		sqm	0.0289*
11.10.4	White cement without any pigment.		0.1205
		sqm	0.0578*
11.10.5	Light shade pigment with ordinary cement.	sqm	0.1783
11.10.6	Ordinary cement without any pigment.	sqm	0.1783
11.11	40 mm thick marble chips flooring, rubbed and polished to granolithic finish, under layer 28 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size) and top layer 12mm thick with white, black, chocolate, grey yellow or green marble chips of sizes from 7mm to 10mm nominal size laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 2:3 (2 cement marble powder mix : 3 marble chips) by volume including cement slurry etc. complete :		
11.11.1	Dark shade pigment with ordinary cement.	sqm	0.1907

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals).
	11.11.2 Light shade pigment with white cement.		0.1097
		sqm	0.081*
	11.11.3 Medium shade pigment with 50% white cement and 50% ordinary cement.		0.1502
		sqm	0.0405*
	11.11.4 White cement without any pigment.		0.1097
		sqm	0.081*
	11.11.5 Light shade pigment with ordinary cement.	sqm	0.1097
	11.11.6 Ordinary cement without any pigment.	sqm	0.1097
11.12	Marble chips skirting (upto 30 cm height) rubbed and polished to granolithic finish, top layer 6 mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from smallest to 4 mm nominal size laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume :		
	11.12.1 18 mm thick with under layer 12 mm thick in cement plaster 1:3 (1 cement : 3 coarse sand) :		
	11.12.1.1 Dark shade pigment with ordinary cement.	sqm	0.1292
	11.12.1.2 Light shade pigment with white cement.		0.0887
		sqm	0.0405*
	11.12.1.3 Medium shade pigment with 50% white cement and 50% ordinary cement.		0.109
		sqm	0.0203*
	11.12.1.4 White cement without any pigment.		0.109
		sqm	0.0405*
	11.12.1.5 Light shade pigment with ordinary cement.	sqm	0.1292
	11.12.1.6 Ordinary cement without any pigment.	sqm	0.1292
11.15	Crazy marble stone flooring including filling the gaps with light shade pigment with white cement marble powder mixture (3 parts of white cement : 1 part of marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 white, black or white and black marble chips of sizes from 1mm to 4mm nominal size by volume) and under layer 25mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm nominal size) rubbing, polishing and cement slurry etc. complete :		
	11.15.1 18 mm thick crazy marble stone white, black or as specified.		0.1200
		sqm	0.0405*
	* White Cement		

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals).
<b>TILE FLOORING</b>			
11.16	Precast terrazo tiles 22mm thick with graded marble chips of size upto 12mm laid in floors, and landings, jointed with neat cement slurry mixed with pigment to match the shade of the tiles including rubbing and polishing complete with precast tiles on 20mm thick bed of cement mortar 1:4 (1 cement :4 coarse sand) :		
11.16.1	Light shade using white cement.	sqm	0.0895
11.16.2	Medium shade using 50%white cement and 50% ordinary cement.	sqm	0.0917
11.16.3	Dark shade using ordinary cement.	sqm	0.0220*
11.16.4	Ordinary cement without any pigment.	sqm	0.0939
11.18	Precast terrazo tiles 22 mm thick with graded marble chips of sizes upto 12 mm in skirting and risers of steps not exceeding 30 cm in height on 12 mm thick cement plaster 1:3 (1 cement : 3 coarse sand) jointed with neat cement slurry mixed with pigment to match the shade of the tiles, including rubbing and polishing complete with tiles of :		
11.18.1	Light shade using white cement.	sqm	0.0734
11.18.2	Medium shades using 50% white cement and 50% ordinary cement.	sqm	0.1064
11.18.3	Dark shade using ordinary cement.	sqm	0.033*
11.18.4	Ordinary cement without any pigment.	sqm	0.1394
11.19	Chequered terrazo tiles 22 mm thick with graded marble chips of size up to 6 mm in floors jointed with neat cement slurry mixed with pigment to match the shade of the tiles including rubbing and polishing complete on 20 mm thick bed of cement mortar 1:4 (1 cement :4 coarse sand) :		
11.19.1	Light shade using white cement.	sqm	0.0895
11.19.2	Medium shade using 50% white cement, 50% ordinary cement.	sqm	0.0917
11.19.3	Dark shade using ordinary cement.	sqm	0.024*
11.19.4	Ordinary cement without any pigment.	sqm	0.0939
11.20	Chequerred precast cement concrete tiles 22 mm thick in footpath & courtyard jointed with neat cement slurry mixed with pigment to match the shade of tiles including rubbing and cleaning etc. complete on 20 mm thick bed of cement mortar 1:4 (1 cement: 4 coarse sand).		
11.20.1	Light shade using white cement.	sqm	0.1291
		sqm	0.066*

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals).
	11.20.2 Medium shade using 50% white cement 50% Grey cement.	sqm	0.1621
		sqm	0.033*
	11.20.3 Dark shade using ordinary cement.	sqm	0.1951
	11.20.4 Ordinary cement without any pigment.	sqm	0.1951
11.21	Providing and fixing 10mm thick acid and or alkali resistant tiles of approved make and colour using acid and or alkali resisting mortar bedding and joints filled with acid and or alkali resisting cement as per IS : 4457 complete as per the direction of Engineer-in- Charge.		
	11.21.1 In flooring on a bed of 10 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand).		
	11.21.1.1 Acid and alkali resistant tile.	sqm	0.0786**
	11.21.2 In dado/skirting on 12 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand).		
	11.21.2.1 Acid and alkali resistant tile.	sqm	0.0862*
11.22	Tile work in skirting, risers of steps and dado (upto 2 m height) over 12 mm thick bed of cement mortar 1:3 (1 cement :3 coarse sand) and jointed with grey cement slurry @ 3.3 kg/sqm including pointing in white cement mixed with pigment of matching shade complete.		
	11.22.1 Marble tiles (polished) Raj Nagar.		
	11.22.1.1 8 mm thick.	sqm	0.1044
<b>STONE FLOORING</b>			
11.23	Marble stone flooring with 18mm thick marble stone (sample of marble shall be approved by Engineer-in-charge) over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with grey cement slurry including rubbing and polishing complete	sqm	0.13512
<b>KOTA STONE FLOORING</b>			
11.26	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :		
	11.26.1 25 mm thick.	sqm	0.1491
11.27	Kota stone slabs 25 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.	sqm	0.1374
<b>SAND STONE FLOORING</b>			
11.28	40 mm thick fine dressed stone flooring over 20 mm (average) thick base of cement mortar 1:5 ( 1cement : 5 coarse sand) with joints	sqm	0.0775

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals).
	finished flush.		
11.29	40 mm thick fine dressed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement : 5 coarse sand) including pointing with cement mortar 1:2 (1 cement : 2 stone dust) with an admixture of pigment to match the shade of stone.	sqm	0.0931
11.30	40 mm thick rubbed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement : 5 coarse sand) with joints 3mm thick, side buttered with cement mortar 1:2 (1 cement : 2 stone dust) admixed with pigment to match the shade of stone and pointing with same mortar	sqm	0.0931
<b>CERAMIC GLAZED TILES</b>			
11.36	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacture ) of approved make in all colours, shades except bergundy, bottle green, black of any size as approved by Engineer-in-Charge in skirting, risers of steps and dados over 12 mm thick bed of cement Mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete.	sqm	0.1242
11.37	Providing and laying Ceramic glazed floor tiles 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick Cement Mortar 1:4 (1 Cement : 4 Coarse sand) including pointing the joints with white cement and matching pigment etc., complete.	sqm	0.1242
11.38	Providing and laying Ceramic glazed floor tiles 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in all colours, shades, except White, Ivory, Grey, Fume Red Brown laid on 20mm thick bed of Cement Mortar 1:4 (1 Cement : 4 Coarse sand) including pointing the joints with white cement and matching pigments etc., complete.	sqm	0.1242
11.39	Providing and laying rectified Glazed Ceramic floor tiles 300x300 mm or more (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours White, Ivory, Grey, Fume Red Brown, laid on 20mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand) including grouting the joints with white cement and matching pigments etc., complete.	sqm	0.1242
11.40	Providing and laying rectified Glazed Ceramic floor tiles 300x300 mm or more (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick Cement Mortar 1:4 (1 Cement : 4 Coarse sand) including pointing the joints with white cement and matching pigments etc., complete.	sqm	0.1242

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals).
<b>VITRIFIED FLOOR TILES</b>			
11.41	Providing and laying polished vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption's less than 0.08% and conforming to IS : 15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including grouting the joints with white cement and matching pigments etc., complete.	sqm	0.1242
	* White cement		
	** Acid alkali resistant cement.		

