

GOA SCHEDULE OF  
RATES  
BUILDING WORKS  
2019

No. 3-3-05/SSW-PWD/Vol-I/2019-20/263  
Government of Goa,  
Office of the Principal Chief Engineer,  
Public Works Department,  
Altinho, Panaji -Goa.

Dated:- 16<sup>th</sup> June 2019.

**CIRCULAR**

**Sub: Goa Schedule of Rates – 2019 for Building Works**

The Goa Schedule of Rates for Building Works (Civil, Plumbing and Sanitation Works) was last revised as on 12<sup>th</sup> May, 2016 and is in operation till date. Consequent upon the implementation of GST from 1<sup>st</sup> July 2017 and variation in prices of basic construction materials, transportation cost, labour and machinery charges etc. it became necessary to revise the schedule of rates to match with the prevailing rates.

Accordingly the new Goa Schedule of Rates – 2019 for Building Works has been prepared on the similar lines of earlier Schedule of Rates by obtaining quotations from the manufacturers or Authorized dealers from the local market excluding GST.

This new Goa Schedule of Rates – 2019 for Building Works will be effective immediately from this date i.e 24<sup>th</sup> June 2019, superseding all earlier Schedule of Rates for Building Works and any other circulars issued in this regard.

This Goa Schedule of Rates – 2019 for Building Works shall be followed for preparation of new estimates and for working out of the Reasonable Amounts prior to opening of tender in accordance with the stipulations under para 20.4.3 of CPWD Works Manual 2014 for acceptance of the tenders of the works for which the tenders are already invited/ being invited based on earlier Schedule of rates.

Sd/-  
(U.P. Parsekar)  
Principal Chief Engineer  
P.W.D.

Authorized for Issue



(Antony Mathew)  
Suptdg. Surveyor of Works

Copy to:

1. The Principal Chief Engineer, PWD, Altinho, Panaji- Goa.
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3. The Suptdg. Surveyor of Works, PWD, Altinho, Panaji – Goa.
4. The Suptdg. Engineer, C.O. I, II, III, IV, V, VI, VII, VIII, IX, PWD, Goa
5. The Suptdg. Engineer (Mon. & Eva.), PWD, Altinho, Panaji – Goa.
6. The Executive Engineer, Works Div, I, II, III, IV, V, VI, VII, VIII, IX, X, XI, XII, XIII, XIV, XV, XVI, XV, XVI, XVII, XVIII, IXX, XX, XXI, XXII, XXIII, XXIV & XXV, PWD, Goa.
7. The Jt. Director of Accounts, PWD, Altinho, Panaji – Goa.

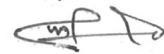
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1. The Chief Secretary, PWD, Govt. of Goa, Secretariat, Porvorim – Goa.
2. The OSD to Hon'ble Minister of PWD, Secretariat, Porvorim – Goa.

## **PREFACE**

1. The Goa Schedule of Rates(GSR) 2019 (Buildings)is based on C.P.W.D Analysis of Rates 2007 & is a revised edition of GSR 2015(Buildings).
2. The Goa Schedule of Rates 2019 (Buildings)is subdivided into the following Chapters.
  - a) Chapter I: Basic Rates of Materials
  - b) Chapter II: Mortar
  - c) Chapter III: Labour
  - d) Chapter IV: Hire Charges&Machinery
  - e) Chapter V: Carriages
  - f) Chapter VI: Earthwork
  - g) Chapter VII: Masonry Work
  - h) Chapter VIII: Plain Cement Concrete Work
  - i) Chapter IX: Reinforced Cement Concrete Work
  - j) Chapter X: Wood Work
  - k) Chapter XI: Steel &Aluminum Work
  - l) Chapter XII: Flooring & Floor Finishing Work
  - m) Chapter XIII: Roofing & Ceiling Work
  - n) Chapter XIV: Plastering& Finishing Work
  - o) Chapter XV: Dismantling, Demolition & Repair Work
  - p) Chapter XVI: Landscaping & Horticulture Work
  - q) Chapter XVII: Water Supply, Sewerage, Plumbing & Sanitation Work
  - r) Chapter XVIII: Miscellaneous Work
3. GSR 2019(Buildings),incorporates most of the items of GSR 2015 (Buildings).Some items ofthe Goa Schedule of Rates 2015(Buildings) have been deleted. Similarly, some of the Rate Analysis have been modified/corrected. Several new Rate Analysis & Sub-Items have been introduced.
4. The Basic Rates of Materials, incorporated in the Analysis of Rates, pertains to materials confirming to BIS Standards/CPWD Specifications/Materials of Good Quality generally available in the market. Labour rates are taken from the minimum wages notification issued by the Government of Goa, Office of the Commissioner, Labour&Employment,vide Notification No. 24/21/2009-LAB-II(14) dated 24<sup>th</sup>May 2016, with the revised Dearness Allowances vide Order No. CLE/PA/MWA-VDA/(10)/2016/3507 dated 04/09/2018.

5. All the Basic Rates of the Materials considered are excluding taxes. The Item Rates are exclusive of taxes but inclusive 1% Labour cess.
6. Lots of efforts have gone into the preparation of Goa Schedule of Rates 2019 (Buildings). I convey my deep appreciation & sincere thanks to the Principal Chief Engineer, Chief Engineer II, Superintending Engineers I & II, Executive Engineers, Division I, V, VIII & XVI, Surveyor of Works, Assistant Surveyor of Works, Technical Assistants, Junior Engineers & the other staff of the O/o Superintending Surveyor of Works, for the sincere efforts they made in the preparation of this document.
7. Use of Goa Schedule of Rates 2019 (Buildings) by PSUs, private bodies & individuals shall be at their own discretion. Public Works Department, Goa shall not be responsible for any ambiguity, discrepancy, dispute or financial loss arising directly or indirectly by using or following Analysis of Rates by such Govt. /Private bodies or individuals.
8. Due care has been taken, to prepare the Goa Schedule of Rates 2019 (Buildings) as correctly as possible. It is however possible that, some errors might have crept in, due to oversight. Acknowledging that **'TO ERR IS HUMAN'**, if any ambiguities/discrepancies/mistakes/omissions, are noticed in the Basic Rates of Materials, Hire Charges for Plants & Machinery for Building Works, GSR Items, Specifications of Items & Rate Analysis, by any Technical Staff or even by Contractors, at any stages of work, (either before execution, during execution or after execution of the work ), the same may be promptly brought to the notice of the Superintending Surveyor of Works, Public Works Department, Altinho, Panaji, Goa, so that the same may be immediately rectified, through a Corrigendum.



(ANTONY MATHEW)

Superintending Surveyor of Works  
Public Works Department,  
Altinho, Panaji, Goa

Dated: 18 /06 /2019

No. 3-3-05/SSW-PWD/Vol-I/2017-18/ 610

Government of Goa,  
Office of the Principal Chief Engineer,  
Public Works Department,  
Altinho, Panaji -Goa.

Dated: 15 November, 2017.

**CIRCULAR**

**Sub: Adoption of Percentage Increase in rates for various working conditions in the State**


The sanction of Government for adoption of percentage increase in rates for various working condition is hereby conveyed on all the prevailing GSR's as follows:

Summary of Details of Percentage Increase in rates for various working conditions in the State of Goa		
Sr. No.	Description/ Location	% increase on
1	2	3
1.a	Works in hilly inaccessible areas where head load exceeds 200 mtrs.	10%
B	Defence area / MPT/ Airport/ high security areas	
C	Sewerage works in Towns/ Corporation / Municipal Areas for working under unhygienic conditions	
D	Works to be taken up by Ferry Crossing and for ferry Ramps	
2.a.	Prison/ Jail area/ Mental Hospitals premises & Raj Bhavan	15%
B	For works to be executed in tidal conditions like jetties, sluice-gates, Bandharas, Wiers, Bunds & Beacons	
3	Works in Corporation area/ Municipal area where heavy traffic Restrictions is notified	5 %
4	Add extra for labours component for difficult working conditions. Restricted working place/ andwhere head load exceeds 200 mtrs.	50 % on Labour component only

This circular supercedes the earlier all circulars in this regard.

Sd/-  
(U.P. Parsekar)  
Principal Chief Engineer  
P.W.D.

Authorized for Issue:

  
(Anil S. Ringane)  
Suptdg. Surveyor of Works  
P.W.D.

Copy to:

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7. The Jt. Director of Accounts, PWD, Altinho, Panaji - Goa.

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CHAPTER I				
Basic Rate for Material				
All the Basic Rates are Exclusive of Taxes				
Sr. No.		Description	Unit	Rate
001		<b>Precast cement concrete solid blocks of compressive strength 70kg/cm2</b>		
	a	PCC (30X20X15)	100 nos	4300.00
	b	PCC (40X20X15)	100 nos	5600.00
	c	PCC (30X23X15)	100 nos	4800.00
	d	PCC (30X20X10)	100 nos	2800.00
002		<b>Precast cement concrete hollow blocks of compressive strength 70kg/cm2</b>		
	a	PCC (40X20X10)	100 nos	3800.00
	b	PCC (40X20X20)	100 nos	7600.00
	c	PCC (40X20X15)	100 nos	5600.00
003		<b>Precast cement concrete hollow blocks of compressive strength 50kg/cm2</b>		
	a	PCC (40X20X10)	100 nos	3100.00
	b	PCC (40X20X20)	100 nos	6400.00
	c	PCC (40X20X15)	100 nos	4700.00
004		Bricks class design 75 kg/cm2 (1st class wire cut)	1000 nos	9500.00
005		Bricks class design 40 kg/cm2 (1st class wire cut)	1000 nos	6500.00
006		<b>Fly ash bricks</b>		
	a	225X150X80MM	1000 nos	9000.00
	b	230X110X80MM	1000 nos	7000.00
	c	200X95X95MM	1000 nos	6000.00
007		<b>Laterite stone</b>		
	a	( 30 x 23 x 16)	100 nos	1900.00
	b	( 30 x 30 x 16 )	100 nos	2100.00
	c	( 30 x 20 x 16 )	100 nos	1900.00
008		Patradevi stone (35 x 30 X 16)	100 nos	5100.00
009		Patradevi stone (60 x 40 X 16)	100 nos	8600.00
010		Stone soling	cu.m	370.00
011		Garden soil	cu.m	200.00

012		<b>Granitic / Basaltic aggregate</b>		
	a	50 mm	cu.m	1150.00
	b	40 mm	cu.m	1200.00
	c	32 mm	cu.m	1200.00
	d	20 mm	cu.m	1300.00
	e	12.5 mm	cu.m	1300.00
	f	10 mm	cu.m	1300.00
013		River pebbles	cu.m	667.00
014		Laterite aggregate (60 / 50 mm)	cu.m	381.00
015		Laterite aggregate (40mm & below)	cu.m	1334.00
016		Cement (Ordinary Portland Cement 43 Grade)	tones	5313.00
017		Sand (river/manufactured:Coarse/fine)	cu.m	1300.00
018		Jungle wood (planks)	cu.m	26486.00
019		Jungle wood (scantlings)	cu.m	26486.00
020		Planks	cu.m	26486.00
021		Scantlings	cu.m	26486.00
022		Jamba wooden battens	cu.m	41143.00
023		Bitumen 80/100 Packed	tones	74000
024		Granitic / Basaltic boulders 150-200	cu.m	900.00
025		Laterite boulders 150-200 mm	cu.m	370.00
026		Kerosene	Litre	60.00
027		Steam coal	quintal	1810.00
028		Cement (white)	tones	16410.00
029		Lime	quintal	950.00
030		Mud/ Earth	cu.m	350.00
031		Marble dust	cu.m	1143.00
032		G.I Sheet 8" x 3" 25 SWG	sq.m	322.00
033		Mild steel (SAIL, TATA, VIZAG,JSW Steel Ltd.)	tones	45000.00
034		HYSD Reinforcement / TMT Steel reinforcement from <b>secondary producers</b>	tones	43000.00
035		CRS-500 Reinforcement (SAIL, TATA, VIZAG,JSW Steel Ltd. )	tones	51000.00
036		TMT Steel reinforcement (SAIL, TATA, VIZAG,JSW Steel Ltd. )	tones	49000.00
037		Steel bars	tones	45000.00
038		Cover blocks	Each	2.50
039		Binding wire	kgs	63.00
040		Non- Asbestos multi purpose fibre cement board 6mm thick	Sq. mt	233.00
041		Plasticizers	litre	140.00
042		Polysafe - Rustonil	litre	330.00
043		Precast reinforced concrete door frames	Metre	190.00
044		Copper	kgs	400.00



045		1st class teakwood(Scantling)	cu.m	134196.00
046		1st class teakwood(Planks)	cu.m	151853.00
047		2nd class teakwood(Scantling)	cu.m	123601.00
048		2nd class teakwood(Planks)	cu.m	123601.00
049		1st class mattiwood(Scantling)	cu.m	88287.00
050		1st class mattiwood(Planks)	cu.m	88287.00
051		2nd class mattiwood(Scantling)	cu.m	88287.00
052		2ndclass mattiwood(Planks)	cu.m	88287.00
053		Nanowood (Planks)	cu.m	84755.00
054		3 mm glass	sq.m	377.00
055		Superior glass	sq.m	400.00
056		Flush door shutters (1st class teak Veneer both faces)		
	a	38 mm	sq.m	2508.00
	b	35 mm	sq.m	2280.00
	c	30 mm	sq.m	2006.00
	d	25mm	sq.m	2663.00
057		Flush door shutters ( Commercial ply both faces)		
	a	38 mm	sq.m	1596.00
	b	35 mm	sq.m	1368.00
	c	30 mm	sq.m	1085.00
	d	25mm	sq.m	1505.00
058		Flush shutters ( 1 face Commercial,1 face teak veneer)		
	a	38 mm	sq.m	2052.00
	b	35 mm	sq.m	1824.00
	c	30 mm	sq.m	1550.00
	d	25mm	sq.m	2052.00
059		Flush door shutters deco type core of particle board(1st class teak Veneer both faces)		
	a	38 mm	sq.m	2235.00
	b	35 mm	sq.m	2071.00
	c	30 mm	sq.m	1903.00
	d	25mm	sq.m	1879.00
060		Flush door shutters deco type core of particle board ( Commercial ply both faces)		
	a	38 mm	sq.m	1437.00
	b	35 mm	sq.m	1280.00
	c	30 mm	sq.m	1115.00
	d	25mm	sq.m	1089.00
061		Flush door shutters deco type core of particle board ( 1 face Commercial,1 face teak veneer)		
	a	38 mm	sq.m	1840.00

	b	35 mm	sq.m	1675.00
	c	30 mm	sq.m	1510.00
	d	25mm	sq.m	1484.00
062		Flush door shutters Cellular core const (1st class teak Veneer both faces)		
	a	38 mm	sq.m	2262.00
	b	35 mm	sq.m	2098.00
	c	30 mm	sq.m	1931.00
	d	25mm	sq.m	1907.00
063		Flush door shutters Cellular core construction ( Commercial ply both faces)		
	a	38 mm	sq.m	1210.00
	b	35 mm	sq.m	793.00
	c	30 mm	sq.m	1142.00
	d	25mm	sq.m	1116.00
064		Flush door shutters Cellular core construction (1 face Commercial,1 face teak veneer)		
	a	38 mm	sq.m	1668.00
	b	35 mm	sq.m	1460.00
	c	30 mm	sq.m	1252.00
	d	25mm	sq.m	1043.00
065		Anodized aluminium hinges		
	a	100 mm x 75 x 4 mm	10Nos	400.00
	b	75 x 45 x 3.5 mm	10Nos	300.00
	c	50 x45 x 3 mm	10Nos	200.00
	d	Coconut rafters	metre	137.50
066		Frosted glass 3 mm	sqm	699.00
067		Iron hinges		
	a	100x 58x1.7 mm	10Nos	300.00
	b	75 x 47x1.5 mm	10Nos	200.00
	c	50x37x1.5mm	10Nos	150.00
068		Iron screws 40 mm	100Nos	110.00
069		Iron screws 30 mm	100Nos	90.00
070		Iron screws 20 mm	100Nos	60.00
071		Nickel plated piano hinges	Each	180.00
072		C.P brass screws 25 mm	Each	3.00
073		4 mm thick Marine Ply	sq.m	492.00
074		4mm thick Commercial Ply	sq.m	337.00
075		M.S round/Square bars	tone	46500.00
076		Priming coat with wood presative	litre	105.00
077		Jungle wood ballies 50 mm 2.75 mtrs long.	Each	130.00
078		Jungle wood ballies 100 mm 3.66 mtrs long.	Each	192.00
079		Jungle wood ballies 125 mm 3.66 mtrs long.	Each	252.00

080	a	Jungle wood ballies150 mm 3.66 mtrs long.	Each	288.00
	b	Jungle wood ballies 200 mm 3.66 mtrs long.	Each	320.00
081		Novapan panels 12 mm	sq.m	349.00
082		Novapan panels 18 mm	sq.m	450.00
083		Wire guage	kgs	272.00
084		4mm thick A.C sheet	sq.m	140.00
085		M.S. flats	tone	4619.00
086		Sintex door	Each	3409.00
087		Neeru	kg	12.00
088		Aluminium paint	litre	246.00
089		Anti corrosive Bituminiuos paint	litre	150.00
090		Black Japan paint	litre	120.00
091		Synthetic enamel paint	litre	154.00
092		Emulsion plastic	litre	208.00
093		Flat wall paint	litre	104.00
094		Ordinary ready mixed paint	litre	104.00
095		Synthetic enemal paint	litre	154.00
096		Transparent wood filler	litre	130.00
097		Putty	kg	28.00
098		Plastic roofing compound	kg	50.00
099		Dry distemper	kg	45.00
100		Oil bound washable distemper	kg	62.00
101		Linseed oil ( raw)	litre	100.00
102		Cement primer	litre	100.00
103		Distemper primer	litre	70.00
104		Waterproofing material(plaster)	litre	28.00
105		Waterproofing compound	litre	30.00
106		Marble chips (3mm&down)	kg	54.00
107		Unslaked lime	quintal	1660.00
108		Polysafe -Ec Primer	litre	208.00
109		Polysafe -Ec 1 <sup>st</sup> coat	litre	481.00
110		Polysafe -Ec 2 <sup>nd</sup> coat	litre	566.00
111		Solvent	litre	130.00
112		Steel paint exp white	litre	225.00
113		Red lead(ready mixed)	kg	117.00
114		White lead	kg	158.00
115		Waterproofing cement paint	kg	32.00
116		Red Oxide Metal primer	litre	129.00
117		Wax polish	kg	183.00
118		Ordinary Varnish flatting	litre	190.00
119		Superior copal	litre	117.00
120		Oil type (wood presavative)	litre	250.00
121		Paint remover	litre	195.00
122		Super snowcem	kg	32.00

123	Glue	kg	59.00
124	Turpentine oil	litre	93.00
125	Linseed (double boiled)	litre	170.00
126	Pink or white primer	litre	138.00
127	Metal primer	litre	129.00
128	Marble Dust	kg	20.00
129	Whiting	quintal	1500.00
130	Weathershield paint	litre	206.00
131	Coal tar	litre	20.00
132	Glass panes 3mm	sq.m	377.00
133	Painting coal tar (2 coats)	sq.m	35.10
134	Acrylic sheet 3 mm	sq.m	114.00
135	M.S steel structurals(SAIL, TATA. VIZAG,JSW Steel Ltd. )(R.S.Joists)	tone	46000.00
136	Flats upto 10 mm thickness	tone	40000.00
137	Flats exceeding 10mm thickness	tone	43000.00
138	M.S Tees, Angles (SAIL, TATA. VIZAG,JSW Steel Ltd. )	tone	46000.00
139	M.S.Plates (SAIL, TATA. VIZAG,JSW Steel Ltd. )	tone	44000.00
140	M.S.Rivets	quintal	6972.00
141	M.S.Hooks	Each	8.00
142	Steel Straining Bolts	quintal	5810.00
143	M.S .Rolling Shutter	sq.m	1460.00
144	Top cover 24 SWG	Metre	509.00
145	Spring 27.5 cm long	Each	543.00
146	Ball bearings Grade 2	Each	349.00
147	Locking arrangement with handle	Each	349.00
148	Chain & crank upto 16.80 Sq.m	sq.m	1550.00
149	Chain & crank above 16.80 Sq.m	sq.m	1550.00
150	M.S. steel sheets (SAIL, TATA. VIZAG,JSW Steel Ltd. )	tone	44000.00
151	Alluminium	kg	220.00
152	G.I pipe 50 mm dia	Metre	223.00
153	M.S round bars upto 10 mm dia (SAIL, TATA. VIZAG,JSW Steel Ltd. )	tone	45000.00
154	M.S round bars above 10 mm dia (SAIL, TATA. VIZAG,JSW Steel Ltd. )	tone	45000.00
155	Steel frame 85 x 60 mm	sq.m	1162.00
156	Steel frame 105 x 60 mm	sq.m	1743.00
157	Steel frame 125 x 60 mm	sq.m	1821.00
158	Fixing windows with lugs	sq.m	194.00
159	Steel doors (fixed)	sq.m	1449.00
160	Steel doors (single leaf)	sq.m	1937.00
161	Steel doors ( double leaf)	sq.m	1937.00

162	Steel windows(fixed)	sq.m	1317.00
163	Brass casement window fastner	Each	93.00
164	Brass peg stay	Each	210.00
165	Pulley ( 38 mm )	Each	101.00
166	Pulley ( 25 mm )	Each	124.00
167	Fuse powder	kg	41.00
168	Steel bolts& nuts abv 30 cm	quintal	6972.00
169	Steel bolts& nuts bel 30 cm	quintal	6972.00
170	Collapsible steel shutters	sq.m	1937.00
171	M.S cleats	Each	234.00
172	M.S square bars (SAIL, TATA. VIZAG,JSW Steel Ltd. )	tone	43000.00
173	Steel vent(side hung)	sq.m	1333.00
174	Steel vent(top hung)	sq.m	1249.00
175	Steel vent(centre hung)	sq.m	3.00
176	White glazed tiles 8"x8"	sq.m	259.00
177	White glazed tiles 8"x12"	sq.m	322.00
178	Colour glazed tiles 8"x12"	sq.m	322.00
179	Precast terr tiles(light)	sq.m	349.00
180	Precast terr tiles(dark)	sq.m	368.00
181	White Makhrana marble	sq.m	1829.00
182	Marble(blue or black veins)	sq.m	736.00
183	Kotah stone(20 mm) machine polished	sq.m	592.00
184	Cuddhapa stone(20mm)machinepolished	sq.m	323.00
185	Shahabad stone polished	sq.m	301.00
186	Ceramic glazed tiles (plain)12'x12"	sq.m	508.00
187	Ceramic glazed tiles (coloured 8"X8")	sq.m	291.00
188	Ceramic glazed tiles(coloured 12"x12")	sq.m	459.00
189	Ceramic glazed tiles(coloured 8"x12")	sq.m	322.00
190	Metallic floor hardener	quintal	357.00
191	High polymer modified quickset tile adhesive	kg	17.00
192	Precast plain cement tacks	sq.m	543.00
193	Vinyl flooring	sq.m	620.00
194	Red agra sand stone	sq.m	504.00
195	Jet black polish granite	sq.m	1991.00
196	Kota stone 35mm thick with nosing & 3 feet and above.	sq.m	753.00
197	Ceramic glazed tiles(col 16"x16")	sq.m	358.00
198	Pigment(light)	kg	117.00
199	Pigment(dark)	kg	109.00
200	Cheq terr tiles(light)	sq.m	602.00
201	Cheq terr tiles(dark)	sq.m	602.00

202	Marble chips(1-4mm)	quintal	388.00
203	Marble chips(4-7 mm)	quintal	465.00
204	Marble chips(7-10 mm)	quintal	504.00
205	Fuse wire	Each	10.00
206	Vitrified tiles(glossy)plain/	sq.m	551.00
207	Vitrified tiles(glossy)dark	sq.m	678.00
208	Vitrified tiles(matt)	sq.m	805.00
209	Vitrified tiles(antiskid)	sq.m	805.00
210	Vitrified tiles(pavers)	sq.m	593.00
211	AntiSkid tiles(light)	sq.m	636.00
212	AntiSkid tiles(dark)	sq.m	636.00
213	Pavers(interlock light dutyM25	sq.m	427.00
214	Pavers(interlock heavy dutyM40	sq.m	543.00
215	Pavers (interlock heavy duty) M30 grey cement	sq.m	465.00
216	Pavers(interlock heavy duty)M30col cement	sq.m	612.00
217	Ceramic	sq.m	300.00
218	Antiskid (dark) 12 x 12 & 16 x 16	sq.m	360.00
219	Antiskid (light) 12 x 12 & 16 x 16	sq.m	313.00
220	Rustics (dark) 380 x 380	sq.m	450.00
221	Rustics (light) 380 x 380	sq.m	425.00
222	Marbonite (dark) 2 x 2	sq.m	636.00
223	Marbonite (light) 2 x 2	sq.m	593.00
224	Marbonite (dark) 3 x 3	sq.m	921.00
225	Marbonite (light) 3 x 3	sq.m	805.00
226	Scratch resistant (dark) 2 x 2	sq.m	720.00
227	Scratch resistant (light) 2 x 2	sq.m	720.00
228	Industrial Tiles (dark) 10 mm	sq.m	825.00
229	Industrial Tiles (dark) 12 mm	sq.m	1050.00
230	Industrial Tiles (light) 10 mm	sq.m	500.00
231	Industrial Tiles (light) 12 mm	sq.m	730.00
232	Tactile lines	sq.m	602.00
233	Tactile buttons	sq.m	602.00
234	Glazed wall tiles 200 x 300	sq.m	322.00
235	Glazed wall tiles 300 x 450	sq.m	466.00
236	Glazed wall tiles 300 x 600	sq.m	550.00
237	A.C pipe 100 mm	Metre	183.00
238	M.S barbed wire	quintal	5810.00
239	G.I barbed wire	quintal	9311.00
240	G.I staples	100Nos	194.00
241	Hollow glass blocks 20x20x10	Each	78.00
242	Pile shoe 150 mm	Each	93.00

243	Pile shoe 200 mm	Each	109.00
244	Brass peg rack	Each	105.00
245	G.I pipe 25 mm	Metre	180.00
246	G.I pipe 40 mm	Metre	250.00
247	G.I elbows 40 mm	Each	70.00
248	Aluminium strip edging	sq.m	71.00
249	M.S plate 6mm	quintal	4400.00
250	Creosote oil	litre	21.00
251	Diesel	litre	65.17
252	Grease	kg	153.00
253	Black Japan paint	litre	195.00
254	Mobil oil	litre	257.00
255	Binding wire	kg	63.00
256	Asbestos sheet 4 mm	Metre	166.00
257	Wooden cleats	Each	25.00
258	Lubricant	litre	233.00
259	Bottle trap 150mm (C.P)	Each	1269.00
260	Fisher union 32 mm	Each	67.00
261	Fisher union 40 mm	Each	92.00
262	15 mm C.P. brass pillar tap	Each	633.00
263	Screws & plugs	Each	83.00
264	C.P brass shower rose 100 mm	Each	208.00
265	C.P brass shower rose 150 mm	Each	233.00
266	Lead connection pipe 30 cm	Each	59.00
267	Lead connection pipe 45 cm	Each	67.00
268	Single equal plain "Y"150 x 150 x 150	Each	350.00
269	Single equal plain "Y"100 x 100 x 100	Each	200.00
270	Single equal plain "Y"75 x 75 x 75	Each	150.00
271	Double unequal plain invert150 x 150 x 100x 100	Each	450.00
272	Double unequal plain invert100x100x75x75	Each	450.00
273	Double equal plain invert 150 mm	Each	400.00
274	Double equal plain invert 100 mm	Each	450.00
275	Double equal plain invert 75 mm	Each	210.00
276	Double unequal junction( plain)100x50	Each	220.00
277	Double unequal junction( plain)100x75	Each	312.00
278	Centri fugally C.I traps 100 inlet 100 mm outlet	Each	515.00
279	Centri fugally C.I traps 100 inlet 75 mm outlet	Each	498.00
280	Centri fugally C.I traps 100 inlet 50 mm outlet	Each	209.00
281	Pipe clips 110 mm	Each	20.00
282	Pipe clips 90 mm	Each	13.00
283	Synthetic enamel	Each	154.00

284		12.5 litres( low level)flushing cistern ceramic	Each	1750.00
285		Single equal "Y"( door)150 x 150 x 150	Each	500.00
286		Single equal "Y"(door)100 x 100 x 100	Each	250.00
287		Single equal "Y"(door)75 x 75 x 75	Each	180.00
288		Brass full way valve with wheel 65 mm	Each	2324.00
289		Double equal invert(door)150mm	Each	729.00
290		Double equal invert(door)100 mm	Each	279.00
291		Double equal invert(door) 75 mm	Each	218.00
292		Double unequal junction(door)100x50	Each	240.00
293		Double unequal junction(door)100x75	Each	347.00
294		Centri (door)y C.I traps 100 inlet 100 mm outlet	Each	152.00
295		Centri C.I traps(door) 100 inlet 75 mm outlet	Each	202.00
296		Centri fugally C.I traps 100 inlet 50 mm outlet	Each	215.00
297		100 mm S.W pipes	Each	80.00
298		S.C.I grating	Each	18.00
299		Double unequal Invt100 x 100x75 x 75(door)	Each	844.00
300		Double unequal Invt100 x 100 x 75x 75(plain)	Each	760.00
301		Single un equal Invt100 x 100 x 75(plain)	Each	562.00
302		Single equal Invt 100 x 100 x 50 (plain)	Each	374.00
303		Single equal Invt 75 x 75 x 50(plain)	Each	233.00
304		S.C.I trap(nahni) 100 mm x 75 mm	Each	100.00
305		White glazed tiles	sq.m	-
306		Porcelain enameled bend	Each	274.00
307		65 mm S.C.I trap	Each	362.00
308		M.S holder bat clamps (32mm)	Each	40.00
		<b>H.D.P.E</b>		
309		H.D.P.E. pipes 25 mm	Metre	42.00
310		H.D.P.E. pipes 32 mm	Metre	67.00
311		H.D.P.E. pipes 30 mm	Metre	67.00
312		H.D.P.E. pipes 40 mm	Metre	83.00
313		H.D.P.E. pipes 50 mm	Metre	113.00
314		H.D.P.E. pipes 65 mm	Metre	133.00
315		H.D.P.E. 200 Litres capacity water storage Tanks	Each	1271.00
316		H.D.P.E. 500 Litres capacity water storage Tanks	Each	3178.00
317		H.D.P.E. 1000 Litres capacity water storage Tanks	Each	6356.00



		<b>P.V.C Fittings</b>		
318		P.V.C connection pipe 18"	Each	100.00
319		P.V.C connection pipe 15"	Each	90.00
320		P.V.C connection pipe 12"	Each	80.00
321		P.V.C flushing cistern 10 litres ( high level)	Each	650.00
322		P.V.C flushing cistern 10 litres ( low level)	Each	650.00
		<b>R.P.V.C. Fittings</b>		
323		R.P.V.C double "Y" (door) 90 mm	Each	108.00
324		R.P.V.C double "Y" (door) 110 mm	Each	117.00
325		R.P.V.C cowl 110 mm	Each	17.00
326		R.P.V.C cowl 90 mm	Each	16.00
327		R.P.V.C double "Y" ( plain) 90 mm	Each	125.00
328		R.P.V.C double "Y" ( plain)110 mm	Each	137.00
329		R.P.V.C nahni trap 110 mm	Each	79.00
330		R.P.V.C nahni trap 90 mm	Each	71.00
		<b>C.I. Fittings</b>		
331		C.I foot rests	Each	750.00
332		C.I manhole frame & Cover(500 mm dia Wt 116(230) kg)	Each	11205.00
333		C.I rectangular frame & cover(455 x 610 wt 38 kg)	Each	3403.00
334		C.I cover with frame 30 x 30 cms(Wt.10Kg)	Each	952.00
335		C.I grating 100 x 100 mm	Each	23.00
		<b>G.I. Pipes</b>		
336		G.I pipes 15 mm(medium)	Metre	64.00
337		G.I pipes 20 mm	Metre	68.00
338		G.I pipes 25 mm	Metre	102.00
339		G.I pipes 32 mm	Metre	127.00
340		G.I pipes 40 mm	Metre	144.00
341		G.I pipes 50 mm	Metre	161.00
342		G.I pipes 60 mm	Metre	271.00
343		G.I inlet connection	Each	54.00
344		G.I nut	Each	100.00
345		G.I chain with G.I pull	Each	125.00
346		G.I Jam nut	Each	65.00
347		G.I Tee( 50 mm )	Each	140.00
		<b>Brass Fittings</b>		
348		Brass stop cock 15 mm	Each	186.00
349		Brass stop cock 20 mm	Each	237.00

350	Brass stop cock 25 mm	Each	322.00
351	Brass stop cock 32 mm	Each	551.00
352	Brass stop cock 40 mm	Each	932.00
353	Brass stop cock 50 mm	Each	1085.00
354	Brass bib cock 15 mm	Each	297.00
355	Brass bib cock 20 mm	Each	550.00
356	Brass bib cock 25 mm	Each	175.00
357	Brass full way valve 15 mm	Each	217.00
358	Brass full way valve 20 mm	Each	466.00
359	Brass full way valve 25 mm	Each	720.00
360	Brass full way valve 32 mm	Each	975.00
361	Brass full way valve 40 mm	Each	1229.00
362	Brass full way valve 50 mm	Each	853.00
363	Brass full way valve 65 mm	Each	1705.00
364	Brass full way valve 80 mm	Each	2015.00
	<b>Sanitary Fittings</b>		
365	Towel rail 600 x 20 mm	Each	1108.00
366	Towel rail 450 x 20 mm	Each	1031.00
367	Soap dish (C.P)	Each	574.00
368	Toilet paper holder(C.P)	Each	574.00
369	Bath tubs ( fibre glass)(1700x740x440)	Each	6198.00
370	Acrylic bath tub(1650x710x440)	Each	140.00
371	Rubber plug 40 mm	Each	20.00
372	Acrylic bath tub(1520x710x440)	Each	736.00
373	Mirror 600 x 450 mm	Each	1352.00
374	Glass shelf 600 x 120 mm(5mm)	Each	272.00
375	Liquid soap container 500 ml wall mounted (glass)	Each	1133.00
376	Liquid soap container 200 ml-(plastic)	Each	1048.00
377	Long Pan pattern ( W.C pan)	Each	2000.00
378	Indian Type ( W.C. pan )	Each	1850.00
379	European type (W.C pan )	Each	1059.00
380	White plastic seat & lid	Each	1394.00
381	Black plastic seat & lid	Each	1394.00
382	Flat - back single urinal	Each	1479.00
383	Range of 2 urinals	Each	1525.00
384	Range of 3 urinals	Each	1797.00
385	Range of 4 urinals	Each	2203.00
386	Single seater	Each	1610.00
387	Range of 2 urinals	Each	1525.00
388	Range of 3 urinals	Each	1797.00

389		Range of 4 urinals	Each	2203.00
390		Flat - back wash basin(550 x 400 mm)	Each	1195.00
391		Pedestal for wash basin	Each	1555.00
392		Foot rests for W,C	Each	500.00
393		5 litres high level P.V,C. flushing cistern	Each	551.00
394		5 litres low level P.V.C flushing cistern	Each	508.00
395		10 litres high level P.V,C. flushing cistern	Each	650.00
396		10 litres low level P.V.C flushing cistern	Each	650.00
397		5 litres C.I automatic flushing cistern	Each	6479.00
398		10 litres C.I automatic flushing cistern	Each	504.00
399		15 litres C.I automatic flushing cistern	Each	1240.00
400		Wash basin(white vitreous) 630 x 450 mm	Each	2021.00
401		Wash basin(white vitreous ) 550 x 400 mm	Each	1144.00
402		Kitchen sink (white vitreous )- 600 x 400 x 250 mm	Each	1610.00
403		Kitchen sink (white vitreous )- 600 x 400 x 200 mm	Each	1525.00
404		Telescopic Flush pipe 32 mm(G.)	Each	291.00
405		Mosquito proof coupling	Each	328.00
406		Angle back wash basin(600 x480 mm)	Each	214.00
407		Angle back wash basin(400 x400 mm)	Each	620.00
408		Heel rest bend 100mm	Each	272.00
409	a	Heel rest bend 75mm	Each	233.00
	b	Heel rest bend 50mm	Each	175.00
410		Flush valve	Each	932.00
411		White glazed tiles	sqm	-
412		Spreader for urinal	Each	523.00
413		Porcelain stopper	Each	69.00
414		Chain with rubber plug 32 mm	Each	127.00

		Pipes		Sand Cast Iron	R.P.V.C	Centri C.I
				(a)	(b)	(c)
415		Pipes 100 mm	Metre	1114.00	212.00	2234.00
416		Pipes 75 mm	Metre	952.00	104.00	1270.00
417		Pipes 50 mm	Metre	770.00	102.00	1055.00
418		Double equal Jnct100(door)	Each	844.00	153.00	919.00
419		Double equal Junction 75(door)	Each	608.00	119.00	662.00
420		Double equal Junction 50(door)	Each	497.00	30.00	523.00
421		Double equal Jnct100(plain)	Each	760.00	110.00	919.00
422		Double equal Junction 75 (plain)	Each	580.00	68.00	631.00
423		Double equal Junction 50(plain)	Each	402.00	30.00	508.00

424		Single equal Jnct150(door)	Each	588.00	407.00	1440.00
425		Single equal Junction 100 (door)	Each	562.00	161.00	611.00
426		Single equal Junction 75(door)	Each	374.00	93.00	407.00
427		Single equal Jnction 100 (plain)	Each	501.00	373.00	545.00
428		Single equal Junction 75 (plain)	Each	347.00	153.00	377.00
429		Single equal Junction 50(plain)	Each	344.00	76.00	292.00
430		Double unequal Jnct100x75(door)	Each	431.00	-	-
431		Double unequal Jnc100 x50 (door)	Each	343.00	-	-
432		Double unequal Junction 75 x 50(door)	Each	245.00	-	-
433		Double unequal Jnct100(plain)x 100 x 75 mm	Each	441.00	55.00	-
434		Double unequal Junction 100 x50 (plain)	Each	353.00	30.00	-
435		Double unequal Junction 75 x50(plain)	Each	280.00	-	-
436		Single unequal Junction 150 x 100(door)	Each	655.00	73.00	1746.00
437		Single unequal Junction 100 x 75 (door)	Each	536.00	-	931.00
438		Single unequal Junction 100 x50(door)	Each	417.00	-	713.00
439		Single unequal Junction 150 x 100(plain)	Each	616.00	254.00	1625.00
440		Single unequal Junction 100 x 75 (plain)	Each	557.00	-	653.00
441		Single unequal Junction 100 x50(plain)	Each	352.00	-	713.00
442		Single equal Invt150 (door)	Each	417.00	88.00	-
443		Single equal Invt 100 (door)	Each	345.00	48.00	-
444		Single equal Invt 75(door)	Each	258.00	-	-
445		Single equal Invt100(plain)	Each	469.00	69.00	1162.00
446		Single equal Invt 75 (plain)	Each	310.00	38.00	451.00
447		Single equal Invt 50(plain)	Each	207.00	-	313.00
448		Bend (plain) 150mm	Each	372.00	246.00	773.00
449		Bend (plain) 100mm	Each	352.00	93.00	382.00
450		Bend (plain) 75 mm	Each	276.00	51.00	300.00
451		Bend (Door) 100 mm	Each	390.00	102.00	424.00
452		Bend (door) 75 mm	Each	318.00	68.00	346.00
453		Bend (door) 50 mm	Each	204.00	92.00	282.00