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 12.0 ROOFING

Code No	Description	Unit	Quantity of cement to used per unit quantity of work (quintals)
12.16	10 cm thick (average) mud phaska of damped brick earth on roofs laid to slope consolidated and plastered with 25 mm thick mud mortar mixed with bhusa at 35 kg per cum of earth and gobri leaping with mix 1:1 (1 clay : 1 cow dung) and covered with flat tile bricks of class designation 100 grouted with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% of integral water proofing compound by weight of cement and finished neat :		
12.16.1	With F.P.S. brick tiles	100sqm	3.11
12.17	10cm thick (average) mud phaska of damped brick earth on roofs laid to slope consolidated and plastered with 25mm thick mud mortar with bhusha at 35kg per cum of earth and gobri leaping with mix 1:1 (1 clay : 1 cow-dung) and covered with machine moulded tile bricks of class designation 125 conforming to IS : 2690 (Part I) -1992 grouted with cement mortar 1:3 ( 1 cement : 3 fine sand ) mixed with 2% of integral water proofing compound by weight of cement and finished neat.		
12.17.1	With machine moulded F.P.S. brick tiles	100sqm	3.11
12.19	Providing and laying brick tiles of class designation 100 over mumty roofs grouted with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% of integral water proofing compound by weight of cement, over a 12 mm layer of cement mortar 1:3 (1 cement : 3 fine sand) and finished neat :		
12.19.1	With F.P.S. brick tiles	100sqm	9.13
12.20	Providing and laying pressed clay tiles (as per approved pattern 20 mm nominal thickness and of approved size) on roofs jointed with cement mortar 1:4 (1 cement : 4 coarse sand) mixed with 2% integral water proofing compound laid over a bed of 20 mm thick cement mortar 1:4 (1 cement : 4 coarse sand) and finished neat complete.	100sqm	19.76
12.21	Providing gola 75x75 mm in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 stone aggregate 10mm and down gauge) including finishing with cement mortar 1:3 (1 cement : 3 fine sand) as per standard design :		
12.21.1	In 75x75mm deep chase	metre	0.031
12.22	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1mx1mx400micron, finished with 12mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement rounding the edge sand	each	0.06

Code No	Description	Unit	Quantity of cement to used per unit quantity of work (quintals)
	making and finishing the outlet complete.		
12.23	Providing sand stone slab for roofing and laying them in cement mortar 1 : 4 (1 cement : 4 coarse sand) over wooden karries or R.C.C. battens (Karries and battens to be paid separately) including pointing the ceiling joints with cement mortar 1:3 (1 cement : 3 fine sand ) complete :		
12.23.1	Red sand stone slab		
12.23.1.1	40 to 50 mm thick	100sqm	0.74
12.23.2	White sand stone slab :		
12.23.2.1	40 to 50 mm thick	100sqm	0.74
12.42	Providing and fixing M.S. holder bat clamps of approved design to C.I. or S.C.I. rain water pipes embedded in and including cement concrete blocks 10x10x10cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and cost of cutting holes and making good the walls etc. :		
12.42.1	100 mm diameter	each	0.005
12.42.2	150 mm diameter	each	0.005



## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 13.0 FINISHING

Code No	Description	Unit	Quantity of cement to used per unit quantity of work (quintals)
<b>CEMENT PLASTER (IN FINE SAND)</b>			
13.1	12 mm cement plaster of mix :		
13.1.1	1:4 (1 cement : 4 fine sand)	100sqm	5.47
13.1.2	1:6 (1 cement : 6 fine sand)	100sqm	3.60
13.2	15 mm cement plaster on the rough side of single or half brick wall of mix :		
13.2.1	1:4 (1 cement : 4 fine sand)	100sqm	6.54
13.2.2	1:6 (1 cement : 6 fine sand)	100sqm	4.30
13.3	20 mm cement plaster of mix :		
13.3.1	1:4 (1 cement : 4 fine sand)	100sqm	8.51
13.3.2	1:6 (1 cement : 6 fine sand)	100sqm	5.60
<b>CEMENT PLASTER (IN COARSE SAND)</b>			
13.4	12 mm cement plaster of mix :		
13.4.1	1:4 (1 cement : 4 coarse sand)	100sqm	5.47
13.4.2	1:6 (1 cement : 6 coarse sand)	100sqm	3.60
13.5	15 mm cement plaster on rough side of single or half brick wall of mix :		
13.5.1	1:4 (1 cement : 4 coarse sand)	100sqm	6.54
13.5.2	1:6 (1 cement : 6 coarse sand)	100sqm	4.30
13.6	20 mm cement plaster of mix :		
13.6.1	1:4 (1 cement : 4 coarse sand)	100sqm	8.51
13.6.2	1:6 (1 cement : 6 coarse sand)	100sqm	5.60
<b>CEMENT PLASTER WITH A FLOATING COAT OF NEAT CEMENT</b>			
13.7	12 mm cement plaster finished with a floating coat of neat cement of mix :		
13.7.1	1:3 (1 cement : 3 fine sand)	100sqm	9.54
13.7.2	1:4 (1 cement : 4 fine sand)	100sqm	7.67
13.8	15 mm cement plaster on rough side of single or half brick wall finished with a floating coat of neat cement of mix :		
13.8.1	1:3 (1 cement : 3 fine sand)	100sqm	10.97

Code No	Description	Unit	Quantity of cement to used per unit quantity of work (quintals)
	13.8.2 1:4 (1 cement : 4 fine sand)	100sqm	8.74
13.9	12 mm cement plaster 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement.	100sqm	9.54
13.10	15 mm cement plaster 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement on the rough side of single or half brick wall.	100sqm	10.97
<b>CEMENT PLASTER IN TWO COATS</b>			
13.11	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement : 5 coarse sand) finished with a top layer 6mm thick cement plaster 1:6 (1 cement : 6 fine sand).	100sqm	6.26
13.12	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement : 5 coarse sand) and a top layer 6mm thick cement plaster 1:3 (1 cement : 3 coarse sand) finished rough with sponge.	100sqm	8.13
13.13	12 mm cement plaster 1:2 (1 cement : 2 stone dust)	100sqm	9.79
13.14	15 mm cement plaster 1:2 (1 cement : 2 stone dust) on the rough side of single or half brick wall.	100sqm	11.70
13.15	20 mm cement plaster 1:2 (1 cement : 2 stone dust)	100sqm	15.23
<b>6 MM CEMENT PLASTER</b>			
13.16	6 mm cement plaster of mix :		
	13.16.1 1:3 (1 cement : 3 fine sand)	100sqm	3.67
13.17	6 mm cement plaster 1:3 (1 cement : 3 fine sand) finished with a floating coat of neat cement and thick coat of Lime wash on top of walls when dry for bearing of R.C.C. slabs and beams.	100sqm	5.87
13.18	Neat cement punning	100sqm	2.20
<b>ROUGH CAST PLASTER</b>			
13.19	Rough cast plaster upto 10m height above ground level with a mixture of sand and gravel or crushed stone from 6mm to 10mm nominal size dashed over and including the fresh plaster in two layers, under layer 12mm cement plaster 1:4 (1 cement : 4 coarse sand) and top layer 10mm cement plaster 1:3 (1 cement : 3 fine sand) mixed with 10% finely grounded hydrated lime by volume of cement.		
	13.19.1 Ordinary cement finish using ordinary cement	100sqm	11.59
<b>PEBBLE DASH PLASTER</b>			
13.20	Pebble dash plaster upto 10m height above ground level with a mixture of washed pebble or crushed stone 6mm to 12.5mm nominal size dashed over and including fresh plaster in two layers under layer 12mm cement plaster 1:4 (1 cement : 4 coarse sand) and top layer 10mm	100sqm	11.59

Code No	Description	Unit	Quantity of cement to used per unit quantity of work (quintals)
	cement plaster with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 10% finely grounded hydrated lime by volume of cement.		
	<b>PLAIN CEMENT MORTAR BANDS</b>		
13.28	12 mm thick plain cement mortar bands in cement mortar 1:4 (1 cement : 4 fine sand) :		
13.28.1	Flush Band	100metre 1cm wide	0.053
13.28.2	Sunk Band	100metre 1cm wide	0.053
13.28.3	Raised Band	100metre 1cm wide	0.053
13.28.4	Moulded Band	100metre 1cm wide	0.053
13.29	18 mm thick plain cement mortar band in cement mortar 1:4 (1 cement : 4 fine sand):		
13.29.1	Flush Band	100metre 1cm wide	0.076
13.29.2	Sunk Band	100metre 1cm wide	0.076
13.29.3	Raised Band	100metre 1cm wide	0.076
13.29.4	Moulded Band	100metre 1cm wide	0.076
13.30	18 mm thick moulded cement mortar band in two coats under layer 12mm thick with cement mortar 1:5 (1 cement : 5 coarse sand) top layer 6mm thick with cement mortar 1:4 (1 cement : 4 fine sand).	100metre 1cm wide	0.07
	<b>POINTING OF BRICK WORK</b>		
13.31	Pointing on brick work or brick flooring with cement mortar 1:3 (1 cement : 3 fine sand) :		
13.31.1	Flush / Ruled/ Struck or weathered pointing.	100sqm	1.53
13.31.2	Raised and cut pointing	100sqm	2.04
	<b>POINTING ON TILE BRICK WORK</b>		
13.32	Pointing on tile brick work with cement mortar 1:3 (1 cement :3 fine sand) :		
13.32.1	Flush/ Ruled/ Struck or weathered pointing	100sqm	2.35
	<b>POINTING ON STONE WORK</b>		
13.33	Pointing on stone work with cement mortar 1:3 (1 cement : 3 fine sand) :		
13.33.1	Flush/ Ruled pointing	100sqm	1.17
13.33.2	Raised and cut pointing	100sqm	2.35