		<b>S.C.I Offset</b>		<b>75 mm dia</b>	<b>100 mm dia</b>	<b>150 mm dia</b>
454		75 mm Projection	Each	221.00	283.00	-
455		150 mm projection	Each	311.00	370.00	781.00

				<b>100 mm</b>	<b>150 mm</b>	<b>230 mm</b>
456		Stone ware pipes	Metre	58.00	105.00	169.00
				<b>100 x 100</b>	<b>150 x 100</b>	-
457		S.W Gully trap	Each	399.00	297.00	-
		<b>Chlorinated Polyvinyl Chloride (CPVC)</b>		<b>Internal work SDR 13.50</b>	<b>concealed work SDR 13.50</b>	<b>external work SDR 11</b>
				<b>(a)</b>	<b>(b)</b>	<b>(c)</b>
458		15 mm	Metre	40.34	40.34	44.00
459		20 mm	Metre	65.09	65.09	67.00
460		25 mm	Metre	94.58	94.58	98.00
461		32 mm	Metre	145.09	145.09	148.00
462		40 mm	Metre	199.66	199.66	200.00
463		50 mm	Metre	329.15	329.15	335.00
		<b>PP-R Pipes &amp; Accessories</b>		<b>16 mm</b>	<b>20 mm</b>	<b>25 mm</b>
				<b>(a)</b>	<b>(b)</b>	<b>(c)</b>
464		Pipe (PN 10/SDR 11) - 3 layer	Metre	75.00	142.00	200.00
465		Pipe (PN 16/SDR 7.4) - 3 layer	Metre	63.00	125.00	183.00
466		Pipe (PN 20/SDR 6) - 3 layer	Metre	50.00	113.00	162.00
				<b>32 mm</b>	<b>40 mm</b>	<b>50 mm</b>
				<b>(d)</b>	<b>(e)</b>	<b>(f)</b>
467		Pipe (PN 10/SDR 11) - 3 layer	Metre	279.00	374.00	507.00
468		Pipe (PN 16/SDR 7.4) - 3 layer	Metre	266.00	357.00	482.00
469		Pipe (PN 20/SDR 6) - 3 layer	Metre	249.00	341.00	461.00
				<b>63 mm</b>	<b>75 mm</b>	<b>90 mm</b>
				<b>(g)</b>	<b>(h)</b>	<b>(i)</b>
470		Pipe (PN 10/SDR 11) - 3 layer	Metre	590.00	681.00	756.00
471		Pipe (PN 16/SDR 7.4) - 3 layer	Metre	507.00	656.00	718.00
472		Pipe (PN 20/SDR 6) - 3 layer	Metre	432.00	623.00	694.00
				<b>110 mm</b>	<b>160 mm</b>	
				<b>(j)</b>	<b>(k)</b>	
473		Pipe (PN 10/SDR 11) - 3 layer	Metre	1299.00	2803.00	
474		Pipe (PN 16/SDR 7.4) - 3 layer	Metre	1857.00	3929.00	
475		Pipe (PN 20/SDR 6) - 3 layer	Metre	2200.00	4605.00	

Sr.No		Description	Unit	Rate			
				S.C.I collar	Rubber insertion	(P.V.C door)	S.C.I terminal guard
				(a)	(b)	(c)	(d)
476		50 mm	Each	160.00	16.00	31.00	200.00
477		75 mm	Each	183.00	18.00	35.00	219.00
478		100 mm	Each	293.00	20.00	42.00	293.00
		<b>WATER STORAGE TANKS</b>					
		<b>R.C.C</b>					
479		225Litres capacity	Each	2472.00			
480		480Litres capacity	Each	4191.00			
481		Double equal Invt100(plain)	Each	515.00			
482		Double equal Invt 75 (plain)	Each	399.00			
483		S.C.I trap(nahni) 100 mm x 100 mm	Each	288.00			
484		S.C.I trap((nahni)100 x 50 mm	Each	133.00			

		A.C off sett		75 mm proj	100 mm proj	150 mm proj	200 mm	300 mm	
				(a)	(b)	(c)	(d)	(e)	
485		100 mm dia	Each	47.00	59.00	28.00	35.00	35.00	
486		80 mm dia	Each	34.00	39.00	22.00	23.00	22.00	
487		50 mm dia	Each	29.00	32.00	23.00	-	-	
488		A.C collars 100 mm dia	Each	-	-	10.00	-	-	
489		A.C collars80 mm dia	Each	-	-	10.00	-	-	
490		A.C collars 50 mm dia	Each	-	-	9.00	-	-	
491		A.C terminal guard 100 mm	Each	-	-	21.00	-	-	
492		A.C terminal guard 80 mm	Each	-	-	17.00	-	-	
493		A.C terminal guard 50 mm	Each	-	-	14.00	-	-	
		<b>Brass ball valve</b>		<b>15 mm</b>	<b>20 mm</b>	<b>25 mm</b>	<b>32 mm</b>	<b>40 mm</b>	<b>50 mm</b>
				(a)	(b)	(c)	(d)	(e)	(f)
494		with P.V.C floats(low)	Each	295.00	380.00	473.00	535.00	616.00	713.00
495		with copper floats High)	Each	504.00	605.00	760.00	1000.00	1302.00	1519.00
496		with plastic	Each	233.00	252.00	291.00	-	-	-

		floats(high & low)							
497		Brass ferrule	Each	284.00	468.00	856.00	-	-	-
498		Brass non return valve	Each	279.00	380.00	458.00	520.00	550.00	616.00
499		Brass non return valve		<b>65 mm</b>	<b>80 mm</b>	-	-	-	-
				<b>(a)</b>	<b>(b)</b>				
			Each	659.00	760.00	-	-	-	-
				<b>50 mm</b>	<b>75 mm</b>	<b>100 mm</b>	<b>150 mm</b>		
				<b>(a)</b>	<b>(b)</b>	<b>(c)</b>	<b>(d)</b>		
500		SC.I intercepting trap with chain & lid	Each	-	-	421.00	475.00		
501		SC.I pass over pipe	Each	603.00	631.00	747.00	-		

		Fittings		Brass	C.P.Brass	Iron fittings	Cu oxidized (Fe)	Aluminum
				<b>(a)</b>	<b>(b)</b>	<b>(c)</b>	<b>(d)</b>	<b>(e)</b>
502		Butt hinges 125x 70x4 mm	10Nos	220.00	897.00	299.00	341.00	698.00
503		100 x 70 x 4 mm	10Nos	160.00		233.00	274.00	598.00
504		75 x 40 x 2,5 mm	10Nos	95.00	718.00	133.00	175.00	479.00
505		50 x 40 x 2.5 mm	10Nos	75.00	498.00	100.00	142.00	299.00
506		Parliamentary hinges 150x125x27	10Nos	680.00	-	498.00	540.00	-
507		Parliamentary hinges 125x125x27	10Nos	570.00	-	399.00	440.00	-
508		Parliamentary hinges 100x125x27X5mm	10Nos	490.00	2623.00	233.00	274.00	-
509		75x100x20x3.2	10Nos	450.00	1561.00	166.00	208.00	-
510		Single acting spring hinges 150	Each	900.00	316.00	249.00	291.00	-
511		125 mm	Each	700.00	213.00	206.00	248.00	-
512		100 mm	Each	600.00	193.00	183.00	225.00	-
513		double acting spring hinges 150	Each	1100.00	299.00	366.00	407.00	-
514		125 mm	Each	850.00	213.00	289.00	331.00	-
515		100 mm	Each	700.00	183.00	246.00	288.00	-
516		Piano hinges 1mm thick 25 mm wide( nickel plated)	Each	320.00	-	186.00	228.00	-
517		Piano hinges 1mm thick 35 mm wide( brass plated)	Each	-	-	240.00	281.00	-
518		Tee Hinges 300 x 115 x 2.24	Each	-	-	63.00	208.00	-
519		Tee Hinges 250 x 100 x 2.25	Each	-	-	75.00	187.00	-
520		Rising hinges(left/right) 150 mm	Each	299.00	299.00	-	-	-

521		125 mm	Each	213.00	230.00	-	-	-
522		100 mm	Each	163.00	193.00	-	-	-
523		Sliding door bolts 300 x 16 mm	Each	850.00	249.00	196.00	238.00	183.00
524		250 x 16 mm	Each	800.00	225.00	157.00	198.00	160.00
525		100 x 16 mm	Each	550.00	-	117.00	158.00	90.00
526		Tower bolts ( barrel type) 300 x 10	Each	540.00	-	-	-	299.00
527		Tower bolts ( barrel type) 250 x 10	Each	450.00	263.00	83.00	125.00	249.00
528		200 x 10 mm	Each	360.00	213.00	75.00	117.00	193.00
529		150 x 10 mm	Each	240.00	157.00	34.00	108.00	130.00
530		100 x 10 mm	Each	160.00	127.00	25.00	100.00	107.00
531		75 x 10 mm	Each	120.00	-	21.00	-	83.00
532		Flush bolts 250 mm	Each	350.00	166.00	-	-	-
533		150 mm	Each	210.00	130.00	-	-	-
534		100 mm	Each	120.00	80.00	-	-	-
535		Handles 125 mm	Each	85.00	100.00	83.00	125.00	130.00
536		100 mm	Each	75.00	79.00	64.00	105.00	90.00
537		75mm	Each	65.00	67.00	47.00	88.00	70.00
538		Door latch 300 x 16 x 5 mm	Each	260.00	528.00	125.00	198.00	83.00
539		250 x 16 x 5 mm	Each	220.00	429.00	130.00	171.00	70.00
540		100 mm mortice latch and lock	Each	1800.00	498.00	623.00	-	-
541		100 mm rim latch and lock	Each	1500.00	462.00	-	-	-
542		100 mm floor door stopper	Each	200.00	233.00	-	-	-
543		Brass cupboard wardrobe Knob	Each	240.00	183.00	-	-	-
544		Hard drawn hooks & eyes 300 mm	10Nos	415.00	249.00	75.00	117.00	-
545		250 mm	10Nos	332.00	208.00	63.00	104.00	-
546		200 mm	10Nos	291.00	200.00	50.00	92.00	-
547		150 mm	10Nos	249.00	166.00	42.00	83.00	64.00
548		100 mm	10Nos	208.00	125.00	25.00	67.00	47.00
549		Quadrant stays 300 mm	Each	60.00	-	-	-	117.00
550		Fan light clamp	10Nos	332.00	-	-	-	-
551		Chain with lock for fan light clamp	10Nos	117.00		32.00	74.00	-
552		Hasps & staples 150 mm	10Nos	623.00	216.00	100.00	142.00	50.00
553		115 mm	10Nos	415.00	166.00	83.00	125.00	42.00
554		90 mm	10Nos	374.00	-	75.00	117.00	
555		Cupboard lock (six levers) Indian make	Each	240.00	97.00	-	-	-
556		Ball catcher 10 mm diameter	Each	25.00	-	-	-	-
557		Helical spring (Indian make)	Each	220.00	-	150.00	191.00	-
558		Cupboard Knob or wardrobe knob	Each	180.00	-	-	42.00	-
559		Screws 50 mm	100Nos	75.00	356.00	166.00	208.00	-
560		40 mm	100Nos	60.00	316.00	133.00	175.00	-



561		35 mm	100Nos	50.00	216.00	125.00	166.00	-
562		25 mm	100Nos	45.00	176.00	100.00	146.00	83.00
563		20 mm	100Nos	45.00	117.00	83.00	125.00	-
564		Hydraulic door closer	Each	1200.00	-	-	-	-
565		Flat latch 300 mm	Each	460.00	-	-	-	133.00
566		200 mm	Each	420.00	-	-	-	117.00
567		Kicking plate 50 cms long 100 x 3.15 mm	Each	-	-	-	-	83.00
568		Curtain rod 12 mm dia 1.25 mm thick	Metre	80.00	-	-	-	240.00
569		Brackets	Each	-	-	176.00	-	176.00
570		Window stays 300 mm mortice line with 5 adjustments	Each	-	-	-	-	117.00
571		Window stays 250 mm mortice line with 4 adjustments	Each	-	-	-	-	100.00
572		Window stays 200 mm mortice line with 3 adjustments	Each	-	-	-	-	70.00
573		Mortice lock lever type without lock	Each	1453.00	-	-	-	382.00
574		Mortice lock Knob type without lock	Each	2034.00	-	-	-	346.00
575		Ventillator 75 mm	Each	-	-	-	-	233.00
576		Pivot hinge 62 mm	Each	125.00	-	-	-	299.00
577		Finger push plate 87 x 225 mm	Each	-	-	-	-	498.00
578		Finger push plate 75 x 150 mm	Each	-	-	-	-	462.00

579		M.S door latch ( a ) 300 x 20 x 6 mm	Each	40.00
580		M.S door latch ( b ) 250 x 20 x 6 mm	Each	27.00
581		CONCRESLIVE 1414 of BASF make or equivalent, a two component, solvent less epoxy resin based.	pack of 1 kg	565.00
582		Acrylic bonding agent RHEOMIX 131 of BASF make	pack of 20 kg	4874.00
583		Masterseal 300H of BASF make or equivalent which is single component, high performance, acrylic resin based coating	pack of 25 kg	7090.00
584		MASTERSEAL SP120, a 100% solids, solvent free, tough abrasion resistant protective coating.	pack of 20 kg	8803.00

585		Protectosil CIT of BASF make or equivalent penetrating deeply into concrete and providing organofunctional molecules to inhibit the electrochemical corrosion process between the rebar and the chloride ions, oxygen and moisture.	pack of 205 litres	581941.00
586		Protectosil BHN of BASF make or equivalent which is solvent free liquid based on a monomeric alkylalkoxysilane.	pack of 200 litres	458765.00
587		Concressive 1315 of 'BASF' make or equivalent which is two-component epoxy injection resin, low viscosity resin system having viscosity less than 350 cps at ambient temperatures	pack of 4.32kg	2620.00
588		Masterflow 400 of 'BASF' make or equivalent which is rapid-curing, high flow, filler-extended epoxy resin grout	pack of 20 kg	2943.00
589		Masterflow 928T of BASF make or equivalent approved which is dual shrinkage-compensated, cementitious grout shall be hydraulic-cement based free-flow, high strength grout that complies with ASTM C1107	pack of 25 kg	889.00
590		Masterflow 935 of 'BASF' make or equivalent which is a two-component, thixotropic, pure epoxy resin based chemical anchoring mortar.	pack of 1Litre	4371.00
591		EMACO S66 T of BASF make or equivalent which is dual shrinkage-compensated, cementitious micro-concrete, high strength, high flow, single component cementitious formulation.	pack of 25 kg	769.00
592		Emaco S88 CT of BASF make or equivalent which is dual shrinkage - compensated, cementitious patch repair mortar, high strength single component mortar modified with fibres	pack of 25 kg	985.00
593		Thorostructurite primer of BASF make or equivalent which is anti-corrosion primer for steel reinforcement shall be a single component polymer- modified, cement-based compound	pack of 5 kg	454.00

594	a	Mbrace glass fiber ( Mbrace G sheet EU 900 @900 GSM(Glass Fibre Unidirectional)	Sq.m	2535.00
	b	Mbrace carbon fiber ( Mbrace CF 240/200 - Unidirectional Carbon Fiber Reinforcement System High Tensile CF) or equivalent	Sq.m	4036.00
	c	Mbrace carbon fiber ( Mbrace CF 240/400 - Unidirectional Carbon Fiber Reinforcement System High Tensile CF) or equivalent	Sq.m	4670.00
595		Mbrace carbon laminate grade 165/2500 - 50x1.4	Metre	2666.00
596		Coniroof 2111 system	Sq.m	1747.00
597		Masterseal 550EL of BASF make or equivalent elastomeric flexible, two component polymers modified cementitious composite system	pack of 20 kg	1775.00
598		Masterpren BG of BASF make or equivalent which is a synthetic membrane made of plasticised PVC of fire resistant manufactured by twin coloured co-extrusion method	20 m X 2.1m	26684.00
599		Masterpren TPE of BASF make or equivalent which is modified polyolefin, in two-colour version (sand grey/black), obtained by co-extrusion.	25m X 2.1m	40209.00
600		Sonoshield HLM 5000 of BASF make or equivalent one-component, moisture-curing, bitumen-modified polyurethane elastomeric waterproofing membrane	pack of 22.50 kg	8154.00
601	a	Feovert-Krishna Conchem Products Pvt Ltd make	Litre	225.00
	b	IPNet-RB-Krishna Conchem Products Pvt Ltd	Litre	651.00
	c	EPCO-KP100-Krishna Conchem Products Pvt Ltd	Litre	498.00
	d	Epibond-Krishna Conchem Products Pvt Ltd	Litre	689.00
	e	Monobond-Krishna Conchem Products Pvt Ltd	Kg	297.00
602		Supercon-100-Krishna Conchem Products Pvt Ltd	Kg	140.00
603		Monopol 456-Krishna Conchem Products Pvt Ltd	Litre	510.00

604		Monopol 456 HB-Krishna Conchem Products Pvt Ltd	Litre	400.00
605		Waterseal -Krishna Conchem Products Pvt Ltd make	Litre	705.00
606		Corroseal TE 321-Krishna Conchem Products Pvt Ltd	Litre	341.00
607		EPCO 2020 TX-Krishna Conchem Products Pvt Ltd	Litre	375.00
608		Alccofine 1109SR	Kg	47.00
609		Concrete Additive Alccofine 1203	Kg	21.00
610		Ready mix concrete OPC		
	a	M10	cu.m	4958.00
	b	M15	cu.m	5212.00
	c	M20	cu.m	5466.00
	d	M25	cu.m	5678.00
	e	M30	cu.m	5847.00
	f	M35	cu.m	6144.00
	g	M40	cu.m	6398.00
611		Ready mix concrete OPC/ Fly Ash		
	a	M10	cu.m	4873.00
	b	M15	cu.m	5127.00
	c	M20	cu.m	5381.00
	d	M25	cu.m	5593.00
	e	M30	cu.m	5763.00
	f	M35	cu.m	6059.00
	g	M40	cu.m	6314.00
612		Ready mix concrete OPC & GGBS		
	a	M10	cu.m	4746.00
	b	M15	cu.m	5000.00
	c	M20	cu.m	5254.00
	d	M25	cu.m	5466.00
	e	M30	cu.m	5636.00
	f	M35	cu.m	5932.00
	g	M40	cu.m	6186.00
613		Ready mix concrete High Performance Concrete		
	a	M10	cu.m	5297.00
	b	M15	cu.m	5551.00
	c	M20	cu.m	5805.00
	d	M25	cu.m	6017.00
	e	M30	cu.m	6186.00
	f	M35	cu.m	6483.00
	g	M40	cu.m	6737.00

614		Curing Compound AC-CURE-R or equivalent	Kg.	71.00
615		PRECAST CEMENT CONCRETE JALI		
	a	(50 MM ) 2 x 0.75 m	Sq.m	461.00
	b	(40 MM) 1.25 x 0.60 m	Sq.m	435.00
	c	( 25 MM ) 0.50 x 0.75 m	Sq.m	256.00
616		Corrugated G I sheets (10'x 3') -26	Each	483.00
617		Corrugated G I sheets (8'x 3') -26	Each	398.00
618		Corrugated G I sheets (10'x 3')-24 G	Each	703.00
619		Corrugated G I sheets (8'x 3')24	Each	585.00
620		Corrugated G I sheets (10'x 3')-22 G	Each	907.00
621		Corrugated G I sheets (8'x 3')22	Each	568.00
622		Plain G.I sheets(8'x 4")24 - .63mm	quintal	7374.00
623		Plain G.I sheets(8'x 4")22G - .80mm	quintal	7374.00
624		Corrugated A.C sheet 7 mm	Sq.m	122.00
625		Corrugated A.C sheet 6 mm	Sq.m	137.00
626		Corrugated G I sheets -24 G	Sq.m	252.00
627		Corrugated G I sheets -26G	Sq.m	173.00
628		Semi corrugated sheets 6mm Thick	Sq.m	137.00
629		Colour coated Galvulium sheets (TATA Make)	Sq.m	424.00
630		A.C sheets 4 mm	Sq.m	108.00
631		G.I bolts& nuts above 300mm	Each	34.00
632		M.S flats upto 10 mm	tone	40000.00
633		A.C One piece angular ridge	Each	104.00
634		A.C Close fitting adj ridge	Each	133.00
635		Serrated or plain adj ridge	Each	129.00
636		A.C half round socketed gutter 150mm	Each	299.00
637		A.C half round socketed gutter 250mm	Each	324.00
638		A.C plain ended valley 100 mm	Metre	332.00
639		A.C plain ended valley gutter 125 mm	Metre	362.00
640		A.C plain ended valley gutter 150 mm	Metre	465.00
641		A.C plain ended valley gutter 200 mm	Metre	625.00
642		A.C plain ended valley gutter 250 mm	Metre	380.00
643		A.C angles	Metre	30.00
644		Unseratted adj hip	pair	153.00
645		North light adj ridge	pair	158.00
646		Apron flashing piece	Each	96.00
647		Eaves filler piece North light ventillater	Each	63.00
648		Expansion joint sheets	Each	146.00
649		Expansion joint ridges	pair	75.00
650		Expansion joint for north light curves	Each	50.00
651		Curved barge board	Each	92.00
652		Cowl type ventillater	Each	121.00

653		Ridge finals	Each	59.00
654		A.C louvers S type	Each	71.00
655		A.C drop end for plain ended eaves or boundary wall gutter		
	a	300x150x225 with 75,150	Each	121.00
	b	457x152x304 with 75,100,150	Each	137.00
	c	508x152x254 with 75,100,150 outlet	Each	150.00
	d	900x200x300 with 75,100,150 outlet	Each	154.00
	e	500 x50x 250 with 75x100x150 drain	Each	158.00
656		A.C drop end for plain ended valley wall gutter		
	a	406.4x 127x254mm with 75,100,150 outlet	Each	105.00
	b	609x152x 228mm withj 75,100,150 outlet	Each	157.00
	c	914x203x228 with 75,100,150 outlet	Each	180.00
	d	457x127x152 with 75,100,150 outlet	Each	97.00
657		A.C stop end 150 mm	Each	10.00
	a	A.C stop end 200 mm	Each	27.00
	b	A,C stop end 300 mm	Each	36.00
658		A.C nozzle for plain ended eaves or boundary wall gutt		
	a	275 x 125 x 175 mm	Each	70.00
	b	304x152x228	Each	104.00
	c	457x152 x 304	Each	110.00
	d	508x152x254mm	Each	130.00
659		A.C angles for socketed eaves or ornamental		
	a	125 mm	Each	30.00
	b	150 mm	Each	50.00
	c	200 mm	Each	98.00
	d	250 mm	Each	108.00
	e	300 mm	Each	121.00
660		Grass poolas	100 Nos	90.00
661		Bamboos	Each	80.00
662		Mangalore roof tiles ( 1 st class )	1000 Nos	16000.00
663		Mangalore roof tiles ( 2 nd class )	1000 Nos	14000.00
664		Ridge tiles(Mangalore)	Each	50.00
665		Ceiling tiles 0.6 x0.6 m	Each	186.00
666		Design board 4 mm	sq.m	117.00
667		Natural colour insulating board 12 mm	sq.m	360.00
668		Natural colour insulating board 18 mm	sq.m	419.00
669		White faced insulating board 12 mm	sq.m	310.00
670		White faced insulating board 18 mm	sq.m	388.00
671		Plain particle board( ceiling tiles)	sq.m	140.00
672		Half random perforated board	sq.m	163.00

673		Full random perforated board	sq.m	186.00
674		Flame retardent board	sq.m	194.00
675		Rabbit wire mesh	Kg	83.00
676		Plaster of Paris	Kg	10.00
677		Hessian	sq.m	34.00
678		A.C plain ended valley gutter 609 x 152x22,8	Per joint	440.00
679		Jointing with spun yarn soaked in bitumen	Each	13.00
680		A.C bend with door 50 mm	Each	13.00
681		A.C bend with door 80 mm	Each	13.00
682		A.C bend with door 100 mm	Each	17.00
683		Junction without door (single)	Each	38.00
684		Commercial ply	Each	159.00
685		75 mm Offset proj 50 mm	Each	29.00
686		75 mm Offset proj 80 mm	Each	34.00
687		75 mm Offset proj 100 mm	Each	47.00
688		A.C single junction 50 mm without door	Each	13.00
689		A.C single junction 50 mm with door	Each	13.00
690		A.C single junction 80 mm without door	Each	21.00
691		A.C single junction 80 mm with door	Each	21.00
692		A.C single junction 100 mm without door	Each	25.00
693		A.C single junction 100 mm with door	Each	30.00
694		A.C roof lights	Each	598.00
695		G.I seam bolts & nuts 25 x 6 mm	10 Nos	30.00
696		G.I plain sheets	quintal	6780.00
697		Steel bolts & nuts above 300 mm length	Kg	21.00
698		G.I plain sheets 1.6mm	quintal	6780.00
699		G.I plain washers	100 nos	85.00
700		G.I washers	100 nos	85.00
701		Northlight ventilator curves	Each	137.00
702		Flat iron brackets	Each	42.00
703		G.I bolts & nuts 8 mm dia and 25 mm long, round headed with slots	10 nos	21.00
704		iron bracket 50 x 3mm	Each	25.00
705		boos & string	Cum	121.00
706		Straining bolts	Each	30.00
707		G.I bolts & nuts	Kg	67.00
708		Seam bolts & nuts	Kg	38.00
709		G.I limpet washer	100Nos	59.00
710		Bitumen washer	100Nos	34.00
711		J or L hooks	Kg	119.00
712		Plastic roofing compound	Kg	47.00
713	a	String, mug or ban		20.00
	b	6 mm aggregate	cu.m	500.00

714		C.I rainwater pipes 75 mm	Metre	450.00
715		C.I rainwater pipes 100 mm	Metre	539.00
716		C.I rainwater pipes 150 mm	Metre	977.00
717		C.I plain bend 100 mm	Each	97.00
718		C.I plain bend 150 mm	Each	113.00
719		C.I plain shoe 100 mm	Each	125.00
720		C.I plain shoe 150 mm	Each	291.00
721		C.I plain branch 100 mm (single)	Each	133.00
722		C.I plain branch 150 mm (single)	Each	262.00
723		C.I plain branch 100 mm (double)	Each	200.00
724		C.I plain branch 150 mm (double)	Each	415.00
725		C.I bat clamps 75,80 mmm	Each	38.00
726		C.I bat clamps 100 mm	Each	50.00
727		C.I bat clamps 150 mm	Each	63.00
728		Spun yarn	kg	127.00
729		C.I Offset 100 mm	Each	127.00
730		Wire nails	kg	59.00
731		fibre based self finished bitumen	sq.m	30.00
732		G.I Plain Corrigated sheets (8x3)	Each	314.00
733		G.I Plain Corrigated sheets (10x3)	Each	-
734		<b>FINOLEX PVC Corrugated sheet</b>		
	a	1.0mm x 1.045m	sq.m	272.00
	b	1.3mm x 1.045m	sq.m	293.00
	c	1.5mm x 1.045m	sq.m	379.00
	d	1.8mm x 1.054m	sq.m	510.00
	e	2.0mm x 1.054m	sq.m	562.00



	PVC SWR PIPES AND FITTINGS FOR ROOFING					
	DESCRIPTION	140mm	180mm	250mm	75mm	110mm
		(i)	(ii)	(iii)	(iv)	(v)
735	joint bracket with 2 clamps	80.00	114.00	246.00	-	-
	a running outlet with 2 clamps	110.00	163.00	323.00	-	-
	b 90 deg elbow without outlet with 2 clamps	162.00	249.00	491.00	-	-
	c 91 deg elbow with outlet with 2 clamps	-	249.00	491.00	-	-
	d short stop end	31.00	48.00	128.00	-	-
	e stop end outlet with one clamp	96.00	144.00	279.00	-	-
	f support bracket	25.00	33.00	90.00	-	-
	g single socket elbow	-	-	-	40.00	64.00
	h clamps	10.00	17.00	40.00	-	-
	i pipe clip	-	-	-	12.00	13.00
	j rafter top/side brackets assembled	25.00	39.00	83.00	-	-
	k rubber gasket	7.00	10.00	30.00	-	-
	l rubber seals	-	-	-	9.00	10.00
	m roof water pipes	-	-	-	-	-
	<b>half round pipes</b>	64.00	108.00	230.00	-	-
	n downline pipes	-	-	-	73.00	146.00
	o downline pipes	-	-	73.00	146.00	-

SN		Type	Size	Thk	Unit	Rate
736		Ceramic			sq.m	300.00
737	a	Antiskid-dark	12 x 12 & 16 x 16		sq.m	360.00
	b	light			sq.m	313.00
738	a	Rustics-dark	380 x 380		sq.m	450.00
	b	light			sq.m	425.00
739	a	Marbonite-dark	2 x 2		sq.m	636.00
740	b	light	2 x 2		sq.m	593.00
	c	dark	3 x 3		sq.m	805.00
	d	light	3 x 3		sq.m	805.00
					sq.m	
741	a	Scratch resistant-dark	2 x 2		sq.m	949.00
	b	light			sq.m	785.00
742	a	Industrial Tiles-dark		10 mm	sq.m	825.00
	b	dark		12 mm	sq.m	1050.00
	c	light		10 mm	sq.m	500.00
	d	light		12 mm	sq.m	730.00
743		Tactile lines			sq.m	930.00
744		Tactile buttons			sq.m	853.00
745	a	Glazed wall tiles-200 x 300			sq.m	322.00
	b	300 x 450			sq.m	466.00
	c	300 x 600			sq.m	550.00

746	High polymer modified quickset tile adhesive.		Kg		17.00
747	M.S rollers		Each		117.00
748	Pig lead		Kg		83.00
749	Single matting 1.2x1.2		Sq.m		101.00

750	Bitumen hot sealing compound : grade A		Kg		56.00
751	Bitumen solution primer of approved quality		litre		84.00
752	Premoulded joint filler 25 mm thick		sq.m		1004.00
753	Stainless Steel tubular lever D-Type mortise handles with round nose, Pin cylinder 60mm with one side key and other side knob.		Each		3220.00
754	Block board construction flush door with teak wood ply veneer on Both faces 35 mm thick - decorative type		sq.m		2142.00
755	Block board construction flush door with teak wood ply veneer on Both faces 30 mm thick - decorative type		sq.m		1977.00
756	Block board construction flush door with teak wood ply veneer on one face 35 mm thick - semi-decorative type		sq.m		1747.00
757	Block board construction flush door with teak wood ply veneer on one face 30 mm thick - semi-decorative type		sq.m		1582.00
758	Block board construction flush door with commercial ply on both faces :35 mm thick - non-decorative type		sq.m		1351.00
759	Block board construction flush door with commercial ply on both faces :30 mm thick - non-decorative type		sq.m		1186.00
760	Galvanised steel plain sheets		quintal		301.00
761	PVC corner guard		Metre		903.00
762	Glass mosaaic tiles (20 mm x 20 mm x 4 mm).		sq.m		807.00
763	Tile fixing chemical adhesive		kg		17.00
764	Cement Polymer Grout Compound		kg		39.00
765	Acid for cleaning tiles		litre		24.00
766	Carbon Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade - a) 10 x 60mm		10 Nos		272.00
767	Carbon Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade - b)10 x 80mm		10 Nos		279.00
768	Carbon Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade - c) 10 x 120mm		10 Nos		365.00
769	Carbon Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade - d) 10 x		10 Nos		388.00

	140mm		
770	Carbon Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade - e) 10 x 160mm	10 Nos	581.00
771	Stainless steel (Grade-304)hollow section round/square tubes	kg	196.00
772	Stainless steel bolts/square bar and plates	kg	101.00
773	Stainless steel bolts/square bar and plates	kg	189.00
774	Mild steel tubes hot finished welded type	kg	53.00
775	Stainless Steel Cylindrical lock 60mm with pair of knob, keys etc. with necessary screws etc.	Each	860.00
776	Wall Hung type (European type) mounted water closet with seat & lid (Size 360x535x380)	Each	5288.00
777	white vitreous china flat back Large lipped front urinal basin (size 335x345x535mm)	Each	3127.00
778	Urinal Valve Auto closing system with built in control cock & wall flange	Each	1440.00
779	White Vetrious China Waterless Urinal	Each	12963.00
780	Cistern with fittings for Waterless Urinal	Each	1584.00
781	White Vetrious Urinal with Sensor Flushing Valve with complete Kit.(battery based infrared sensor operated - 485x310x710mm)	Each	13508.00
782	Stainless steel kitchen sink with drain board. Overall Size 1040mmx510mm(41"x20"), bowl size460mmx410mmx215mm(18"x 16"x 8 1/2") Glossy.	Each	6013.00
783	Stainless steel kitchen sink without drain board. Overall Size 610mmx510mm(24"x20"), bowl size545mmx445mmx200mm(21 1/2"x 17 1/2"x 8") Glossy.	Each	4466.00
784	Stainless steel kitchen sink without drain board. Overallsize 610mmx460mm(24"x18") bowl size560mmx410mmx215mm(22"x16"x8 1/2") Glossy.	Each	4398.00
785	Stainless steel kitchen sink without drain board. Overall size 535mmx460mm (21"x18"), Bowl size 460x380x200mm (18"x15"x8") Glossy	Each	3708.00
786	High pressure decorative Laminates (glossy/matt)	sqm	336.00
787	Melamine polish - Glossy	litre	210.00
788	Melamine polish - Matt	litre	223.00
789	Glass wool insulation	sq.m	419.00
790	Double action hydraulic floor spring with stainless steel cover plate, door weight upto 120kg/125 kg/150kg.	Each	6550.00
791	HEALTH FAUCET with 8mm dia 1.2m long flexible tube & wall Hook	Each	1144.00
792	2 Way Bib Cock with single knob and wall flange	Each	1250.00
793	Handrail cum crash guard	Metre	1648.00
794	Stainless steel kitchen sink without drain board.	sq.m	4466.00

		Overall Size 610mmx510mm(24"x20"), bowl size 545mmx445mmx200mm(21 1/2"x 17 1/2"x 8") Glossy.		
795		Stainless steel kitchen sink without drain board. Overall size 610mmx460mm(24"x18") bowl size 560mmx410mmx215mm(22"x16"x8 1/2") Glossy.	sq.m	4398.00
796		Stainless steel kitchen sink without drain board. Overall size 535mmx460mm(21"x18"), Bowl size 460x380x200mm (18"x15"x8") Glossy	sq.m	3708.00
797		PTMT Angle Stop cock with Flange 15mm	Each	409.00
798		PTMT Urinal Spreader 15MM	Each	523.00
799		Water repellent chemical approved by ASI	Litre	246.00
800		C.P. Bib cock long body with wall flange	Each	890.00
801		C.P. pillar cock long body with wall flange	Each	890.00
802		Stainless steel screws 40 mm	100 Nos	120.00
803		Stainless steel butt hinges (heavy weight) 100x60x2.5 mm	10 Nos	535.00
804		GI Metal Tile Clip in Plain Beveled edge global white colour tiles of size 600x600 mm and	sq.m	1357.00
805		SCH - 40(Blue)/(white) - 20mm outer dia.	Metre	48.25
		SCH - 40(Blue)/(white) - 25mm outer dia.	Metre	71.50
		SCH - 40(Blue)/(white) - 32mm outer dia.	Metre	97.00
		SCH - 40(Blue)/(white) - 40mm outer dia.	Metre	115.49
		SCH - 40(Blue)/(white) - 50mm outer dia.	Metre	153.19
		SCH - 40(Blue)/(white) - 63mm outer dia.	Metre	277.67
		SCH - 40(Blue)/(white) - 75mm outer dia.	Metre	359.00
		SCH - 40(Blue)/(white) - 90mm outer dia.	Metre	475.00
		SCH - 40(Blue)/(white) - 110mm outer dia.	Metre	566.03
806		SCH - 80(Blue)/(white) - 20mm outer dia.	Metre	62.19
		SCH - 80(Blue)/(white) - 25mm outer dia.	Metre	90.78
		SCH - 80(Blue)/(white) - 32mm outer dia.	Metre	126.75
		SCH - 80(Blue)/(white) - 40mm outer dia.	Metre	154.05
		SCH - 80(Blue)/(white) - 50mm outer dia.	Metre	211.46
		SCH - 80(Blue)/(white) - 63mm outer dia.	Metre	356.00
		SCH - 80(Blue)/(white) - 75mm outer dia.	Metre	481.00
		SCH - 80(Blue)/(white) - 90mm outer dia.	Metre	719.33
		SCH - 80(Blue)/(white) - 110mm outer dia.	Metre	815.85
807		Antiskid tape	Metre	61.00
808		Autoclaved aerated cement (AAC) blocks - size 600x200x100mm/625x240x100mm/ 625x250x100mm	cum	4200.00
809		Autoclaved aerated cement (AAC) blocks - size 600x200x150mm/ 625x240x150mm/ 625x250x150mm	cum	4222.00
810		Autoclaved aerated cement (AAC) blocks - size 600x200x200mm/ 625x240x200mm/	cum	4200.00

		625x250x200mm		
811		Autoclaved aerated cement (AAC) blocks - size 600x200x230mm/ 625x240x230mm/ 625x250x230mm	cum	4202.00
812		Flamed finish Granite stone 18mm thick Jet Black	sq.m	2098.00
813		Flamed finish Granite stone 18mm thick Cherry Red	sq.m	1883.00
814		Flamed finish Granite stone 18mm thick Elite Brown	sq.m	1775.00
815		Flamed finish Granite stone 18mm thick Cat Eye	sq.m	2098.00
816		Jaisalmer Stone flooring	sq.m	915.00
817		Mirror finish Granite stone 18mm thick Jet Black	sq.m	1991.00
818		Mirror finish Granite stone 18mm thick Cherry Red	sq.m	1775.00
819		Mirror finish Granite stone 18mm thick Elite Brown	sq.m	1668.00
820		Mirror finish Granite stone 18mm thick Cat Eye	sq.m	1991.00
821		Interlocking Shot Blasted Cement Concrete paver block ( 60 mm thick, M-35) Colour	sq.m	1085.00
822		Interlocking Shot Blasted Cement Concrete paver block ( 60 mm thick, M-35 ) Grey	sq.m	885.00
823		Interlocking Shot Blasted Cement Concrete paver block ( 80 mm thick, M-40 ) Colour	sq.m	1233.00
824		Interlocking Shot Blasted Cement Concrete paver block ( 80 mm thick, M-40 ) Grey	sq.m	1021.00
825		Chamfered edge Cement Concrete paver block (60 mm thick, M-35) Grey	sq.m	611.00
826		Chamfered edge Cement Concrete paver block (60 mm thick, M-35) Red/black	sq.m	675.00
827		Chamfered edge Cement Concrete paver block (60 mm thick, M-35) Yellow/ Orange/ Earth	sq.m	739.00
828		Chamfered edge Cement Concrete paver block ( 80 mm thick, M-40 ) Grey	sq.m	793.00
829		Chamfered edge Cement Concrete paver block (80 mm thick, M-40) Red/black	sq.m	875.00
830		Chamfered edge Cement Concrete paver block (80 mm thick, M-40) Yellow/ Orange/ Earth	sq.m	948.00
831		Toughened glass 12 mm thickness	sq.m	2098.00
832		Toughened glass 10 mm thickness	sq.m	1829.00
833		Stainless steel D type handles with necessary screws etc complete a)L 300mm/325mm x 22 to 25mm dia	Each	940.00
834		120 gsm plastic film/sheet	Sq.m	39.00
835		Co-efficeint for L.S. items (149/100)	L.S.	2.00
836		Single Colour Foam Core FRP (Fiber Reinforced Polymer) Door Shutter including accessories.		
	a	Shutter Thickness : a) 30mm	sq.m	3450.00
	b	Shutter Thickness : b) 35mm	sq.m	3600.00
	c	Shutter Thickness : c) 40mm	sq.m	3880.00
837		Wood Finish Foam Core FRP (Fiber Reinforced Polymer) Door Shutter including accessories.		
	a	Shutter Thickness : a) 30mm	sq.m	3990.00
	b	Shutter Thickness : b) 35mm	sq.m	4220.00

	c	Shutter Thickness : c) 40mm	sq.m	4430.00
838		Standard Wood Core FRP (Fiber Reinforced Polymer) Door Shutter with Single Colour including accessories.		
	a	Shutter Thickness : a) 32mm	sq.m	4370.00
	b	Shutter Thickness : b) 35mm	sq.m	4800.00
	c	Shutter Thickness : c) 40mm	sq.m	5035.00
839		Wood Finish Wood Core FRP (Fiber Reinforced Polymer) Door Shutter including accessories.		
	a	Shutter Thickness : a) 32mm	sq.m	4900.00
	b	Shutter Thickness : b) 35mm	sq.m	5350.00
	c	Shutter Thickness : c) 40mm	sq.m	5585.00
840		FRP (Fiber Reinforced Polymer) Frames including accessories.		
	a	Specified Cross Section : a) 3" x 2"	Metre	625.00
	b	Specified Cross Section : b) 4" x 2"	Metre	665.00
	c	Specified Cross Section : c) 4" x 2 ½"	Metre	710.00
	d	Specified Cross Section : d) 5" x 2 ½"	Metre	800.00
841		FRP (Fiber Reinforced Polymer) Frames with Wood Finish including accessories		
	a	Specified Cross Section : a) 3" x 2"	Metre	700.00
	b	Specified Cross Section : b) 4" x 2"	Metre	755.00
	c	Specified Cross Section : c) 4" x 2 ½ "	Metre	795.00
	d	Specified Cross Section : d) 5" x 2 ½"	Metre	895.00
842		UPVC Only Door Frame Including Accessories	Metre	339.00
843		UPVC 20 Mm Door Shutter Including Accessories	sq.m	2203.00
844		UPVC 32 Mm Door Shutter Including Accessories	sq.m	2297.00
845		UPVC Turn windows Including Accessories	sq.m	8602.00
846		UPVC Three Track Sliding Windows Including Accessories	sq.m	6453.00
847		UPVC Two Track Sliding Window (Economical) Including Accessories	sq.m	5356.00
848		UPVC Two Track Sliding Window (Heavy) Including Accessories	sq.m	7517.00
849		UPVC Partition Including Accessories	sq.m	4305.00
850		UPVC Porta Cabins Including Accessories	sq.m	1839.00
851		UPVC False Ceiling Including Accessories	sq.m	2153.00
852		0.5mm thick coloured galvalume trapezoidal profile sheets (JSW or Equivalent)	sq.m	350.00
853		0.45mm thick coloured galvalume trapezoidal profile sheets (JSW or Equivalent)	sq.m	325.00
854		Flashings -[Corners, Ridges, valleys, gable end & Trims] (Girth <b>upto</b> 610mm) (JSW or Equivalent)	Metre	290.00
855		Flashings -[Corners, Ridges, valleys, gable end & Trims] (Girth <b>above</b> 610mm) (JSW or Equivalent)	Metre	550.00
856		Double unequal plain junction of required degree complete		
	a	75 mm x 75 x 50 x 50mm dia	Each	171.00
	b	100mm x 100mm x 50 mm x 50 mm dia	Each	220.00

	c	100mm x 100mm x 75 mm x 75 mm dia	Each	312.00
	d	150mm x 150mm x 100 mm x 100 mm dia	Each	581.00
857		Double unequal junction of required degree with access door insertion rubber washer 3 mm thick bolts & nuts complete		
	b	100mm x 100mm x 50 mm x 50 mm dia	Each	752.00
	c	100mm x 100mm x 75 mm x 75 mm dia	Each	1069.00
	d	150mm x 150mm x 100 mm x 100 mm dia	Each	1737.00
858		Fancy Pillar Cock with lift type operating Knob & Base flang Jaguar make or equivalent. a) 15mm nominal bore	Each	1186.00
859		Fancy BIB Cock Short Body Jaguar make or equivalent. a) 15mm nominal bore	Each	678.00
860		Fancy LONG BODY BIB Cock WITH WALL FLANGE Jaguar make or equivalent. a) 15mm nominal bore	Each	890.00
861		Fancy TWO WAY LONG BODY BIB Cock WITH WALL FLANGE Jaguar make or equivalent. a) 15mm nominal bore	Each	784.00
862		Fancy CONCEALED STOP COCK WITH SHEET FLANGE 20MM Jaguar make or equivalent.	Each	826.00
863		Fancy CONCEALED STOP COCK WITH SLIDING FLANGE 15MM Jaguar make or equivalent.	Each	403.00
864		Fancy wall mixer with 115mm long bend pipe for connection to over head shower Jaguar make or equivalent.	Each	2797.00
865		Fancy wall mixer with 3 IN 1 SYSTEM WITH 115MM long bend pipe for connection to over head shower Jaguar make or equivalent.	Each	3220.00
866		Fancy wall mixer NON TELEPHONIC SHOWER SYSTEM Jaguar make or equivalent.	Each	2839.00
867		FANCY SINK MIXER WITH J SHAPE SWINGING CASTED SPOUT Jaguar make or equivalent.	Each	2966.00
868		Fancy TELEPHONIC SHOWER 1.5M FLEXIBLE TUBE WITH SWINGING WALL HOOK Jaguar make or equivalent.	Each	2627.00
869		Fancy BOTTLE TRAP ECONOMY TYPE 32MM Jaguar make or equivalent.	Each	1102.00
870		Fancy WASTE COUPLING 32MM WITH 190MM LONG CONNECTION PIPE WALL FLANGE Jaguar make or equivalent.	Each	381.00
871		Single Towel Rail - Jaquar make		
	a	300mm long	Each	826.00
	b	600mm long	Each	932.00
872		Soap Dish Holder - Jaquar make (ACN-1131N)	Each	445.00
873		Soap Dispenser with Glass Bottle - Jaquar make (ACN-1135N)	Each	932.00
874		Tumbler Holder - Jaquar make (ACN-1153N)	Each	424.00
875		Toilet Roll Holder with Flap - Jaquar make (ACN-	Each	826.00

		1153N)		
		Coat Hook - Jaquar make		
876	a	CAN-1161N	Each	381.00
	b	CAN-1191N	Each	254.00
877		Towel Rack 600mm long with Lower Hangers - Jaquar make (CAN-1181N)	Each	2076.00
878		Hand Shower(Health Faucet) with 8mm dia 1.20mt. Long Flexible Tube with Wall Hook - Jaquar make (ALD CHR-565)	Each	1144.00
879		Wall Hung Cistern with installation kit - Jaquar make (WHC-WHT-184)	Each	1398.00
880		Slim Concealed Cistern with Floor mounting frame - Jaquar make (CIB-WHT-31801011XFP)	Each	8517.00
881		Flushing Plate - Jaquar make - Controlled Plate Square All Chrome		
	a	CIS-CHR 31207219	Each	2646.00
	b	CIS-CHR 31181810X	Each	1186.00
882		Metropole Flush Valves Dual 3/6 litres - Jaquar make (FLV-10855Q)	Each	2335.00
883		Wall Hung WC with 360 X 535 X 380 Seat Cover - jaquar make		
	a	CNS-WHT-959NS	Each	5627.00
	b	CNS-WHT-959NN	Each	5288.00
884		Floor mounted WC 350 X 480 X 390 - Jaquar make		
	a	CNS-WHT-553SN	Each	2873.00
	b	CNS-WHT-553SS	Each	3212.00
885		Orissa Pan/ Indian Type WC Pan - Size 580 X 445 X 260 - Jaquar make (CNS-WHT-451)	Each	1518.00
886		Urinal - Size 355 X 345 X 535 - Jaquar make (URS-WHT-13261)	Each	3127.00
887		Urinal with fixing accessories set - Size 375 X 315 X 620 - Jaquar make (URS-WHT-13253)	Each	6093.00
888		Wash Basin - Under Counter Basin - Size 370 X 480 X 200 (CNS-WHT-701)	Each	1653.00
889		Wall Hung Basin with provision of Pedestal - Size 400 X 550 X 200 - Jaquar make		
890	a	CNS-WHT-801	Each	1517.00
	b	Pedestal - CNS-WHT-301	Each	1093.00
891		Wall Hung Basin - Size 575 X 475 X 195 - Jaquar make (OPS-WHT-15801)	Each	3042.00
892		Wall Mixer with provision for Overhead Shower with 115mm long bend pipe - Jaquar make		
	a	Florentine (FLR-5273UPR)	Each	3729.00
	b	Queen's (QQT-7273UPR)	Each	4237.00
893		Wall mixer 3 in 1 system with provision of both Hand Shower & Overhead Shower complete - Jaquar make		
	a	Florentine (FLR-5281N)	Each	4152.00
	b	Queen's (QQT-7281)	Each	4661.00



894		Pillar Cock - Jaquar make		
	a	Florentine (FLR-5011N)	Each	975.00
	b	Queen's (QQT-7011)	Each	1314.00
895		Basin Mixer - Jaquar make		
	a	Florentine (FLR-5167NB)	Each	2331.00
	b	Queen's (QQT-7167B)	Each	3263.00
896		Two way Bib Cock with Wall Flange - Jaquar make		
	a	Florentine (FLR-5041N)	Each	1250.00
	b	Queen's (QQT-7041)	Each	1610.00
897		Angular Stop Cock with wall Flangue - Jaquar make		
	a	Florentine (FLR-5053N)	Each	826.00
	b	Queen's (QQT-7053)	Each	1038.00
898		Flush Cock with Wall Flangue - Jaquar make		
	a	Florentine (FLR-5083NK)	Each	339.00
	b	Queen's (QQT-7083K)	Each	593.00
899		Sink Mixer - Jaquar make		
	a	Florentine (FLR-5319NB)	Each	2479.00
	b	Queen's (QQT-7319B)	Each	3517.00
900		Pressmatic - Jaquar make		
	a	Pillar Cock with Closing System (PRS-031)	Each	1504.00
	b	Urinal Valve auto closing System (PRS-077)	Each	1568.00
901		Solid PVC door frame in plain colour Rajshri Plastiwood or equivalent including accessories	Metre	300.00
902		Solid PVC door frame in prelaminate colour Rajshri Plastiwood or equivalent including accessories	Metre	353.00
903		Solid panel PVC door shutter (Plain) of make Rajshri Plastiwood or equivalent including accessories	Sq.m	1670.00
904		Solid Panel PVC door shutter (Both side Prelaminated) of make Rajshri Plastiwood or equivalent including accessories	Sq.m	2614.00
905		Solid core PVC moulded door in plain colour of make Rajshri Plastiwood or equivalent including accessories	Sq.m	3457.00
906		Solid core PVC moulded door in prelaminate colour of make Rajshri Plastiwood or equivalent including accessories	Sq.m	4015.00
907		PVC false ceiling grid type of make Rajshri Plastiwood or equivalent including accessories	Sq.m	922.00
908		PVC wall paneling of make Rajshri Plastiwood or equivalent including accessories	Sq.m	1346.00
909		PVC insulated wall paneling of make Rajshri Plastiwood or equivalent including accessories	Sq.m	1805.00
910		SOLID PVC WINDOW FRAME AND SHUTTER of make Rajshri Plastiwood or equivalent including accessories	Sq.m	4874.00
911		Aluminium composite panel cladding with 3mm/0.25mm thick ACP sheets, aluminium framework with 50 X 25 X 1.2MM thick sections, silicon sealants	Sq. m	2625.00

		including accessories.		
912		Aluminium composite panel cladding with thick 4mm/ 0.25mm ACP sheets, alluminium framework with 50 X 25 X 1.2MM thick sections, silicon sealents including accessories.	Sq. m	3228.00
913		Resin roof tile 3 mm thick	Sq. m	930.00
914		L angle ridge 1.00m	Each	427.00
915		FACTORY MADE PVC Flush DOOR SHUTTER prelength both side of make Rajshri Plastiwood or equivalent including accessories	Sq.m	2788.00
916		Alccofine 1109SR	Kg	60.00
917		White Cement based wall putty	Kg	20.00
918		Fusion Bonded Epoxy Coated TMT Steel bars Fe 500 Grade	tones	61000.00
919		PVC RUBBER MOULDED Interlocking Cement Concrete paver blocks ( 60 mm thick, M-35 grade) Colour	sq.m	739.00
920		PVC RUBBER MOULDED Interlocking Cement Concrete paver blocks ( 60 mm thick, M-35 grade) Grey	sq.m	611.00
921		PVC RUBBER MOULDED Interlocking Cement Concrete paver blocks ( 80 mm thick, M-40 grade) Colour	sq.m	948.00
922		PVC RUBBER MOULDED Interlocking Cement Concrete paver blocks ( 80 mm thick, M-40 grade) Grey	sq.m	793.00
922		PVC RUBBER MOULDED Interlocking Cement Concrete paver blocks ( 80 mm thick, M-40 grade) Grey	sq.m	793.00
923		Shot Blasted Cement Concrete Paving Slab(400X400X40mm)	sq.m	1017.00
924		Chamfered edge Cement Concrete paver block (100 mm thick, M-50) Grey	sq.m	1017.00
925		Chamfered edge Cement Concrete paver block (100 mm thick, M-50) Colour	sq.m	1186.00

CHAPTER II			
MORTARS			
Sr. No.	Description	Units	Rate
	<b>LIME MORTAR</b>		
1601	Lime mortar (1 lime putty:1 fine sand)	cu.m	6402.00
1602	Lime mortar (1 lime putty: 2 Surkhi)	cu.m	5333.00
	<b>CEMENT MORTAR</b>		
1603	Cement Mortar (1 Cement : 1 Fine Sand)	cu.m	7550.00
1604	Cement Mortar(1Cement:2Fine Sand)	cu.m	6099.00
1605	Cement Mortar (1Cement:3Fine Sand)	cu.m	5376.00
1606	Cement Mortar (1Cement:4Fine Sand)	cu.m	4603.00
1607	Cement Mortar (1Cement:5Fine Sand)	cu.m	4213.00
1608	Cement Mortar (1Cement:6Fine Sand)	cu.m	3861.00
1609	Mud mortar	cu.m	975.00
1610	Lime surkhi mortar 1:1:1 (1 Lime putty:1 Surkhi:1Fine Sand)	cu.m	2859.00
1611	White cement mortar 1:2 (1 White Cement:2Fine Sand)	cu.m	13151.00
<b>Note:</b> Sand mean river/manufacture sand			

BASIC RATES					
LABOUR					
Sr. No			Description	Unit	Rate as per GSR 2019 (Labour rate)
1701	1	a)	(Semi-skilled) Bandhani, Mate, Mazdoor, Bhisti	Per day	Rs.386
		b)	(Unskilled) Chowkidar, Hedge cutter, Mali,	Per day	Rs.325
		c)	Mate Coolie (ord.), Sweeper, Helper, Beldar	Per day	Rs.325
		d)	Hardrock rock or stone cutting	Per day	Rs.441
		1	Stone cutter 1 <sup>st</sup> class (skilled)	Per day	Rs.441
		2	Stone cutter 2 <sup>nd</sup> class (semi-skilled), Chiseller, Hole Driller, breaker, Excavator	Per day	Rs.386
1702	2		<b>Driver</b>		
		a)	For road rollers and heavy machinery	Per day	Rs.441
		b)	For truck	Per day	Rs.441
		c)	For light vehicles, jeep etc.	Per day	Rs.441
1703	3		Cleaner: For truck, road roller etc.	Per day	Rs.325
1704	4		<b>Operator</b>		
		a)	Pneumatic drill hammer	Per day	Rs.483
		b)	Concrete mixer, Asphalt boiler	Per day	Rs.441
		c)	Pump attendant, Bitumen sprayer	Per day	Rs.386
		d)	Laboratory attendant, specialised machine	Per day	Rs.386
1705	5)		<b>Marines</b>		
		a)	Driver	Per day	Rs.441
		b)	Oarsman, Tandel, Sarang	Per day	Rs.386
1706	6		<b>Mason</b>		
		a)	Stone Ornamental work (highly skilled)	Per day	Rs.483
		b)	1 <sup>st</sup> class (skilled)	Per day	Rs.441
		c)	2 <sup>nd</sup> class brick layer, stone layer for plaster of paris work	Per day	Rs.386
		d)	Assistant	Per day	Rs.325

1707	7)		<b>Carpenter</b>		
		a)	Furniture (highly skilled)	Per day	Rs.483
		b)	1 <sup>st</sup> class (skilled)	Per day	Rs.441
		c)	2 <sup>nd</sup> class (semi-skilled)	Per day	Rs.386
		d)	Assistant	Per day	Rs.325
1708	8		<b>Blacksmith:</b>		
		a)	1 <sup>st</sup> class (skilled)	Per day	Rs.441
		b)	2 <sup>nd</sup> class (semi-skilled)	Per day	Rs.386
		c)	Assistant	Per day	Rs.325
1709	9		<b>Fitter</b>		
		a)	1 <sup>st</sup> class (skilled)	Per day	Rs.441
		b)	2 <sup>nd</sup> class (semi-skilled)	Per day	Rs.386
		c)	Assistant	Per day	Rs.325
1710	10		Welder (Highly skilled)	Per day	Rs.483
1711	11		<b>Mechanic</b>		
		a)	1 <sup>st</sup> class	Per day	Rs.441
		b)	2 <sup>nd</sup> class	Per day	Rs.386
		c)	Assistant	Per day	Rs.325
1712	12		<b>Painter</b>		
		a)	Artist painter (Highly skilled)	Per day	Rs.483
		b)	Painter (skilled)	Per day	Rs.441
		c)	2 <sup>nd</sup> class (semi-skilled)	Per day	Rs.386
		d)	White washer	Per day	Rs.386
1713	13		<b>Plumber, Electrician</b>		
		a)	Highly skilled	Per day	Rs.483
		b)	1 <sup>st</sup> class (skilled)	Per day	Rs.441
		c)	2 <sup>nd</sup> class	Per day	Rs.386
1714	14		Meter reader, gauge reader	Per day	Rs.441

1715	15	a)	<b>Supervisor</b>	Per day	Rs.483
		b)	Mistri	Per day	Rs.483
		c)	Typist	Per day	Rs.441
		d)	works assistant, draughtsman	Per day	Rs.441
		e)	Head Surveyor	Per day	Rs.386
1718	16		Dozer operator / dumper/poclain operator/ motor grander / crane operator	Per day	Rs.441
1719	17		Compressor operator	Per day	Rs.441
1720	18		<b>Tin smith</b>		
		a)	1 <sup>st</sup> class	Per day	Rs.441
		b)	2 <sup>nd</sup> class	Per day	Rs.386
		c)	Assistant	Per day	Rs.325
1721	19		<b>Auto Electrician</b>		
		a)	1 <sup>st</sup> class (skilled)	Per day	Rs.441
		b)	2 <sup>nd</sup> class (semi-skilled)	Per day	Rs.386
		c)	Assistant	Per day	Rs.325
1722	20		<b>Rig Operator</b>		
		a)	1 <sup>st</sup> class (skilled)	Per day	Rs.441
		b)	2 <sup>nd</sup> class (semi-skilled)	Per day	Rs.386
		c)	Assistant	Per day	Rs.325
<b>Note :These rates are exclusive of contractor's profit and overheads and are inclusive of the wages for weekly day of rest.</b>					

<b>CHAPTER IV</b>			
<b>Hire Charges for Plants &amp; Machinery for Building Works</b>			
<b>Sr. No.</b>	<b>Machine</b>	<b>Units</b>	<b>Rate</b>
2001	Static Roller	Day	7600
2002	Excavator (3D) with Driver & Fuel	Day	14100
2003	Hydraulic rock breaker with driver & fuel	Day	14100
2004	Loader	Day	4813
2005	Tipper	Day	4800
2006	Mixer	Cu.m	3500
2007	Pump 1	Day	250
2008	Pump 2	Day	350
2009	Pumping charges	Cu.m	200
2010	Vibrator	Day	600
2011	Polishing machine	Day	350
2012	Mechanical mixer (Hire)	Cum	140
2013	Spraying machine including electricity charges	Day	350
2014	Hire charges of Pump set of capacity 4000 litres/hour.	Day	500

CHAPTER V										
<u>TRANSPORTATION AND CARRIAGE OF MATERIALS</u>										
	(A) By tipper truck including loading, unloading and stacking									
Item nos	Materials	Unit	1 km	2km	3km	4 km	5 km	Beyond 5 upto 10 km per km	Beyond 10 upto 20 km per km	Beyond 20 upto 30 km per km
	(A) Lime,building rubbish, manure sludge, moorum excavated rock									
3001- 8	( i ) Lime,moorum, building rubbish	Cum	86.82	106.03	125.25	125.63	163.69	19.22	19.22	19.22
3009- 16	( ii ) Earth	Cum	108.52	132.54	156.57	180.59	204.62	24.02	24.02	24.02
3017 -24	( iii ) Manure or sludge	Cum	94.36	115.26	136.15	157.04	177.93	20.89	20.89	20.89
3025 -32	(iv ) Excavated rock	Cum	173.63	212.07	250.51	288.95	327.39	38.44	38.44	38.44
3033 -40	( B ) Sand, stone metal and soling									
3041 - 48	( i ) Sand stone metal below 40 mm	Cum	104.18	127.24	150.30	173.37	196.43	23.06	23.06	23.06
3049 - 56	( ii ) Stone metal 40 mm & above	Cum	112.75	137.71	162.67	187.63	212.59	24.96	24.96	24.96
3057 - 64	( iii ) Soling stone	Cum	122.56	149.70	176.83	203.96	231.10	27.13	27.13	27.13



CARRIAGE OF MATEIALS										
	<b>(B) By mechanical transport including loading, unloading and stacking</b>									
Item nos	Materials	Unit	1 km	2km	3km	4 km	5 km	Beyond 5 upto 10 km per km	Beyond 10 upto 20 km per km	Beyond 20 upto 30 km per km
	(A) Lime,building rubbish, manure sludge, moorum excavated rock									
3065 - 72	(i) Lime,moorum, building rubbish	Cum	155.00	175.34	195.31	214.49	232.95	16.63	13.48	10.97
3073 - 80	(ii) Earth	Cum	193.75	219.17	244.14	268.12	291.18	20.79	16.85	13.71
3081 - 88	(iii) Manure or sludge	Cum	168.48	190.58	212.29	233.14	253.20	18.08	14.65	11.92
3089 - 96	(iv) Excavated rock	Cum	310.00	350.67	390.62	428.99	465.89	33.26	26.96	21.94
	(B) Sand, stone metal and soling									
3097 - 04	(i) Sand stone metal below 40 mm	Cum	186.00	210.40	234.37	257.39	279.54	19.96	16.17	13.16
3105 - 12	(ii) Stone metal 40 mm & above	Cum	201.30	227.71	253.65	278.56	302.53	21.60	17.50	14.25
3113- 20	(iii) Soling stone	Cum	218.82	247.53	275.73	302.81	328.87	23.48	19.03	15.49
3121 - 28	(2) Bricks	1000 nos	465.00	803.67	853.44	901.61	948.31	49.89	40.43	32.91
3129- 36	(3) Tiles	1000 nos	290.62	328.76	366.21	402.17	436.77	31.18	25.27	20.57

3137- 44	(4) Cement,stone blocks,C.I,A.C & C.C pipes below 100 mm dia and other heavy materials									
		Tonne	132.86	150.29	167.41	183.85	199.67	14.26	11.55	9.40
3145 - 52	(5 ) Steel	Tonne	132.86	150.29	167.41	183.85	199.67	14.26	11.55	9.40
3153 - 60	(6) Timber	cum	186.00	210.40	234.37	257.39	279.54	19.96	16.17	13.16
3161 - 68	(7) Tar, bitumen	Tonne	206.67	233.78	260.42	285.99	310.59	22.17	17.97	14.63
3169 - 76	(8) Steam coal	cum	169.09	191.28	213.07	233.99	254.12	18.14	14.70	11.97
3177 - 84	(9) Stoneware pipes									
	(a ) 100 mm dia	100m	193.75	219.17	244.14	268.12	291.18	20.79	16.85	13.71
3185 - 92	(b ) 150 mm dia	100m	387.50	438.34	488.28	536.23	582.37	41.58	33.69	27.42
3193 - 00	(c ) 200 mm dia	100m	688.89	779.27	868.05	953.30	1035.32	73.92	59.90	48.75
3221 - 28	(d ) 230 mm dia	100m	885.71	1001.92	1116.06	1225.67	1331.12	95.04	77.02	62.68
3229 - 36	(e ) 250 mm dia	100m	1107.14	1252.40	1395.08	1532.09	1663.90	118.79	96.27	78.35
3237 - 44	(f ) 300 mm dia	100m	1409.08	1593.97	1775.56	1949.94	2117.69	151.19	122.53	99.72
	(10) R.CC, P.C Hume steel C.I pipes									
3245 - 52	(a ) 100 mm dia	100m	317.62	359.30	400.23	439.54	477.35	34.08	27.62	22.48
3253 - 60	(b ) 150 mm dia	100m	508.19	574.87	640.37	703.26	763.76	54.53	44.19	35.96
3261 - 68	(c ) 200 mm dia	100m	846.99	958.12	1067.28	1172.09	1272.93	90.88	73.65	59.94
3269 - 76	(d ) 250 mm dia	100m	1154.99	1306.53	1455.38	1598.31	1735.81	123.93	81.74	81.74
3277 - 84	(e ) 300 mm dia	100m	1494.69	1690.81	1883.43	2068.40	2246.35	160.38	105.78	105.78

3285 - 92	(f) 350 mm dia	100m	2117.48	2395.31	2668.19	2930.23	3182.32	227.20	149.85	149.85
3293 - 00	(g) 400 mm dia	100m	2823.30	3193.74	3557.58	3906.98	4243.10	302.94	199.80	199.80
3301 - 08	(h) 450 ,500 mm dia	100m	3629.96	4106.24	4574.04	5023.26	5455.41	389.49	256.88	256.88
3309 - 16	(i) 600,700,750,800 mm dia	100m	5081.94	5748.74	6403.65	7032.56	7637.58	545.28	359.64	359.64
3317 - 24	(k) 900, 1000, 1100 & 1200mm dia	100m	6352.43	7185.92	8004.56	8790.70	9546.97	681.60	449.55	449.55
3325 - 32	(l)1400,1600,1800 mm dia	100m	12704.86	14371.85	16009.13	17581.40	19093.94	1363.21	899.09	899.09
3333 - 40	(11) Empty cement bags	1000 nos	4.65	5.26	5.86	6.43	6.99	0.50	0.40	0.33
3341 - 48	(12) Hollow glass block	100 nos	4.43	5.01	5.58	6.13	6.66	0.48	0.39	0.31

<b>C) BY MANUAL LABOUR INCLUDING LOADING, UNLOADING STACKING FOR A LEAD LESS THAN 0.5Kms.</b>						
<b>Item No.</b>			<b>Materials</b>	<b>Unit of rates</b>	<b>Cost of carriage including loading unloading and stacking for first 50 metres</b>	<b>Cost for additional 50m or part thereof beyond 1st 50m upto 0.5m (Y)</b>
			<b>Light Material</b>			
	a)		Lime, Murrum, building rubbish, earth, manure or sludge and excavated rocks			
3349-50		i.	lime, moorum, earth , building materials, rubbish	1 cu.m	82.00	18.00
3351-52		ii.	Earth	1 cu.m	102.00	22.00
3353-54		iii.	Manure or sludge	1cu.m	89.00	19.00
3355-56		iv.	Exacavated rock	cu.m	164.00	36.00
	b)		Sand, stone aggregate and soiling.			
3357-58		i.	sand, stone agg below 40mm nominal	1cu.m	102.00	22.00
3359-60		ii.	stone aggregate 40mm & above	1cu.m	111.00	24.00
3361-62		iii.	soling stone	1cu.m	120.00	26.00
3363-64		iv.	bricks	1000 nos	191.00	42.00
3365-64		v.	Brick tiles, Allahabad mangalore tiles	1000 nos	119.00	26.00
3367-68		vi.	Steam coal	1 tonne	96.00	21.00
<b>Remarks:</b>	<b>This rate is applicable to net quantities after deduction of prescribed percentage for voids mentioned in the specification under sub-head "Carriage of materials".</b>					

<b>C) CARRIAGE OF MATERIALS BY MANUAL LABOUR INCLUDING LOADING, UNLOADING STACKING FOR A LEAD LESS THAN 0.5Kms.</b>					
<b>Sr.no</b>		<b>Materials</b>	<b>Unit of rates</b>	<b>Cost of carriage including loading unloading and stacking for first 50 metres</b>	<b>Cost for additional 50m or part thereof beyond 1st 50m upto 0.5m (Y)</b>
		<b>Heavy Materials</b>			
3369-72	a)	Stone blocks .G.I.,C.I, pipes below 100mm dia and other heavy materials	1 tonne	75.00	11.00
3371-72	b)	cement	1 tonne	59.00	9.00
3372-74	c)	Steel	1 tonne	127.00	19.00
3375-76		Timber	cu.m	82.00	12.00
3377-78		Tar, bitumen, etc.	1 tonne	75.00	11.00
3379-80		S.W. pipes			
3381-82	a)	100mm	100m	150.00	22.00
3383-84	b)	150mm	100m	246.00	36.00
3385-86	c)	200mm	100m	344.00	51.00
3387-88	d)	230mm	100m	441.00	65.00
3389-90	e)	250mm	100m	573.00	84.00
3391-92	f)	300mm	100m	819.00	120.00
3393-94	g)	350mm	100m	1146.00	168.00
3395-96	h)	400mm	100m	1433.00	210.00
3397-98	i)	450mm	100m	1737.00	255.00
3399-00	j)	500mm	100m	2123.00	311.00
3401-02	k	600mm	100m	2605.00	382.00
		R.C.C. pipes, steel cylinders, R.C. pipes, C.I. pipes, Ununreinforced pipes			
3403-05	a)	100mm	100m	202.00	30.00
3405-06	b)	150mm	100m	247.00	36.00
3407-08	c)	200mm	100m	285.00	42.00
3409-10	d)	230mm	100m	427.00	63.00
3411-12	e)	250mm	100m	751.00	110.00
3413-14	f)	300mm	100m	939.00	138.00
3415-16	g)	350mm	100m	1343.00	197.00
3417-18	h)	400mm	100m	1563.00	229.00
3419-20	i)	450mm & 500mm dia	100m	2084.00	306.00
3421-22	j)	600, 700,750 & 800 mm	100m	2292.00	336.00

<b>C) CARRIAGE OF MATERIALS BY MANUAL LABOUR INCLUDING LOADING, UNLOADING STACKING FOR A LEAD LESS THAN 0.5Kms.</b>					
<b>Sr.no</b>		<b>Materials</b>	<b>Unit of rates</b>	<b>Costof carriage including loading unloading and stacking for first 50 metres</b>	<b>Cost for additional 50m or part thereof beyond 1st 50m upto 0.5m (Y)</b>
		<b>Asbestos Cement sheets</b>			
3423-24	a)	50mm dia	100m	34.00	5.00
3424-25	b)	80mm dia	100m	94.00	14.00
3426-27	c)	100 mm dia	100m	134.00	20.00
3428-29	d)	150mm dia	100m	188.00	28.00
<b>Remark:</b>		<b>The length of SW pipes will be measured excluding of the internal depth of sockets.</b>			

<b>MISCELLANEOUS</b>				
<b>Sr. No</b>		<b>Description</b>	<b>Unit</b>	<b>Rate</b>
3430		Loading in or unloading cement from the railway wagons at siding and caring the same from or into godown adjacent to the siding including stacking the same properly into the rows upto any height as per direction of Engineer - in - charge and sweeping the floors.	Tonne	24.00
3431	a)	Steel	Per M.T.	33.00
3432	b)	C.I., G.I. or C.C. pipes upto 500 mm dia and similar heavy materials (except cement and steel).	Per M.T.	22.00
3433	c)	Heavy materials where each piece or bundle crate, or case weights more than one tonne and R.C.C. C.I., and concrete pipe above 500 mm dia.	Per M.T.	46.00
3434		Extra for sorting the steel size wise inside the store yard and stacking the same for measurements within the lead of 100 metres as directed by the Engineer in charge.	Per M.T.	56.00
<b>Remarks: The rates will be applicable in all whether materials are unloaded on or loaded from railway siding or directly unloaded on or loaded from transport. No deduction shall be made from carriage rates for such direct unloading or loading.</b>				

CHAPTER VI				
EARTHWORK				
Sr.No.		DESCRIPTION	UNIT	RATE
4001		Clearing grass and removal of rubbish upto a distance of 50 m outside the periphery of the area	100 sq.m.	418.00
4002		Felling trees of girth(measured at a height of 1. m. Above ground level) including cutting of trunks and branches removing the roots stacking the serviceable material and disposal of unserviceable material for all leads :		
	a	Beyond 30 cm and upto 60 cm grith	Each	418.00
	b	Beyond 60 cm and upto 120 cm grith	Each	952.00
	c	Beyond 120 cm and upto 240 cm grith	Each	4097.00
	d	Beyond 240 cm girth	Each	8100.00
4003		Surface dressing of ground including removing vegetation in equalities not exceeding 15 cm deep and disposal of rubbish lead upto 50 m and lift upto 1.5 m.		
	a	Ordinary soil	sq.m	21.00
	b	Hard soil	sq.m	29.00
4004		Earthwork in surface excavation not exceeding 30 cm depth(but exceeding 1.5 m width as well as 10 sq.m on plan) including disposal of excavated earth beyond work site for all leads lift disposed earth to be leveled and neatly dressed in:		
	a	Ordinary soil	sq.m	39.00
	b	Hard soil	sq.m	54.00
4005		Earthwork in excavation by mechanical means (hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sq.m on plan) including disposal of excavated earth lead upto 50 m and lift upto 1.5m disposed earth to be leveled and neatly dressed including providing barricading, danger lighting guarding as directed in :		
	a	All kinds of soil	cu.m	259.00
	b	All types of Ordinary rock including all types of laterite rock, blasting prohibited	cu.m	644.00
	c	Hard rock where blasting prohibited	cu.m	1103.00



4006		Earthwork in excavation by mechanical means (hydraulic excavator)/manual means in foundation pipeline trenches drain (not exceeding 1.5 m in width or 10 sq.m. 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.		
	a	All kinds of soil	cu.m	263.00
	b	All types of Ordinary rock including all types of laterite rock, blasting prohibited	cu.m	672.00
	c	Hard rock where blasting prohibited	cu.m	1123.00
4007		Earthwork in excavation over areas in saturated soil (exceeding 0.30 m upto a depth of 0.60 m) including disposal of excavated earth lead upto 50 m and lift upto 1.5 m disposed earth to be neatly dressed and leveled including pumping or bailing out water	cu.m	614.00
4008		Earthwork in excavation in foundation pipeline trenches, drain in saturated soil upto a depth of 0.60 m lift upto 1.50 m including shoring, strutting and pumping/bailing out water stacking the excavated soil not more than 5 m. clear from the edge the excavation and returning the stacked soil in 0.15 m layers when required into plinth sides of foundation etc. consolidating each deposited layer by ramming, watering and disposing of all surplus excavated soil within a lead upto 20m.	cu.m	671.00
4009		Extra for earthwork excavated in saturated soil for every 0.30 m depth or part thereof over 0.60 m depth below water table including pumping and bailing out water	cu.m	103.00
4010		Extra for additional depth of 1.5 m or part thereof in:		
	a	All types of soil	cu.m	31.00
	b	Saturated soil	cu.m	51.00
	c	All types of laterite rocks and hard rocks	cu.m	41.00
4011		Extra for all type of laterite rock and hard rock in wet condition including pumping or bailing out water.	cu.m	179.00
4012		Refilling the pipeline/foundation trenches plinth sides, foundation etc. with available excavated earth in layers not exceeding 20 cm depth consolidating each layer ramming and watering lead upto 50 M and all lifts and disposal of surplus earth as directed by Engineer in Charge.	cu.m	182.00