Code No	Description	Unit	Quantity of cement to used per unit quantity of work (quintals)
13.34	Raised and cut pointing on stone work in white cement mortar 1:3 (1 white cement : 3 marble dust)	100sqm	2.35*
13.35	Pointing on stone slab ceiling with cement mortar 1:2 (1 cement : 2 fine sand):		
13.35.1	Flush/ Ruled pointing	100sqm	0.68
13.72	Washed stone grit plaster on exterior walls of height upto 10 M. above level in two layers, under layer 12mm cement plaster 1:4 (1 cement : 4 coarse sand ) furrowing the under layer with scratching tool, applying cement slurry on the under layer @ 2 Kg of cement per square metre, top layer 15mm cement plaster 1:1/2:2 (1 cement : 1/2 coarse sand : 2 stone chipping 10mm nominal size) in panels with groove all around as per approved pattern including scrubbing and washing, the top layer with brushes and water to expose the stone chippings ,complete as per specification and direction of Engineer-in- charge (Payment for providing grooves shall be made separately).	100sqm	17.472

**Note:** - cement consumption for pointing is same for FPS & modular bricks.

\* White cement

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 14.0 REPAIR TO BUILDING

Code No	Description	Unit	Quantity of cement to used per unit quantity of work (quintals)
14.1	Repairs to plaster of thickness 12mm to 20mm in patches of area 2.5 sq. meters and under including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete including disposal of rubbish to the dumping ground within 50metres lead :		
14.1.1	With cement mortar 1:4 (1 cement : 4 fine sand)	100sqm	6.95
14.1.2	With cement mortar 1:4 (1 cement : 4 coarse sand).	100sqm	6.95
14.2	Fixing chowkhats in existing opening including embedding chowkhats in floors or walls cutting masonry for holdfasts embedding hold fasts in cement concrete blocks with cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) painting two coats of approved wood preservative to sides of chowkhats and making good the damages to walls and floors as required complete including disposal of rubbish to the dumping ground within 50 meters lead :		
14.2.1	Door chowkhats	each	0.12
14.2.2	Window chowkhats	each	0.06
14.2.3	Clerestory window chowkhats	each	0.03
14.12	Providing and fixing 16 mm M.S. Fan clamps of standard shape and size in existing R.C.C. slab including cutting chase and making good and painting exposed portion of the clamps complete.	each	0.016
14.13	Regrading terracing of mud phaska covered with tiles or brick, in cement by dismantling tiles or bricks, removing mud plaster preparing the surface of mud phaska to proper slope relaying mud plaster gobri leaping and tiles or bricks, grouted in cement mortar 1:3 (1 cement : 3 fine sand) including replacing unserviceable tiles or bricks with new ones and disposal of unserviceable material to the dumping ground (the cost of the new tiles or brick excluded) within 50 metres lead.	100sqm	3.11
14.14	Replacing sand stone slabs in roofing laid in cement mortar 1:4 (1 cement : 4 coarse sand) including necessary repairs and cement pointing with same mortar complete including disposal of rubbish to dumping ground within 50 metres of lead :		
14.14.1	Red/ white sand stone slabs 30 to 50 mm thick.	100sqm	0.78
14.15	Renewing wooden battens in roofs, including making good the holes in wall and painting with oil type wood preservative of approved brand and manufacture complete including removal of rubbish to the dumping		

Code No	Description	Unit	Quantity of cement to used per unit quantity of work (quintals)
	ground within 50 metres lead :		
14.15.1	Sal wood battens.	cum	0.36
14.16	Renewing wooden beams in roofs including making good the holes in walls and painting with oil type wood preservative of approved brand and manufacture complete including removal of rubbish to the dumping ground within 50 metres lead :		
14.16.1	Not exceeding 4.00 metres in length.		
14.16.1.1	Sal wood beams	cum	0.13
14.16.1.2	Hollock wood beams	cum	0.13
14.16.2	Above 4.00 metres and upto 5.00 metres length.		
14.16.2.1	Sal wood beams	cum	0.13
14.16.2.2	Hollock wood beams	cum	0.13
14.18	Flush pointing with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% of integral water proofing compound by weight of cement for flat tile bricks on top of mud phaska :		
14.18.1	With F.P.S. brick tiles	100sqm	0.76
14.18.2	With modular brick tiles	100sqm	0.76

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 16.0 ROAD WORK

Code No	Description	Unit	Quantity of cement to used per unit quantity of work (quintals)
<b>FENCING</b>			
16.15	Supplying at site :		
16.15.1	R.C.C. Standards post/ struts/rails/ pales of mix 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 12.5 mm nominal size) with wooden plugs or 6mm bar nibs wherever required as per direction of Engineer-in-charge including fixing (cost of earth works in excavation, concrete works to be paid separately).	cum	4.00
16.23	Providing and fixing 15cm dia at top 20cm at bottom and 90cm high precast reinforced cement concrete 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20mm nominal size) boundary stone as per standard design including finishing smooth with cement mortar 1:3 (1 cement : 3 fine sand) (cost of excavation, refilling and concreting to be paid for separately).	each	0.082
16.24	Providing and fixing precast reinforced cement concrete 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20mm nominal size) kilometre stone as per standard design including finishing smooth in 1:3 cement mortar (1 cement : 3 fine sand) but excluding the cost of earth work, concrete in foundation, painting and lettering etc. which shall be paid for separately.		
16.24.1	35x111x25 cm size.	each	0.37
16.24.2	50x152.5x25 cm size.	each	0.698
16.24.3	35x93.5x18 cm size.	each	0.23
<b>CONCRETE PAVEMENT</b>			
16.42	Cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size) in pavements, laid to required slope and camber in panels as required including consolidation finishing and tamping complete.	cum	3.20
<b>MISCELLANEOUS</b>			
16.49	Making bell mouth opening/ entrance of size 100x50x50cm for drainage pipe under footpath including providing cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) for shape of bell mouth including plastering providing and fixing precast R.C.C./ S.F.R.C. slab including plastering with cement mortar 1:3 (1 cement : 3 fine sand) of 6 mm thickness on exposed surface of the slab & bell mouth including centring, shuttering & neat cement punning inside	10 nos	6.60

Code No	Description	Unit	Quantity of cement to used per unit quantity of work (quintals)
	the bell mouth etc. all complete.		
16.52	Providing and fixing precast lime fly ash concrete blocks 1:2:3:6 (1lime : 2 fly ash : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) including finishing with 10mm thick cement mortar 1:3 (1 cement : 3 coarse sand) in foot paths including preparation of sub grade with a hand rammer, laying 10 mm thick leveling course of fine sand (jamuna sand) and filling the joints with fine sand.	sqm	0.05
<b>NEW ITEMS/ MODIFIED ITEMS</b>			
16.63	Providing and laying and making kerb channel 30cm wide and 50mm thick of cement concrete 1:3:6 (1 cement:3 coarse sand:6 graded stone aggregate 20mm nominal size) over 75mm bed of dry brick ballast 40 mm nominal size well rammed and consolidated and grouted with fine sand including finishing the top smooth etc. complete and as per direction of Engineer-in-charge.	metre	0.11
16.67	Providing and fixing at or near ground level factory made RCC pavement slab of M-30 grade of size 450x450x50mm (HPL or equivalent ) including reinforcement with 6mm dia M.S. bars 4 nos on each side including setting in position in footpath to the required level and line over a bed of 20mm average thick cement mortar (1 cement : 3 coarse sand ) having thickness not more than 5mm except on curve including filling of joints with same cement mortar and making grooves etc. complete as per direction of Engineer-in-charge.	100sqm	7.75
16.69	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement in position to the required line, level and curvature jointed with cement mortar 1:3 (1 cement : 3 coarse sand ) including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5mm) including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge ( length of finished kerb edging shall be measured payment ). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	cum	0.05