4013		Open timbering in trenches including strutting and shoring complete. (face area to be timbered only to be taken)		
	a	Depth not exceeding 1.5 m	sq.m	154.00
	b	Depth exceeding 1.5 m but not exceeding 3.0 m	sq.m	179.00
	c	Depth exceeding 3.00 m	sq.m	207.00
4014		Extra for planking and strutting in open planks as required to be left permanently in position(face area to be left permanently to be measured)	sq.m	560.00
4015		Closed planking in trenches including strutting and shoring packing cavities (wherever required) complete. (measurement to be taken only on face area to be timbered)		
	a	Depth not exceeding 1.5 m	sq.m	295.00
	b	For depth exceeding 1.5 m but not exceeding 3.0 m	sq.m	339.00
	c	For depth exceeding 3.0 m	sq.m	397.00
4016		Extra for planking and strutting and packing material for cavities (in closed timbering) if required to be left permanently in position.(face area of timbering permanently left to be measured)	sq.m	1076.00
4017		Supplying and filling in plinth under floors, trenches including watering ramming consolidating, dressing, complete.		
	a	Sand	cu.m	2170.00
	b	Moorum	cu.m	710.00
4018		Open timbering over areas including shuttering shoring and use and waste of racking shores, complete(measurements to be taken on face area timbered)		
	a	Upto depth of 1.5 m	sq.m	93.00
	b	For depth exceeding 1.5 m but upto 3.00 m	sq.m	110.00
	c	For depth beyond 3.00 m	sq.m	123.00
4019		Open timbering in case of shafts, wells, cesspits man holes and like including strutting and shoring complete (measurements to be taken of face area timbered)		
	a	Upto depth of 1.5 m	sq.m	157.00
	b	For depth exceeding 1.5 m but upto 3.00 m	sq.m	167.00
	c	For depth beyond 3.00 m	sq.m	193.00
4020		Close timbering over areas including strutting shoring packing cavities (wherever required) and use waste of ranking shore etc. complete.		
	a	Upto depth of 1.5 m	sq.m	260.00

	b	For depth exceeding 1.5 m but upto 3.00 m	sq.m	304.00
	c	For depth beyond 3.00 m	sq.m	347.00
4021		Close timbering in case of shafts wells, cesspits, manholes, and the like including strutting, shoring and packing cavities(whenever required) complete. (measurements to be taken of face area timbered)		
	a	Upto depth of 1.5 m	sq.m	323.00
	b	For depth exceeding 1.5 m but upto 3.00 m	sq.m	357.00
	c	For depth beyond 3.00 m	sq.m	406.00
4022		Dewatering the trenches and bailing out water including removal of slush, mud etc. for any depth and disposal of pumped mud, water, slush to suitable point not forming circuit of return of pumped water to the very trench, by employing diesel generated pump	cu.m	415.00
4023		Earth work in rough excavation banking excavated earth in layers not exceeding 20 cm in depth breaking clods, watering rolling each layer with 1/2 tonne roller or wooden or steel rammers, and rolling every third 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		
	a	All types of soil	cu.m	320.00
4024		Ploughing the existing ground to a depth from 15 cm. to 35 cm. and watering the same:		
	a	Ordinary soil	sq.m	20.00
	b	Hard soil	sq.m	32.00
4025		Banking excavated earth in layers not exceeding 20 cm in depth breaking clods, watering, rolling each layer with 1/2 tonne roller, or wooden or steel rammers, & rolling every 3 <sup>rd</sup> & top most layer with power roller of minimum 8 tonnes & dressing up in embankments for roads, flood banks, marginal banks, and guide banks, etc. lead upto 50 m. and lift upto 1.5 m.		
	a	Ordinary soil	cu.m	213.00
	b	Hard soil	cu.m	250.00
4026		Deduct for not rolling with power roller minimum 8 tonnes in item No. 4025.	cu.m	20.00
4027		Deduct for not watering in item Nos. 4025.	cu.m	16.00

4028		Clearing jungle including up rooting of rank vegetation grass bush wood trees and sapling of girth upto 30 cm. measured at a height of 1 m above ground level & removal of rubbish upto a distance of 50 mt. outside the periphery of the area cleared. (if however, only grass is met with the area will be measured and paid for under item 4001).	sq.m	8.00
4029		Earthwork in excavation in saturated soil upto depth of 0.60 m including pumping or bailing out water and banking in layer for the purpose of making embankments or filling up ground depressions, lead upto 20 m. and lift upto 1.5 m.	cu.m	961.00
4030		Extra rates for quantities of works executed in or under foul position including pumping out water as required.* METER DEPTH.(25% of the Rate of the item. This pertains to only such. Pumping of water as is envisaged at the time of tendering & don't include those that covered under contractual risk).The unit, namely meter depth,to be considered for payment,shall be the depth measured from the sub soil water level up to the center of gravity of the Qty excuted in difficult condition. the depth shall be reckoned correct to 0.10m, 2.05 m or more shall be taken as 0.10 m & less than 0.05 m ignored.	Meter Depth	25%
4031		Stacking stone boulder (15 to 23 cm size) for measurement	cu.m	137.00
4032		Stacking stone aggregate for measurement	cu.m	92.00
4033		Stacking sand for measurement	cu.m	76.00

CHAPTER VII				
PRECAST MASONRY WORKS				
Sr. No.		DESCRIPTION	UNIT	RATE
5001		Pre-cast cement concrete solid block masonry of compressive strength 70 kg / cm <sup>2</sup> in cement mortar 1:4 (1 cement : 4 coarse sand ) in foundation and plinth size of blocks (30 x 20 x 15)		
		In foundation and plinth	cu.m	7224.00
5002		Pre-cast cement concrete solid block masonry of compressive strength 70 kg / cm <sup>2</sup> in cement mortar 1:4 (1 cement : 4 coarse sand ) in foundation and plinth size of blocks (40 x 20 x 15)		
		In foundation and plinth	cu.m	7140.00
5003		Pre-cast cement concrete solid block masonry of compressive strength 70 kg / cm <sup>2</sup> in cement mortar 1:4 (1 cement : 4 coarse sand ) in foundation and plinth size of blocks (30 x 23 x 15)	cu.m	7067.00
5004		Pre-cast cement concrete solid blocks masonry of compressive strength 70 kg / cm <sup>2</sup> in cement mortar 1:4 (1 cement : 4 coarse sand ) in partition walls size of blocks (30 x 20 x 10)	sq.m	769.00
5005		Extra for precast concrete block masonry in all sizes in superstructure from floor one level upto floor V level	cu.m	774.00
5006		Extra for precast concrete block masonry in all sizes in superstructure above floor V level for every four floors or part thereof.	cu.m	763.00

BRICK MASONARY WORKS				
5007		Brick work using common burnt building bricks in cement mortar 1:3 (1 cement : 3 coarse sand) with bricks of class designation 75 kg/ cm <sup>2</sup> (wire cut bricks)		
	a	In foundation and plinth.	cu.m	8362.00
	b	In superstructure upto floor five level.	cu.m	9188.00
5008		Brick work using common burnt building bricks in cement mortar 1:3 (1 cement : 3 coarse sand) with bricks of class designation 40 kg / cm <sup>2</sup> (wire cut bricks)		
	a	In foundation and plinth.	cu.m	6708.00
	b	In superstructure upto floor five level.	cu.m	7533.00
5009		Brick work using common burnt building bricks in cement mortar 1:4 (1 cement : 4 coarse sand) with bricks of class designation 75 kgs/ cm <sup>2</sup> (wire cut bricks)		
	a	In foundation and plinth.	cu.m	8137.00
	b	In superstructure upto floor five level.	cu.m	8963.00
5010		Brick work using common burnt building bricks in cement mortar 1:4 (1 cement : 4 coarse sand) with bricks of class designation 40 kg/ cm <sup>2</sup> .		
	a	In foundation and plinth.	cu.m	6483.00
	b	In superstructure upto floor five level.	cu.m	7309.00
5011		Brick work using common burnt building bricks in cement mortar 1:5 (1 cement : 5 coarse sand) with bricks of class designation 75 kg/ cm <sup>2</sup> .		
	a	In foundation and plinth.	cu.m	8024.00
	b	In superstructure upto floor five level.	cu.m	8850.00
5012		Brick work using common burnt building bricks in cement mortar 1:5 (1 cement : 5 coarse sand) with bricks of class designation 40 kg/ cm <sup>2</sup> .		
	a	In foundation and plinth.	cu.m	6370.00
	b	In superstructure upto floor five level.	cu.m	7196.00
5013		Extra for brick work in square and rectangular pillars	cu.m	365.00
5014		Extra for brick work in circular pillars:		
	a	With bricks of class designation 75 kg / cm <sup>2</sup> (wire cut bricks)	cu.m	2507.00
	b	With bricks of class designation 40 kg / cm <sup>2</sup> .	cu.m	2036.00

5015		Extra for brick work curved in plan upto a mean radius not exceeding 6 meters.		
	a	With bricks of class designation 75 kg/cm <sup>2</sup> .	cu.m	756.00
	b	With bricks of class designation 40 kg./cm <sup>2</sup> .	cu.m	636.00
5016		Extra for making tapered surface of brick masonry		
	a	With bricks of class designation 75 kg./cm <sup>2</sup> .	sq.m	447.00
	b	With bricks of class designation 40 kg./cm <sup>2</sup> .	sq.m	377.00
5017		Half brick masonry in cement mortar 1:3 (1 cement : 3 coarse sand) with bricks of class designation 75 kg /cm <sup>2</sup> .		
	a	In foundation and plinth.	sq.m	1030.00
	b	Upto floor V level.	sq.m	1134.00
5018		Half brick masonry in cement mortar 1:3 (1 cement : 3 coarse sand) with bricks of class designation 40 kgs / cm <sup>2</sup> .		
	a	In foundation and plinth.	sq.m	831.00
	b	Upto floor V level.	sq.m	935.00
5019		Half brick masonry in cement mortar 1:4 (1 cement : 4 coarse, sand) with bricks of class designation 75 kg/ sq. cm upto floor five level .		
	a	In foundation and plinth.	sq.m	1005.00
	b	Upto floor V level.	sq.m	1109.00
5020		Half brick masonry in cement mortar 1:4 (1 cement :4 coarse, sand) with bricks of class designation 40 kg/ sq. cm upto floor five level .		
	a	In foundation and plinth.	sq.m	806.00
	b	Upto floor V level.	sq.m	910.00
5021		Extra for cutting or chamfering of bricks to required shape masonry work.	sq.m	21.00
5022	a	Providing 10 cm drip course at junction of roofs and wall in cement mortar 1:4 (1 cement : 4 fine sand) with bricks of class designation 75 kg / cm <sup>2</sup> .	Metre	73.00
	b	Providing 10 cm drip course at junction of roofs and wall in cement mortar 1:4 (1 cement : 4 fine sand) with bricks of class designation 40 kg / cm <sup>2</sup> .	Metre	59.00
5023	a	Providing 7.62 cm thick 5 cm projected string course in cement mortar 1:4 (1 cement : 4 fine sand) with bricks of class designation 75 kg / cm <sup>2</sup> .	Metre	36.00

	b	Providing 7.62 cm thick 5 cm projected string course in cement mortar 1:4 (1 cement : 4 fine sand) with bricks of class designation 40 kg / cm <sup>2</sup> .	Metre	29.00
5024		Brick work using fly ash bricks in cement mortar 1:4 (1 cement : 4 coarse sand ) with bricks of class designation 40 kgs / cm <sup>2</sup> . in foundation and plinth.		
	a	230 x 110 x 80 mm	cu.m	6701.00
		Brick work using fly ash bricks in cement mortar 1:4 (1 cement : 4 coarse sand ) with bricks of class designation 40 kgs / cm <sup>2</sup> . in superstructure upto floor five level.		
	b	230 x 110 x 80 mm	cu.m	7816.00
5025		Brick work using fly ash bricks in cement mortar 1:5 (1 cement : 5 coarse sand) with bricks of class designation 40 kg / cm <sup>2</sup> in foundation and plinth.		
	a	230 x 110 x 80 mm	cu.m	6877.00
		Brick work using fly ash bricks in cement mortar 1:5 (1 cement : 5 coarse sand) with bricks of class designation 40 kg / cm <sup>2</sup> in superstructure upto floor five level.		
	b	230 x 110 x 80 mm	cu.m	7650.00
5026		Half brick masonry usign fly ash bricks in cement mortar 1:3 (1 cement : 3 coarse sand ) with bricks of class designation 40 kgs / cm <sup>2</sup> .		
	a	In foundation and plinth 200 x 95 x 95	sq.m	752.00
	b	Above plinth upto floor V level 200 x 95 x 95	sq.m	872.00
5027		Half brick masonry using fly ash bricks in cement mortar 1:4 (1 cement : 4 coarse sand) with bricks of class designation 40 kg/cm <sup>2</sup>		
	a	In foundation and plinth 200 x 95 x 95	sq.m	659.00
	b	Above plinth upto floor V level 200 x 95 x 95	sq.m	846.00
5028		Extra for brickwork in super structure above floor V level for every four floors or part thereof.	cu.m	572.00
5029		Extra for half brickwork in super structure above floor V level for every four floors or part thereof.	sq.m	65.00



<b>LATERITE MASONRY WORKS</b>				
5035		Rubble packing with hard laterite stone under floors including watering ramming and consolidating etc. in pipeline trenches and other foundations complete.	cu.m	1291.00
5036		Laterite masonry of dressed stones of size as specified laid dry in pitching riverment etc.	cu.m	2820.00
5037		Random rubble masonry of laterite stone not less than 20 cm laid dry in pitching rivetment etc.	cu.m	1608.00
5038		Laterite masonry in neatly dressed stones of size as specified in cement mortar 1: 4 (1 cement : 4 coarse sand) in foundation and basement.	cu.m	4405.00
5039		Laterite masonry in neatly dressed stones of size as specified in cement mortar 1: 5 (1 cement : 5 coarse sand) in foundation and basement.	cu.m	4315.00
5040		Extra for flat semi-circular or segmental arch works .	cu.m	352.00
5041		Extra for labour in well lining cornices coping, etc.	cu.m	372.00
5042		Exposed decorative laterite masonry using Patradevi stone of size as specified and laid as directed by architect in cement mortar 1:4 (1 cement : 4 coarse sand)	cu.m	9790.00
5043		Laterite masonry in neatly dressed stones for 23 cms thick masonry walls in c.m. 1 : 4 (1 cement : 4 coarse sand in foundation upto plinth level	cu.m	5116.00
5044		Laterite masonry in neatly dressed stones for 23 cms thick masonry walls in cm. 1 : 5 (1 cement : 5 coarse sand) in foundation upto plinth level	cu.m	5025.00
5045		Laterite masonry in neatly dressed stones for 20 cms thick masonry walls in cm. 1 : 4 (1 cement : 4 coarse sand) in foundation upto plinth level	cu.m	5428.00
5046		Laterite masonry in neatly dressed stones for 23 cms thick masonry walls in cm. 1 : 5 (1 cement : 5 coarse sand) in foundation upto plinth level	cu.m	5337.00
5047		Extra for laterite masonry in all sizes in superstructure from floor I level upto floor V level.	cu.m	774.00

5048		Extra for laterite masonry in all sizes in superstructure above floor V level for every 4 floors or part thereof	cu.m	763.00
5049		Providing and laying Autoclave Aerated cement blocks masonry (Light Weight Foam Concrete Blocks) with 100 mm 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.	cu.m.	7766.00
5050		Laterite stone masonry in neatly dressed stones as specified in Lime Mortar (1 Lime Putty : 2 Surkhi) in foundation and basement.	cu.m.	4575.00

CHAPTER VIII				
PLAIN CONCRETE WORKS				
Sr. No	Description		Unit	Rate
6001		Providing and laying in position cement concrete 1:2:4 (1 cement : 2 coarse sand: 4 graded granitic or basaltic stone aggregate 40 m nominal size) excluding cost of centering, shuttering and finishing :		
	a	All works upto plinth level	cu.m	5999.00
	b	In retaining walls , return walls(any thk) 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, upto floor five level.	cu.m	6618.00
6002		Providing & laying cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded granitic or basaltic stone aggrt. 40 mm. nominal size) excluding cost of centering, shuttering and finishing in:		
	a	All works upto plinth level	cu.m	5629.00
	b	In retaining walls , return walls(any thk) 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, upto floor five level.	cu.m	6044.00
6003		Providing & laying cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 river pebbles 40mm nominal size) excluding cost of centering, shuttering and finishing in:		
	a	All works upto plinth level	cu.m	4608.00
	b	In retaining walls , return walls(any thk) 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, upto floor five level.	cu.m	4938.00
6004		Providing & laying cement concrete 1:4:8 (1 cement 4 : coarse sand : 8 river pebbles aggregates 40 mm. nominal size) excluding cost of centering, shuttering and finishing in:		
	a	All works upto plinth level	cu.m	4413.00

	b	In retaining walls , return walls(any thk) 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, upto floor five level.	cu.m	4776.00
6005		Providing & laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 river pebbles aggregate 40 mm. nominal size) excluding cost of centering, shuttering and finishing in:		
	a	All works upto plinth level	cu.m	4156.00
	b	In retaining walls , return walls(any thk) 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, upto floor five level.	cu.m	4529.00
6006		Providing & laying cement concrete 1:3:6 (1 cement: 3 coarse sand: 6 hard laterite stone ballast aggrt. 50 mm. nominal size) excluding cost of centering and shuttering in :		
	a	All works upto plinth level	cu.m	5543.00
6007		Providing and laying cement concrete 1:4:8 (1 cement: 4 coarse sand: 8 graded granitic a basaltic stone aggregate 40 mm nominal size) excluding cost of centering, shuttering and finishing in		
	a	All works upto plinth level	cu.m	5307.00
	b	In retaining walls , return walls(any thk) 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, upto floor five level.	cu.m	5770.00
6008		Providing & laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded granitic or basaltic stone aggrt. 40 mm. nominal size) excluding cost of centering, shuttering and finishing in:		
	a	All works upto plinth level	cu.m	5050.00
	b	In retaining walls , return walls(any thk) 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, upto floor five level.	cu.m	5513.00

6009		Providing & laying cement concrete 1: 1.5: 3 (1 cement: 1.5 coarse sand: 3 graded granitic or basaltic stone aggrt. 20 mm. nominal size) excluding cost of centering, shuttering and finishing in:		
	a	All works upto plinth level	cu.m	6689.00
	b	In retaining walls , return walls(any thk) 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, upto floor five level.	cu.m	7211.00
6010		Providing & laying cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded granitic or basaltic stone aggrt. 20 mm. nominal size) excluding cost of centering, shuttering and finishing in:		
	a	All works upto plinth level	cu.m	6297.00
	b	In retaining walls , return walls(any thk) 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, upto floor five level.	cu.m	6760.00
6011		Providing & laying cement concrete 1:3:6 (1 cement: 3 coarse sand: 6 graded granitic or basaltic stone aggrt. 20 mm. nominal size) excluding cost of centering, shuttering and finishing in:		
	a	All works upto plinth level	cu.m	5925.00
	b	In retaining walls , return walls(any thk) 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, upto floor five level.	cu.m	6211.00
6012		Centering and shuttering including struttings, propping etc. and removal of formwork for :		
	a	Foundations, footings, bases for columns and mass concrete.	sq.m	394.00
	b	vertical surfaces such as retaining walls , return walls, walls (any thk) including attached pilasters, buttresses, plinth and string courses, fillets, etc.	sq.m	467.00
	c	Columns, Pillars ,piers,abutments, posts and strut, square, rectangular, polygon in plan. etc.	sq.m	590.00

6013		Providing and laying cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded granitic or basaltic stone aggregate 20 mm nominal size) excluding the cost of centering, shuttering and finishing etc.		
	a	Kerbs, steps and the like at or near ground level	cu.m	6297.00
6014		Providing and laying cement concrete 1:3:6 (1 cement: 3 coarse sand: 6 graded granitic or basaltic stone aggregate 20 mm nominal size) excluding the cost of centering, shuttering and finishing etc.		
	a	Kerbs, steps and the like at or near ground level	cu.m	5925.00
6015		Providing and laying upto floor five level cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded granitic or basaltic stone aggregate 20 mm nominal size) including smooth finishing to exposed surfaces, with cement mortar 1:3 (1 cement: 3 fine sand) including centering and shuttering etc.		
	a	Kerbs, steps and the like at or near ground level	cu.m	10234.00
	b	String courses, copings, bedplates, anchor blocks, plain window sills and the like.	cu.m	14109.00
	c	Small lintels not exceeding 1.5 m clear span, including coping and the like requiring form work to the suspended portions.	cu.m	15770.00
	d	Moulding as in cornices, window sills etc. exceeding 15 cm in girth.	cu.m	15271.00
	e	Moulding in cornices, window sills etc. not exceeding 15 cm girth.	cu.m	15358.00
6016		Providing and laying upto floor five level pre-cast cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded granitic or basaltic stone aggregate 20 mm nominal size) including hoisting and setting in position in cement mortar 1:3 (1cement : 3 Coarse sand) including smooth finishing the exposed surfaces, with cement mortar 1:3 (1 cement: 3 fine sand) including centering and shuttering etc.		
	a	Kerbs, steps and the like at or near ground level	cu.m	12735.00
	b	String courses, copings, bed plates, anchor blocks, plain window sills and the like.	cu.m	15850.00
	c	Small lintels not exceeding 1.5 m clear span, including coping and the like requiring form work to suspended portions.	cu.m	13813.00

	d	Moulding as in cornices, window sills etc. exceeding 15 cm in girth.	cu.m	17012.00
	e	Moulding in cornices, window sills etc. not exceeding 15 cm girth.	cu.m	17099.00
6017		Extra for laying concrete in or under water & or liquid mud including cost of pumping and bailing out water and removing slush etc. complete. * Per cu.m per m depth	Cum per meter depth	484.00
6018		Extra for laying concrete in or under foul condition	cu.m	190.00
6019		Providing & laying damp proof course 25 mm thick with cement concrete 1:2:4 (1 cement: 2 coarse sand : 4 graded stone agg. 10 mm nominal size).	sq.m	198.00
6020		Providing & laying damp proof course 40 mm thick with cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone agg 12.5 mm nominal size).	sq.m	292.00
6021		Providing & laying damp proof course 50 mm thick with cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone agg. 20 mm nominal size).	sq.m	348.00
6022		Extra for providing and mixing water proofing material in cement concrete work in the proportion recommended by the manufacturers. *Per bag of 50 kg of cement used in the mix .	per cement bag	40.00
6023		Applying a coat of hot bitumen (maxphalt 80/100 or equivalent) using 1.5 kg/sq.m. on damp proof course after cleaning the surface with brushes and finally with a piece of cloth light soaked in bitumen.	sq.m	193.00
6024		Providing and laying plum concrete in cement concrete 1:3:6 (1 cement: 3 coarse sand: 6 graded granitic or basaltic stone aggregate 40 mm nominal size) with plums not exceeding 15% of the volume of the finished concrete of size ranging from 150 to 300 mm (but the maximum dimension not exceeding 1/3 <sup>rd</sup> (one third) the least dimension of member under consideration excluding the cost of centering and shuttering:		
	a	With granitic or basaltic stone plums in:		
	1	foundation and plinth	cu.m	5095.00

	2	Walls including attached buttresses pilasters, string courses, independent piers, columns and pillasters coping and the like. upto floor five level.	cu.m	5447.00
	b	With laterite stone plum: -		
	1	foundation and plinth	cu.m	5001.00
	2	Walls including attached buttresses pilasters, string courses, independent piers, columns and pillasters coping and the like. upto floor five level.	cu.m	5354.00
6025		Providing and laying plum concrete in cement concrete 1:2: 4 (1 cement: 2 coarse sand: 4 graded granitic or basaltic stone aggregate 40 mm nominal size) with plums not exceeding 15% of the volumne of the finished concrete of size ranging from 150 to 300 mm (but the maximum dimension not exceeding 1/3 <sup>rd</sup> (one third) the least dimension of member under consideration excluding the cost of centering and shuttering:		
	a	With granitic or basaltic stone plums in :		
	1	foundation and plinth	cu.m	5409.00
	2	Walls including attached buttresses pilasters, string courses, independent piers, columns and pillasters coping and the like. upto floor five level.	cu.m	5935.00
	b	Lateritic stone plum in: -		
	1	foundation and plinth	cu.m	5316.00
	2	Walls including attached buttresses pilasters, string courses, independent piers, columns and pillasters coping and the like. upto floor five level.	cu.m	5841.00
6026		Extra for concrete work in superstructure above floor five level for each four floors or part thereof.	cu.m	572.00
6027		Making plinth protection 50mm thick of Cement Concrete 1:3:6 (1cement: 3 Coarse Sand: 6 graded stone aggregate 20mm nominal size) over 75mm bed of dry laterite aggregate 40mm nominal size well rammed and consolidated and grouted with fine sand including finishing the top smooth.	sq.m	718.00



CHAPTER IX				
REINFORCED CEMENT CONCRETE WORKS				
Sr. No		Description	Unit	Rate
6030		Providing and laying in position (1:11/2:3) Reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement (1 cement: 1½ coarse sand:3 graded stone agg 20mm nominal size)		
	a	All works upto plinth level	cu.m	6518.00
	b	In walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. upto floor five level	cu.m	7214.00
	c	In beams, suspended floors, roofs having slope upto 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases upto floor five level	cu.m	7280.00
6031		Providing and laying in position (1:2:4) reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement. (1 cement:2 coarse sand:4 graded stone agg 20mm nominal size)		
	a	All works upto plinth level	cu.m	6124.00
	b	In walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. upto floor five level	cu.m	6820.00
	c	In beams, suspended floors, roofs having slope upto 15° landings, balconies, shelves, chajjas, intels, bands, plain window sills, staircases upto floor five level	cu.m	6877.00
6032		Providing and laying upto floor five level reinforced cement concrete (1:2:4) in kerbs, steps and the like excluding the cost of centering, shuttering and finishing and reinforcement (1 cement: 2 coarse sand: 4 graded grantic or basaltic aggregate 20mm nominal size)	cu.m	6983.00
6033		Reinforced cement concrete work in arches, arch ribs, domes, vaults, shells, folded plate and roofs having slope more than 15° upto floor five level excluding the cost of centering, shuttering, finishing and reinforcement with 1:1½ :3 (1 cement: 1½ coarse sand: 3 graded grantic or	cu.m	6922.00

		basaltic aggregate 20mm nominal size)		
6034		Reinforced cement concrete work in arches, arch ribs, domes, vaults, shells, folded plate and roofs having slope more than 15° upto floor five level excluding the cost of centering, shuttering, finishing and reinforcement with 1:2:4 (1 cement: 2 coarse sand: 4 graded granitic or basaltic aggregate 20mm nominal size)	cu.m	6528.00
6035		Reinforced cement concrete work in chimneys, shafts upto floor five level excluding the cost of centering, shuttering, finishing and reinforcement with 1:1½ :3 (1 cement: 1½ coarse sand: 3 graded granitic or basaltic aggregate 20mm nominal size)	cu.m	7313.00
6036		Reinforced cement concrete work in chimneys, shafts upto floor five level excluding the cost of centering, shuttering, finishing and reinforcement with 1:2:4 (1 cement: 2 coarse sand: 4 graded granitic or basaltic aggregate 20mm nominal size)	cu.m	6918.00
6037		Reinforced cement concrete work in well steining excluding the cost of centering, shuttering, finishing and reinforcement with 1:1½ :3 (1 cement: 1½ coarse sand: 3 graded granitic or basaltic aggregate 20mm nominal size)	cu.m	6720.00
6038		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 granitic or basaltic aggregate 20mm nominal size)	cu.m	6030.00
6039		Reinforced cement concrete work in vertical and horizontal fins individually or forming box louvers, fascias and eaves boards upto floor five level excluding the cost of centering, shuttering, finishing and reinforcement with 1:1½ :3 (1 cement: 1½ coarse sand: 3 graded stone agg 20mm nominal size)	cu.m	6993.00
6040		Reinforced cement concrete work in vertical and horizontal fins individually or forming box louvers, fascias and eaves boards upto floor five level excluding the cost of centering, shuttering, finishing and reinforcement with 1:2:4 (1 cement: 2 coarse sand: 4 graded stone agg 20mm nominal size)	cu.m	6599.00

6041		Reinforced cement concrete work(1:2:4) (1 cement: 2 coarse sand: 4 graded granitic or basaltic aggregate 20mm nominal size )in suspended floors, roofs,landings, shelves and their supports and balconies upto floor five level including finishing and plastering the ceiling with cement mortar (1:3) (1 cement: 3 fine sand) of thickness not exceeding 6mm to give a smooth and even surface but excluding the cost of centering and shuttering	cu.m	7482.00
6042		Reinforced cement concrete work (1:1½:3) (1 cement:1½ coarse sand: 3 graded granitic or basaltic aggregate 20mm nominal size)in suspended floors, roofs, landings, shelves and their supports and balconies upto floor five level including finishing and plastering the ceiling with C.M. (1:3) (1 cement: 3 fine sand) of thickness not exceeding 6mm to give a smooth and even surface but excluding the cost of centering and shuttering	cu.m	7674.00
6043		Reinforced cement concrete work 1:2:4 (1 cement: 2 coarse sand: 4 granitic or basaltic stone aggregate 20mm nominal size excluding plastering and cost of centering, shuttering & reinforcement, in sloping or battering surface (slabs, beams, louvers, etc)		
	i	Where inclination to the horizontal does not exceed 30°	cu.m	6264.00
	ii	Where inclination to the horizontal exceeds 30°	cu.m	6417.00
6044		Reinforced cement concrete work 1:1½:3 (1 cement: 1½ coarse sand: 3 granitic or basaltic stone aggregate 20mm nominal size excluding plastering and cost of centering, shuttering & reinforcement, in sloping or battering surface (slabs, beams, louvers, etc)		
	i	Where inclination to the horizontal does not exceed 30°	cu.m	6461.00
	ii	Where inclination to the horizontal exceeds 30°	cu.m	6618.00
6045		Centering & shuttering including Strutting, Propping & removal of forms for :		
	i	Foundations, Footings, Bases for columns	sq.m	394.00
	ii	Vertical surfaces such as retaining walls, return walls, Partitions, walls (any thickness) including attached Pilasters, Buttresses, Plinth and string courses, Fillets and the like	sq.m	467.00

	iii	Columns, Piers, Pillars, Aburments, Posts and struts (square rectangle polygon in plan)	sq.m	590.00
	iv	Sides and Soffits of beams, Beam Haunchings, Cantilever, Girders, Bressumers and Lintels plinth beams not exceeding 1m in depth	sq.m	410.00
	v	Sides and Soffits of beams, Beam Haunchings, Cantilever, Girders, Bressumers and Lintels plinth beams exceeding 1m in depth	sq.m	503.00
	vi	Staircases (except spiral staircases) excluding landing	sq.m	332.00
	vii	Spiral staircases including landing	sq.m	421.00
	viii	Arches, domes, vaults upto 6.00 span	sq.m	1205.00
	ix	Extra for arches, domes, shell roofs exceeding 6m. Span.	sq.m	1779.00
	x	Domes, vaults, shell roofs having curved surface in both the directions.	sq.m	2223.00
	xi	Chimneys & shafts	sq.m	467.00
	xii	Well steining	sq.m	479.00
	xiii	Suspended floors, roofs landings, shelves & their supports	sq.m	615.00
6046	xiv	Vertical or horizontal fins individually forming box louvers or projected bands	sq.m	627.00
		Centering & shuttering including Strutting, Propping & removal of forms for sloping or battering surface (slabs, beams, louvers, etc) including folded plates		
	i	Where inclination to the horizontal does not exceed 30° requiring shuttering on the underside only	sq.m	766.00
	ii	Where inclination to the horizontal exceeds 30° requiring shuttering on the underside & upperside if required (Only area of underside shall be measured for payment)	sq.m	895.00
	iii	Columns, Pillars, Posts & struts (circular or curved in plan)	sq.m	691.00
6047	iv	Cornices & Mouldings	sq.m	639.00
		Extra to be added for additional height in centering, shuttering where ever required with adequate bracing, propping etc. including cost of de- shuttering and de-centering at all levels, over a height of 3.5m, for every additional height of 1m or part thereof. (Plan area to be measured) Suspended floors, roofs, landings, beams and balconies (plan area to be measured)	sq.m	289.00

6048		Providing and laying RCC work 1:2:4 (1 cement coarse sand: 4 granitic or basaltic stone aggregate 20mm nominal size in chajjas not exceeding 15cms thickness upto 1st floor level including finishing and plastering the exposed surface with cement mortar 1:3 (1 cement: 3 fine sand) of thickness not exceeding 6mm to give an even surface throating & moulding, centering & shuttering complete but excluding cost for reinforcement	cu.m	17374.00
6049		RCC work 1:2:4 (1 cement: 2 coarse sand: 4 granitic or basaltic stone aggregate 20mm nominal size in chajjas exceeding 15cms thickness upto 1st level including finishing and plastering the exposed surface with cement mortar 1:3 (1 cement: 3 fine sand) of thickness not exceeding 6mm to give an even surface throating & moulding, centering, shuttering but excluding cost of reinforcement	Cu.m.	10623.00
6050		Providing corrosion resistant steel CRS-50 bars of (SAIL, TATA, VIZAG, JSW Steel Ltd.)(Confirming to IS 1786 of 1985) for RCC work including bending, binding & placing in position in all the floors along with factory made precast concrete cover blocks of specified sizes whose compressive strength is not less than that of surrounding concrete in the structural member.	kg	74.00
6051		Providing Mild steel reinforcement bars of (SAIL, TATA, VIZAG, JSW Steel Ltd.)(Confirming to IS 1786 of 1986) for RCC work including bending, binding & placing in position in all the floors along with the factory made precast concrete cover blocks of specified sizes whose compressive strength is not less than that of surrounding concrete in the structural member.	kg	66.00
6052		Providing TMT steel reinforcement bars of (SAIL, TATA, VIZAG, JSW Steel Ltd.)(Confirming to IS 1786 of 1986) for RCC work (conforming to I.S. 1786 of 1986) including bending, binding & placing in position in all the floors along with the factory made precast concrete cover blocks of specified sizes whose compressive strength is not less than that of surrounding concrete in the structural member.	kg	71.00

6053		Providing High yield strength steel reinforcement bar (HYSD)/TMT steel reinforcement bar from <u>secondary producers</u> (Confirming to IS 1786 of 1986) for RCC work including bending, binding & placing in position in all the floors along with the factory made precast concrete cover blocks of specified sizes whose compressive strength is not less than that of surrounding concrete in the structural member.	Kg	64.00
6054		Bending, binding & placing in position mild steel or TMT or High yield strength deformed reinforcement including cost of wire for binding but excluding cost of mild steel in R.C.C all the floors alongwith factory made precast concrete cover blocks of specified sizes whose compressive strength is not less than that of the surrounding concrete in the structural member.	Kg	10.00
6055		Extra for rendering smooth the top of the suspended floors, landing and staircase (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 cms of earth laid over 15mm layer of fine sand in case of suspended floor and bricks laid in mud mortar in landing of steps including subsequent removal and cleaning of the same	sq.m	133.00
6056		Applying cement slurry on RCC slab on cement concrete work using 2.75kgs of cement per sq.m for receiving cement concrete floor including roughening, cleaning, etc complete	sq.m	27.00
6057		Providing Pre-cast cement concrete jali 1:2:4 (1 cement: 2 coarse sand: 4 stone aggregate 6mm nominal size) reinforced with 1.6mm dia mild steel wire including centering and shuttering, roughening, cleaning, fixing and finishing in cement mortar 1:3 (1 cement: 3 fine sand) all complete excluding plastering of the jambs, sills and soffits		
	i	50mm thick	sq.m	1166.00
	ii	40mm thick	sq.m	1100.00
	iii	25mm thick	sq.m	921.00
6058		Providing and filling in position Bituminous filler of proportion 80kg of hot bitumen, 1kg of cement and 0.25 cu.m. of coarse sand for expansion joint	cm. depth/ cm. width/ 100m length	313.00

6059		Providing and fixing in position copper plate as per design for expansion joint	sq.m	487.00
6060		Smooth finishing of the exposed surface of RCC work with 6mm thick cement mortar 1:3 (1 cement: 3 fine sand)	sq.m	153.00
6061		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	cu.m per meter depth	415.00
6062		Extra for laying reinforced cement concrete in or under foul positions	cu.m	172.00
6063		Providing and fixing sheet covering over expansion joints with iron screws as per design to match the colour/shade of the wall treatment Non-Asbestos fibre cement board 6mm thick as per I.S. 14862		
	i	150mm wide	Metre	118.00
	ii	200mm wide	Metre	152.00
6064		Providing and fixing G.I. sheet of 26 S.W.G. for using in construction/Expansion joint wherever necessary as per directions of the Engineer-in-Charge.	Metre	409.00
6065		Providing and laying in position <u>machine batched concrete</u> (BMC), machine mixed and machine vibrated design mix cement concrete of specified grade for reinforced cement concrete work including pumping of concrete to the 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 the strength and durability as per the direction of the Engineer-in-charge. M25 grade of reinforced cement concrete by using 410kg of cement per cu.m. of concrete. All works upto floor V level.	cu.m	7412.00
6066		Deduct for providing leaner mixes respectively at all floor levels		
	i	Providing M-15 grade concrete by using 325kgs of cement per cu.m of concrete instead of M-25 grade of <u>B.M.C.</u>	cu.m	566.00

	ii	Providing M-20 grade concrete by using 400kgs of cement per cu.m of concrete instead of M-25 grade of B.M.C.	cu.m	73.00
6067		Add for providing richer or leaner mixes respectively at all floor levels		
	i	Providing M-30 grade concrete by using 420kgs of cement per cu.m. of concrete instead of M-25 grade of B.M.C.	cu.m	73.00
	ii	Providing M-35 grade concrete by using 428kgs of cement per cu.m. of concrete instead of M-25 grade of B.M.C.	cu.m	129.00
	iii	Providing M-40 grade concrete by using 435kgs of cement per cu.m. of concrete instead of M-25 grade of B.M.C.	cu.m	182.00
6068		Deduct for using less cement than the quality as provided in the item of batch mix concrete as arrived as per the mix design	Tones	647.00
6069	a	Providing and laying in position <u>ready mixed concrete</u> (RMC) with usage of <b>Ordinary Portland Cement</b> manufactured in fully automatic batching plant and transported to site of work in transit mixer for a lead upto 10kms having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work including pumping of <u>R.M.C.</u> , from the transit mixer to the site of laying, excluding the cost of centering, shuttering, finishing and reinforcement including the 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 the directions of the engineer-in-charge. All works upto floor V level		
	i	M-10 grade of concrete	cu.m	6368.00
	ii	M-15 grade of concrete	cu.m	6644.00
	iii	M-20 grade of concrete	cu.m	6919.00
	iv	M-25 grade of concrete	cu.m	7150.00
	v	M-30grade of concrete	cu.m	7333.00
	vi	M-35 grade of concrete	cu.m	7656.00
	vii	M-40 grade of concrete	cu.m	7931.00



6069	b	Providing and laying in position <u>ready mixed concrete</u> (RMC) with usage of <b>Fly Ash</b> as per IS 3812 and IS 456-2000 manufactured in fully automatic batching plant and transported to site of work in transit mixer for a lead upto 10kms having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work including pumping of <u>R.M.C.</u> , from the transit mixer to the site of laying, excluding the cost of centering, shuttering, finishing and reinforcement including the 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 the directions of the engineer-in-charge. All works upto floor V level		
	i	M-10 grade of concrete	cu.m	6276.00
	ii	M-15 grade of concrete	cu.m	6551.00
	iii	M-20 grade of concrete	cu.m	6827.00
	iv	M-25 grade of concrete	cu.m	7057.00
	v	M-30grade of concrete	cu.m	7242.00
	vi	M-35 grade of concrete	cu.m	7563.00
	vii	M-40 grade of concrete	cu.m	7840.00
6069	c	Providing and laying in position <u>ready mixed concrete</u> (RMC) with usage of Ground Granulated Blast Furnace Slag ( <b>GGBS</b> ) as per IS 12089 and IS456-2000 manufactured in fully automatic batching plant and transported to site of work in transit mixer for a lead upto 10kms having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work including pumping of <u>R.M.C.</u> , from the transit mixer to the site of laying, excluding the cost of centering, shuttering, finishing and reinforcement including the 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 the directions of the engineer-in-charge. All works upto floor V level		
	i	M-10 grade of concrete	cu.m	6079.00
	ii	M-15 grade of concrete	cu.m	6413.00
	iii	M-20 grade of concrete	cu.m	6689.00
	iv	M-25 grade of concrete	cu.m	6927.00
	v	M-30grade of concrete	cu.m	7104.00

	vi	M-35 grade of concrete	cu.m	7425.00
	vii	M-40 grade of concrete	cu.m	7701.00
6069	d	Providing and laying in position <u>ready mixed concrete</u> (RMC) <b>High Performance Concrete</b> per MORTH clause 1715 manufactured in fully automatic batching plant and transported to site of work in transit mixer for a lead upto 10kms having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work including pumping of <u>R.M.C.</u> , from the transit mixer to the site of laying, excluding the cost of centering, shuttering, finishing and reinforcement including the 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 the directions of the engineer-in-charge. All works upto floor V level		
	i	M-10 grade of concrete	cu.m	6736.00
	ii	M-15 grade of concrete	cu.m	7012.00
	iii	M-20 grade of concrete	cu.m	7287.00
	iv	M-25 grade of concrete	cu.m	7518.00
	v	M-30grade of concrete	cu.m	7701.00
	vi	M-35 grade of concrete	cu.m	8024.00
	vii	M-40 grade of concrete	cu.m	8299.00
6070		Extra for RCC with B.M.C/R.M.C work (with pump) above floor five level for each four floors or part thereof	cu.m	235.00
6071		Extra for carriage of R.M.C. beyond the initial lead of 10 kms.	cu.m./km	47.00
6072		Providing & applying Rustonil (P.no.569) or equivalent for removing rust & phosphating of steel structures or steel reinforcement in RCC to be applied in 1 coat ( it necessary then 2nd coat) before application of bonding agent.	sq.m	300.00
6073		Extra for reinforced concrete work in super structure above floor five level for every four floors or part there of.	cu.m	572.00
6074		Extra for shuttering in circular work	sq.m	20%

6075		Providing and fixing precast reinforced concrete door frames of ASTRA make or equivalent in M25 grade concrete and reinforced with minimum three bars of 6 mm dia and confirming to IS:6523. The frames shall be manufactured in approved factory with all the necessary arrangements for fixing hinges, tower bolts by way of inserted PVC blocks and holes for receiving sliding bolts as specified. Sectional size of frame with single rebate : 60X 100 mm		
	i	2100 X 750 mm	Metre	277.00
	ii	2100 X 900 mm	Metre	276.00
	iii	2100 X 1000 mm	Metre	275.00
	iv	2050 X 750 mm	Metre	278.00
	v	2050 X 900 mm	Metre	277.00
	vi	2050 X 1000 mm	Metre	276.00
6076		Providing and laying reinforced cement concrete of grade M-25 (Mix design) with coarse sand & graded granatic or basaltic stone Aggregate 20 mm nominal size as per mix design requirment excluding plastering & cost of centering/shuttering & reinforcement. including admixtures in recommended proportions as per IS 9103 to accelerate, retard setting of concrete, improve workability without impairing the strength and durability as per the direction of the Engineer in charge. M-25 grade of reinforced cement concrete by using 410 kg of cement per cu.m of concrete. All works upto floor five level.	cu.m	7037.00
6077		Providing Concrete additive to enhance strength and durability of concrete by mixing in to concrete with ultra-fine additive such as Alccofine 1203 manufactured by <i>M/s. Counto Microfine Products Pvt Ltd. or Equivalent</i> Goa or equivalent to improve the properties of concrete such as strength and durability. Ultra-fine additive shall have the Particle Size Distribution of d90 <9microns and d50 <5microns. Such material shall comply to IS 1727 for cement reactivity test and ASTM C1240 for accelerated pozzolanic activity test. Addition rate shall be 25 kg per cubic meter for all grades of concrete.	Kg/Cu.m	675.00
6078		Providing & Applying Curing Compound AC-CURE-R (Resin based curing compound) or equivalent @ 1.82 KG per 10 Sq.m on concrete surface conforming to ASTM: C- 309,BS:7542,BS: 8110 Part 1 complete and as per the direction of	Kg.	92.00

		Engineer in-Charge.		
6079		Providing Fusion Bonded Epoxy Coated TMT steel reinforcement bars Fe-500 Grade (Confirming to IS 1786:2008 & IS 13620:1993) for RCC work including bending, binding & placing in position at all the floors along with the factory made precast concrete cover blocks of specified sizes whose compressive strength is not less than that of surrounding concrete in the structural member.	kg	86.00

CHAPTER X				
WOOD WORK				
Sr. No		Description	Unit	Rate
7001		Providing woodwork in frames of doors, windows, clerestory windows trusses & other frames wrought framed and fixed in position.		
	a	First class Indian teak wood	cu.m	171597.00
	b	Second class Indian teak wood	cu.m	165175.00
	c	First class matti wood	cu.m	117532.00
	d	Second class matti wood	cu.m	117532.00
7002		Providing wood work in frames of false ceiling, partitions etc., sawn and put up in position.		
	a	Second class matti wood	cu.m	113778.00
7003		Providing and fixing woodwork wrought, framed and fixed in position in purlins common rafters, bressumers, wall plates joists and the like in roof work.		
	a	Second class Indian teak wood	cu.m	152923.00
	b	First class matti wood	cu.m	109424.00
	c	Second class matti wood	cu.m	109396.00
7004		Providing & fixing 20 mm caves barge boards 1 <sup>st</sup> class matti wood	sq.m	3289.00
7005		Providing & fixing 20 mm caves barge boards 2 <sup>nd</sup> class matti wood	sq.m	3301.00
7006		Providing and fixing 50 mm thick panelled glazed or panelled and glazed shutters for doors, windows and clerestory window including anodized aluminium butt hinges with necessary screws:		
	a	First class Indian teak wood	sq.m	8891.00
	b	Second class Indian teak wood	sq.m	7510.00
7007		Providing and fixing 44 mm. thick panelled, glazed or panelled and glazed shutters for doors, windows and clerestory windows including anodized aluminium butt hinges with necessary screws.		
	a	Second class Indian teak wood	sq.m	6694.00
7008		Providing and fixing 38 mm thick panelled glazed or panelled and glazed shutters for doors, windows and clerestory window including anodized aluminium butt hinges with necessary screws:		

	a	Second class Indian teak wood	sq.m	6224.00
7009		Providing and fixing 38 mm thick panelled glazed or panelled and glazed shutters for doors, windows and clerestory window including black enamelled iron butt hinges with necessary screws:		
	a	Second class Indian teak wood	sq.m	6200.00
	b	Nano or equivalent	sq.m	4388.00
7010		Providing and fixing 35 mm thick panelled glazed or panelled and glazed shutters for doors, windows and clerestory window including anodized aluminium butt hinges with necessary screws:		
	a	First class Indian teak wood	sq.m	7067.00
	b	Second class Indian teak wood	sq.m	5892.00
7011		Providing and fixing 35 mm thick panelled glazed or panelled and glazed shutters for doors, windows and clerestory window including black enameled iron butt hinges with necessary screws:		
	a	Second class Indian teak wood	sq.m	5862.00
	b	Nano or equivalent	sq.m	4160.00
7012		Deduct if 38 mm or 35 mm thick fixed shutters (without hinges are provided instead of openable shutters for doors, windows or clerestory windows with:		
	a	Anodised aluminium butt hinges with necessary screws :		
		For second class teak wood and other inferior class of wood shutters.	sq.m	183.00
	b	Black enamelled iron hinges with necessary screws	sq.m	145.00
7013		Providing and fixing 25 mm thick panelled and glazed shutters for cupboards etc. in 2 nd class indian teak wood including anodised butt hinges with necessary screws.	sq.m	4777.00
7014		Providing and fixing 25 mm thick panelled glazed or panelled and glazed shutters for cupboards etc. including black enamelled iron hinges with necessary screws.		
	a	Second class Indian teak wood	sq.m	4722.00
	b	Nano or equivalent	sq.m	3592.00
7015		Extra for superior type of glass panes used instead of ordinary glass panes in glazed or panelled and glazed doors, windows, clerestory windows (total area of shutters to be measured).	sq.m	12.00

7016		Providing & fixing flush door shutters decoration type core of block board construction with frame of first class hard wood and well matched first class Indian teak ply veneering with vertical grains and cross bands and face veneers on both faces of shutters.		
	a	40 mm thick including anodized aluminium butt hinges with necessary screws:	sq.m	3479.00
	b	35mm thick including anodized aluminium butt hinges with necessary screws:	sq.m	3212.00
	c	30 mm thick including anodized aluminium butt hinges with necessary screws:	sq.m	2841.00
	d	25 mm thick (for cupboard) including nickle plated bright finished M.S. piano hinges with necessary screws.	sq.m	3822.00
7017		Providing and fixing flush doors shutters commercial type, core of block board construction with frame of first class hard wood and well matched commercial ply veneering and vertical grains or cross bands and face veneers on the both other faces of shutters.		
	a	40 mm thick including anodized aluminium butt hinges with necessary screws:	sq.m	2401.00
	b	35mm thick including anodized aluminium butt hinges with necessary screws:	sq.m	2133.00
	c	30 mm thick including anodized aluminium butt hinges with necessary screws:	sq.m	1769.00
	d	25 mm thick (for cupboard) including nickle plated bright finished M.S. piano hinges with necessary screws.	sq.m	2463.00
7018		Providing and fixing flush door shutters, core of block board construction with frame of first class hard wood and well matched first class Indian teak ply veneering with vertical grains or cross band and face veneers on one face and commercial ply venerring with vertical grains or cross bands and face veneer on other face of shutters.		
	a	40 mm thick including anodized aluminium butt hinges with necessary screws:	sq.m	2936.00
	b	35mm thick including anodized aluminium butt hinges with necessary screws:	sq.m	2668.00

	c	30 mm thick including anodized aluminium butt hinges with necessary screws:	sq.m	2315.00
	d	25 mm thick (for cupboard) including nickle plated bright finished M.S. piano hinges with necessary screws.	sq.m	3105.00
7019		Providing and fixing flush door shutters decorative type core of particle board (medium density) construction with frame of first class hard wood and well matched teak ply veneering with vertical grains or cross bands and face veneer on both faces of shutters.		
	a	25 thick (for cupboard) including nickle plated bright finished M.S. piano hinges with necessary screws.	sq.m	2463.00
7020		Providing and fixing flush doors shutters commercial type, core of block board construction with frame of first class hard wood and well matched commercial ply veneering and vertical grains or cross bands and face veneers on the both faces of shutters.		
	a	40 mm thick including anodized aluminium butt hinges with necessary screws:	sq.m	3150.00
	b	35mm thick including anodized aluminium butt hinges with necessary screws:	sq.m	2958.00
	c	30 mm thick including anodized aluminium butt hinges with necessary screws:	sq.m	2729.00
	d	25 mm thick (for cupboard including nickle plated bright finished M.S. piano hinges with necessary screws.	sq.m	2902.00
7021		Providing and fixing flush door shutter core of particle board (medium density) construction with frame of first class hard wood and well matched first class Indian teak ply veneering with vertical grains or cross band and face veneer on one face & commercial ply veneering with vertical grain		
	a	40 mm thick including anodized aluminium butt hinges with necessary screws:	sq.m	2214.00
	b	35mm thick including anodized aluminium butt hinges with necessary screws:	sq.m	2030.00
	c	30 mm thick including anodized aluminium butt hinges with necessary screws:	sq.m	1804.00



	d	25 mm thick (for cupboard) including nickle plated bright finished M.S. piano hinges with necessary screws.	sq.m	1975.00
7022		Providing and fixing flush door decorative type cellular core construction with frame of first class hard wood and well matched first class Indian teak ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.		
	a	40 mm thick including anodized aluminium butt hinges with necessary screws:	sq.m	2687.00
	b	35mm thick including anodized aluminium butt hinges with necessary screws:	sq.m	2493.00
	c	30 mm thick including anodized aluminium butt hinges with necessary screws:	sq.m	2268.00
	d	25 mm thick (for cupboard) including nickle plated bright finished M.S. piano hinges with necessary screws.	sq.m	2439.00
7023		Providing and fixing flush doors shutters commercial type, cellular core construction with frame of first class hard wood and well matched commercial play veneering and vertical grains or cross bands and face veneers on the both other faces of shutters.		
	a	40 mm thick including anodized aluminium butt hinges with necessary screws:	sq.m	3182.00
	b	35mm thick including anodized aluminium butt hinges with necessary screws:	sq.m	2990.00
	c	30 mm thick including anodized aluminium butt hinges with necessary screws:	sq.m	2794.00
	d	25 mm thick (for cupboard) including nickle plated bright finished M.S. piano hinges with necessary screws.	sq.m	2935.00
7024		Providing and fixing flush door shutters of cellular core construction with frame of first class hardwood and well matched first class Indian teak ply veneering with vertical grains or cross band and face cover on one face and commercial ply veneering with vertical grain or cross band and face veneer an other face of shutter.		
	a	40 mm thick including anodized aluminium butt hinges with necessary screws:	sq.m	1948.00

	b	35mm thick including anodized aluminium butt hinges with necessary screws:	sq.m	1459.00
	c	30 mm thick including anodized aluminium butt hinges with necessary screws:	sq.m	1868.00
	d	25 mm thick (for cupboard) including nickle plated bright finished M.S. piano hinges with necessary screws.	sq.m	2007.00
7025		Providing & fixing flush door shutters of solid core construction with plywood panel fixed on either side of the shutters alongwith polymer sheet overlaid on the exterior surface (wooden or equivalent ) as per manufacturers specifications with second class Indian teak wood lipping (not less than 6 mm thick) all round 30 mm thick shutter with bright finished brass hinges 100 x 70 x 4 mm with brass screws.	sq.m	1827.00
7026		Providing and fixing factory made panel doors made of kiln seasoned and preservative treated hardwood & rails vertical stiles & top rail of 100 mm width, bottom rails and lock rail of 175 mm, width & panels made of 12 mm thick both sides commercial, veneered teakwood particle board blended with formal dehyde phenol synthetic resin adhesive conforming to I.S. 3097 of 1965		
	a	40 mm thickness with anodised aluminium hinges (100 x 75 x 4mm) with C.P. brass screws.	sq.m	2370.00
	b	35 mm thickness with anodised aluminium hinges (100 x 75 x 4mm) with C.P. brass screws.	sq.m	2184.00
	c	30 mm thickness with anodised aluminium hinges (100 x 75 x 4mm) with C.P. brass screws.	sq.m	1940.00
7027		Extra for providing vision panel not exceeding 0.1 sq.m. in all types of flush doors (cost of glass excluded).		
	a	Rectangular or square Unit: SQ.M. door area	sq.m	70.00
	b	Circular : Unit : SQ.M.door area	sq.m	73.00
7028		Extra if louvers not exceeding 0.2 sq.m. are provided in flush door shutters.		
	a	Decorative type door. Unit: SQ.M. door area.	sq.m	56.00
	b	Commercial type door : Unit: SQ.M. door area	sq.m	38.00
7029		Extra for cutting rebate in flush door shutter (total area of the door to be measured)	sq.m	42.00

7030		Providing and fixing 38 mm thick battened and framed door shutters including bright finished or and black enamelled iron hinges with necessary screws.		
	a	Second class Indian teak wood	sq.m	5650.00
	b	Nano or equivalent	sq.m	4061.00
7031		Providing and fixing 19 mmthick battened door and window shutters with necessary ledges and braces (25 mm) including bright finished or and black enamelled iron hinges with necessary screws.		
	a	Second class Indian teak wood	sq.m	5624.00
	b	Nano or equivalent	sq.m	3278.00
7033		Providing and fixing 38 mm thick wire gauze shutters, using galvanized m.s. wire gauze of i.s. gauze designation 85 g with wire of dia 0.71mm for doors, windows and clerestory windows including M.S oxidized butt hinges and necessary with necessary screws.		
	a	Second class Indian teak wood	sq.m	4751.00
7034		Providing and fixing 30 mm thick wire gauze shutters, using galvanized m.s. wire gauze of i.s. gauze designation 85 g with wire of dia 56 mm for doors, windows and clerestory windows including anodized aluminium butt hinges and necessary with necessary screws.		
	a	Second class Indian teak wood	sq.m	4613.00
7035		Providing and fixing 30 mm thick wire gauze shutters, using galvanized m.s. wire gauze of i.s. gauze designation 85 g with wire of dia 0.56 mm for doors, windows and clerestory windows including bright finished or/and black enamelled iron hinges with necessary screws.		
	a	Second class Indian teak wood	sq.m	3714.00
7036		Providing and fixing 38 mm thick louvered shutters with fixed or movable venetians 12 mm thick for windows including bright finished or and black enamelled, iron hinges with necessary screws.		
	a	Second class Indian teak wood	sq.m	5755.00
7037		Providing and fixing louvers 50 mm wide in grooves in clerestory window frames excluding the cost of frames.		
	a	Second class Indian teak wood 12 mm thick	sq.m	2735.00
	b	Glass sheets 3 mm thick	sq.m	761.00

	c	Frosted glass sheets 3mm thick	sq.m	1308.00
7038		Providing and fixing plain jaffri of 38 mm x 12 mm laths placed 38 mm apart (frame to be paid separately) including fixing 50 mm x 12 mm beading complete with.	.	
	a	Nano or equivalent	sq.m	2390.00
	b	Second class Indian teak wood	sq.m	3023.00
7039		Providing & fixing half split coconut wood rafters purlins, ridges, bressumers, wall plates and like in the roof work including splitting chipping planing, chiselling etc. complete;	Metre	150.00
7040		Providing & fixing 1/3 <sup>rd</sup> split (one third) coconut wood rafters, purlins, bressumers and like in the roof work including splitting, chipping, planing, chiselling etc. complete.	Metre	122.00
7041		Providing and fixing compound gates as per standard design including M.S. straps, clamps pintals sets with pin clamps fixed in cement concrete blocks 50 x 30 x 20 cm of 1:3:6 mix aggregate 20 mm nominal size complete with		
	a	Second class Indian teak wood	sq.m	6304.00
	b	Nano or equivalent	sq.m	4593.00
7042		Providing 2 <sup>nd</sup> class 50 x 50 x 50 mm Indian teak wood plugs including cutting brickwork and fixing in cement mortar 1:3 (1 cement: 3 fine sand)	Each	30.00
7043		Providing and fixing 4 mm thick plywood plain lining with necessary screws, priming coat on unexposed surface etc. complete with		
	a	Marine ply facing of approved manufacture	sq.m	1330.00
	b	Commercial ply facing of approved manufacture	sq.m	1200.00
7044		Providing and fixing first class Indian teak wood moulded beading to door and window frames with iron screws, plugs and priming coat on unexposed surfaces etc.		
	a	50 x 12 mm	Metre	193.00
7045		Providing & fixing 12 mm thick & 100 mm wide pelmet with 25 mm diameter, wooden curtain rod and bracket including fixing within 25 x 3 mm flat 10 cm long and plugs etc. complete.		
	a	First class Indian teak wood	Metre	823.00
	b	Second class Indian teak wood	Metre	520.00

7046		Providing and fixing curtain rods of 1.25 mm thick anodized aluminium plates brackets in pelment instead of wooden curtain rods of 25 mm diameter and brackets (actual length of rods to be measured).		
	a	12 mm dia.	Metre	506.00
7047		Providing and fixing in partition 4 mm thick with Marine plywood of approved quality including fixing in frames with brass screws etc. complete with 50 x 12 mm First class Indian teak wood beading (frame to be paid separately).	sq.m	1196.00
7048		Providing and fixing plain asbestos cement sheet 4 mm thick in partition including fixing to frames with brass screws etc. complete with 50 x 12 nano wood beading (frames to be paid separately).	sq.m	545.00
7049		Providing and fixing in partition 4 mm thick Commercial plywood of approved quality including fixing in frames with brass screws etc. complete with 50 x 12 mm second class Indian teak wood beading (frame to be paid separately).	sq.m	697.00
7050		Providing flat iron hold fast 40 cm including fixing to frame with 10 mm dia bolts, nuts and wooden plugs and embedded in cement concrete block 30 x 10 x 15 cm 1:3:6 mix (1 cement: 3 coarse sand: 6 stone aggregate 20 mm nominal size).		
	a	40 x 3 mm flat iron hold fast 40 cm long	Each	120.00
	b	40 x 3 mm flat iron hold fast, 15 cm long	Each	87.00
7051		25 mm thick wooden shelves supported on 40 x 40 x 6 mm T or L iron brackets fixed at suitable distances but not exceeding 7 cm apart in 7.5 x 7.5 x 15 cm blocks of cement concrete mix 1 : 3 : 6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm.nominal size) with		
	a	Second class Indian teak wood	sq.m	5083.00
	b	Nano or equivalent	sq.m	3792.00
7052		Providing and fixing M.S. round or square bars at required spacing in wooden frames of windows and clerestory windows.	kg	81.00
7053		Providing and fixing M.S. round or square bars with M.S. flats at required spacings in wooden frames of windows & clerestory windows.	kg	78.00

7054		Providing and fixing M.S. grill of required pattern in wooden frames of Windows etc. with M.S. flats square or round bars with round headed bolts and nuts or by by screws.		
	a	Plain grill	kg	109.00
	b	Ornamental grill	kg	148.00
7055		Providing and fixing expanded metal 20 x 60 mm strands 3.25 mm wide & 1.6 mm thick for windows etc. including 62 x 19 mm beading of second class Indian Teak Wood.	sq.m	1035.00
7056		Providing and fixing fly proof galvanized M.S. wire gauge of I.S. gauge designation 140 g. with wire of dia. 0.56 mm to windows and clerestory windows including 62 x 19 mm beading of second class Indian wood .	sq.m	1198.00
7057		Providing beams including hoisting fixing in position & applying wood preservative for unexposed surfaces etc. complete with.		
	a	First class matti wood	cu.m	112366.00
7058		Providing joist (karries) including hoisting, fixing in position and applying wood preservative on unexposed surface etc. complete with.		
	b	First class matti wood	cu.m	108248.00
7059		Providing and fixing jungle wood ballies in posts, purlins rafters posts plates etc. including cast iron nails & spikes required and applying wood preservative on all exposed surfaces.		
	a	80 mm dia	Metre	78.00
	b	100 mm dia.	Metre	91.00
	c	125 mm dia.	Metre	119.00
	d	150 mm dia.	Metre	139.00
7060		Providing and fixing jungle wood ballies in trusses including cost of iron nails and spikes required and applying wood preservative on all exposed surfaces.		
	a	80 mm dia	Metre	118.00
	b	100 mm dia.	Metre	125.00
	c	125 mm dia.	Metre	146.00
	d	150 mm dia.	Metre	159.00
7061		Providing and fixing bright finished brass butt hinges with necessary screws etc complete		
	a	125 x 70 x 4 mm (ordinary type)	Each	48.00
	b	100 x 70 x 4 mm (ordinary type)	Each	38.00

	c	75 x 40 x 2.5mm (ordinary type)	Each	29.00
	d	50 x 40 x 2.5mm (ordinary type)	Each	20.00
7062		Providing and fixing bright finished brass parliamentary hinges with necessary screws etc complete		
	a	100 x 125 x 27 mm x 5 mm	Each	80.00
	b	75 x 100 x 20 x 3.2 mm	Each	72.00
7063		Providing and fixing bright finished brass single acting spring hinges with necessary screws etc complete		
	a	150 mm	Each	1094.00
	b	125 mm	Each	859.00
	c	100 mm	Each	742.00
7064		Providing and fixing bright finished brass double acting spring hinges with necessary screws etc complete		
	a	150 mm	Each	1328.00
	b	125 mm	Each	1035.00
	c	100 mm	Each	859.00
7065		Providing and fixing bright finished brass rising hinges with necessary screws etc complete (left or right)		
	a	150 mm	Each	389.00
	b	125 mm	Each	286.00
	c	100 mm	Each	228.00
7066		Providing and fixing bright finished brass sliding door bolts with nuts and screws etc complete		
	a	300 x 16 mm	Each	1023.00
	b	250 x 16 mm	Each	964.00
7067		Providing and fixing bright finished brass tower bolts (barrel type) with screws etc. complete		
	a	250 x 10 mm	Each	541.00
	b	200 x 10 mm	Each	434.00
	c	150 x 10 mm	Each	291.00
	d	100 x 10 mm	Each	199.00
7068		Providing and fixing bright finished brass flush bolts with necessary screws etc complete		
	a	250 mm	Each	427.00
	b	150 mm	Each	261.00
	c	100 mm	Each	155.00

7069		Providing and fixing bright finished brass handles with necessary screws etc complete		
	a	125 mm	Each	107.00
	b	100 mm	Each	96.00
7070		Providing and fixing bright finished brass door latch with necessary screws etc complete		
	a	300x 16 x 5 mm	Each	319.00
	b	250 x 16 x 5 mm	Each	272.00
7071		Providing & fixing bright finished brass 100 mm. mortice latch & lock & a pair of levers, handles with necessary screws etc. complete (Indian make of approved quality).	Each	2258.00
7072		Providing & fixing bright finished brass 100 mm. rim latch & lock & a pair of knob, with necessary screws etc. complete (Indian make of approved quality).	Each	1906.00
7073		Providing and fixing 50-mm. bright finished brass cupboard or wardrobe knob.	Each	291.00
7074		Providing and fixing 150 mm. bright finished brass floor door stopper with rubber cushion screws etc. to suit shutter thickness complete.	Each	246.00
7075		Providing and fixing bright finished brass hard drawn hooks and eyes.		
	a	300 mm	Each	56.00
	b	250 mm	Each	47.00
	c	200 mm	Each	42.00
	d	150 mm	Each	37.00
	e	100 mm	Each	32.00
7076		Providing and fixing bright finished brass quadrant stays with necessary screws etc. complete	Each	80.00
7077		Providing and fixing bright finished brass fan light catch with necessary screw etc. complete	Each	48.00
7078		Providing and fixing bright finished brass ball catcher 10 mm dia.	Each	41.00
7079		Providing and fixing 300 mm long bright finished brass chain with hooks for fan light including necessary screws etc.complete.	Each	24.00



7080		Providing and fixing bright finished brass hasp and staples (safety type) with necessary screws etc. complete.		
	a	150 mm	Each	84.00
	b	115 mm	Each	59.00
	c	90 mm	Each	54.00
7081		Providing and fixing 65 x 35 mm. special quality bright finished brass cupboard locks with six levers of reputed firms such as Godrej or equivalent including necessary screws etc. complete.	Each	399.00
7082		Providing and fixing bright finished brass helical door spring superior quality.	Each	737.00
7083		Providing and fixing brass hydraulic door closer of make Everest universal 68 or equivalent with necessary screws and fittings complete.	Each	1459.00
7084		Providing and fixing chromium plated brass butt hinges with necessary screws etc. complete		
	a	125 x 70 x 4.0mm (ordinary type)	Each	161.00
	b	75 x 40 x 2.5 mm (ordinary type)	Each	113.00
	c	50 x 40 x 2.5 mm (ordinary type)	Each	80.00
7085		Providing and fixing chromium plated brass parliamentary hinges with necessary screws etc. complete		
	a	100 x 125 x 27 x 5 mm	Each	352.00
	b	75 x 100 x 20 x 3.2 mm	Each	213.00
7086		Providing and fixing chromium plated brass single action spring hinges with necessary screws etc. complete		
	a	150 mm.	Each	435.00
	b	125mm	Each	314.00
	c	100 mm	Each	287.00
7087		Providing and fixing chromium plated brass double acting spring hinges with necessary screws etc. complete.		
	a	150 mm	Each	415.00
	b	125mm	Each	314.00
	c	100mm	Each	275.00
7088		Providing and fixing chromium plated brass rising hinges with necessary screws etc. complete. (right or left)		
	a	150 mm	Each	415.00

	b	125 mm	Each	334.00
	c	100 mm	Each	287.00
7089		Providing and fixing chromium plated brass sliding door bolt with bolts, nuts and screws etc. complete.		
	a	300 x 16 mm	Each	315.00
	b	250 x 16 mm	Each	287.00
7090		Providing and fixing chromium plated brass tower (barrel type) with necessary screws etc. complete		
	a	300 x 16 x 5 mm	Each	647.00
	b	250 x 16 x 5 mm	Each	545.00
7091		Providing & fixing chromium plated brass tower bolts (barrel type) with necessary screws complete.		
	a	250 x 10 mm	Each	337.00
	b	200 x 10 mm	Each	274.00
	c	150 x 10 mm	Each	204.00
	d	100 x 10 mm	Each	169.00
7092		Providing and fixing chromium plated brass flush bolts with necessary screws etc. complete		
	a	250 mm	Each	218.00
	b	150 mm	Each	176.00
	c	100 mm	Each	118.00
7093		Providing and fixing chromium plated brass handle with necessary screws etc. complete		
	a	125 mm	Each	131.00
	b	100 mm	Each	107.00
	c	75 mm	Each	93.00
7094		Provided and fixing chromium plated brass 100 mm. mortice latch and a pair of levers and handles with necessary screws etc. complete (Indian make of approved quality).	Each	701.00
7095		Provided and fixing chromium plated brass 100-mm. rim latch and lock and a pair of knobs with necessary screws etc. complete (Indian make of approved quality).	Each	655.00
7096		Providing and fixing chromium plated brass 50 mm cupboard or wardrobes knobs with nuts complete	Each	32.00

7097		Provided and fixing 150 mm chromium plated brass floor door stopper with rubber cushion screws etc. to suit shutters thickness complete.	Each	309.00
7098		Providing and fixing chromium plated brass hard drawn hooks and eyes	Each	
	a	300 mm. Unit: per hook and eye	Each	37.00
	b	250 mm. Unit: per hook and eye	Each	32.00
	c	200 mm. Unit: per hook and eye	Each	31.00
	d	150 mm. Unit: per hook and eye	Each	26.00
	e	100 mm. Unit: per hook	Each	22.00
7099		Providing and fixing chromium plated brass hasp and staple (safety type) with necessary screws etc. complete		
	a	150 mm	Each	49.00
	b	115 mm	Each	35.00
7100		Providing and fixing 65 x 35 mm special quality chromium plated brass cupboards lock with six levers including necessary screws etc. complete.	Each	231.00
7101		Providing and fixing M.S. pressed butt hinges bright finished with necessary screws etc. complete.		
	a	125 x 65x 2.12mm	Each	63.00
	b	100 x 50 x 1.90 mm	Each	52.00
	c	75 x 47 x 1.70 mm	Each	37.00
	d	50 x 37 x 1.50 mm	Each	22.00
7102		Providing and fixing M.S. pressed parliamentary hinges with necessary screws etc. complete.		
	a	150 x 125 x27x2.80 mm	Each	88.00
	b	125x125x27x1.80 mm	Each	74.00
	c	100x125x27x1.80 mm	Each	53.00
	d	75 x 100x20x2.24 mm	Each	43.00
7103		Providing and fixing M.S. single acting spring hinges bright finished with necessary screws etc. complete.	Each	
	a	150 mm	Each	336.00
	b	125 mm	Each	282.00
	c	100 mm	Each	255.00
7104		Providing and fixing M.S. double acting spring hinges bright finished with necessary screws etc. complete.		
	a	150 mm	Each	473.00

	b	125 mm	Each	380.00
	c	100 mm	Each	329.00
7105		Providing 1mm thick M.S. piano hinges finished with brass plating flange being 35 mm wide & fixing with necessary screws.	Each	371.00
7106		Providing 1mm thick M.S. piano hinges finished with nickle plating, flange being 35 mm wide & fixing with necessary screws.	Each	434.00
7107		Providing and fixing M.S. Tee hinges bright finished or and black enamelled, with necessary screws etc. complete		
	a	300 x 115 x 2.24 mm	Each	37.00
	b	250 x 100 x 2.24 mm	Each	38.00
7108		Providing & fixing ms. Sliding door bolts bright finished or and black enamelled with nuts and screws etc. complete		
	a	300 x 16 mm	Each	273.00
	b	250 x 16 mm	Each	219.00
7109		Providing and fixing M.S. door latch with screws etc. complete		
	a	300 x 20 x 6 mm	Each	165.00
	b	250 x 20 x 6 mm	Each	171.00
7110		Providing and fixing M.S. tower bolts (barrel type) with necessary screws etc. complete		
	a	250 x 10 mm	Each	116.00
	b	200 x 10 mm	Each	104.00
	c	150 x 10 mm	Each	53.00
	d	100 x 10 mm	Each	43.00
7111		Providing and fixing M.S. handles with necessary screws etc. complete.		
	a	125 mm	Each	107.00
	b	100 mm	Each	85.00
	c	75 mm	Each	65.00
7112		Providing and fixing M.S. hooks and eyes		
	a	300 mm	Each	14.00
	b	250 mm	Each	12.00
	c	200 mm	Each	10.00
	d	150 mm	Each	9.00
7113		Providing and fixing M.S. fan light pivots with necessary screws etc. complete	Each	35.00

7114		Providing and fixing 300 mm long M.S. chain with hook for fan light including necessary screws etc. complete.	Each	49.00
7115		Providing and fixing M.S. safety hasp and staple with necessary screws etc. complete		
	a	150 mm	Each	28.00
	b	115 mm	Each	25.00
	c	90 mm	Each	24.00
7116		Providing and fixing bright finished or and black enamelled iron helical door spring	Each	286.00
7117		Providing and fixing oxidised M.S. pressed butt hinges bright finished with necessary screws etc. complete.		
	a	125 x 65 x 2.12 mm	Each	72.00
	b	100 x 50 x 1.90 mm	Each	61.00
	c	75x47x1.70mm	Each	45.00
	d	50x3x1.50 mm	Each	29.00
7118		Providing and fixing oxidised M.S. pressed parliamentary hinges with necessary screws etc. complete.		
	a	150x125x27x2.80mm	Each	97.00
	b	125x125x27x2.80mm	Each	82.00
	c	100x125x27x2.80mm	Each	62.00
	d	75x100x20x2.24mm	Each	50.00
7119		Providing and fixing oxidised M.S. single acting spring hinges bright finished with necessary screws etc. complete.		
	a	150 mm	Each	340.00
	b	125 mm	Each	289.00
	c	100 mm	Each	259.00
7120		Providing and fixing oxidised M.S. double acting spring hinges bright finished with necessary screws etc. complete.		
	a	150 mm	Each	96.00
	b	125 mm	Each	84.00
	c	100 mm	Each	78.00
7121		Providing 1 mm thick oxidised MS piano hinges finished with brass plating flange being 35 mm wide and fixing with necessary screws.	Each	449.00
7122		Providing 1 mm thick oxidised MS piano hinges finished with nickle plating flange being 35 mm wide and with necessary screws.	Each	511.00

7123		Providing and fixing oxidised MS tee hinges bright finished or and black enamelled with necessary screws etc. complete.		
	a	300x115x2.24mm	Each	58.00
	b	250x100x2.24 mm	Each	53.00
7124		Providing and fixing oxidised M.S. sliding door bolts with nuts and screws etc. complete		
	a	300 x 16 mm	Each	78.00
	b	250 x 16mm	Each	64.00
7125		Providing and fixing oxidised M.S. door latch with necessary screws etc. complete		
	a	300x20x6mm	Each	70.00
	b	250x20x6mm	Each	55.00
7126		Providing and fixing oxidised M.S. tower bolts (barrel type) with necessary screws etc. complete		
	a	250 x 10 mm	Each	39.00
	b	200 x 10 mm	Each	35.00
	c	150 x 10 mm	Each	29.00
	d	100 x 10 mm	Each	28.00
7127		Providing and fixing oxidised M.S. handles with necessary screws etc. complete		
	a	125 mm	Each	27.00
	b	100 mm	Each	24.00
	c	75 mm	Each	22.00
7128		Providing and fixing oxidised M.S. hooks and eyes		
	a	300 mm	Each	19.00
	b	250 mm	Each	17.00
	c	200 mm	Each	15.00
	d	150 mm	Each	14.00
	e	100 mm	Each	12.00
7129		Providing and fixing MS safety hasp and staple with necessary screws etc. complete		
	a	150 mm	Each	37.00
	b	115 mm	Each	33.00
	c	90 mm	Each	32.00
7130		Providing and fixing aluminium butt hinges anodised transparent or dyed to required colour or shade with necessary screw etc. complete.		