# 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

## 17.0 SANITARY INSTALLATIONS

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals)
17.1/17.2/ 17.3	Fixing water closet squatting pan (Indian type W.C. pan ) with 100mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required	each	0.05
17.4	Fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350mm and 340x410x265mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :		
17.4.1	One urinal basin with 5 litre white P.V.C. automatic flushing cistern.	each	0.025
17.4.2	Range of two urinal basins with 5 litre white P.V.C. automatic flushing cistern.	each	0.04
17.4.3	Range of three urinal basins with 10litre white P.V.C. automatic flushing cistern.	each	0.067
17.4.4	Range of four urinal basins with 10 litre white P.V.C. automatic flushing cistern.	each	0.095
17.5	Fixing white vitreous china flat back half stall urinal of size 580x380x350mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS : 2556, C.I. trap with outlet grating and other couplings in C.P. brass including painting of fittings and cutting and making good the walls and floors :		
17.5.1	Single half stall urinal with 5 litre P.V.C. automatic flushing cistern.	each	0.051
17.5.2	Range of two half stall urinals with 5 litre P.V.C. automatic flushing cistern.	each	0.102
17.5.3	Range of three half stall urinals with 10 litre P.V.C. automatic flushing cistern.	each	0.153
17.5.4	Range of four half stall urinals with 10 litre P.V.C. automatic flushing cistern.	each	0.203
17.6	Fixing one piece construction white vitreous china squatting plate with an integral longitudinal flushing pipe, white P.V.C. automatic		

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals)
	flushing cistern, with fittings, standard size G.I. flush pipe for back and front flush with standard spreader pipes with fittings, G.I clamps and C.P. brass coupling complete including painting of fittings and cutting and making good the walls and floors etc. wherever required :		
17.6.1	Single squatting plate with 5 litre P.V.C. automatic flushing cistern.	each	0.051
17.6.2	Range of two squatting plates with 5 litre P.V.C. automatic flushing cistern.	each	0.102
17.6.3	Range of three squatting plates with 10 litre P.V.C. automatic flushing cistern.	each	0.153
17.6.4	Range of four squatting plates with 10 litre P.V.C. automatic flushing cistern.	each	0.203
17.7	Fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls	each	0.025
17.8	Fixing white vitreous china pedestal for wash basin completely recessed at the back for the reception of pipes and fittings.	each	0.016*
17.9/17.10/ 17.11	Fixing kitchen sink with C.I. brackets, C.P. brass chain with rubber plug, 40 mm C.P. brass waste complete, including painting the fittings and brackets, cutting and making good the walls	each	0.025
17.12	Fixing draining board with C.I. brackets including painting of brackets, cutting and making good the walls	each	0.014
17.13	Fixing White vitreous china water closet squatting pan (Indian type)	each	0.025
17.17	Fixing a pair of white vitreous china foot rests of standard pattern for squatting pan water closet	each	0.025
17.23	Fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350mm and 340x410x265mm sizes respectively.	each	0.01
17.24	Fixing white vitreous china squatting plate urinal with integral rim longitudinal flush pipe.	each	0.02
17.25	Fixing white vitreous china wash basin including making all connections but excluding the cost of fittings :	each	0.015
17.26/17.27	Fixing kitchen sink including making all connections excluding cost of fittings.	each	0.015
17.37	Providing and fixing M.S. holder-bat clamps of approved design to Sand Cast iron/cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) including cost of cutting holes and making good the walls etc. :	each	0.005

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals)
17.59	Providing and fixing M.S. stays and clamps for sand cast iron/centrifugally cast (spun) iron pipes of diameter 100, 75 or 50 mm	each	0.005
17.60	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors :		
17.60.1	100 mm inlet and 100 mm outlet	each	0.025
17.60.2	100 mm inlet and 75 mm outlet	each	0.025
17.61	Cutting chases in brick masonry walls for following diameter sand cast iron/ centrifugally cast (spun) iron pipes and making good the same with cement concrete 1:3:6 ( 1 cement : 3 coarse sand :6 graded stone aggregate 12.5 mm nominal size ) including necessary plaster and pointing in cement mortar 1:4 (1 cement : 4 coarse sand) :		
17.61.1	100 mm dia.	100 metre	5.40
17.61.2	75 mm dia.	100 metre	3.70
17.61.3	50 mm dia.	100 metre	1.87

\* White Cement.

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 18.0 WATER SUPPLY

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals)
18.1/18.4/ 18.7/18.10	Providing and fixing G.I./ PE-AL-PE/ PP-R pipes complete with fittings and clamps, including cutting and making good the walls etc.		
	<b>Internal work – Exposed on wall.</b>		
18.10.1	15 mm dia. nominal bore	metre	0.05
18.10.2	20 mm dia. nominal bore	metre	0.06
18.10.3	25 mm dia. nominal bore	metre	0.07
18.10.4	32 mm dia. nominal bore	metre	0.075
18.10.5	40 mm dia. nominal bore	metre	0.08
18.10.6	50 mm dia. nominal bore	metre	0.08
18.2/18.5/ 18.8/18.11	Concealed pipes including painting with anti corrosive bitumastic paint, cutting chases and making good the wall	metre	0.88
18.32	Constructing masonry Chamber 30x30x50 cm, inside with 75 class designation brick work in cement mortar 1:5 (1 cement :5 fine sand) for stop cock, with C. I. surface box 100x100 x75 mm (inside) with hinged cover fixed in cement concrete slab 1:2:4 mix (1 cement :2 coarse sand : 4 graded stone aggregate 20 mm nominal size ) necessary excavation foundation concrete 1:5:10 ( 1 cement :5 fine sand:10 graded stone aggregate 40mm nominal size ) and inside plastering with cement mortar 1:3 (1 cement :3 coarse sand) 12mm thick finished with a floating coat of neat cement complete as per standard design :		
18.32.1	With F.P.S. bricks	each	0.26
18.33	Constructing masonry Chamber 60x60x75 cm, inside with 75 class designation brick work in cement mortar 1:5 (1 cement : 5 fine sand) for sluice valve, with C.I. surface box 100mm. top diameter, 160 mm bottom diameter and 180 mm deep ( inside) with chained lid and RCC top slab 1:2:4 mix (1 cement :2 coarse sand : 4 graded stone aggregate 20mm nominal size ) necessary excavation foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design :		
18.33.1	With F.P.S. bricks	each	1.44
18.34	Constructing masonry Chamber 90x90x100 cm, inside with 75 class designation brick work in cement mortar 1:5 (1 cement : 5 fine sand)		

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals)
	for sluice valve, with C.I. surface box 100 mm. top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size ) necessary excavation foundation concrete 1:5:10 (1 cement : 5 fine sand:10 graded stone aggregate 40 mm nominal size ) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design :		
18.34.1	With F.P.S. bricks	each	2.48
18.35	Constructing masonry Chamber 120x120x100 cm, inside with 75 class designation brick work in cement mortar 1:5 (1 cement : 5 fine sand) for sluice valve, with C.I. surface box 100 mm. top diameter, 160 mm bottom diameter and 180 mm deep ( inside) with chained lid and RCC top slab 1:2:4 mix (1 cement :2 coarse sand : 4 graded stone aggregate 20 mm nominal size) necessary excavation foundation concrete 1:5:10 (1 cement : 5 fine sand:10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design :		
18.35.1	With F.P.S. bricks	each	3.50
18.36	Constructing masonry Chamber 60x60x75 cm, inside with 75 class designation brick work in cement mortar 1:5 (1 cement : 5 fine sand) for fire hydrants, with C.I. surface box 350x350 mm. top and 165 mm deep ( inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) necessary excavation foundation concrete 1:5:10 (1 cement : 5 fine sand:10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design :		
18.36.1	With F.P.S. bricks	each	1.30
18.37	Constructing masonry Chamber 60x45x50 cm, inside with 75 class designation brick work in cement mortar 1:5 (1 cement : 5 fine sand) for water meter complete with C.I. double flap surface box 400x200x200 mm (inside) with locking arrangement and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) necessary excavation foundation concrete 1:5:10 ( 1 cement : 5 fine sand:10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design :		
18.37.1	With F.P.S. bricks	each	1.34

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals)
18.76	Cutting holes up to 30x30 cm in walls including making good the same:		
	18.76.1 With F.P.S. bricks	100 nos.	2.92
18.77	Cutting holes up to 15x15cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement :2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including finishing complete so as to make it leak proof.	100 nos.	0.70
18.78	Making chases up to 7.5x7.5 cm in walls including making good and finishing with matching surface after housing G.I. pipe etc.	100 metre	0.88
18.79	Making hole up to 20x20 cm and embedding pipes up to 150 mm diameter in masonry and filling with cement concrete 1:3:6 (1 cement : 3 coarse sand 6 graded stone aggregate 20 mm nominal size) including disposal of malba.	100 metre	4.90