	a	125 75 x 4 mm	Each	103.00
	b	100 x 75 x 4 mm	Each	88.00
	c	75 x 45 x 3.2 mm	Each	72.00
	d	50 x 45 x 3.2mm	Each	43.00
7131		Providing and fixing anodised aluminium sliding door bolt anodised transparent or dyed required colour and shade with bolts, nuts and screws etc. complete:		
	a	300 x 16 mm	Each	241.00
	b	250 x 16 mm	Each	214.00
7132		Providing and fixing aluminium tower bolt (barrel type) anodised or dyed to required colour or shade with screws etc. complete.		
	a	300 x 10 mm	Each	48.00
	b	250 x 10 mm	Each	42.00
	c	200 x 10 mm	Each	35.00
	d	150 x 10 mm	Each	26.00
	e	100 x 10 mm	Each	25.00
7133		Providing and fixing aluminium handle anodised or dyed to required colour or shade with screws etc. complete.		
	a	125 mm	Each	23.00
	b	100 mm	Each	18.00
	c	75 mm	Each	16.00
7134		Providing and fixing 50 cm long aluminium kicking plate 100 x 15 mm anodised transparent or dyed to required colour or shade with necessary screws etc. complete.	Each	108.00
7135		Providing and fixing anodised aluminium flat latch		
	a	300 mm	Each	164.00
	b	200 mm	Each	146.00
7136		Providing and fixing anodised aluminium hooks and eyes.		
	a	150 mm	Each	16.00
	b	100 mm	Each	11.00
7137		Providing and fixing anodised aluminium hasps and staples		
	a	100 mm	Each	60.00
	b	150 mm	Each	70.00
7138		Providing and fixing anodised aluminium windows stay.		
	a	300 mm narrow line with five adjustments	Each	147.00
	b	250 mm narrow line with four adjustments	Each	127.00
	c	200 mm narrow line with three adjustments	Each	92.00

7139		Providing and fixing anodised aluminium mortice lock lever type handle (without lock)	Each	565.00
7140		Providing and fixing anodised aluminium mortice lock knob type handle (without lock)	Each	523.00
7141		Providing and fixing anodised aluminium pivot hinge 62 mm	Each	43.00
7142		Providing and fixing parliamentary hinges with nylon washers		
	a	100 x 31.75x4.76 mm	Each	171.00
7143		Providing and fixing anodized aluminium ventilator latch 75 mm.	Each	282.00
7144		Providing and fixing anodized aluminium finger push plate		
	a	87 x 225 mm	Each	68.00
	b	75 x 150 mm	Each	63.00
7145		Providing and fixing factory made panelled door shutter fabricated out of second class teak wood with styles top and middle rail and lock and bottom rail, with Navopan or equivalent plain particle board exterior grade as per IS-3087 (1985) type I including anodized aluminium butt hinges with necessary screws etc. complete.		
	a	12 mm thick panel (i) 38 mm thick panel	sq.m	5491.00
	b	12 mm thick panel (ii) 35 mm thick panel	sq.m	5253.00
	c	12 mm thick panel (iii) 30 mm thick panel	sq.m	6749.00
	d	18 mm thick panel (i) 38 mm thick panel	sq.m	5609.00
	e	18 mm thick panel (ii) 35 mm thick panel	sq.m	5372.00
	f	18 mm thick panel (ii) 30 mm thick panel	sq.m	6868.00
7146		Providing and fixing factory made panelled door shutter fabricated out of Nano or equivalent wood with styles top and middle rail and lock and bottom rail, with Navopan or equivalent plain particle board exterior grade as per IS - 3087 (1985) type I including anodized alluminium butt hinges with necessary screws etc. complete.		
	a	12 mm thick panel (i) 38 mm thick panel	sq.m	4168.00
	b	12 mm thick panel (ii) 35 mm thick panel	sq.m	4004.00
	c	12 mm thick panel (iii) 30 mm thick panel	sq.m	3800.00
	d	18 mm thick panel (i) 38 mm thick panel	sq.m	4286.00
	e	18 mm thick panel (ii) 35 mm thick panel	sq.m	4122.00
	f	18 mm thick panel (iii) 30 mm thick panel	sq.m	3919.00



7147		Providing and fixing 12 mm sheets flat pressed three layered melamine faced prelaminated wood based particle board bonded with BWP/BWR exterior grade synthetic resin panelling / cladding as for wall panelling / cladding as per IS-3087 (1985) type I one side approved shade and other side balancing white lamination of Novapan make or equivalent to be fixed to frames by cleates, leaving expansion allowance of 6 MM in between each panel. The width of the panel can be 1.5 feet/2 feet/3 feet as per Architects discretion.		
	a	Second class teak wood.	sq.m	1332.00
	b	Nano / kinal or equivalent	sq.m	1123.00
7148		Providing and fixing in position single skin partition with second class teak wood, frame in 2.5" x 1.5" and with BWP/BWR exterior grade synthetic resin as per IS-3087 (1985) type I on the edges of Navopan or equivalent. One side shade of approved lamination and other side white balancing lamination (PLX) on both sides it lamination of approved shade (PTX).	sq.m	1583.00
7149		Providing and fixing position 62 mm thick double skin partition with frame in size 75 x 38 mm and internal frame of 50 mm x 38mm and fixing of 12 mm thick flat pressed melamine faced three layered prelaminated wood based particle board with exterior grade BWP /BWR synthetic resin as per IS-3087 (1985) type I on the edges of Navopan make or equivalent. One side shade of approved lamination and other side white balancing lamination		
	a	Second class teak wood	sq.m	2230.00
	b	Nano / equivalent	sq.m	1888.00
7150		Providing and fixing factory made panelled door shutter fabricated out of second class teak wood with styles top and middle rail, lock and bottom rail with Navopan or equivalent weather resistant melamine faced prelaminated twin particle board - bonded with BWP/BWR exterior grade synthetic resin as per IS - 3087 (1985) type I including anodised aluminium butt hinges with necessary screws etc. complete.		
	a	12 mm thick panel (i) 38 mm thick	sq.m	5382.00
	b	12 mm thick panel (ii) 35 mm thick	sq.m	5144.00
	c	12 mm thick panel (iii) 30 mm thick	sq.m	6640.00
	d	18 mm thick panel (i) 38 mm thick	sq.m	5636.00
	e	18 mm thick panel (ii) 35 mm thick	sq.m	5398.00

	f	18 mm thick panel (iii) 30 mm thick	sq.m	6894.00
7151		Providing and fixing factory made panelled door shutter fabricated out of nano or equivalent wood with styles top and middle rail, lock and bottom rail with Navopan or equivalent weather resistant melamine faced prelaminated twin particle board - bonded with BWP/BWR exterior grade synthetic resin as per IS - 3087 (1985) type I including anodised aluminium butt hinges with necessary screws etc. completed.		
	a	12 mm thick panel (i) 38 mm thick	sq.m	4188.00
	b	12 mm thick panel (ii) 35 mm thick	sq.m	4024.00
	c	12 mm thick panel (iii) 30 mm thick	sq.m	3821.00
	d	18 mm thick panel (i) 38 mm thick	sq.m	4312.00
	e	18 mm thick panel (ii) 35 mm thick	sq.m	4148.00
	f	18 mm thick panel (iii) 30 mm thick	sq.m	3945.00
7152		Providing and fixing factory made panelled door shutter fabricated out of second class teak wood with styles top and middle rail, lock and bottom rail with Navopan or equivalent weather resistant melamine faced flat pressed three layered prelaminated wood based particle board bonded with BWP/BWR exterior grade synthetic resin as per IS - 3087 (1985) type I including anodised aluminium butt hinges with necessary screws etc. complete.		
	a	12 mm thick panel (i) 38 mm thick	sq.m	5532.00
	b	12 mm thick panel (ii) 35 mm thick	sq.m	5294.00
	c	12 mm thick panel (iii) 30 mm thick	sq.m	6790.00
	d	18 mm thick panel (i) 38 mm thick	sq.m	5662.00
	e	18 mm thick panel (ii) 35 mm thick	sq.m	5425.00
	f	18 mm thick panel (ii) 30 mm thick	sq.m	6920.00
7153		Providing and fixing factory made panelled door shutter fabricated out of Nano or equivalent wood with styles top and middle rail, lock and bottom rail with Navopan or equivalent weather resistant melamine faced prelaminated flat pressed three layered wood based particle board – bonded with BWP/BWR exterior grade synthetic resin as per IS - 3087 (1985) type I including anodised aluminium butt hinges with necessary screws etc. complete.		
	a	12 mm thick panel (i) 38 mm thick	sq.m	4208.00
	b	12 mm thick panel (ii) 35 mm thick	sq.m	4044.00
	c	12 mm thick panel (iii) 30 mm thick	sq.m	3841.00
	d	18 mm thick panel (i) 38 mm thick	sq.m	4339.00

	e	18 mm thick panel (ii) 35 mm thick	sq.m	4175.00
	f	18 mm thick panel (ii) 30 mm thick	sq.m	3971.00
7154		Providing and fixing flush door shutter of solid core melamine face three layered, prelaminated wood based particle board exterior grade having shade of choice on both sides (PTX) or having shade of choice on one side and balancing lamination on the other side (PLX) as per IS 3087 (1985) type I on the edge of Novopan or equivalent bonded with BWR/BWP synthetic resin with second class teak wood, lipping of section of size 12 mm x 30 mm flange and 18 mm x 10 mm web (18 mm deep) fixed into 18 x 10 mm groves of shutter with water resistant adhesive and fully threaded G.I. screws 50 mm not more than 450 mm centre to centre including anodized aluminium butt hinges with necessary screws etc. complete.		
	a	Natural teak on both faces: 1) 35 mm thick	sq.m	2943.00
	b	Natural teak on both faces: 2) 30 mm thick	sq.m	2747.00
7155		Providing and fixing flush door shutter of solid core melamine face three layered, prelaminated wood based particle board exterior grade having shade of choice on both sides (PTX) or having shade of choice on one side and balancing lamination on the other side (PLX) as per IS 3087 (1985) type I on the edge of Novopan or equivalent bonded with BWR/BWP synthetic resin with second class teak wood, lipping of section of size 12 mm x 30 mm flange and 18 mm x 10 mm web (18 mm deep) fixed into 18 x 10 mm groves of shutter with water resistant adhesive and fully threaded G.I. screws 50 mm not more than 450 mm centre to centre including anodized aluminium butt hinges with necessary screws etc. complete.		
		Commercial on both faces: 1) 35 mm thick	sq.m	1412.00
		Commercial on both faces : 2) 30 mm thick	sq.m	1821.00

7156		Providing and fixing flush door shutter of solid core melamine face three layered, prelaminated wood based particle board exterior grade having shade of choice on both sides (PTX) or having shade of choice on one side and balancing lamination on the other side (PLX) as per IS 3087 (1985) type I on the edge of Novopan or equivalent bonded with BWR/BWP synthetic resin with second class teak wood, lipping of section of size 12 mm x 30 mm flange and 18 mm x 10 mm web (18 mm deep) fixed into 18 x 10 mm groves of shutter with water resistant adhesive and fully threaded G.I. screws 50 mm not more than 450 mm centre to centre including anodized aluminium butt hinges with necessary screws etc. complete.		
	a	White balancing lamination on one face and natural teak on other face 35mm thick	sq.m	2194.00
	b	White balancing lamination on one face and natural teak on other face 30mm thick	sq.m	1950.00
7157		Providing FRP door shutters 35mm thick with frame size in clear opening of 0.75x2.10m hinges and screws complete.,	sq.m	1852.00
7158		<b>Single Colour Foam Core FRP (Fiber Reinforced Polymer) Door Shutter</b> Manufacture, Supply and Installation (including accessories as mentioned below) of EPEE or equivalent Goan make FRP (Fiber Reinforced Polymer) door shutter of specified thickness as per options below by using tray system with seasoned hard wood, moisture less than 17%, wood styles for Top rail and lock rails. FRP (Fiber Reinforced Polymer) laminate made up of 450 grams per sq.mts (gsm) chop strand matt and unsaturated polyester resin with viscosity range of 400/450 centipoises per second (cps) . The core of shutter will be filled as specified (Expanded Polystyrene Foam / Polyurethane Foam (EPS/PU) Foam). The shutter to be of single colour & water proof as well as mild acid / alkali resistant manufactured using RV TIFAC (R V Engineering College, Bangalore & Technology Information Forecasting & Assessment Council) technology in line with IS 13034 1990 test Standard in an ISO 9001 – 2015 certified factory.		

		Accessories:		
	i	i) S. S. Hinges 4" - 3 Nos		
	ii	ii) S. S. Latch - 1 No		
	iii	iii) Tower Bolt 5" - 2 Nos		
	iv	iv) Handle 5" - 2 Nos		
		Shutter Thickness : a) 30mm	sqm	4047.00
		: b) 35mm	sqm	4223.00
		: c) 40mm	sqm	4552.00
		Note: For 35 & 40mm thickness shutters, only frames of 5 x 2 ½ Cross section frames to be used.		
7159		<b>Wood Finish Foam Core FRP (Fiber Reinforced Polymer) Door Shutter</b> Manufacture, Supply and Installation (including accessories as mentioned below) of EPEE or equivalent Goan make FRP (Fiber Reinforced Polymer) door shutter of specified thickness as per options below by using tray system, with seasoned hard wood, moisture less than 17%, wood styles for Top rail and lock rails. FRP (Fiber Reinforced Polymer) laminate made up of 450 grams per sq.mts (gsm) chop strand matt and unsaturated polyester resin with viscosity range of 400/450 centipoises per second (cps) along with printed matt having wooden textures, used along with UV Resistant resin to give the clear wooden texture on the door. The core of shutter will be filled as specified (Expanded Polystyrene Foam / Polyurethane Foam (EPS/PU) Foam) The shutter to be water proof as well as mild acid / alkali resistant manufactured using RV TIFAC (R V Engineering College, Bangalore & Technology Information Forecasting & Assessment Council) Technology in line with IS 13034 1990 test Standard in an ISO 9001 – 2015 certified factory.		
		Accessories:		
	i	i) S. S. Hinges 4" - 3 No		
	ii	ii) S. S. Latch - 1 No		
	iii	iii) Tower Bolt 5" - 2 Nos		
	iv	iv) Handle 5" - 2 Nos		

		Shutter Thickness : a) 30mm	sqm	4681.00
		: b) 35mm	sqm	4951.00
		: c) 40mm	sqm	5197.00
		Note: For 35 & 40mm thickness shutters, only frames of 5 x 2 ½ Cross section frames to be used.		
7160		<b>Standard Wood Core Door Shutter with Single Colour</b> Manufacture, Supply and Installation (including accessories as mentioned below) of EPEE or equivalent Goan make FRP (Fiber Reinforced Polymer) door shutter of specified thickness as per options below by using tray system with seasoned hard wood, moisture less than 17%, wood styles for Top rail and lock rails. FRP (Fiber Reinforced Polymer) laminate made up of 450 grams per sq.mts (gsm) chop strand matt and unsaturated polyester resin with viscosity range of 400/450 centipoises per second (cps). The core of Shutter will be filled with MR2nd grade Block Board. The shutter to be water proof as well as mild acid / alkali resistant manufactured using RV TIFAC (R V Engineering College, Bangalore & Technology Information Forecasting & Assessment Council) technology in line with IS 13034 1990 test Standard in an ISO 9001 – 2015 certified factory.		
		Accessories:		
		i) S. S. Hinges 4" - 3 Nos ii) S. S. Latch - 1 No iii) Tower Bolt 5" - 2 Nos iv) Handle 5" - 2 Nos		
		Shutter Thickness : a) 32mm	sqm	5127.00
		: b) 35mm	sqm	5631.00
		: c) 40mm	sqm	5907.00
		Note: For 35 & 40mm thickness shutters, only frames of 5 x 2 ½ Cross section frames to be used.		

7161		<p><b>Wood Finish Wood Core FRP (Fiber Reinforced Polymer) Door Shutter</b></p> <p>Manufacture, Supply and Installation (including accessories as mentioned below) of EPEE or equivalent Goan make FRP (Fiber Reinforced Polymer) door shutter of specified thickness as per options below by using tray system with seasoned hard wood, moisture less than 17%, wooden styles for Top rail and lock rails. FRP (Fiber Reinforced Polymer) laminate made up of 450 grams per sq.mts (gsm) chop strand matt and unsaturated polyester resin with viscosity range of 400/450 centipoises per second (cps) and printed matt having wooden textures used along with UV Resistant resin to give the clear texture on the door. The core of shutter will be filled with MR 2nd grade Block Board. The Shutter to be water proof as well as mild acid / alkali resistant manufactured using RV TIFAC (R V Engineering College, Bangalore &amp; Technology Information Forecasting &amp; Assessment Council) technology in line with IS 13034 1990 test Standard in an ISO 9001 – 2015 certified factory.</p>		
		<p>Accessories:</p> <p>i) S. S. Hinges 4" - 3 Nos</p> <p>ii) S. S. Latch - 1 No</p> <p>iii) Tower Bolt 5" - 2 Nos</p> <p>iv) Handle 5" - 2 Nos</p>		
		Shutter Thickness : a) 32mm	sqm	5748.00
		: b) 35mm	sqm	6276.00
		: c) 40mm	sqm	6552.00
		Note: For 35 & 40mm thickness shutters, only frames of 5 x 2 ½ Cross section frames to be used.		

7162		<b>FRP (Fiber Reinforced Polymer) Frames</b> Manufacture, Supply and Installation (with anchor fastener) of EPEE or equivalent Goan make FRP (Fiber Reinforced Polymer) Frame of cross section as per options below with right angle joint and FRP (Fiber Reinforced Polymer) laminate made from 450 grams per sq.mts (gsm) chop strand glass fiber (matt) and unsaturated polyester resin with viscosity range of 400/450 centipoises per second (cps). The core of frame would be filled with seasoned wood as infill material. The slot of frame for door resting will be of suitable width so as to take specified thickness door.. The frame will be water proof as well as mild acid/ alkali resistant manufactured in an ISO 9001- 2015 certified company.		
		Specified Cross Section : a) 3" x 2"	Metre	733.00
		b) 4" x 2"	Metre	780.00
		c) 4" x 2 ½ "	Metre	833.00
		d) 5" x 2 ½ "	Metre	938.00
7163		<b>FRP (Fiber Reinforced Polymer) Frames with Wood Finish</b> Manufacture, Supply and Installation (with anchor fastener) of EPEE or equivalent Goan make FRP (Fiber Reinforced Polymer) Frame of cross section as per options below with right angle joint and FRP (Fiber Reinforced Polymer) laminate made from 450 grams per sq.mts (gsm) chop strand glass fiber (matt) and unsaturated polyester resin with viscosity range of 400/450 centipoises per second (cps). The core of frame would be filled with seasoned wood as infill material. The slot of frame for door resting will be of suitable width so as to take specified thickness door. The frame will be water proof as well as mild acid/ alkali resistant manufactured in an ISO 9001- 2015 certified company.		
		Specified Cross Section : a) 3" x 2"	Metre	821.00
		b) 4" x 2"	Metre	886.00
		c) 4" x 2 ½ "	Metre	933.00
		d) 5" x 2 ½ "	Metre	1050.00
7164		Providing & fixing Stainless Steel Cylindrical lock 60mm dia with pair of knob, keys etc. with necessary screws etc. for doors complete as approved by engineer. Entrance Function: Internal Push Button & External Key Operation	Each	1105.00



7165		Providing & fixing Stainless Steel tubular lever D-Type mortise handles with round/Square nose, 24mm Mortise/sash lock body & Strike plate (all SS Finish), Pin cylinder 60mm with one side key and other side knob/thumb turn with necessary screws etc. complete	Each	3874.00
7166		Providing and fixing Stainless steel D type handles with necessary screws etc complete a) L 300mm/325mm x 22 to 25mm dia	Each	1223.00
7167		Providing and fixing 1.00mm high pressure decorative Laminates (glossy/ matt) on wooden surfaces like doors, windows. The laminate should comprise of layers of specially selected paper, impregnated with melamine and phenolic resins pressed and hardened under heat and high pressure and should ensure strong bonding, resistance to boiling water and chemical and increase dimensional stability. Including cost of adhesive, nails during fixing etc. complete	sq.m.	704.00
7168		Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) decorative type (BWP), core of block board construction with frame of 1 st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.		
	a	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	sq.m.	2971.00
	b	30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	sq.m.	2778.00
7169		Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) semi-decorative type (BWP), core of block board construction with frame of 1 st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on One face of shutters & well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on Other face of shutters		
	a	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	sq.m.	2508.00
	b	30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	sq.m.	2314.00

7170		Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) non-decorative type (BWP), core of block board construction with frame of 1 st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters:		
	a	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	sq.m.	2043.00
	b	30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	sq.m.	1849.00
7171		<b><u>UPVC ONLY DOOR FRAME:-</u></b>		
		Providing & fixing Upvc Door Frame Yashashri make or equivalent made out of Upvc extruded multi cavity frame of 60 mm x 60mm x 2mm wall thickness. Frame is reinforced with G.I. Channel & welded in corners with Average weight 0.80 kg per running mtr. These frames are tested by using BS 2782 & DIN 53459 test methods.	Metre	398.00
7172		<b><u>20 MM DOOR SHUTTER:-</u></b>		
		Providing & fixing 20 mm door shutter Yashashri make or equivalent, made by using 20mm x 155mm x 1.2mm upvc multi-cavity section and boarder of 30mm x 40mm x 2.5mm Upvc multi cavity section. The corners are joined by inserting polymetric corners & hardware used for fixing the door shutter is stainless steel hinges & S. S. handle & S.S. tower bolt. The average weight of 20mm door shutter is 4.60kg per sq mtr. These Upvc sections are tested by using BS 2782 & DIN 53459 test methods.	sq.m.	2584.00
7173		<b><u>32 MM DOOR SHUTTER:-</u></b>		
		Providing & fixing 32mm door shutter Yashashri make or equivalent, made by using 31mm x 150 mm x 1.5mm upvc multi-cavity section having Tounge & Groove jointing method and boarder having 35mm x 30mm x multi- cavity section. The corners are joined by inserting polymetric corners & hardware used for fixing the door shutter is stainless steel hinges & S. S. handle & S.S. tower bolt. The average weight of 32mm door shutter is 6.30 kg per sq mtr. These Upvc sections are tested by using BS 2782 & DIN 53459 test methods.	sq.m.	2695.00
7174		<b><u>TURNWINDOWS:-</u></b>		

		Providing & fixing Single or multi shutter turn windows Yashashri make or equivalent, made out of upvc multi- cavity frames Sections of 60mm x 60mm x 2.5mm reinforced with G.I channel and double multi-shutters Division are made by using shash mullion having 50mm x 64mm x 2.5mm multi- cavity upvc section, reinforced with G.I. channel and shutters are made out of 50mm x 64mm x 2.5mm upvc section, Reinforced and welded in corners with EPDM Gaskets and using suitable glass bead with perfect hardware like hinges, handles, stays & 4mm clear Glass. Some portion of windows can be made fixed glass. The average weight of Turn window is 11.5 kg per sq mtr. These Upvc sections are tested by using BS 2782 & DIN 53459 test methods.	sq.m.	10091.00
7175		<b><u>THREE TRACK SLIDING WINDOWS:-</u></b>		
		Providing & fixing Three track Sliding Windows Yashashri make or equivalent, made out of 97mm x 43mm x 2mm upvc multi-cavity reinforced with G.I. channel and having up word projection for sliding of shutter on Nylon Rollers and having slope for draining rain water outside and welded in corners. Shutters are made out of 57mm x 31mm x 2mm multi-cavity section having provision for nylon rollers fixing, glass fixing with EPDM gasket, glass bead and welded in corners. In Three Track Sliding window 4mm clear glass is used. The average weight of Three Track Sliding window is 16.5 kg per sq mtr. These Upvc sections are tested by using BS 2782 & DIN 53459 test methods.	sq.m.	7570.00
7176		<b><u>TWO TRACK SLIDING WINDOW (Economical):-</u></b>		
		Providing & fixing Two Track sliding window in economical section made out of 60mm x 45mm x 2.5mm Upvc multi cavity track section & Shutter made out of 57mm x 31mm x 2.5mm Upvc multi cavity section welded in corners with Glass beading & EPDM Gasket & 4mm clear glass with lock & rollers. The average weight of Two Track Sliding window (Economical) is 12.25 kg per sq mtr. These Upvc sections are tested by using BS 2782 & DIN 53459 test methods.	sq.m.	6283.00
7177		<b><u>TWO TRACK SLIDING WINDOW (Heavy):-</u></b>		

		Providing & fixing Two Track sliding window Yashashri make or equivalent, in heavy sections made out of 104mm x 51 mm x 2.5 mm Upvc multi cavity track section & shutter made out of 45mm x 54mm x 2.5mm Upvc multi cavity section welded in corners with Glass beading & EPDM Gasket & 4mm clear glass with lock & rollers. The average weight of Two Track Sliding window (Heavy) is 16.75 kg per sq mtr. These Upvc sections are tested by using BS 2782 & DIN 53459 test methods.	sq.m.	8818.00
7178		<b><u>PARTITION:-</u></b> Providing & fixing Partitions Yashashri make or equivalent, made out of frame support structure in 2" x 1" M.S. sq tube & walls paneled by 20mm x 155mm x 1.2mm Upvc multi cavity section fixed on structure with hidden screwing system. Door frame & shutter made out of 50mm x 50mm x 2.5mm & 31mm x 150mm x 1.5mm Upvc multi cavity section. Some portion of partition can be made by 4mm fixed glass. The average weight of Partition is 17 kg per sq mtr. These Upvc sections are tested by using BS 2782 & DIN 53459 test methods	sq.m.	5050.00
7179		<b><u>PORTA CABINS: -</u></b> Providing & fixing UPVC Porta Cabin Yashashri make or equivalent, made out of frame support structure in 2" x 1" M.S. square tube welded as per designs suitable for transportation, assembling / disassemble nut bolt systems & painted . Walls are made out of UPVC extruded multi cavity panels of 20mm x 116mm x 1.2mm fixed on structure with hidden screwing system. Door frame is made out of 50mm x 50mm x 2.5mm. Multi cavity UPVC frame reinforced suitably & shutter made out of 31mm x 150mm x 2mm. upvc 2 track windows with 4 mm glass. Roof is made out 0.5 Gauge G.I. pre coated corrugated Sheet along with 20mm Upvc False Ceiling at 8' Height. The side height of Porta Cabin is 8' & center height of Porta cabin is 9.5' approximate.	sq.m.	2157.00
7180		<b><u>FALSE CEILING:-</u></b>		

		Providing & fixing False Ceiling Yashashri make or equivalent, made out of 2" x 1" M.S sq tube frame support structure & 20mm x 155mm x 1.2mm multi-cavity upvc section, 30mm x 40mm x 2mm Upvc multi-cavity section with hidden screwing system. The average weight of False Ceiling is 8.50 kg per sq mtr. These Upvc sections are tested by using BS 2782 & DIN 53459 test methods.	sq.m.	2526.00

CHAPTER XI				
STEEL AND ALUMINIUM WORK				
Sr. No		Description	Unit	Rate
8001		Steel work in single sections (SAIL, TATA. VIZAG & using electrodes of Ador or ES4B or Deh Secheron make only) including cutting, hoisting fixing in position and applying a priming coat of red lead paint.		
	a	In R.S. joists, channels, angles, tees	qtl	8439.00
	b	In flats of all sizes	qtl	7590.00
	c	In flats exceeding 100mm thickness	qtl	7960.00
8002		Steel work(SAIL, TATA. VIZAG only) riveted or bolted in built up sections, trusses and framed work including cutting, hoisting, fixing in position and applying a priming coat of red lead paint.		
	a	In R.S. joists	qtl	6609.00
	b	In tees, angles, flats and channels	qtl	7442.00
8003		Steel work welded (SAIL, TATA. VIZAG & using electrodes of Ador or ES4B or Deh Secheron make only)in built up sections trusses and framed work including cutting, hoisting, fixing in position and applying priming coat of red lead paint.		
	a	In R.S. Joists	qtl	8272.00
	b	In tees, angles, flats and channels	qtl	8279.00
8004		Providing and fixing in position collapsible steel shutters with vertical channels 20 mm x 10 mm x 2 mm and braced with flat iron diagonals 20mm x 5mm size with top and bottom rails of T-iron, 40 x 40 x 6 mm with 38 mm dia. Steel pullys completely bolts locking arrangement, stopper, handles including applying a priming coat of red lead paint.	sq.m	4906.00
8005		Providing and fixing 1 mm thick M.S. sheet sliding shutters with frame & diagonal braced of 40 mm x 40 mm x 6 mm angle iron, 3.15 mm M.S. gusset plates at junctions and corners, 25 mm dia pulley 40 mm x 40 mm x 6 mm angle and T-iron guide at top and bottom respectively including applying a priming coat of lead paint.	sq.m	3733.00

8006		Providing and fixing 1 mm thick M.S. sheet garage door with frame of 40 x 40 x 6 mm angle iron 3.15 mm M.S. gusset plate at the junction and corners, all necessary fitting complete including applying a priming coat of red lead paint.		
	a	Using M.S. angles 40 mm x 40 mm x 6 mm for diagonal braces.	sq.m	2970.00
	b	Using M.S. Flats 30 mm x 6 mm for diagonals braces and central cross	sq.m	3077.00
8007		Supplying and fixing rolling shutters of approved make, made of 80 x 1.25 mm 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 1.25mm thick for rolling shutterstop cover and spring.	sq.m	2335.00
8008		Providing and fixing 27.5cm long wire spring grade No.2 for rolling shutters.	Each	678.00
8009		Providing and fixing top cover for rolling shutters	Metre	638.00
8010		Providing and fixing Ball bearings for rolling shutters	Each	480.00
		Extra for providing mechanical device, chain and crank operation for operating rolling shutters.		
8011	a	Exceeding 10.00 sq.m. and upto 16.80 sq.m. in area	sq.m	1889.00
	b	Exceeding 16.80 sq.m. in area Chain & overhead operation	sq.m	1889.00
8012		Fixing standard steel or aluminum glazed doors windows and ventilators in wall with lugs 10 cm x 16mm x 3.15 mm embed in C.C. block 15 x 10 x 10 cm size of 1:3:6 (1 cement : 3 coarse sand, 6 aggregate 20 mm nominal size) or with wooden plugs or with rawl plugs & screws or with fixing clips or with nuts as required including fixing of glass panes with glazing clips and special metal sash pulley of approved make or metal bearing with screws shall be supplied by department free of cost.	sq.m	420.00

8013		Providing and fixing steel glazed doors windows and ventilators of standard rolled steel sections, joints mitred and welded with 16 x 3.15 cm lugs 10 cm long embedded in cement concrete block 15cm x 10 cm size of 1:3:6 (1 cement: 3 coarse sand 6 graded stone aggregate 20 mm nominal size) or with wooden plugs and screws of raw plugs and screws for with fixing clamps or with bolts and nuts as required, including providing and fixing of glass panes with glazing clips and special metal sash putty of approved made on metal beading with screws complete including applying a priming coat of red lead paint.		
	a	Stell door (Fixed doors)	sq.m	2073.00
	b	Steel doors (Single leaf door)	sq.m	2779.00
	c	Steel door (Double leaf door)	sq.m	2768.00
	d	Fixed steel windows	sq.m	2063.00
	e	Side hung windows	sq.m	2075.00
	f	Top hung ventilators	sq.m	2028.00
	g	Centre hung ventilators	sq.m	566.00
8014		Providing and fixing cast brass peg stay 300 mm long for steel window ventilators etc.	Each	256.00
8015		Providing & fixing cast brass casement window fastener 125 mm long.	Each	118.00
8016		Providing and fixing M.S. fan clamp type 1or II of 16 mm dia M.S. bar bent to shape with hooke ends in R.C.C. slabs, beams during laying including painting the exposed portion of loop, all as per standard design complete.	Each	164.00
8017		Extra rate for providing and fixing M.S. fan clamp type 2 as per standard design in R.C.C. beams during laying towards the additional height of the clamps due to beam rib.	Metre	330.00
8018		Providing & fixing M.S. round holding down with nuts & Washer plates complete.	qtl	10481.00
8019		Providing & fixing bolts with nuts & washer complete.	qtl	13246.00
8020		Providing & fixing M.S. Rivets of sizes in position.	qtl	17535.00
8021		Welding by gas plant (using Ador or ES4B or Deh Secheron make electrodes only)	cm	8.00
8022		Welding by electric plant (using Ador or ES4B or Deh Secheron make electrodes only )	cm	7.00



8023		Providing and fixing in position 2 <sup>nd</sup> class Indian teak wood hand rail 6.4 x 11.5 cm (4.5" x 2.5") fixed to 40 x 3 mm size M.S. flat welded to 10 mm mild steel square balusters of clear height 86 cm spaced at 15 cm c/c including making necessary hold fast fixtures embeded in staircase concrete to the depth of 20 cm as per detailed drawings.	Metre	1855.00
8024		Providing & fixing in position hand rails in staircase, landing and the like with 2" dia G.I. pipe (light class) resting on 25 mm (1") size M.S. square bars of clear height 90cms placed at 30 cm c/c including making necessary hold fast fixture (25 mm square bars 22 cm long) embeded in staircase concrete for resting the M.S. vertical square bars with holding etc. as required for the work including bending hand rail pipe to proper shape in curves with specials etc. complete (measurement will be made along the running length of hand rail).	Metre	1313.00
8025		Providing and fixing in position hand rail in balconies, landings and the like with 2" dia G.I. pipe (light class) resting on 20 x 20mm M.S. square bars of clear height making necessary holdfast fixture (20mm square bars 15 cms long) embeded in balcony concrete for resting the M.S. vertical square bars with holding etc as required (measurements will be made along the length of the hand rail)	Metre	645.00
8026		Providing and fixing in position G.I. hand rail polyster powder coated in external passage, as per approved design shown in drawing including bending hand rail pipe to proper shape in curves with special etc. complete.	Metre	2744.00
8027		Providing and fixing in position S.S. hand rail in main stair case, and landing as per approved design shown in the drawing including bending handrail pipe to proper shape in curves with specials, etc. complete.	Metre	4969.00
8028		Providing and fixing steel pressed frames confirming to IS 4351/1976 in doors / windows including providing necessary arrangement for fixing hinges etc. complete.		
	a	Size 125 x 60 mm	Metre	484.00
	b	Size 105 x 60 mm	Metre	447.00
	c	Size 85 x 60 mm	Metre	446.00

8029		Providing and fixing anodised aluminium shutters in accordance with the specification annexed with Goa schedule of Rates (2004) Vol & II including all taxes, transportation, scaffolding and handling etc. complete as per direction of the Engineer-in-charge: Window with two or three sliding shutters using 14.5/15 mm series shutters section.		
	a	Acrylic sheet	sq.m	1698.00
	b	Plain glass	sq.m	1486.00
	c	Figured glass	sq.m	1443.00
8030		Providing and fixing anodized aluminium shutters in accordance with the specification annexed with Goa schedule of Rates (2004) Vol & II including all taxes, transportation, scaffolding and handling etc. complete as per direction of the Engineer-in-charge: windows with two sliding shutters using 18 mm series shutters section.		
	a	Acrylic sheet	sq.m	2547.00
	b	Plain glass	sq.m	2378.00
	c	Figured glass	sq.m	2335.00
8031		Providing and fixing anodised aluminium sliding windows with two sliding shutters 20 mm sections and 5 mm clear float glass.	sq.m	2971.00
8032		Providing and fixing anodized aluminium shutters in accordance with the specification annexed with Goa schedule of Rates (2004) Vol & II including all taxes, transportation, scaffolding and handling etc. complete as per direction of the Engineer-in-charge: windows with three sliding shutters using 18 mm series shutters section.		
	a	Acrylic sheet	sq.m	2971.00
	b	Plain glass	sq.m	2887.00
	c	Figured glass	sq.m	2841.00
8033		Providing and fixing anodised aluminium sliding windows with two sliding shutters 20 mm sections and 5 mm clear float glass.	sq.m	2971.00
8034		Providing and fixing anodized aluminium shutters in accordance with the specification annexed with Goa schedule of Rates (2004) Vol & II including all taxes, transportation, scaffolding and handling etc. complete as per direction of the Engineer-in-charge: Openable windows and ventilators using 18 mm series shutters section.		

	a	Acrylic sheet	sq.m	1953.00
	b	Plain glass	sq.m	1910.00
	c	Figured glass	sq.m	1867.00
8035		Providing and fixing anodized aluminium shutters in accordance with the specification annexed with Goa schedule of Rates (2004) Vol & II including all taxes, transportation, scaffolding and handling etc. complete as per direction of the Engineer-in-charge: Adjustable louvered windows.		
	a	Acrylic sheet	sq.m	1953.00
	b	Plain glass	sq.m	1910.00
	c	Figured glass	sq.m	1867.00
8036		Providing and fixing anodized aluminium shutters in accordance with the specification annexed with Goa schedule of Rates (2004) Vol & II including all taxes, transportation, scaffolding and handling etc. complete as per direction of the Engineer-in-charge: Fixed windows/ ventilators matching with 4.5 mm series shutters.		
	a	Acrylic sheet	sq.m	2378.00
	b	Plain glass	sq.m	2123.00
	c	Figured glass	sq.m	2037.00
8037		Providing and fixing anodized aluminium shutters in accordance with the specification annexed with Goa schedule of Rates (2004) Vol & II including all taxes, transportation, scaffolding and handling etc. complete as per direction of the Engineer-in-charge: Fixed windows/ ventilators matching with 18 mm series shutters.		
	a	Acrylic sheet	sq.m	1910.00
	b	Plain glass	sq.m	1698.00
	c	Figured glass	sq.m	1655.00
8038		Providing and fixing anodized aluminium shutters in accordance with the specification annexed with Goa schedule of Rates (2004) Vol & II including all taxes, transportation, scaffolding and handling etc. complete as per direction of the Engineer-in-charge: Curved fixed windows.		
	a	Acrylic sheet	sq.m	2547.00
	b	Plain glass	sq.m	2378.00
	c	Figured glass	sq.m	2293.00