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 19.0 DRAINAGE

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals)
19.1	Jointing glazed stoneware pipes grade 'A' with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete :		
19.1.1	100 mm diameter	100 metre	2.17
19.1.2	150 mm diameter	100 metre	3.23
19.1.3	200 mm diameter	100 metre	4.33
19.1.4	230 mm diameter	100 metre	4.87
19.1.5	250 mm diameter	100 metre	5.40
19.1.6	300 mm diameter	100 metre	6.47
19.2	Laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) around S.W. pipes including bed concrete as per standard design:		
19.2.1	100 mm diameter S.W. pipe	100 metre	19.24
19.2.2	150 mm diameter S.W. pipe	100 metre	23.53
19.2.3	200 mm diameter S.W. pipe	100 metre	27.43
19.2.4	230 mm diameter S.W. pipe	100 metre	30.03
19.2.5	250 mm diameter S.W. pipe	100 metre	31.72
19.3	Laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) upto haunches of S.W. pipes including bed concrete as per standard design :		
19.3.1	100 mm diameter S.W. pipe	100 metre	9.14
19.3.2	150 mm diameter S.W. pipe	100 metre	14.82
19.3.3	200 mm diameter S.W. pipe	100 metre	17.42
19.3.4	230 mm diameter S.W. pipe	100 metre	19.11
19.3.5	250 mm diameter S.W. pipe	100 metre	20.28
19.3.6	300 mm diameter S.W. pipe	100 metre	23.40
19.4	Providing and fixing square-mouth S.W. gully trap grade 'A' complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design :		
19.4.1	100x100 mm size P type	each	0.27

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals)
	19.4.2 150 x 100 mm size P type.	each	0.26
	19.4.3 180x150 mm size P type	each	0.25
19.6	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete :		
	19.6.1 100 mm dia. R.C.C. pipe	100 metre	0.5
	19.6.2 150 mm dia. R.C.C. pipe	100 metre	0.6
	19.6.3 250 mm dia. R.C.C. pipe	100 metre	0.9
	19.6.4 300 mm dia. R.C.C. pipe	100 metre	1.10
	19.6.5 450 mm dia. R.C.C. pipe	100 metre	2.40
	19.6.6 500 mm dia. R.C.C. pipe	100 metre	2.60
	19.6.7 600 mm dia. R.C.C. pipe	100 metre	3.20
	19.6.8 700 mm dia. R.C.C. pipe	100 metre	3.70
	19.6.9 800 mm dia. R.C.C. pipe	100 metre	4.20
	19.6.10 900 mm dia. R.C.C. pipe	100 metre	4.90
	19.6.11 1000 mm dia. R.C.C. pipe	100 metre	5.50
	19.6.12 1100 mm dia. R.C.C. pipe	100 metre	6.10
	19.6.13 1200 mm dia. R.C.C. pipe	100 metre	6.80
19.7	Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand ) R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size) inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design :		
	19.7.1 Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions	each	2.92
	19.7.2 Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (medium duty) 500 mm internal diameter	each	4.73
	19.7.3 Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (heavy duty) 560 mm internal diameter,	each	4.73
19.8	Extra for depth for manholes		



Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals)
	19.8.1 Size 90x80 cm	metre	1.26
	19.8.2 Size 120x90 cm	metre	1.52
19.9	Constructing brick masonry circular type manhole 0.91m internal dia at bottom and 0.56m dia at top in cement mortar 1:4 (1 cement : 4 coarse sand), in side cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size), and making necessary channel in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement all complete as per standard design :		
	19.9.1 0.91 m deep with S.F.R.C. cover and frame (heavy duty, HD-20 grade designation) 560mm internal diameter ) :	each	2.75
19.10	Extra depth for circular type manhole 0.91m internal dia (at bottom) with beyond 0.91m to 1.67m	metre	3.61
19.11	Constructing brick masonry circular manhole 1.22m internal dia at bottom and 0.56m dia at top in cement mortar 1:4 (1 cement : 4 coarse sand) inside cement plaster 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement foundation concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size) and making necessary channel in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement all complete as per standard design :		
	19.11.1 1.68 m deep with SFRC Cover and frame (heavy duty HD-20 grade designation) 560mm internal diameter	each	5.39
19.12	Extra depth for circular type manhole 1.22m internal dia (at bottom) beyond 1.68 m to 2.29 m	metre	6.27
19.13	Constructing brick masonry circular manhole 1.52 m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement : 4 coarse sand) inside cement plaster 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size) and making necessary channel in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement all complete as per standard design :		
	19.13.1 2.30m deep with SFRC Cover and frame (heavy duty HD-20 grade designation) 560mm internal diameter	each	10.86
19.14	Extra depth for circular type manhole 1.52 m internal dia (at bottom) beyond 2.30 m	metre	16.71

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals)
19.15	Providing M.S. foot rests including fixing in manholes with 20x20x10 cm cement concrete blocks 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) as per standard design	100 nos.	0.88
19.16	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910 on 12mm dia steel bar conforming to IS : 1786 having minimum cross section as 23 mmx25mm and over all minimum length 263 mm and width as 165mm with minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete	100 nos	1.98
19.17	Replacement of M.S. foot rests in manholes including dismantling concrete blocks and fixing with 20x20x10 cm cement concrete blocks 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) :	100 nos	0.88
19.19	Providing and fixing in position precast R.C.C. manhole cover and frame of required shape and approved quality		
19.19.1	L D- 2.5		
19.19.1.1	Rectangular shape 600x450mm internal dimensions	each	0.128
19.19.1.2	Square shape 450mm internal dimensions	each	0.096
19.19.1.3	Circular shape 450mm internal diameter	each	0.096
19.19.2	M D - 10		
19.19.2.1	Square shape 450mm internal dimension	each	0.128
19.19.2.2	Circular shape 500mm internal diameter	each	0.096
19.19.3	H D - 20		
19.19.3.1	Circular shape 560 mm internal diameter	each	0.096
19.19.4	EHD - 35		
19.19.4.1	Circular shape 560 mm internal dia.	each	0.096
19.21	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement and making necessary channels for the drain etc.		

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals)
	complete :		
19.21.1	For pipes 100 to 230 mm diameter	each	0.056
19.21.2	For pipes 250 to 300 mm diameter	each	0.095
19.21.3	For pipes 350 to 450 mm diameter	each	0.153
19.22	Providing sand cast iron drop connection externally for 60 cm drop from branch sewer line to main sewer manhole including inspection and cleaning eye with chain and lid, sand cast iron drop pipe and bend encased alround with cement concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) with all centring and shuttering required, cutting holes in walls and making good with brick work in cement mortar 1:4 (1 cement : 4 coarse sand) plastered with cement mortar 1:3 (1 cement : 3 coarse sand) on inside of the manhole wall lead caulked joints between sand cast iron pipes and fittings, stiff cement mortar 1:1 (1 cement : 1 fine sand) joints between sand cast iron tee and S.W. pipe, making required channels complete as per standard design and specifications :		
19.22.1	100 mm dia. sand cast iron drop connection	each	0.34
19.22.2	150 mm dia. sand cast iron drop connection	each	0.46
19.23	Extra for depths beyond 60 cm of sand cast iron drop connection complete :		
19.23.1	For 100 mm dia. sand cast iron drop connection	metre	0.21
19.23.2	For 150 mm dia. sand cast iron drop connection	metre	0.26
19.27	Constructing brick masonry road gully chamber 50x45x60 cm with bricks of class designation 75 in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm precast R.C.C. horizontal grating with frame complete as per standard design :	each	0.93
19.28	Constructing brick masonry road gully chamber 45x45x77.5 cm with bricks of class designation 75 in cement mortar 1:4 (1 cement : 4 coarse sand ) with precast R.C.C. vertical grating complete as per standard design :	each	0.82
19.29	Constructing brick masonry road gully chamber 110x50x77.5 cm with bricks of class designation 75 in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm precast R.C.C. horizontal grating with frame and vertical grating complete as per standard design :	each	1.66
19.30	Constructing brick masonry chamber for underground C.I. inspection chamber and bends with 75 class designation bricks in cement mortar 1:4 (1 cement : 4 coarse sand) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) R.C.C. top slab with 1:2:4 mix (1 cement :2 coarse sand		

Code No	Description	Unit	Quantity of cement to be used per unit quantity of work (Quintals)
	: 4 graded stone aggregate 20 mm nominal size) foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design :		
19.30.1	Inside dimensions 455x610 mm and 45 cm deep for single pipe line :	each	0.90
19.30.2	Inside dimensions 500x700 mm and 45 cm deep for pipe line with one or two inlets :	each	1.02
19.30.3	Inside dimensions 600x 850 mm and 45 cm deep for pipe line with three or more inlets :	each	1.27
19.31	Extra for depth beyond 45 cm of brick masonry chamber :		
19.31.1	For 455x610 mm size	metre	0.87
19.31.2	For 500x700 mm size	metre	0.95
19.31.3	For 600x850 mm size	metre	1.12
19.32	Making soak pit 2.5 m diameter 3.0 metre deep with 45 x 45 cm dry brick honey comb shaft with bricks of class designation 75 and S.W. drain pipe 100 mm diameter, 1.8 m long complete as per standard design.	each	0.072
19.34	Providing and fixing S.W. intercepting trap in manholes with stiff mixture of cement mortar 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete :		
19.34.1	100 mm dia	each	0.013
19.34.2	150 mm dia	each	0.019

# 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

## 20.0 PILE WORK

Code No	Description	Unit	Quantity of cement to used per unit quantity of work (quintals)
20.1	Providing, driving and installing driven cast-in-situ reinforced cement concrete piles of specified diameter and length below the pile cap M 35 in cement concrete, to carry safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap) :		
20.1.1	400 mm dia piles	metre	0.537
20.1.2	450 mm dia piles	metre	0.681
20.1.3	500 mm dia piles	metre	0.840
20.1.4	550 mm dia piles	metre	1.017
20.1.5	750 mm dia piles.	metre	1.889
20.1.6	1000 mm dia piles.	metre	3.360
20.1.7	1200 mm dia piles.	metre	4.836
20.1.8	1500 mm dia piles.	metre	7.561
20.2	Boring, providing and installing bored cast-in-situ reinforced cement concrete pile of specified diameter and length below the pile cap M 35 in cement concrete, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with, bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc. all complete, including removal of excavated earth with all lifts and leads (Length of pile for payment shall be measured upto bottom of pile cap).		
20.2.1	300 mm dia piles	metre	0.302
20.2.2	400 mm dia piles	metre	0.537
20.2.3	450 mm dia piles	metre	0.681
20.2.4	500 mm dia. piles	metre	0.840
20.2.5	600 mm dia piles	metre	1.209
20.2.6	750 mm dia piles.	metre	1.889
20.2.7	1000 mm dia piles.	metre	3.360
20.2.8	1200 mm dia piles.	metre	4.836
20.2.9	1500 mm dia piles.	metre	7.561

Code No	Description	Unit	Quantity of cement to used per unit quantity of work (quintals)
20.3	Boring, Providing and installing cast in situ single under reamed piles of specified diameter and length below pile cap in M 35 cement concrete, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and the length of the pile to be embedded in pile cap etc. all complete. (Length of pile for payment shall be measured upto to the bottom of pile cap) :		
20.3.1	300 mm dia piles.	metre	0.333
20.3.2	400 mm dia piles	metre	0.633
20.3.3	450 mm dia piles	metre	0.816
20.3.4	550 mm dia piles	metre	1.027
20.4	Extra over item No. 20.3 for providing additional bulb in under reamed piles, under specified dia meter (Only the quantity of extra bulbs are to be paid).		
20.4.1	300mm dia piles.	each	0.141
20.4.2	400mm dia piles.	each	0.27
20.4.3	450 mm dia piles.	each	0.347
20.4.4	550 mm dia piles.	each	0.437
20.5	Providing, driving and installing driven Pre-cast reinforced cement concrete piles of specified diameter and length below the pile cap in M 35 cement concrete to carry safe working load not less than specified. With a central through preformed hole with M.S. black pipe of dia, 40mm for grouting with cement sand grouting of mix 1:2 (1 cement : 2 coarse sand) under sufficient positive pressure to ensure complete filling including centring, shuttering, driving and removing the steel casing pipe and lifting casing etc. complete but excluding the cost of steel reinforcement. (Length of pile for payment shall be measured from top of the shoe to the bottom of pile cap).		
20.5.1	400 mm dia piles.	metre	0.621
20.5.2	450 mm dia piles.	metre	0.784
20.5.3	500 mm dia piles.	metre	0.959
20.5.4	550 mm dia piles.	metre	1.168
20.5.5	750 mm dia piles.	metre	2.663
20.5.6	1000 mm dia piles.	metre	3.839

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 22.0 WATER PROOFING

Code No	Description	Unit	Quantity of cement to used per unit quantity of work (quintals)
22.1	Providing and laying integral cement based treatment for water proofing on horizontal surface at all depth below ground level for under ground structures as directed by Engineer-in-Charge and consisting of : i) 1st layer of 22mm to 25mm thick approved and specified rough stone slab over a 25mm thick base of cement mortar 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound conforming to IS:2645 in the recommended proportion over the leveling course (leveling course to be paid separately). Joints sealed and grouted with cement slurry mixed with water proofing compound . ii) 2nd layer of 25mm thick cement mortar 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound in recommended proportions. iii) Finishing top with stone aggregate of 10mm to 12mm nominal size spreading @ 8 cudm/sqm thoroughly embedded in the 2nd layer.		
	22.1.1 Using rough kota stone.	sqm	0.342
22.2	Providing and laying integral cement based treatment for water proofing on the vertical surface by fixing specified stone slab 22 mm to 25mm thick with cement slurry mixed with water proofing compound conforming to IS:2645 in recommended proportions with a gap of 20mm (minimum) between stone slabs and the receiving surfaces and filling the gaps with neat cement slurry mixed with water proofing compound and finishing the exterior of stone slab with cement mortar 1:3 (1 cement : 3 coarse sand) 20mm thick with neat cement punning mixed with water proofing compound in recommended proportion complete at all levels and as directed by Engineer-in-charge :		
	22.2.1 Using rough Kota stone	sqm	0.443
22.3	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like consisting of : i) 1st course of applying cement slurry @ 4.4 Kg/sqm mixed with water proofing compound conforming to IS 2645 in recommended proportions including rounding off junction of vertical and horizontal surface. ii) IInd course of 20mm cement plaster 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound in recommended proportion including rounding off junction of vertical and	sqm	0.158

Code No	Description	Unit	Quantity of cement to used per unit quantity of work (quintals)
	horizontal surface.		
	iii) IIIrd course of applying blown or residual bitumen applied hot at 1.7 Kg. per sqm of area.		
	iv) IVth course of 400 micron thick PVC sheet. (Overlaps at joints of PVC sheet should be 100 mm wide and pasted to each other with bitumen @ 1.7 Kg/sqm.)		
22.5	Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying : a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. This layer will be allowed to air cure for 4 hours. b) Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.	sqm	0.0123
22.6	Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying : a) after surface preparation, first layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30cm on parapet wall and tucked into groove in parapet all around. d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately For the purpose of measurement the entire treated surface will be measured.	sqm	0.0195
22.7	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: a) Applying a slurry coat of neat cement using 2.75 kg/sqm. of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300mm height including cleaning the surface before treatment. b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of		



Code No	Description	Unit	Quantity of cement to used per unit quantity of work (quintals)
	<p>cement mortar of mix 1:5 (1 cement :5 coarse sand ) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs c) After two days of proper curing applying a second coat of cement slurry using 2.75kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge. d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3mm deep. e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer-in-Charge :</p>		
	22.7.1 With average thickness of 120mm and minimum thickness at khurra as 65 mm.	sqm	0.387
22.14	Grading roof for water proofing treatment with		
	22.14.1 Cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	3.20
	22.14.2 Cement mortar 1:3 (1 cement : 3 coarse sand)	cum	5.10
	22.14.3 Cement mortar 1:4 (1cement : 4 coarse sand)	cum	3.80

# **COEFFICIENT FOR BITUMEN CONSUMPTION**

## 2.0 COEFFICIENT FOR BITUMEN CONSUMPTION

### 16.0 ROAD WORK

Code No	Description	Unit	Quantity of bitumen to be used per unit quantity of work (quintals)
<b>SURFACE DRESSING</b>			
16.25	Surface dressing on new surface with paving bitumen of grade A-90/S-90 of approved quality using 2.25 kg of bitumen per sqm with 1.65 cum of stone chippings 13.2 mm nominal size per 100 sqm of road surface including consolidation with road roller of 6 to 8 tonne capacity etc. complete:	sqm	0.0225
16.26	Surface dressing on new surface in two coats with bitumen of grade A-90/S-90 of approved quality using 1.8kg.of bitumen per sqm with 1.5cum of stone chippings 13.2mm nominal size per 100 sqm of road surface for first coat and 1.1kg. of bitumen per sqm. with 1.00 cu. metre of stone chippings 11.2mm nominal size per 100 sqm. of road surface for second coat including consolidation of each coat separately with road roller of 6 to 8 tonne capacity etc. complete.	sqm	0.029
16.27	Surface dressing on old surface with hot bitumen of grade A-90/ S-90 of approved quality using 1.95 kg of bitumen per sqm. with 1.50 cum of stone chippings 11.2 mm nominal size per 100 sqm of road surface including consolidation with road roller of 6 to 8 tonne capacity, etc. complete.	sqm	0.0195
16.28	Surface dressing one coat on new surface with bitumen of specified grade at a rate of 1.95 kg/sqm. of surface area with 1.5 cum. of stone chippings 13.2 mm nominal size per 100 sqm. of road surface including consolidation with road roller of 6 to 8 tonne capacity , etc. complete :		
16.28.1	Using bitumen emulsion (minimum 50% bitumen content - RS grade conforming to IS : 8887).	sqm	0.0195
16.29	Surface dressing one coat on old surface with bitumen of specified grade at the rate of 1.22 kg/ sqm of surface area with 1.10 cum of stone chippings 11.2 mm nominal size per 100 sqm. of road surface including consolidation with road roller of 6 to 8 tonne capacity etc. complete :		
16.29.1	Using bitumen emulsion (minimum 50% bitumen content - RS grade conforming to IS : 8887).	sqm	0.0122
<b>PREMIX CARPET</b>			
16.30	Providing and applying tack coat using hot straight run bitumen of grade 80/ 100 including heating the bitumen, spraying the bitumen with mechanically operated spray unit fitted on bitumen boiler, cleaning and preparing the existing road surface as per specifications :		
16.30.1	On W.B.M. @ 0.75 Kg / sqm.	sqm	0.0075