8039		Providing and fixing anodized aluminium shutters in accordance with the specification annexed with Goa schedule of Rates (2004) Vol & II including all taxes, transportation, scaffolding and handling etc. complete as per direction of the Engineer-in-charge: Single or double leaf door shutters.		
	a	Acrylic sheet	sq.m	3393.00
	b	Plain plate glass	sq.m	3227.00
	c	Figured glass	sq.m	3057.00
8040		Providing and fixing anodised aluminium single or double leaf door shutters with heavy sections as specified.	sq.m	2971.00
8041		Providing and fixing anodized aluminium shutters in accordance with the specification annexed with Goa schedule of Rates (2004) Vol & II including all taxes, transportation, scaffolding and handling etc. complete as per direction of the Engineer-in-charge: Fixed partitions		
	a	Acrylic sheet	sq.m	2378.00
	b	Plain plate glass	sq.m	2335.00
8042		Extra for powder coating with pure polyester powder of shade of required colour on the aluminium section	sq.m	395.00
8043		Providing & fixing frictional stay hinges of reputed make WINDFIX, GRAVICLOSE company or equivalent complete with chromium plated brass screws as required.	pair	429.00
8044		Providing and fixing hydraulic floor spring of reputed make Everrite, prabhat or equivalent as per the manufacturer's as specification having double action spring as approved by the Engineer-in-charge.	Each	4040.00
8045		Providing and fixing aluminium stay adjustor 250 mm long with minimum three holds self threading galvanized MS screws.	Each	126.00
8046		Providing and fixing in position hand rail in staircase, landings and the like with 2" dia G.I. pipe (light class) resting on 50 x 50mm M.S. square bars of clear height 40cms placed at 50cm including making necessary holdfast fixtures (30mm square bars 22 cms long) embedded in staircase concrete for resting the M.S. vertical square bars with holding etc as required including bending the G.I. pipe to necessary shape in curves with specials etc. (Measurements will be made along the length of	Metre	1164.00

		the hand rail)		
8047		Providing and fixing of aluminium windows with three tracks and three shutters sliding windows with tubular frame sections powder coated with pure polyester powder of thickness 15-80 microns with approved standard accessories such as ball bearing rollers concealed lock, 6mm plain clear glass with EPDM beading etc.	sq.m	3393.00
8048		Providing and fixing of aluminium window with 3 tracks and 2 shutters sliding window with tubular frame polyester powder of thickness 75-80 microns with approved standard accessories such as ball bearing rollers, concealed lock, 6mm thick plain clear glass with EPDM beading etc.	sq.m	2971.00
8049		Providing and laying of aluminium fixed with 65mm x 38mm tubular frame with 6mm thick glass sections are powder coated with pure polyester powder of thickness 75-80 microns with approved standard accessories. The glass would be fixed with taper clips with EPDM beading	sq.m	2462.00
8050		Steel work in built up tubular (round, square or rectangular hollow tubes etc.) (Square Hollow Section (SHS) IS4923 /Rectangular Hollow Section (RHS) IS4923/ Circular Hollow Section (CHS) IS1161 closed Structural Steel of (SAIL, TATA, VIZAG, JSW ,APOLLO Steel Ltd.) make (Min Yield Stress 310 Mpa)) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete.	kg	118.00
8051		Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc.with hairline finish, including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer, ( for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	kg	478.00

8052		Supply and installation of Aluminium Louvers. The frame should be made of Aluminium tubes of size 100x50X1.50 mm thk and 50X25x1.50 mm thk C channels. Aluminium Z shaped louvers of 100mm should be fixed to the supporting frame with aluminium cleats, GI screws, etc complete. The whole assembly is powder coated with pure polyester paint. (MS framing to be paid separately)	sq.m.	3545.00
8053		Design, supply & installation of suspended Spider Glazing system (Frameless glass structural glazing) designed to withstand the wind pressure as pr IS 875 (Part-III). The Suspended System held with Spider Fittings of SS-316 Grade Steel of approved manufacturer with glass panel having 12 mm thick clear toughened glass held together with SS- 316 Grade Stainless steel Spider & bolt assembly with laminated glass fins 21mm thick. The Glass fins and glass panel assembly shall be connected to Slab/beams by means of SS- 316 Grade stainless steel brackets & Anchor bolts and at the bottom using SS channel of 50x25x2mm using fastener & anchor bolts, non staining weather sealants of approved make, Teflon/ nylon bushes and separators to prevent bi-metallic contacts, all complete to perform as per specification and approved drawings. The complete system to be designed to accommodate thermal expansion & seismic movements etc. The joints between glass panels (6 to 8 mm) and gaps at the perimeter & in U channel of the assembly to be filled with non staining weather sealant, so as to make the entire system fully water proof & dust proof. The rate shall include all design, Engineering and shop drawing including approval from structural designer, labour, T&P, scaffolding , other incidental charges including wastage, enabling temporary services all fitting fixers nut bolts, washer, Buffer plates, fastener, anchors, SS channel laminated glass etc. all complete. For the purpose of payment, actual elevation area of Glazing including thickness of joints and the portion of Glass panel inside the SS channel shall be measured.	sq.m.	12357.00

8054		Extra over design, supply and installation of Spider glazing system, for provision of 12mm thk clear toughened glass door shutter fittings including the cost of top & bottom patch fitting, over panel patch, panel connector pivot, over panel/sidepanel connector with pivot, bottom lock, stainless steel hardware fittings of 316 grade for operating door i.e. door handle 450mm Lg, floor spring of approved make and locking arrangement etc. complete including the cost of cutting the floor and making good the same, as per design and drawing all complete as required.	sq.m.	9873.00
8055		Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top & bottom pivot & spring type fixing arrangement and making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer (Door handle, lock and stopper etc.to be paid separately)	sq.m.	10638.00
8056		Providing & fixing in position fixed glass for shower partition with 10mm toughened clear glass on patch fittings in SS 316 grade, Reinforcement bar, silicone sealant Complete.	sq.m.	6525.00
8057		Providing and supplying aluminium extruded tubular and other aluminium sections as per the architectural drawings and approved shop drawings , the aluminium quality as per grade 6063 T5 or T6 as per BS 1474,including super durable powder coating of 60-80 microns conforming to AAMA 2604 of required colour and shade as approved by the Engineer. (The item includes cost of material such as cleats, sleeves, screws etc. necessary for fabrication of extruded aluminium frame work. Nothing extra shall be paid on this account).	kg	460.00
8058		Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight 120-150 kg for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing 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. a) With stainless steel cover plate minimum 1.25 mm thickness	Each	7935.00

8059	<p>Supply &amp; Fixing of Aluminium Plain Exterior Ventilated Facade of approved colour consisting of linear roll formed panel 84 mm wide x 16 mm deep x 0.6 mm thick with round edges panel length upto 6 meter coil coated on a continuous paint line double baked and roll formed from enameled corrosion Resistance Aluminum Alloy AA3005 / AA3003 (Al.Mn.) for higher strength and good Roll forming characteristics. Panels shall be clipped at a distance of 146mm with a gap of 62mm between two panels to baked enameled Aluminium panel stringer 33mm wide and 48mm deep x 0.95 mm thick in a standard length of 5mtrs made of double baked enameled Aluminium Alloy AA5050 (Al.Mg.) white to hold the panel in a module of 86mm centre to centre. The prongs on stringers shall be to accommodate a gap of 62 mm between two panels as per enclosed profile details. stringers shall be fixed at 150 mm from panel ends and at a distance of less than 1000 mm center to center across the panel span based on the wind load criteria. The Stringer shall be fixed to a suitable structure (other's scope) by means of rigid fixing details. All properties and specifications shall comply with ECCA directives and more specifically EN 1396:1996.</p> <p>Paint Finish: Panel shall be stove enamelled and finished with standard color Natural TF Silver (7080) or Pure White (0260) or any other colour max. 10% quantity, a special three layered coating system (consisting of first a conversion layer of thickness 800-2000mg/sqmtr, a polyurethane basecoat of 16-20 microns, and a special top coat of polyamide particles of 8-12 microns thick to provide excellent abrasion and damage resistance) in a continuous coil coating process of the approved colour on the exposed side and the reverse side with epoxy. Complete including Wall, corner profiles as per manufacturers' specifications etc. (MS Substructure to be paid separately, Rate to include all ridge, eaves, valley &amp; joints flashing, verge &amp; junction trims, fascia, etc. of similar finish, making cut-outs for light fittings, diffusers, columns, etc. as required, complete as per approved shop drawings and as directed/ approved by Engineer.)</p>	sq.m.	2593.00
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8060	Designing, fabricating, testing, installing and fixing in position Curtain Wall with Aluminium Composite Panel Cladding, with open grooves for linear as well as curvilinear portions of the building , for all heights and all levels etc. including: a) Structural analysis & design and preparation of shop drawings for pressure equalisation or rain screen principle as required, proper drainage of water to make it watertight including checking of all the structural and functional design. b) Providing, fabricating and supplying and fixing panels of aluminium composite panel cladding in pan shape in metallic colour of approved shades made out of 4mm thick aluminium composite panel material consisting of 3mm thick FR grade mineral core sandwiched between two Aluminium sheets (each 0.5mm thick). The aluminium composite panel cladding sheet shall be coil coated, with Kynar 500 based PVDF / Lumiflon based fluoropolymer resin coating of approved colour and shade on face # 1 and polymer (Service) coating on face # 2 as specified using stainless steel screws, nuts, bolts, washers, cleats, weather silicone sealant, backer rods etc.	sq.m.	3717.00
	c) The fastening brackets of Aluminium alloy 6005 T5 / MS with Hot Dip Galvanised with serrations and serrated washers to arrest the wind load movement, fasteners, SS 316 Pins and anchor bolts of approved make in SS 316, Nylon separators to prevent bi-metallic contacts all complete required to perform as per specification and drawing The item includes cost of all material & labour component, the cost of all mock ups at site, cost of all samples of the individual components for testing in an approved laboratory, field tests on the assembled working curtain wall with aluminium composite panel cladding, cleaning and protection of the curtain wall with aluminium composite panel cladding till the handing over of the building for occupation. Base frame work for ACP cladding is payable under the relevant aluminium items. The Contractor shall provide curtain wall with aluminium composite panel cladding, having all the performance characteristics all complete , as per the Architectural drawings, as per item description, as specified, as per the approved shop drawings		

		and as directed by the Engineer. However, for the purpose of payment, only the actual area on the external face of the curtain wall with Aluminum Composite Panel Cladding (including width of groove) shall be measured in sqm. up to two decimal places.		
8061		Providing and fixing carbon steel galvanised ( minimum coating 5 micron) dash fastner of 10 mm dia double threaded 6.8 grade (yield strength 480 N/mm <sup>2</sup> ), counter sunk head, comprising of 10 m dia polyamide PA6 grade sleeve, including drilling of hole in frame, concrete/ masonry, etc. as per direction of Engineer.		
	a	10 x 60 mm.	Each	68.00
	b	b) 10 x 80mm	Each	69.00
	c	c) 10 x 120mm	Each	87.00
	d	d) 10 x 140mm	Each	90.00
	e	e) 10 x 160mm	Each	120.00

Chapter XII				
Flooring and Floor Finishes				
Sr. No		Description	Unit	Rate
9001		First class brick flooring in cement mortar 1:4 (1 cement: 4 fine sand)	sq.m	907.00
9002		First class brick flooring in cement mortar 1:6 (1 cement: 6 fine sand)	sq.m	882.00
9003		Second class dry brick flooring including filling joints with fine sand.	sq.m	705.00
9004		25 mm cement concrete flooring 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 12.5 mm nominal size) finished with a floating coat of neat cement.	sq.m	267.00
9005		Cement concrete flooring 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement.		
	a	40 mm thick	sq.m	367.00
	b	50 mm thick	sq.m	645.00
	c	75 mm thick	sq.m	564.00
9006		40 mm. thick red oxide flooring under layer of 30 mm thick cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 12.5mm nominal size) and top layer of 10 mm thick plaster of cement red oxide mix using 3.5 kg. Of red oxide of iron per 50 kg. of cement 1:3(1cement : 3 coarse sand) finished with floating coat of neat cement red oxide mix of same proportion.	sq.m	808.00
9007		Add or deduct for using more or less than 3.5 kg of redoxide of iron per 50 kg. Cement in 40 mm thick red oxide flooring.	sq.m	36.00
9008		Cement concrete pavement (25 mm to 50 mm thick) with 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) including finishing complete *: per extra kg. of redoxide used for each 50 kg of cement.	cu.m	7646.00
9009		Extra for making chequeres of approved pattern on cement concrete floor, steps, landings pavements etc.	sq.m	35.00

9010		52mm thick cement concrete flooring with metallic concrete hardener topping, under layer of 40 mm thick cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) and top layers 12 mm thick metallic cement hardener constituting of mix 1:2 (1 cement: 2 graded stone aggregate 6 mm nominal size by volume with which metallic quality is mixed in ratio 4:1 (4 parts of cement: 1 part of metallic) hardening compound of approved floor hardening compound of approved quality) by weight, including finishing complete.	sq.m	520.00
9011		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 including of rounding of junction with floor		
	a	18 mm thick	sq.m	150.00
	b	21 mm thick	sq.m	330.00
9012		Red oxide plaster skirting (upto 30 cm height) with top layer of 6 mm thick plaster of cement mix using 3.5 kg of red oxide of iron per 50 kg of cement in mortar 1:3 (1 cement: 3 coarse sand) finished with a floating coat of cement red oxide mix of same proportion.		
	a	18 mm thick with under layer 12 mm thick cement plaster 1:3 (1 cement: 3 coarse sand)	sq.m	393.00
	b	21 mm thick with under layer 12 mm thick cement plaster 1:3 (1 cement: 3 coarse sand)	sq.m	411.00
9013		Add or deduct for using more or less 3.5 kg of red oxide of iron per 50 kg of cement in 18 mm or 21 mm thick red oxide plaster skirting. *: Per extra kg. of red oxide used for each 50 kg of cement.	sq.m	14.00
9014		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 basaltic or ganitic stone aggregate 12.5 mm nominal size) and top layer 6 mm thick white black or white and black marble chips of sizes from 1MM 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).		
	a	Dark shade pigment with ordinary cement	sq.m	619.00

	b	Light shade pigment with white cement	sq.m	673.00
	c	Medium shade pigment with approximately 50% white cement & 50% ordinary cement.	sq.m	648.00
	d)	White cement without any pigment	sq.m	1035.00
	e	Light shade pigment with ordinary cement	sq.m	1048.00
9015		40 mm. thick marble chips flooring rubbed and polished to granolithic finish under layer 31 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand: 4 graded basaltic or ganitic stone aggregate 12.5 mm nominal size) and top layer 9 mm thick white black or white and black marble chips of sizes 4 to 7 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).		
	a	Dark shade pigment with ordinary cement	sq.m	653.00
	b	Light shade pigment with white cement	sq.m	732.00
	c	Medium shade pigment with approximately 50% white cement & 50% ordinary cement.	sq.m	773.00
	d	White cement without any pigment	sq.m	681.00
	e	Light shade pigment with ordinary cement	sq.m	656.00
9016		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 basaltic or granitic stone aggregate 12.5 mm nominal size) and top layer 12 mm thick with black or white and black marble chips of sizes 7 to 10 mm 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).		
	a	Dark shade pigment with ordinary cement	sq.m	1280.00
	b	Light shade pigment with white cement	sq.m	1390.00
	c	Medium shade pigment with approximately 50% white cement & 50% ordinary cement.	sq.m	1338.00
	d	White cement without any pigment	sq.m	715.00
	e	Light shade pigment with ordinary cement	sq.m	721.00

9017		Marble chips skirting (upto 30 cm height) rubbed and polished to granolithic finish top layer 6 mm thick with white black or white and black marble chips of sizes from smallest to 40 mm nominal size laid in cement marble powder mix 3: (3 cement : 1 marble powder ) by weight in proportion of 4 : 7 (4 cement marble powder mix : 7 marble chips ) by volume 18 mm thick under layer 12 mm thick cement plaster 1:3 (1 cement) 3 coarse sand)		
	a	Dark shade pigment with ordinary cement	sq.m	707.00
	b	Light shade pigment with white cement	sq.m	757.00
	c	Medium shade pigment with approximately 50% white cement & 50% ordinary cement.	sq.m	736.00
	d	White cement without any pigment	sq.m	814.00
	e	Light shade pigment with ordinary cement	sq.m	817.00
9018		Extra for providing & fixing aluminium strips 40 mm wide x 1.16 mm thick in joints of terrazo floor.	Metre	75.00
9019		Extra for laying terrazo flooring in borders, margins & similar band not exceeding 30 cm in width.	sq.m	24.00
9020		Extra for laying terrazo flooring on staircase treads not exceeding 30 cm in width including the cost of forming nosing etc.	sq.m	36.00
9021		Extra for laying terrazo in narrow band not exceeding 7.5 cm width.	sq.m	51.00
9022		Precast terrazo tiles 20 mm thick with white, black or white and black marble chips of size upto 6 mm laid in floors, thread of steps & landings 25 mm thick bed of lime mortar 1: 4 (1 cement : 4 coarse sand jointed with neat cement slurry mixed with pigment to match the shade of the tiles incl. Rubbing & polishing completed with precast tiles of .		
	a	Light shade using white cement	sq.m	955.00
	b	Medium shades using approximately 50% ordinary cement.	sq.m	938.00
	c	Dark shade using ordinary cement.	sq.m	923.00
	d	Dark shade using ordinary cement with pigment	sq.m	926.00

9023		Precast terrazo tiles 20 mm thick with white, black or white and black marble chips of size upto 6 mm laid in floors, thread of steps & landings 25 mm thick bed of lime mortar 1: 2 (1 lime putty : 2 surkhi ) jointed with neat cement slurry mixed with pigment to match the shade of the tiles incl. Rubbing & polishing complete with precast tiles of .		
	a	Light shade using white cement	sq.m	892.00
	b	Light shade using pigment	sq.m	875.00
	c	Dark shade using ordinary cement.	sq.m	852.00
	d	Dark shade using ordinary cement with pigment	sq.m	863.00
9024		Extra if terrazo tiles are laid in treads of steps not exceeding 20 cm in width.	sq.m	43.00
9025		Precast terrazo tiles 20 mm thick with marble chips of sizes upto 6 mm in skirting & 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 including rubbing and polishing completed with precast tiles of		
	a	Light shade using white cement	sq.m	1303.00
	b	Light shade using pigment	sq.m	1279.00
	c	Dark shade using ordinary cement.	sq.m	1238.00
	d	Dark shade using pigment	sq.m	1241.00
9026		Precast terrazo tiles 20 mm thick with marble chips of sizes upto 6 mm fixed on walls of 12 mm bed of cement plaster 1:3 (1 cement : 3 coarse sand) jointed with neat cement slurry including rubbing and polishing completed with precast tiles of :		
	a	Light shade using white cement	sq.m	1840.00
	b	Light shade using pigment	sq.m	1816.00
	c	Dark shade using ordinary cement.	sq.m	1242.00
	d	Dark shade using pigment	sq.m	1246.00
9027		Extra if cut tiles other than half tiles are used in risers of steps skirting and dado in risers of steps, skirting and dado.	sq.m	1460.00
9028		Chequered terrazo tiles 22 mm thick with marble chips of sizes upto 6 mm in floor on 25 mm thick bed of lime mortar 1:1:1 (1 lime putty : 1 surkhi : 1 coarse sand ) jointed with neat cement slurry mixed with pigment to match the shade of tiles including rubbing and polishing completed.		
	a	Light shade using white cement	sq.m	957.00

	b	Light shade using pigment	sq.m	931.00
	c	Dark shade using ordinary cement.	sq.m	931.00
9029		Chequered terrazo tiles 22 mm thick with marble chips of sizes upto 6 mm in floor on 25 mm thick bed of lime mortar 1:2 (1 lime putty : 2 coarse sand ) jointed with neat cement slurry mixed with pigment to match the shade of tiles including rubbing and polishing completed.		
	a	Light shade using white cement	sq.m	894.00
	b	Light shade using pigment	sq.m	869.00
	c	Dark shade using ordinary cement.	sq.m	868.00
	d	Dark shade using pigment	sq.m	871.00
9030		Precast plain cement chequered tiles 22 mm thick of required shades laid in floors, treads of steps and landing on 20 mm thick bed of Cement mortar 1:4 (1cement : 4 coarse sand) jointed with neat cement slurry mixed with pigment to match the shade of tiles including rubbing and cleaning etc. complete.		
	a	Light shade using white cement	sq.m	1248.00
	b	Medium shade using pigment with 50% white cement 50% Grey cement	sq.m	1222.00
	c	Dark shades using ordinary cement	sq.m	1167.00
	d	Dark shades without any pigment	sq.m	1093.00
9031		Precast plain cement chequered tiles 22 mm thick laid in floors treads of steps and landing on 25 mm thick bed of lime mortar 1:1:1 (1 lime :1 surkhi: 1 coarse sand) jointed with neat cement slurry including rubbing and polishing complete.	sq.m	1132.00
9032		Precast plain cement tiles 20 mm thick fixed on walls, on 12 mm bed of cement plaster 1:3 (1 cement : 3 coarse sand) jointed with neat cement slurry including rubbing and polishing complete.	sq.m	1270.00
9033		Providing and fixing precast terrazo, chequered or plain tiles of any shades with grooves in the nosing in treads of steps on 25 mm thick bed of lime mortar 1:1:1 (1 lime : 1 surkhi : 1 coarse sand) jointed with neat cement slurry mixed with pigment to match the shades of tiles including rubbing and polishing complete.	sq.m	1202.00
9034		White glazed tiles 6 mm thick in flooring treads of steps & landings laid on a bed of 12 mm thick cement mortar 1:3 (1 cement : 3 coarse sand) finished with flush pointing in white cement.	sq.m	1118.00



9035		Extra for laying white glazed tiles in treads of steps not exceeding 30 mm in width.	sq.m	125.00
9036		White glazed tiles 6 mm thick in skirting, risers of steps & dado on 12 mm thick cement plaster 1:3 (1 cement : 3 coarse sand and jointed with white cement slurry.	sq.m	1242.00
9037		Extra for laying white glazed tiles in skirting, risers of steps, and dado where they are required to be cut (only area of portion of cut tiles to be measured).	sq.m	146.00
9038		Providing and fixing 50 mm internal or external angles of glazed tiles.	Metre	82.00
9039		Marble stone slab flooring over :		
		20 mm (average) thick base of lime mortar 1:1:1 (1 lime Putty: 1 surkhi:1 coarse sand) laid and jointed with grey cement slurry including rubbing & polishing complete.		
	a	Pure white makrana marble slab 25 mm thick.	sq.m	3152.00
	b	White makrana marble with blue or black veins (25 mm thick)	sq.m	1882.00
9040		Marble tiles in risers of steps, skirtings, dado, walls and pillars laid on 12 mm (average) thick base of cement mortar 1:3 (1 cement : 3 coarse sand) and jointed with grey cement slurry including rubbing and polishing complete with Kotah stone slab flooring over 20 mm (average thick base of lime mortar 1:1:1 (1 lime putty : 1 surkhi : 1 coarse sand) laid		
	a	Plain white makrana marble slab 25 mm thick	sq.m	4851.00
	b	White makrana marble with blue or black vein (25 mm thick)	sq.m	3582.00
9041		Kotah stone slab flooring over 20 mm (average) thick base laid over & jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing & complete with base of lime mortar 1:1:1 (1 lime putty : 1 surkhi : 1 coarse sand)	sq.m	1481.00
9042		Kotah stone slab flooring over 20 mm (average) thick base laid over & jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing & complete with base of cement mortar 1:4 (1 cement : 4 coarse sand)		
	a	20 mm thick.	sq.m	1527.00

	b	Kotah stone slab flooring over 25 mm thick in risers of steps, skirtings, dado & pillars laid on 12mm (average) thick cement mortar 1:3 (1 cement : 3 coarse sand) & jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing & polishing complete.	sq.m	1566.00
9043		25 mm wooden plank tongued and grooved, in flooring including fixing with iron screws complete with		
	a	Second class Indian teak wood.	sq.m	4650.00
	b	Second class matti wood	sq.m	3310.00
9044		Colour glazed tiles 6 mm thick in flooring, treads of steps, landings laid on a bed of 12 mm thick cement mortar 1:3 (1 cement : 3 coarse sand) finished with flush jointing in coloured cement of required pigment.	sq.m	1210.00
9045		Colour glazed tiles 6 mm thick in skirtings risers of steps, dado laid on a bed of 12 mm thick cement plaster 1:3 (1 cement : 3 coarse sand ) jointed with white cement slurry.	sq.m	1179.00
9046		Providing and fixing coloured plain ceramic glazed internal or external angles of 50 mm size.	Metre	292.00
9047		Providing and laying crazy paving (as per design shown in the drawing or as directed by the engineer-in- charge) with approved quality shahabad tile 20 mm thickness (unpolished) of specified sizes laid on 20 mm thick (average) bed of cement mortar 1:5 (1 cement : 5 coarse sand) as directed completed.	sq.m	624.00
9048		Cuddappah stone slab machine cut flooring over 20mm (average) thickness of cement mortar 1:4 (1 cement : 4 coarse sand laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete - 25 mm thick.	sq.m	997.00
9049		Providing and fixing coloured ceramic tiles spartek or equivalent of 8" x 8" size and 6 mm thick in skirting and dados on 12 thick cement plaster 1:3 (1 cement : 3 coarse sand) and jointed with cement slurry complete.	sq.m	1014.00
9050		Providing and fixing coloured ceramic tiles spartek or equivalent of 8" x 4" size and 6 mm thick in skirting and dados on 12 mm thick cement plaster 1:3 (1 cement : 3 coarse sand) and jointed with cement slurry complete.	sq.m	1014.00

9051		Providing and fixing coloured ceramic tiles spartek or equivalent of 12 " x 12" (399x150 mm cut size) 6 mm thick in skirting and dados on 12 mm thick cement plaster 1:3 (1 cement : 3 coarse sand) and jointed with cement slurry complete.	sq.m	956.00
9052		Providing and fixing coloured ceramic tiles spartek or equivalent of 8" x 8" size and 6 mm thick in floors thread of steps and landing on 25 mm thick bed of cement mortar 1:3 and jointed with cement slurry complete.	sq.m	1045.00
9053		Providing and fixing coloured ceramic tiles spartek or equivalent of 8" x 4" size and 6 mm thick in floors thread of steps and landing on 25 mm bed of cement of cement mortar 1:3 and jointed with cement slurry complete.	sq.m	1127.00
9054		Providing and fixing coloured ceramic tiles spartek or equivalent of 12" x 12" size and 6 mm thick in floors thread of steps and landing on 25 mm thick bed of cement mortar 1:3 and jointed with cement slurry complete.	sq.m	1085.00
9055		Precast terrazao tiles 20 mm thick with white, black or white, black marble chips of size upto 6 mm laid in floors, thread of steps & landings 25 mm thick bed of cement mortar 1:4 (1 cement : 4 coarse sand) jointed with neat cement slurry mixed with pigment to match the shade of the tiles including rubbing & polishing complete with precast tiles of		
	a	Light shade using while cement	sq.m	999.00
	b	Medium shades suing approx. 50% ordinary cement	sq.m	1018.00
	c	Dark shade using ordinary cement	sq.m	1002.00
	d	Dark shade using ordinary cement with pigment	sq.m	894.00
9056		Rounding of edges of marble slab to semi circular slope	Metre	381.00
9057		Providing and laying ceramic tiles 12"x12" in floors treads of steps landings with adhesive including filling the joints with required pigment etc. complete as directed by the engineer-in-charge	sq.m	944.00
9058		Providing 20mm thick marble slab to urinal partitions with cement complete	sq.m	4499.00

9059		Providing and laying jet black mirror polish granite flooring and dado over 20mm thick base of cement mortar 1:4 laid over and jointed with cement slurry including rubbing complete Granitic slab (jet blk with mirror polish) 20 mm thick add 0% wastage 1.00	sq.m	2995.00
9060		Providing and laying 20mm thick cuddapah in shelves over 20 mm thick base of cement mortar 1:3 complete	sq.m	669.00
9061		Providing 25 mm thick cuddapah slabs machine cut and polished on either side in partitions including making necessary grooves in the wall and fixing with cement mortar, complete as directed by the engineer-in-charge	sq.m	808.00
9062		Providing and laying 25 mm shahabad stone flooring over 25 mm thick bed of cement mortar 1:4 (1 cement :4 coarse sand) laid over with grey cement slurry mixed with pigment, including. Rubbing and polishing complete.	sq.m	931.00
9063		Marble stone flooring with 18 mm thick marble stone (sample of marble shall be approved by Engineer-in-charge) over 20mm (average) thick base of cement Mortar 1:4 (1 cement:4 coarse ) using :		
	a	white Makrana Marble.	sq.m	3124.00
	b	White Makrana Marble with blue or black veins	sq.m	1652.00
9064		Fixing glazed/ceramic/vitrified floor tiles with cement based high polymer modified quick-set tile adhesive (waterbased) conforming to IS 15477, using 5kg. Adhesive per sq.m. of tile area, in avg 3mm thickness .	sq.m	362.00
9065		Providing and fixing Kota stone tread tiles 35mm thick in single piece with rounded nosing antiskid groove laid on and including 20mm (average ) thk bed of cement slurry including pointing with pigmented cement slurry to match the shade of the slab, cleaning etc. complete.	sq.m	1456.00
9066		Providing and fixing vitrified matt finished (600x600) and 10mm thick tiles in floor, treads of steps, landing on 25mm thick bed of cement mortar 1:3 and jointed with cement slurry complete.	sq.m	1477.00

9067		Providing and fixing vitrified glossy finished (600x600) and 10mm thick tiles in floor, treads of steps, landing on 25mm thick bed of cement mortar 1:3 and jointed with cement slurry complete.	sq.m	1045.00
9068		Providing and fixing vitrified antiskid tiles (320x320) and 10mm thick tiles in floor, treads of steps, landing on 25mm thick bed of cement mortar 1:3 and jointed with cement slurry complete.	sq.m	1499.00
9069		Precast plain Cement Tacktiles 32mm thk of required shade in floors, treads of steps and landing laid on 25mm bed of cement mortar 1:4(1cement:4coarse sand) jointed with neat cement slurry with pigment to match the shade of tiles including rubbing and polishing complete.	sq.m	1418.00
9070		Providing and fixing Vinyl flooring of approved shade and design with adhesive complete.	sq.m	925.00
9071		Providing red agra stone flooring 30 mm thickness (avg) on 20 mm thick base of cement mortar 1:4 (1 cement :4 coarse send) jointed with grey cement slurry mixed with pigment to match the shade of the tile including rubbing and polishing complete	sq.m	1277.00
9072		Providing and fixing coloured ceramic tiles (Bell or equivalent) of 8" x 12" size and 6 mm thick in skirting and dados on 12 mm thick cement plaster 1:3 (1 cement : 3 coarse sand) and jointed with cement slurry complete.	sq.m	792.00
9073		Providing and fixing coloured ceremic tiles(bell or equivalent) of 16" x 16" size and 6 mm thick in skirting and dados on 12 mm thick cement plaster 1:3 (1 cement : 3 coarse sand) and jointed with cement slurry complete.	sq.m	835.00
9074		Providing and fixing 1st quality ceramic glazed wall tiles (Johnson, Somany, Kajaria )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 sq.m including pointing in white cement mixed with pigment of matching shade complete.		

	a	Wall Ceramic Glazed Tiles : 200 x 300	sq.m	835.00
	b	Wall Ceramic Glazed Tiles : 300 x 450	sq.m	1009.00
	c	Wall Ceramic Glazed Tiles : 300 x 600	sq.m	1110.00
9075		Providing and and laying Ceramic glazed floor tiles 300 x 300 (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	sq.m	781.00
9076		Providing and and laying antiskid floor tiles 12 x 12 upto 16 x 16 in of Johnson, Somany, Kajaria (thickness to be specified by the manufacturer) of 1st quality conforming to IS:15622 of approved make in shades as specified 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		
	a	Dark Shades	sq.m	853.00
	b	Light Shades	sq.m	797.00
9077		Providing and and laying rustic floor tiles (rectified) 374 x 374 mm of Johnson, Somany, Kajaria or equivalent (thickness to be specified by the manufacturer) of 1st quality conforming to IS:15622 of approved make in shades as specified 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		
	a	Dark Shades	sq.m	962.00
	b	Light Shades	sq.m	931.00
9078		Providing and and laying vitrified floor tiles in different sizes of Johnson, Somany, Kajaria (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622 of approved make in colours and shades as specified laid on 20 mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand) including grouting the joints with white cement and matching pigment etc., complete		
	a	600x 600 mm Dark Shades	sq.m	1166.00
	b	600 x 600 mm light Shades	sq.m	1114.00
	c	900x 900 mm Dark Shades	sq.m	1369.00
	d	900 x 900 mm light Shades	sq.m	1270.00

9079		Providing and and laying scratch resistant floor tiles in different sizes of Johnson, Somany, Kajaria (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622 of approved make in colours and shades as specified laid on 20 mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand) including grouting the joints with white cement and matching pigment etc., complete		
	a	600x 600 mm Dark Shades	sq.m	1542.00
	b	600 x 600 mm light Shades	sq.m	1345.00
9080		Providing and laying vitrified industrial floor tiles in different sizes of Johnson, Somany, Kajaria (thickness to be specified by the manufacturer) and conforming to IS:15622 of approved make in colours and shades as specified laid on 20 mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand) including grouting the joints with white cement and matching pigment etc., complete		
	a	300 x 300 mm darkShades - 10 mm thick	sq.m	1393.00
	b	300 x 300 mm dark Shades - 12mm thick	sq.m	1664.00
	c	300 x 300 mm Light Shades - 10 mm thick	sq.m	1002.00
	d	300 x 300 mm Light Shades - 12mm thick	sq.m	1279.00
9081		Providing and and laying vitrified unglazed porcelain tactile floor tiles in different sizes of Johnson, Somany, Kajaria (thickness to be specified by the manufacturer) and conforming to IS:15622 of approved make in colours and shades as specified laid on 20 mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand) including grouting the joints with white cement and matching pigment etc., complete		
	a	300 x 300 mm Design - Liner	sq.m	1519.00
	b	300 x 300 mm Design - Buttons	sq.m	1427.00
9082		Deduct for not using 20 mm thick cement mortar 1:4 (1 cement : 4 coarse sand) bedding in laying of floor tiles	sq.m	408.00
9083		Fixing glazed / ceramic / vitrified floor tiles with cement based high polymer modified quick-set tile adhesive (water based) conforming to IS:15477, using 5 kg. adhesive per sq.m of tile area, in average 3 mm thickness	sq.m	358.00

9084		Providing and laying factory made Shot blasted cement concrete interlocking paver block of minimum M35/M40 grade made by heavy duty block making machine with strong vibratory compaction and of approved size and design / shape laid in 50 mm thick compacted bed of coarse sand, filling the joints with coarse sand, etc. all complete as per the direction of Engineer.- in I, Wave, Rectangular, Square etc. shapes. The products should comply to IS 15658:2006 and manufactured by ISO9001:2008 certified plant. The shot blasting should be done using 0.4-0.5mm dia steel shots with a speed of 3200 rpm.		
	a	60 mm thick in all colours except grey (M35 grade)	sq.m.	1526.00
	b	60 mm thick in Grey colour (M35 grade)	sq.m.	1519.00
	c	80 mm thick in all colours except grey (M40 grade)	sq.m.	1693.00
	d	80 mm thick in grey colour (M40 grade)	sq.m.	1444.00
9085		Providing and fixing in position Glass mosaic tiles at finished plain/flat/curved/inclined surface of size 10-50 mm square x 4 mm in all colour, design, fixing in customize design as per direction of Engineer. The glass mosaic tiles to be fixed on the surface with the help of approved adhesive applied at the rate of 2.5 kg per sqm and grouting of the same. The rate is inclusive of all operation, material and required pattern approved by Engineer.	sq.m.	1294.00
9086		Vacuum dewatering of laid concrete for roads/ areas using Tremix machinery including formwork with MS channel/ angle sections on sides of concrete with proper supporting system, surface/screed & needle vibrating & levelling of concrete. Vacuum dewatering should be done using suction mats (spread on surface) & suction pump, power floating/ troweling using screen floater, manual spreading of hardening compound (if any), smooth/rough/broom finish to the required slope, camber & level, groove cutting (upto 10mm wide x50mm deep) for contraction/expansion, construction & longitudinal joints, Providing dowel bars with sleeve/tie bars, filling two component polysulfide sealant/joint filler (Bitumen hot sealing compound: Grade A), taping with masking tape etc complete. (Concrete, reinforcement, Dowel Bar with sleeve/tie bar	cu.m.	994.00



		Reinforcement, tarpaulin sheet to be paid separately)		
9087		Providing and fixing Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps and dados, jointing with grey cement slurry @3.3 kg per sqm, including pointing/grouting in white cement mixed with pigment of matching shade complete.		
	a	600 x 600 mm - Dark Shades	sq.m.	1096.00
	b	600 x 600 mm - light Shades	sq.m.	1044.00
	c	900 x 900 mm - Dark Shades	sq.m.	1439.00
	d	900 x 900 mm - light Shades	sq.m.	1300.00
9088		Providing and laying flamed finish Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer : Flamed finish granite stone slab.		
	a	Jet Black	sq.m.	4631.00
	b	Cherry Red	sq.m.	3149.00
	c	Elite Brown	sq.m.	2991.00
	d	Cat Eye	sq.m.	3426.00
9089		Providing and fixing 18 mm 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, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels. Granite of any colour and shade, area of slab over 0.50 sqm		

	a	Jet Black	sq.m.	3968.00
	b	Cherry Red	sq.m.	3703.00
	c	Elite Brown	sq.m.	3570.00
	d	Cat Eye	sq.m.	3968.00
9090		Jaisalmer stone flooring with 18mm thick polished Jaisalmer stone over 20mm (average) thick base of CM 1:4 (1 cement : 4 Coarse sand) with joints finished flush	sq.m.	1567.00
9091		Providing and fixing Scratch resistant ceramic tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps and dados, jointing with grey cement slurry @3.3 kg per sqm, including pointing/grouting in white cement mixed with pigment of matching shade complete.		
	a	600 x 600 mm - Dark Shades	sq.m.	1191.00
	b	600 x 600 mm - Light Shades	sq.m.	1197.00
9092		Providing and laying in design & pattern factory made chamfered edge Cement Concrete paver blocks ( C. C. paver blocks) of M35/M40 strength, thickness & size/shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of fine sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with river/manufactured sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand in footpath, parks, lawns, drive ways or light traffic parking etc. complete as per manufacturer's specifications & direction of Engineer.		
	a	60mm thick with Grey colour (M35 grade)	sq.m.	946.00
	b	60mm thick with Red/ Black colour (M35 grade)	sq.m.	1021.00
	c	60mm thick with Yellow/ Orange/ Earth colour (M35 grade)	sq.m.	1096.00
	d	80 mm thick with Grey colour (M40 grade)	sq.m.	1159.00
	e	80 mm thick with Red/ Black colour (M40 grade)	sq.m.	1255.00
	f	80 mm thick with Yellow/ Orange/ Earth color (M40 grade)	sq.m.	1341.00