Code No	Description	Unit	Quantity of bitumen to be used per unit quantity of work (quintals)
	16.30.2 On bituminous surface @ 0.50 Kg / sqm.	sqm	0.0050
16.31	Providing and applying tack coat using bitumen emulsion (Rapid Setting) complying with IS 8887-1995, spraying the bitumen emulsion with mechanically operated spray unit, cleaning and preparing the existing road surface as per specifications :		
	16.31.1 On W.B.M @ 0.4kg/sqm.	sqm	0.0040
	16.31.2 On bituminous surface @ 0.25kg/sqm.	sqm	0.0025
16.32	2 cm premix carpet surfacing with 1.8 cum and 0.90 cum of stone chippings of 13.2 mm size and 11.2 mm size respectively per 100 sqm. and 52 kg. and 56 kg. of hot bitumen per cum of stone chippings of 13.2 mm and 11.2 mm size respectively including a tack coat with hot straight run bitumen including consolidation with road roller of 6 to 9 tonne capacity etc. complete: (tack coat to be paid for separately).		
	16.32.1 With paving Asphalt 80 /100 heated and then mixed with solvent at the rate of 70 grams per kg of asphalt.	sqm	0.0144
	16.32.2 With paving Asphalt 60/70 with no solvent	sqm	0.0144
	16.32.3 With Refinery Modified Bitumen CRMB 55 conforming to IRC : SP : 53-1999.	sqm	0.0144
16.33	2.5 cm premix carpet surfacing with 2.25 cum and 1.12 cum of stone chippings of 13.2mm and 11.2mm size respectively per 100 sqm. and 52 kg. and 56 kg. of hot bitumen per cum of stone chippings of 13.2 mm and 11.2 mm size respectively including a tack coat with hot straight run bitumen including consolidation with road roller of 6 to 9 tonne capacity etc. complete. (tack coat to be paid for separately) :		
	16.33.1 With paving Asphalt 80/100 heated and then mixed with solvent at the rate of 70 grams per kg of asphalt.	sqm	0.018
	16.33.2 With paving Asphalt 60/70 with no solvent	sqm	0.018
	16.33.3 With Refinery Modified Bitumen CRMB 55 conforming to IRC : SP : 53-1999.	sqm	0.018
16.34	2 cm premix carpet surfacing with 2.4cum of stone chippings 11.2 mm nominal size per 100 sqm and bitumen emulsion (medium setting min. 65% bitumen content) complying with IS : 8887-1995 using 96kg per cum of chipping including consolidation with road roller of 6 to 9 tonne capacity etc. complete (tack coat to be paid for separately).	sqm	0.033*
16.35	2.5 cm premix carpet surfacing with 3 cum of stone chippings 10 mm nominal size per 100 sqm and bitumen emulsion (medium setting min. 65% bitumen contents) complying with IS : 8887-1995 using 96 kg per cum of chippings of road surface including consolidation with road roller etc complete (tack coat to be paid for separately) :	sqm	0.0388*

Code No	Description	Unit	Quantity of bitumen to be used per unit quantity of work (quintals)
16.36	Providing and laying Bitumen Penetration Macadam with hard stone aggregate of quality, size and grading as specified, with bitumen of suitable penetration grade including required key aggregate as specified, spreading coarse aggregate with the help of self propelled / tipper tail mounted aggregate spreader and applying bitumen by a pressure distributor and then spreading key aggregate with the help of aggregate spreader complete including consolidation with road roller of minimum 8 to 10 tonne capacity to achieve specified values of compaction and surface accuracy :		
16.36.1	For 50mm compacted thickness using coarse aggregate of size 50-20 mm graded @ 0.60 cum per 10 sqm key aggregate of size 12.5 mm graded @ 0.15 cum per 10 sqm. With paving asphalt 80/100 @ 50 kg/10 sqm.	sqm	0.05
16.36.2	For 75 mm compacted thickness in two layers using stone aggregate of size 63-41 mm graded @ 0.90 cum per 10 sqm key aggregate of size 20.0 mm graded @ 0.18 cum per 10 sqm. With paving asphalt 80/100 @ 68 kg/10 sqm.	sqm	0.068
<b>MASTIC AND BITUMASTIC WEARING COURSE</b>			
16.37	Providing and laying bitumen mastic wearing course (as per specifications) with industrial bitumen of grade 85/25 conforming to IS : 702 prepared by using mastic cooker and laid to required level and slope including providing antiskid surface with bitumen precoated fine grained hard stone chipping of approved size at the rate of 0.005 cum per 10 sqm and at approximates spacing of 10cm centre to centre in both directions, pressed into surface protruding 1mm to 4mm over mastic surface, including cleaning the surface, removal of debris etc. all complete. ( Considering bitumen using 10.2% as per MORTH specification .)		
16.37.1	25mm thick.	sqm	0.0586
16.37.2	40 mm thick	sqm	0.0938
16.38	2.5 cm thick bitumastic sheet with hot bitumen of approved quality using stone chippings (60% 12.5 mm nominal size and 40% 10 mm nominal size) @ 1.65 cum per 100 sqm and coarse sand at 1.65 cum per 100 sqm of road surface and with bitumen @ 56 kg/cum of stone chippings and @ 128 kg/cum. of sand over a tack coat with hot straight run bitumen including consolidation with road roller of 8 to 10 tonne etc. complete. (tack coat to be paid separately) :		
16.38.1	With paving Asphalt 80/100 heated and then mixed with solvent at the rate of 70 grams per kg of asphalt.	sqm	0.0303
16.38.2	With paving Asphalt 60/70.	sqm	0.0303
16.38.3	With Refinery Modified Bitumen CRMB 55 conforming to	sqm	0.0303

Code No	Description	Unit	Quantity of bitumen to be used per unit quantity of work (quintals)
IRC : SP : 53-1999.			
16.39	4 cm thick bitumastic sheet with hot bitumen of approved quality using stone chippings (60% 12.5mm nominal size and 40% 10mm nominal size) @ 2.60cum per 100 sqm and coarse sand at 2.60cum per 100 sqm of road surface and with bitumen @ 56 kg/cum. of stone chippings and at 128 kg/cum of sand over a tack coat with hot straight run bitumen including consolidation with road roller of 8 to 10 tonne etc. complete. (tack coat to be paid separately) :		
16.39.1	With paving Asphalt 80/100 heated and then mixed with solvent at the rate of 70 grams per kg of asphalt.	sqm	0.0479
16.39.2	With paving asphalt 60/70 with no solvent	sqm	0.0479
16.39.3	With Refinery Modified Bitumen CRMB 55 conforming to IRC : SP : 53-1999.	sqm	0.0479
<b>SEAL COAT</b>			
16.40	Providing and laying seal coat of premixed fine aggregate ( passing 2.36 mm and retained on 180 micron sieve) with bitumen using 128 kg of bitumen of grade 80 / 100 bitumen per cum of fine aggregate and 0.60 cum of fine aggregate per 100 sqm of road surface including rolling and finishing with road roller all complete.	sqm	0.0077
16.41	Providing and laying seal coat over prepared surface of road with bitumen heated in bitumen boiler fitted with the spray set spraying using 98 kg of bitumen of grade 80/100 and blinding surface with 0.90cum of stone aggregate of 6.7 mm size (Passing 11.2mm sieve and retained on 2.36mm sieve) per 100 sqm of road surface including rolling and finishing with power road roller all complete.	sqm	0.0098
16.54	Providing and laying Dense Bituminous macadam on prepared surface with specified graded crushed stone aggregate for profile corrective base/ binding course including loading of aggregate with FE loader and hot mixing of stone aggregate, filler and bitumen in hot mix plant, transporting the mixed material by tippers to paver and laying the mixed material with paver finisher fitted with electronic sensing device to the required level and grade and rolling by road roller as per MORTH specifications, to achieve the desired density, but excluding the cost of primer / tack coat.		
16.54.1	50/75mm average compacted thickness with bitumen of 60/70 grade @ 5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate).	cum	1.15
16.55	Providing and laying Bituminous Macadam on prepared surface with specified graded crushed stone aggregate for profile corrective base/ binder course including loading of aggregate with F.E. loader , hot mixing of stone aggregates and bitumen in hot mix plant, transporting the mixed material by tippers to paver and laying the mixed material with paver		

Code No	Description	Unit	Quantity of bitumen to be used per unit quantity of work (quintals)
	finisher fitted with electronic sensing device to the required level and grade and rolling with road rollers, as per MORTH specification to achieve the desired density and compaction but excluding the cost of primer/ tack coat.		
16.55.1	50mm / 75mm average compacted thickness with bitumen of 60/70 grade @ 3.5% (Percentage by weight of total mix)	cum	0.7708
16.56	Providing and laying Dense Bituminous concrete on prepared surface with specified graded stone aggregate for wearing course including loading of aggregate with F.E. loader , and hot mixing of bitumen with filler and stone aggregate in hot mix plant , transporting the mixed material by tippers to paver and laying the mixed material with mechanical paver finisher fitted with electronic sensing device to the required level and grade and rolling with road rollers, as per MORTH specification, to achieve the desired density and compaction but excluding cost of primer/ tack coat.		
16.56.1	40 mm/50mm compacted thickness with bitumen of grade 60/ 70 @ 5.5% and lime @3% (percentage by weight of total mix).	cum	1.298
16.57	Providing and laying Dense Bituminous Concrete on prepared surface with specified graded stone aggregate for wearing course including loading of aggregate with F.E. loader, and hot mixing of bitumen with filler and stone aggregate in hot mix plant, transporting the mixed material by tippers to paver and laying the mixed material with mechanical paver finisher fitted with electronic sensing device to the required level and grade and rolling with road rollers, as per MORTH specifications, to achieve the desired density and compaction but excluding cost of primer/ tack coat.		
16.57.1	40 mm/50mm compacted thickness with bitumen of grade CRMB - 60 @ 5.5% and lime @3% (percentage by weight of total mix).	cum	1.298
16.58	Providing and laying Dense Bituminous Concrete on prepared surface with specified graded stone aggregate for wearing course including loading of aggregate with F.E. loader, and hot mixing of bitumen with filler and stone aggregate in hot mix plant, transporting the mixed material by tippers to paver and laying the mixed material with mechanical paver finisher fitted with electronic sensing device to the required level and grade and rolling with road rollers, as per MORTH specifications, to achieve the desired density and compaction but excluding cost of primer/ tack coat.		
16.58.1	40 mm/50mm compacted thickness with bitumen of grade PMB - 40 @ 5.5% and lime @3% (percentage by weight of	cum	1.298

<b>Code No</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity of bitumen to be used per unit quantity of work (quintals)</b>
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total mix).

\* Including tack coat



## 2.0 COEFFICIENT FOR BITUMEN CONSUMPTION

### 22.0 WATER PROOFING

Code No	Description	Unit	Rate Rs.
22.3	<p>Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like consisting of :</p> <p>i) Ist course of applying cement slurry @ 4.4 Kg/sqm mixed with water proofing compound conforming to IS 2645 in recommended proportions including rounding off junction of vertical and horizontal surface.</p> <p>ii) IInd course of 20mm cement plaster 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface.</p> <p>iii) IIIrd course of applying blown or residual bitumen applied hot at 1.7 Kg. per sqm of area.</p> <p>iv) IVth course of 400 micron thick PVC sheet. (Overlaps at joints of PVC sheet should be 100 mm wide and pasted to each other with bitumen @ 1.7 Kg/sqm.)</p>	sqm	0.017
22.6	<p>Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying : a) after surface preparation, first layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30cm on parapet wall and tucked into groove in parapet all around. d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately For the purpose of measurement the entire treated surface will be measured.</p>	sqm	0.01
22.8	<p>Providing and laying four courses water proofing treatment with bitumen felt over roofs consisting of first and third courses of blown bitumen 85/25 or 90/15 conforming to IS : 702 applied hot @ 1.45 Kg per square metre of area for each course, second course of roofing felt type 3 grade-I (hessian based self finished bitumen felt) and fourth and final course of stone grit 6mm and down size or pea-sized gravel spread at 6 cubic diameter per square metre including preparation of surface but excluding grading complete with :</p>		
22.8.1	<p>Bitumen felt (hessian base) type 3 grade I conforming to IS : 1322.</p>	sqm	0.029

Code No	Description	Unit	Rate Rs.
22.9	Providing and laying six courses water proofing treatment with bitumen felt over roofs consisting of first, third and fifth course of blown bitumen 85/25 or 90/15 conforming to IS : 702 applied hot @ 1.45, 1.20 and 1.45 Kg per square metre of area respectively, second and fourth courses of roofing felt type 3 grade I conforming to IS : 1322 (Hessian based self finished bitumen felt) conforming to IS : 1322 and sixth and final course of stone grit 6 mm and down size or pea sized gravel spread at 6 cubic dm per sqm including preparation of surface but excluding grading, complete.	sqm	0.041
22.10	Providing and laying six courses water proofing treatment with bitumen felt over roofs consisting of first, third and fifth courses of blown or / and residual bitumen applied hot at 1.45, 1.20 and 1.70 kg per square metre of area respectively, second and fourth courses of roofing felt type 2 grade I (fibre base self finished bitumen felt) six and final courses of stone grit 6mm and down size or pea sized gravel spread at 6cu.dm per sqm including preparation of surface, excluding grading, complete.	sqm	0.0435
22.11	Providing and laying six courses water proofing treatment with bitumen felt over roofs consisting of first, third and fifth courses of blow or/ and residual bitumen applied hot at 1.45, 1.20 and 1.70 kg per square metre of area respectively, second and fourth courses of roofing felt type 2 grade II (glass fibre base self finished bitumen felt) and sixth and final course of stone grit 6mm and down size or pea sized gravel spread at 6 cubic dm per sqm including preparation of surface but excluding grading, complete.	sqm	0.0435
22.18	Providing and fixing APP (Atactic Polypropylene Polymer) modified prefabricated five layer 2mm thick water proofing membrane, black finished reinforced with glass fibre matt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 ltr/sq. mtr. by the same membrane manufacture of density at 25°C, 0.87 - 0.89 kg/ ltr and viscosity 70 - 160 cps. Over the primer coat the layer of membrane shall be laid using Butane torch and sealing all joints etc., and preparing the surface complete. The vital physical and chemical parameters of the membrane shall be as under : Joint strength in longitudinal and transverse direction at 23°C as 350/300 N/ 5cm. Tear strength in longitudinal and transverse direction as 60/80N. Softening point of membrane not less than 150°C. Cold flexibility shall be upto -2°C when tested in accordance with ASTM, D - 5147. The laying of membrane shall be got done through the authorised applicator of the manufacture of membrane.		
	22.18.1 2mm (for corrugated roof sheets)	sqm	0.036
22.19	Providing and laying APP (Atactic Polypropylene Polymer) modified prefabricated five layer, 3mm thick water proofing membrane, black finished reinforced with glass fibre matt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 ltr/sqm. by the same membrane manufactured of density at 25°C, 0.87 - 0.89 kg/ltr and viscosity 70 - 160 cps. Over the primer coat the layer of membrane shall be laid using butane torch and sealing all joints etc., and		

Code No	Description	Unit	Rate Rs.
	preparing the surface complete. The vital physical and chemical parameters of the membrane shall be as under : Joint strength in longitudinal and transverse direction at 23°C as 350/300 N/5cm. Tear strength in longitudinal and transverse direction as 60/80N. Softening point of membrane not less than 150°C. Cold flexibility shall be upto -2°C when tested in accordance with ASTM, D - 5147. The laying of membrane shall be got done through the authorised applicator of the manufacturer of membrane :		
22.19.1	3 mm thick	sqm	0.024
22.20	Providing and laying APP (Atactic Polypropylene Polymer) modified prefabricated five layer 3mm thick water proofing membrane, black finished reinforced with non-woven polyester matt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 ltr/sqm. by the same membrane manufacture of density at 25°C, 0.87-0.89 kg/ltr and viscosity 70-160 cps. Over the primer coat the layer of membrane shall be laid using Butane Torch and sealing all joints etc., and preparing the surface complete. The vital physical and chemical parameters of the membrane shall be as under : Joint strength in longitudinal and transverse direction at 23°C as 650/450N/5cm. Tear strength in longitudinal and transverse direction as 300/250N. Softening point of membrane not less than 150°C. Cold flexibility shall be upto -2°C when tested in accordance with ASTM, D - 5147. The laying of membrane shall be got done through the authorised applicator of the manufacturer of membrane :		
22.20.1	3 mm thick	sqm	0.036