9093		Providing and fixing Granite stone slabs (flamed finish) 18mm thick in risers of steps, skirting, dado and pillars laid on cement paste and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete		
	a	Jet black	sq.m.	3592.00
	b	Cherry Red	sq.m.	3302.00
	c	Elite Brown	sq.m.	3155.00
	d	Cat Eye	sq.m.	3592.00
9094		Providing and fixing Granite stone slabs (mirror polished) 18mm thick in risers of steps, skirting, dado and pillars laid on cement paste and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete		
	a	Jet black	sq.m.	3447.00
	b	Cherry Red	sq.m.	3155.00
	c	Elite Brown	sq.m.	3011.00
	d	Cat Eye	sq.m.	3447.00
9095		Providing and laying in design & pattern factory made PVC RUBBER MOULDED Interlocking Cement Concrete paver blocks of M35/M40 strength, thickness & size/shape, made by table vibratory method using Rubber mould, laid in required colour & pattern over 50mm thick compacted bed of fine sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with river/manufactured sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand in footpath, parks, lawns, drive ways or light traffic parking etc. complete as per manufacturer's specifications & direction of Engineer.		
	a	60mm thick -Grey colour (M35 grade)	sq.m.	946.00
	b	60mm thick -Coloured other than Grey (M35 grade)	sq.m.	1096.00
	d	80 mm thick -Grey colour (M40 grade)	sq.m.	1159.00
	e	80 mm thick -coloured other than Grey (M40 grade)	sq.m.	1341.00

9096		Crazy ceramic tile flooring (China Mosaic flooring), with under layer 12 mm thick cement mortar 1:4 (1 cement: 4 coarse sand), with joints not exceeding 5 mm, including filling the gaps with ordinary cement mixture & mixing with synthetic polyester fibre, triangular in shape having specific gravity of 1.34 to 1.40, cross section size ranging from 10 to 40 micron & length upto 6 mm , mixing fibre @ 125 grams per 50 kg of cement in cement mortar, including providing and mixing water proofing material in mortar @ 1 kg per 50 kg of cement, all complete as per direction of Engineer-in-charge.	sq.m.	711.00

CHAPTER XIII				
ROOFING & CEILING WORKS				
Sr. No.		Description	Unit	Rate
10001		Providing corrugated G.I. sheet roofing, fixed with galvanized iron j or 1 hooks, bolts and nuts 8 mm diameter with bitumen and G.I. limpet washers filled with white lead complete excluding the cost of purlins rafter and trusses.		
	a	0.63 mm thick sheet - 24 G	sq.m	626.00
	b	0.50 mm thick sheet.-26G	sq.m	476.00
10002		Proving ridges or hips of width 60 cm over all in plain G.I. sheet fixed with galvanized iron J or L hooks bolts and nuts 8 mm dia G.I. limpet and bitumen washers complete		
	a	0.80 mm thick sheet.	Metre	717.00
	b	0.63 mm thick G. I. Sheet.	Metre	625.00
10003		Providing and fixing 15cm wide 45cm overall semi-circular plain G.I. sheets gutter with iron brackets 40 x 3 mm bolts nuts and washers etc., including making necessary connection with rain water pipe complete as per design.		
	a	0.80 mm thick sheet	Metre	541.00
	b	0.63 mm thick sheet	Metre	464.00
10004		Extra for providing and fixing curved corrugated G.I. sheets to roofing		
	a	0.80 mm thick sheet	sq.m	13.00
	b	0.63 mm thick sheet	sq.m	10.00
10005		Extra for providing & fixing corrugated G.I. sheets vertically or to a pitch exceeding 60 degrees.	sq.m	12.00
10006		Extra for straight cutting and waste in corrugated G.I. sheet roofing for making opening of area exceeding 40dm2 for chimneys stacks, sky light etc.		
	a	0.63 mm thick sheet	Metre	85.00
	b	0.50 mm thick sheet	Metre	70.00
10007		Extra for racking or circular cuttings and waste in C.G.I. sheets roofing.		
	a	0.63 mm thick sheet	Metre	220.00
	b	0.50 mm thick sheet	Metre	220.00

10008		Extra for making opening or recesses in C.G.I. sheets roofing or girth not more than 1 m.		
	a	Upto 100 sq.cm. in area	Each	32.00
	b	Above 100 sq.cm. but upto 400 sq.cm. in area	Each	81.00
	c	Above 400 sq.cm. in area	Each	121.00
10009		Providing valleys 90 cm overall in plain 1.60 mm thick G.I. sheet fixed with galvanized iron j or l hooks bolts 8mm dia G.I. limpet and bitumen washers complete.	Metre	1379.00
10010		Providing flashings 35 cm overall in plain G.I. sheet fixed with galvanized iron j or l hooks, bolts and nuts G.I. limpet & bitumen washer complete bent to shape and fixed in walls in cement mortar 1:3 (1 cement : 3 coarse sand).		
	a	1.25 mm thick sheet	Metre	620.00
	b	1.00 mm thick sheet	Metre	403.00
10011		Extra for making opening or recesses in plain G.I. sheets of girth not more than 1 m.		
	a	Upto 100 sq.cm. in area.	Each	22.00
	b	Above 100 sq.cm. but upto 400 sq.cm. in area.	Each	16.00
	c	Above 400 sq.cm. in area	Each	35.00
10012		Extra for providing and fixing wind ties of 40 x 6mm flat iron section.	Metre	112.00
10013		Providing asbestos cement sheets roofings fixed with galvanized iron j or l hooks, bolts & nuts 8mm dia G.I. plain and bitumen washer complete excluding the cost of purlines rafters, and trusses.		
	a	Corrugated sheets 6mm thick.	sq.m	284.00
10014		Extra for asbestos cement corrugated sheets roofing with vertical sheeting or sheeting to a pitch exceeding 60 degree.	sq.m	14.00
10015		Extra for straight cutting and waste in AC corrugated sheet roofing for making opening of area exceeding 0.40 sq.m. for chimney stacks, sky lights etc. (a) 6mm thick corrugated sheet	Metre	68.00
10016		Extra for racking or circular cutting and waste in AC corrugated or semi - corrugated sheet roofing.		
	a	6mm thick corrugated or semi corrugated sheet	Metre	145.00

10017		Providing and fixing ridges & hips in asbestos cement sheets roofing with G.I. j or l hooks, bolts and nuts 8mm dia G.I. plain and bitumen washers complete.		
	a	One piece plain angular ridges	Metre	172.00
	b	Serrated or plain wing adjustable ridges	Metre	199.00
	c	Close fitting adjustable ridges	Metre	227.00
10018		Extra for straight cutting and waste in AC corrugated, semi corrugated sheet roofing for making openings of area exceeding 0.40 sq.m. for chimney stacks, skylights etc.		
	a	6mm thick semi – corrugated sheet	Metre	65.00
10019		Extra for making or circular cutting and waste in A.C. sheet roofing:		
	a	6mm thick semi corrugated sheet	Metre	136.00
10020		Extra for making openings or recesses in A.C. corrugated, semi – corrugated sheet roofing of girth not more than 1meter		
	a	Those not exceeding 100 sq.cm. in area	Each	42.00
	b	Those exceeding 100 sq.cm. but not exceeding 400 sq.cm.	Each	80.00
	c	Those exceeding 400 sq.cm. in area	Each	116.00
10021		Providing and fixing ridges & hips in asbestos cement sheets roofing, with G.I. j or l hooks bolts and nuts 8mm dia G.I. plain and bitumen washer		
	a	North light adjustable ridges	Metre	231.00
	b	Unserrated adjustable hips	Metre	226.00
10022		Providing and fixing asbestos cement roofing accessories with galvanized iron J or L hooks, bolts and nuts and or G.I. seam bolts G.I. plain and bitumen washers etc. complete.		
	a	Apron flashing pieces	Metre	146.00
	b	Eaves fillet pieces	Metre	107.00
	c	Northlight & Ventilator curves	Metre	276.00
	d	Barge boards	Metre	83.00
	e	Expansion joints for sheets	Metre	112.00
	f	Ridge finals	Each	145.00
	g	Cowl type ventilators	Each	218.00
	h	Curved barge boards for north light curves	Each	303.00
	i	Roof lights	Each	854.00
	j	Expansion joints for ridges	pair	368.00
	k	Expansion joints for north light curves	Metre	87.00
	l	S. Type louvers	Metre	232.00

10023		Providing Thatched roofing 15 cms thick in two layers Each 75 mm thick with Pool as, half split bamboos fillet and tying strings complete	sq.m	314.00
10024		Providing and laying split bamboo jaffree 150mm mesh including tying to the purlins and rafters with mung ban or string complete.	sq.m	156.00
10025		Providing & laying thatched capping to ridges & hips upto 1m girth including tying etc. complete.	Metre	359.00
10026		Making khurras 45 x 45cm with average minimum thickness of 5cm of cement concrete 1:2:4 (1 cement: 2 coarse sand : 4 stone aggregate of 20mm nominal gauge) finished with 12mm cement plaster 1: 3 (1 cement: 3 coarse sand) & a coat of neat cement rounding the edges and making and finishing the outlet complete.	Each	186.00
10027		Providing angular fillets 7.5 x 7.5 cm cement concrete 1:2:4 (1 cement: 2 coarse sand : 4 graded stone) aggregate 20mm nominal size)	Metre	24.00
10028		Making water purnelas 25cm to 35 cm wide along the wall with cement mortar 1:4 (1 cement; 4 fine sand) & finished neat with floating coat of neat cement.	Metre	97.00
10029		Providing and laying 1 <sup>st</sup> class mangalore tile roof covering with 25 x 50mm (1" x 2") jamba wood or similar batten including nails etc. but excluding rafters.	sq.m	768.00
10030		Providing and laying 2 <sup>nd</sup> class mangalore tile roof covering with 25 x 37 mm (1" x 1.5") jamba wood or similar batten including nails etc., but excluding rafters.	sq.m	674.00
10031		Laying mangalore tile roof covering with 25 x 50 mm jamba wood or similar battenn including nail etc. complete (mangalore tiles will be supplied by the department free of cost).	sq.m	457.00
10032		Laying mangalore tile roof covering with 25 x 37 mm jamba wood or similar battenn including nails etc. complete (mangalore tiles will be supplied by the department free of cost).	sq.m	400.00
10033		Providing and laying ridge tiles laid dry & pointed with lime mortar 1: 2 (1 lime: 2 surkhi)	Metre	331.00



10034		Laying the ridge tiles laid dry and pointed with limemortar 1: 2 (1 lime : 2 surkhi) (ridge tiles will be supplied by the department free of cost).	Metre	97.00
10035		G.I. sheet gutters 26 s.w.g. semi circular 15cm width and 45 cm overall including fixing with clamps & making connection with rain water pipe complete.	Metre	288.00
10036		Ridge and valleys 45cm overall in plain G.I. sheet 26 s.w.g. fixed with galvanised j or l hooks 3/8" dia G.i. limpets and bitumen washers complete.	Metre	346.00
10037		Filling cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 hard aggregate 12.5 mm nominal gauge) in gaps of A.C. sheets corrugation and wings of ridges.	Metre	55.00
10038		Providing and fixing 20mm thick wooden planks ceiling (frame work for base to be paid separately) with M.S. screws		
	a	Indian teak wood second class	sq.m	3040.00
	b	Nano or chafo wood	sq.m	2129.00
10039		Providing and fixing 13mm thick wooden planks ceiling (frame work for base to be paid separately) with M.S. screws		
	a	Second class indian teak wood	sq.m	2114.00
	b	Nano or chafo wood	sq.m	1493.00
10040		Providing and fixing 4mm thick ply wood (5 ply) ceiling with second class indian teak wood beading of size 65 x 12mm not exceeding 180 cm center to centre apart and brass screws 1.5" for fixing etc. complete (frame work for base to be paid separately)	sq.m	1013.00
10041		Providing and fixing 4 mm thick A.C. plain sheet ceiling of approved quality with necessary nails etc. complete (frame work to be paid separately)	sq.m	387.00
10042		Providing & fixing insulating board board sheet ceiling of approved of quality with necessary nails, etc. complete (frame for base to be paid separately)		
	a	White faced insulating board 12mm thick	sq.m	648.00
	b	White faced insulating board 18 mm	sq.m	749.00
10043		Providing & fixing hard board sheet ceiling of approved quality with necessary nails, etc. complete (frame for base to be paid separately)		

		Standard quality 4 mm thick	sq.m	695.00
10044		Providing & fixing hard board sheet ceiling of approved quality with necessary nails, etc. complete (frame for base to be paid separately) Design boards 4 mm thick.	sq.m	399.00
10045		Providing and fixing insulating board sheet ceiling of approved of approved quality with necessary nails etc. complete (frame for base to be paid seperately). Flame retardent insulating board 12 mm.	sq.m	498.00
10046		Providing 18mm thick plaster of parts (gypsum anhydrous) ceiling upto height of 5m above floor level over 1 <sup>st</sup> class matti wood strips 25 x 6mm with 10mm gap in between & reinforced with rabbit wire mesh fixed to wooden frame.		
	a	Flat Surfaces	sq.m	1383.00
	b	Curved surfaces	sq.m	1930.00
10047		Extra for any sunk moulding in the plaster of Paris (gypsum anhydrous)	sq.m	344.00
10048		Extra for providing plaster of Paris (gypsum anhydrous) ceiling above 5 m from floor level.	sq.m	121.00
10049		Providing and fixing 12mm thick plaster of Paris (gypsum anhydrous) ceiling tiles upto a height of 5m above floor level over wooden frames rendered smooth with plaster of paris (gypsum anhydrous) (frame work to be paid separately)	sq.m	635.00
10050		Extra for providing and fixing plaster of paris (gypsum anhydrous) ceiling tiles above 5 meters height from floor level PER meter HEIGHT.	sq.m	61.00
10051		Providing and fixing in position ceiling tiles of 12mm thickness made of uncovered teak wood particle board bonded with phenol formal dehyde synthetic resin conforming to IS 3087 – 1965 with necessary second class indian teak wood beading of size 65 x 12 mm with brass screws (30 mm size) complete (frame work for base to be paid separately)		
	a	Plain boards	sq.m	1247.00
	b	Half random perforated board	sq.m	1329.00
	c	Full random perforated board	sq.m	1412.00
10052		Providing and fixing plain square edged wooden boarding 65 x 12mm with screws of approved quality for ceiling		
	a	Second class indian teak wood	Metre	180.00

	b	Nano wood	Metre	142.00
10053		Providing and fixing on wall face C.I. rain water pipes including filling the joints, with spun yarn soaked in neat cement slurry and cement mortar 1:2 (1 cement: 2 fine sand)		
	a	100 mm dia pipe	Metre	452.00
	b	150mm dia pipe	Metre	774.00
10054		Providing and fixing M.S. holder bat clamps of approved design to C.I. or S.C.I. pipes embeded in and including cement concrete blocks 10 x 10 x 10 cm of 1:2:4 ( 1 cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal size) including cost of cutting holes and making good the wall etc.		
	a	75mm or 80mm dia.	Each	212.00
	b	100mm dia meter	Each	216.00
	c	150 mm diameter	Each	234.00
10055		Providing and fixing on wall face C.I. accessories for rain water pipes including filling the joints with spun yarn soaked in neat cement slurry and cement mortar 1 : 2 (1 cement : 2 sand):		
	a	C.I. plain bend 100 mm dia	Each	266.00
	b	C.I. plain bend 150 mm dia	Each	285.00
10056		Providing and fixing to wall face C.I. accessories for rainwater pipes including filling the joints with spun yarn soaked in neat cement slurry and cement mortar 1:2 ( 1 cement : 2 coarse sand)		
	a	C.I. plain shoe 100mm dia	Each	299.00
	b	C.I. plain shoe 150mm dia	Each	494.00
10057		Providing and fixing to wall face C.I. accessories for rainwater pipes including filling the joints with spun yarn soaked in neat cement slurry and cement mortar 1:2 ( 1 cement : 2 coarse sand)		
	a	C.I. branch (plain) 100 mm dia single branch	Each	309.00
	b	C.I. branch (plain) 150 mm dia single branch	Each	460.00
10058		Providing and fixing on wall face C.I. accessories for rainwater pipes including filling the joints with spun yarn soaked in neat cement slurry and cement mortar 1:2 ( 1 cement : 2 coarse sand)		
	a	C.I. branch (plain) 100 mm dia double branch	Each	387.00
	b	C.I. branch (plain) 150 mm dia double branch	Each	639.00

10059		Providing and fixing to wall face C.I. accessories for rainwater pipes including filling the joints with spun yarn soaked in neat cement slurry and cement mortar 1:2 ( 1 cement : 2 coarse sand) C.I. offsets (plain) 100 mm dia 55 mm projection.	Each	301.00
10060		Providing & 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 1.7kg., per sq.m. of area respectively second and fourth course of roofing felt type 3 grade 1 (hessian based self finished bitumen felt ) & sixth and final course of stone grit 6 mm and down size or grade gravel spread at 0.008 cu.m per sq. m excluding grading complete.	sq.m	704.00
10061	a	Providing and fixing colour coated galvalium roofing sheets of 0.5mm thickness including all the accessories (TATA make) but excluding the cost of purlins, rafters, trusses, flashings etc. complete as per the directions of the Engineer in charge.	sq.m	698.00
	b	Providing and fixing Colouren Plus galvalium roofing Sheets of <b>0.5mm thick</b> double ribbed trapezoidal profile coated 1080mm with cover width of 1020mm including all the accessories (JSW or equivalent make) but excluding the cost of purlins, rafters, trusses, flashings etc. complete as per the directions of the Engineer in charge.	sq.m	600.00
	c	Add for providing & fixing Flashings -[Corners, Ridges, valleys, gable end & Trims] (Girth <b>upto</b> 610mm) including all the accessories complete as per the directions of the Engineer in charge.	Metre	340.00
	d	Providing and fixing Colouren Plus galvalium roofing Sheets of <b>0.45mm thick</b> double ribbed trapezoidal profile coated 1080mm with cover width of 1020mm including all the accessories (JSW or equivalent make ) but excluding the cost of purlins, rafters, trusses, flashings etc. complete as per the directions of the Engineer in charge.	sq.m	567.00
	e	Add for providing & fixing Flashings -[Corners, Ridges, valleys, gable end & Trims] (Girth <b>above</b> 610mm) including all the accessories complete as per the directions of the Engineer in charge.	Metre	645.00

10062		Providing and fixing plain square wooden boarding 50 x 12 mm section with screws of approved quality for ceiling and as directed by the Engineer in charge.		
	a	Nano wood.	sq.m	109.00
10063		Supply of mangalore tiles including loading, unloading and transportation complete.	Each	17.00
10064		Supply of mangalore ridge tiles including loading, unloading and transportation complete.	Each	59.00
10065		Providing and laying finolex roof covering with fittings on existing battens as directed by Engineer in charge.		
	a	PCV corrugated sheet - 1.0mm thick.	sq.m	678.00
	b	PCV corrugated sheet - 1.3mm thick.	sq.m	706.00
	c	PCV corrugated sheet - 1.5 mm thick.	sq.m	823.00
	d	PCV corrugated sheet - 1.8mm thick.	sq.m	1000.00
	e	PCV corrugated sheet - 2.0 mm thick.	sq.m	1070.00
10066		Providing and fixing PVC SWR pipes confirming to IS 13592 type A including jointing with seal ring confirming to IS 5382 leaving 10 mm gap for thermal expansion.		
	a	Single socketed pipe 75 mm dia	Metre	140.00
	b	Single socketed pipe 110 mm dia	Metre	226.00
10067		Providing and fixing Prince or equivalent make PVC SWR half round eaves gutter with bolts, nuts and flat iron brackets 40 x 3 mm size complete.		
	a	140 mm nominal size	Metre	178.00
	b	180 mm nominal size	Metre	229.00
	c	250 mm nominal size	Metre	372.00
10068		Extra for providing flat iron bracket 50 x 3 mm size instead of 40 x 3 mm size with necessary bolts nuts, washers etc. for fixing A.C. gutters to purlins.	Each	10.00
10069		Extra for providing and fixing prince or equivalent make PVC SWR joint bracket with 2 clamps for socketed half round eaves gutters.		
	a	140 mm nominal size	Each	106.00
	b	180 mm nominal size	Each	145.00
	c	250 mm nominal size	Each	300.00

10070		Extra for providing and fixing prince or equivalent make PVC SWR running outlet with 2 clamps for socketed half round eaves gutters.		
	a	140 mm nominal size	Each	141.00
	b	180 mm nominal size	Each	203.00
	c	250 mm nominal size	Each	391.00
10071		Extra for providing and fixing prince or equivalent make PVC SWR 90 deg. Elbow with /without outlet with 2 clamps for socketed half round eaves gutters.		
	a	140 mm nominal size	Each	202.00
	b	180 mm nominal size	Each	304.00
	c	250 mm nominal size	Each	588.00
10072		Extra for providing and fixing prince or equivalent make PVC SWR short stop ends for socketed half round eaves gutters.		
	a	140 mm nominal size	Each	48.00
	b	180 mm nominal size	Each	68.00
	c	250 mm nominal size	Each	162.00
10073		Extra for providing and fixing prince or equivalent make PVC SWR stop end outlet with one clamp for socketed half round eaves gutters.		
	a	140 mm nominal size	Each	124.00
	b	180 mm nominal size	Each	181.00
	c	250 mm nominal size	Each	339.00
10074		Extra for providing and fixing prince or equivalent make PVC SWR support bracket for socketed half round eaves gutters.		
	a	140 mm nominal size	Each	41.00
	b	180 mm nominal size	Each	50.00
	c	250 mm nominal size	Each	117.00
10075		Extra for providing and fixing prince or equivalent make PVC SWR clamps for socketed half round eaves gutters.		
	a	140 mm nominal size	Each	23.00
	b	180 mm nominal size	Each	32.00
	c	250 mm nominal size	Each	59.00
10076		Extra for providing and fixing prince or equivalent make PVC SWR rafter top / side brackets assembled for socketed half round eave gutters.		
	a	140 mm nominal size	Each	41.00
	b	180 mm nominal size	Each	57.00

	c	250 mm nominal size	Each	109.00
10077		Extra for providing and fixing prince or equivalent make PVC SWR rubber gasket for socketed half round eaves gutters.		
	a	140 mm nominal size	Each	20.00
	b	180 mm nominal size	Each	23.00
	c	250 mm nominal size	Each	47.00
10078		Extra for providing and fixing prince or equivalent make PVC SWR single socket elbow for socketed half round eaves gutters.		
	a	75 mm nominal size	Each	59.00
	b	110 mm nominal size	Each	87.00
10079		Extra for providing and fixing prince or equivalent make PVS SWR pipe clip for socketed half round eaves gutters.		
	a	75 mm nominal size	Each	26.00
	b	110 mm nominal size	Each	27.00
10080		Extra for providing and fixing prince or equivalent make PVC SWR rubber seals for socketed half round eaves gutters.		
	a	75 mm nominal size	Each	22.00
	b	110 mm nominal size	Each	23.00
10081		Providing water proofing treatment over the new R.C.C. roofs terrace toilet by spreading cement slurry over the R.C.C. slab and laying of 10cms. Average laterite stone ballast coba with the necessary gradient for easy flow of rain water and the coba in covered with damp proof of Hindustan water proofing co. Or equivalent jointless water proofing plaster of mix 1:3 ( 1 cement : 3 find sand), finished smooth with wooden trowel with false marking of 30 cms square. The vertical surface of the adjoining walls are to be treated upto a height of 30cms including rounding of junction (the rate includes for complete items including labour and materials and including cost of initial treatment of roof slab as follows. The injunction of damp proof or equivalent compound with cement solution will be given as and when found necessary for filling honey comb, cracks etc. in the R.C.C. slabs). NOTE: cement consumption 25 kg/sq.m.	sq.m	872.00

10082		M.F. suspended ceiling (single layer) which includes G.I. perimeter of size 0.55 mm thick (having one flange of 20 mm and another flange of 30 mm and a web of 27 mm) alongwith perimeter of ceiling, screw fixed to brick wall / partition wit	sq.m	652.00
10083		M.F. wall lining which includes 9.5 /12.5 mm thick Gypsum board (conforming to IS : 2095 – 1982) screw fixed to the ceiling section (0.55 mm thick having a knurled web of 51.5 mm and two equal flanges of 26 mm each with lips of 10.5 mm made of	sq.m	618.00
10084		75 mm Metal stud partition 2438 mm height which includes one layer of tapered edge 12.5 mm thick Gypsum board (conforming to IS:2095 – 1982) screw fixed with drywall screw of 25 mm at 300 mm centres to either side of 48 mm studs (0.55 mm thick)	sq.m	1136.00
10085		97 mm metal stud partition 2438 mm height) which includes one layer of tapered edges 12.5 mm thick Gypsum board (conforming to IS : 2095 – 1982) or equivalent, screw fixed with drywall screw of 25mm at 300 mm centres to either side of 70 mm studs (0.55 mm thick)	sq.m	1151.00
10086		Gypliner or equivalent ceiling which includes providing & fixing G.I. HG angle of size 0.55 mm thick having two equal flanges of 25 mm each screw fixed to brick wall / partition with the help of nylon sleeves & screws at 610 mm c/c. Then suspending channel 12.5 mm tapered edge Gypboard (confirming to IS:2095-1982) is then fixed to channel section with 25 mm drywall screws at 230 mm centre. Screw fixing is done mechanically with drill machine and suitable attachment. Finally square and tapered edges joints of the boards are jointed and finished so as to have flush look which includes filling finishing with jointing compound, joint paper tape and two coats of Drywall top coat suitable for Gypboard (as per recommended practices of India Gypsum Limited).	sq.m	657.00
10087		Gypliner wall lining or equivalent which includes 12.5 mm thick or equivalent (confirming to IS : 2095 – 1982) screw fixed to the Gypliner channel section (0.55 mm thick having a web of 45 mm & two equal flanges of 18 mm each with lips of 6 mm made of G.I. Ste	sq.m	646.00



10088	Fineline or equivalent (pre-coated) 600 mm x 600mm grid size providing & fixing pre-coated G.I. angle size 24 x 24 x 0.90 mm thick fixed to the brick wall/partition at the perimeter of ceiling with nylon sleeves and screws at 610 mm centres. Then suspending main G.I. 'T' section (bottom pre-coted) size 24x38x0.7 mm and 3600 mm long from soffit in one direction with the help of metal rawl plug, soffit cleat & G.I. rod 4 mm diameter with galvanised spring steel level clip 1220 mm centres G.I. Cross T section (bottom pre-coated) size 24x 38.70 mm and 600 mm long in insert fixed into the slots provided in main 'T' at 600 mm centres to form 600 x 600 mm grid. Boarding: 9.5 mm / 12.5 mm thick thick Gyboard or equivalent cut in panel size of 595 x 595 mm can be laid onto the grid P.V.C. universal holding clips are to be placed on ceiling panel in each direction i.e. 4 clips per panel.	sq.m	606.00
10089	Fineline or equivalent (precoated) 600 mm x 1200 mm grid size pre-coated G.I. angle size 25 x 25 x 0.70 mm thick fixed to the brick wall / partition at the perimeter of ceiling with nylon sleeves and screws at 610 mm centres. Then suspending main G.I. 'T' section (bottom precoated) size 24 x 38 x 0.7 mm and 3600 mm long from soffit in one direction with the help of Metal Rawl Plug, sffit cleat & G.I. Rod 4 mm diameter with galvanised spring steel level clip 1220 mm centres G.I. Cross T section (bottom pre-coated) size 24 x 38 x 0.70 mm and 600 mm long is insert fixed into the slots provided in main 'T' at 1200 mm centres to form 1200 x 600 mm grid. Boarding : 9.5 mm / 12.5 mm thick Gyboard cut in panel size of 595 x 595 mm can be laid onto the grid P.V.C. universal holding clips are to be placed on ceiling panel in position 2 nos. on 1195 mm side and 1 no. on 595 mm side.	sq.m	591.00

10090		Providing & fixing in position Galvalume/Zincalume flashings, cappings, ridges, gutters upto 600mm/610mm girth and min 3.00m in length (cold Rolled Steel 550 MPa yeild Stress ASTM A 446 Grade E) with hot-dip metallic coating of aluminium-zinc alloy(AZ 150 galvalume) (150 gms/sqm total of both sides with Al-Zn Composition= 55% & 43.5% resp. & 1.5% Si conforming to ASTM 792/ AS 1397) 0.45 mm base metal thickness and 0.50mm total coated thickness, factory cut at all heights for roof, side & gable cladding complete in all respects with AZ 150 GSM SMP color Coated (20mic exterior coat of Silicon Modified Polyester paint system over 5 mic primer and 5 mic polyester back coat over 5 mic primer) incl. fixing to purlins with no 12x14x55mm mechanically galvanised hex head self drilling screws of the best quality as per AS-3566 class 3-4 approved, which should be compatible to be used with sheets. with integral washers and EPDM seals etc. Silicon sealant non-hardening neutral cure type shall be applied at all end laps, complete as directed.	Metre	401.00
10091		Supplying and Providing in position under deck 50mm thk non combustible Glass wool insulation 24 kg/m3 density with white prelaminated polypropelene facing (WMP-50) under the metallic roof complete for sound and heat insulation including cost of GI welded mesh of 75x75x1.60 thk streched over purlin complete. The GI Welded mesh should be primed and painted with min. 2 coats of superior quality ready mixed paint for steel work	sq.m.	558.00
10092		Extra for crimp curving for curved 0.5mm TCT Galvalume/Zincalume sheets.	sq.m.	73.00
10093		Providing and fixing in position 2mm thick one side embossed clear polycarbonate sheet in same profile to match the roofing sheets including self tapping screws.	sq.m.	1917.00

10094	<p>Providing &amp; Fixing in position Double Skin roof with Zinalume/ Galvalume colour coated &amp; bare profile sheet with subtle square fluting factory cut at all heights for roof, side &amp; Gable cladding complete in all respect. TOP SHEET-The end rib shall be designed for anti-capillary action. The feed material should be manufactured out of nominal 0.45 mm Base Metal Thickness (BMT), Hi-strength steel with min. 550 MPa yield strength, metallic hot dip coated with Aluminium-Zinc alloy (55% Aluminium, 43.5% Zinc &amp;1.5% Si) as per AS 1397 - Zinalume AZ150 (Min. 150 gms/sq.mt total on both sides) with quality paint coat as per AS/NZS 2728 type 3-4. The paint shall have a total coating thickness of nominal 35 µm, comprising of nominal 20 µm exterior SMP coat on top surface and nominal 5 µm reverse backer coat on back surface over nominal 5 µm primer coat on both surfaces of approved colour shade. Total Coated Thickness (TCT) should be 0.50mm. Total Painted Thickness (TPT) should be in addition to 0.50mm. The steel sheet shall be fastened with nominal 40 µm zinc coated or nominal 25 µm zinc-tin alloy coated, Hex head, self-drilling screw as per AS 3566-2002 Class 3 fasteners of approved make with EPDM washer as per the requirement considering the profile shape and design load. The fastener size shall be calculated as per the design or manufacturers recommendations.</p>	sq.m.	2236.00
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		<p>The profile sheet, fastener size etc. shall be approved by the Engineer. The sheeting should be with minimum 200mm lap &amp; waterproof with Silicon sealant non-hardening neutral cure type shall be applied at all end laps, complete as directed Z-Sub Girt - roll formed section 50x50x50x1.50 TCT, 120GSM Galvanised, High Strength (345 MPa), approximate Wt. 1.85 kg/r.m. fixed with self tapping screws Glass Wool Insulation with FSK facing 50mm with 24 kg/m<sup>3</sup> density in between 2 sheets. LINER SHEET-bare galvalume/zincalume roofing sheet of same profile as top sheet. The feed material is of manufactured out of nominal 0.45 mm Base Metal Thickness (BMT) (0.47 mm TCT), Hi-strength steel with min. 550 MPa yield strength, metallic hot dip coated with Aluminium-Zinc alloy (55% Aluminium, 45% Zinc) as per AS 1397 - Zincalume AZ150 (Min. 150 gms/sq.mt total on both sides), passivated &amp; resin coated. The feed material should have coil manufacturer's product details marked at regular interval for confirming genuinity of the material. complete as per the directions of the engineer. The steel manufacturer's test certificate for the chemical &amp; mechanical properties of steel must be submitted for approval prior to installation.</p>		
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10095		Providing and fixing tiled false ceiling of approved materials of size 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @ 120 grams/ sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24/15x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, 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 of size 27 x 37 x 25/15 x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanised butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24/15 mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer.		
	a	GI Metal Ceiling Lay in plain Tegular/ Bevelled edge Global white color tiles of size 595x595 mm, and 0.4-0.5 mm thick with 8 mm drop; made of G I sheet having galvanizing of 100 gms/sqm (both sides inclusive) and electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending.	sq.m.	1319.00

	b	GI Metal Ceiling Lay in perforated Tegular/ Bevelled edge global white color tiles of size 595x595 mm and 0.4-0.5 mm thick with 8 mm drop; made of GI sheet having galvanizing of 100 gms/sqm (both sides inclusive) and 20% perforation area with 1.8 mm dia holes and having NRC (Noise Reduction Coefficient ) of 0.5, electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending and perforation, and backed with a black Glass fiber acoustical fleece.	sq.m.	1671.00
10096		Providing and fixing GI Clip in Metal Ceiling System of 600x600 mm module which includes providing and fixing 'C' wall angle of size 20x30x20 mm made of 0.5 mm thick pre painted steel along the perimeter of the room with help of nylon sleeves and wooden screws at 300 mm center to centre, suspending the main C carrier of size 10x38x10 mm made of G.I steel 0.7 mm thick from the soffit with help of soffit cleat 37x27x25x1.6 mm, rawl plugs of size 38x12 mm and C carrier suspension clip and main carrier bracket at 1000 mm c/c. Inverted triangle shaped Spring Tee having height of 24 mm and width of 34 mm made of GI steel 0.45 mm thick is then fixed to the main C carrier and in direction perpendicular to it at 600 mm centers with help of suspension brackets. Wherever the main C carrier and spring T have to join, C carrier and spring T connectors have to be used. All sections to be galvanized @ 120 gms/sqm (both side inclusive), fixing with clip in tiles into spring 'T' with :		
	a	a) GI Metal Ceiling Clip in plain Beveled edge global white colour tiles of size 600x600 and 0.4-0.5 mm thick with 25 mm height, made of G I sheet having galvanizing of 100 gms/sqm (both sides inclusive) and electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending.	sq.m.	1668.00

	b	b) GI Metal Ceiling Clip in plain Beveled edge global white colour tiles of size 600x600 and 0.4-0.5 mm thick with 25 mm height, made of G I sheet having galvanizing of 100 gms/ sqm (both sides inclusive) and 20% perforation area with 1.8 mm dia holes and having NRC of 0.5, electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending and perforation.	sq.m.	1849.00
10097		Providing & Fixing of Aluminium Lay in Plain Tile Ceiling on 24 /14 mm 'T' Framework of module 600mm X 600mm. Tiles of size 575mm X 575mm / 584mm x584mm made out of 0.6mm thick Aluminium. The tile shall be manufactured on advanced equipment, which includes several leveling. The tile end shall be raised up ward & bend outward to lay the tile in framework. The tile shall be Polyester based, Powder coated in white color. Grid system for fixing ceiling tiles shall comprise of Tees. The 24 /14 mm main Tee runners shall be suspended at an interval of 1200mm centre to centre. The 24 /14 mm cross runner shall be suspended at 600 mm center to centre and further supported with 24 /14 mm cross Tee at 600 mm centre to centre with internal locking arrangements to form grid of 600mm X 600mm. The main Tee shall be supported by means of 4mm GI rod from slab / roof. The suspension shall be provided at 1200mm to 1500 mm centre to centre. Tee framework would be made of GI and Powder coated.	sq.m.	1720.00

10098	<p>Providing &amp; Fixing of Aluminium Lay-in Perforated Tile Ceiling on 24 /14 mm 'T' Framework of module 600mm x 600mm. Tiles of size 575mm X 575mm / 584mm x584mm made out of 0.6mm thick Aluminium. Perforation of the tiles shall be 2.5mm dia 5.5mm c/c. The Tile shall be manufactured on advanced equipment, which includes several levelling. The tile end shall be raised upward by 38mm and bend outward to lay the tile in framework. The Tile shall be Polyester based, powder coated in white colour. Grid system for fixing ceiling tiles shall comprise of Tees. The 24 /14 mm main tee runners shall be suspended at an interval of 1200mm centre to centre. The 24 /14 mm cross tee runner shall be suspended at 600mm centre to centre and further supported with 24 /14 mm cross tee at 600mm centre to centre with interlocking arrangements to form grid of 600mm x 600mm. The main tee shall be supported by means of 4mm G.I. rod from slab/roof. The suspension shall be provided at 1200 to 1500mm centre to centre. Tee framework would be made of GI and Powder coated. Acoustic Felt: Non-woven felt made of glass-reinforced fibre glued over the perforation for sound absorption.</p>	sq.m.	1793.00
10099	<p>Providing &amp; Fixing of Metal Tile Ceiling System comprising of Tile of 600mm wide and 600mm long manufactured out of 0.6mm thick Aluminium Clip-in Plain. The Tile shall be manufactured on advanced equipment that includes several levelling stages in the manufacturing process. Tile ends shall be raised with pips and stops to ensure positive engagement into the spring to enable for de-mounting of individual panels. The Tile sides shall be sufficiently high to ensure a minimum deflection across the length of Tile. All Tiles shall be bevel edged. The Tile shall be Polyester based, powder coated in white colour. The Tile shall be clipped into clip in profile of 0.5mm thick G.I. The clip in profile shall be supported from slab by means of rigid suspension of 4mm G.I. Rod, Hold on Clamp with Clip.</p>	sq.m.	1787.00



10100	Providing & Fixing of Metal Tile Ceiling System comprising of Tile of 600mm wide and 600mm long manufactured of 0.6mm thick Aluminium Clip-in perforated 2.5mm dia 5.5mm c/c. The Tile shall be manufactured on advanced equipment, which includes several levelling stages in the manufacturing process. Tile ends shall be raised with pips and stops to ensure positive engagement into the spring to enable for de-mounting of individual panels. The Tile sides shall be sufficiently high to ensure a minimum deflection across the length of Tile. All Tiles shall be bevelled edged. The Tile shall be polyester based, powder coated in White Colour. Tile shall be clipped into clip in profile of 0.5mm thick G.I. The clip in profile shall be supported from slab by means of rigid suspension of 4mm G.I. Rod, Hold on Clamp with Clip. Acoustic Felt: Non-woven felt made of glass-reinforced fibre glued over the perforation for sound absorption.	sq.m.	1858.00
10101	Providing and laying integral cement based treatment (Box type) for water proofing on horizontal surface at all depth below ground level for under ground structures as directed by Engineer and consisting of : i) 1st layer of 20 mm to 25 mm thick approved and specified rough stone slab over a 25 mm 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 25 mm 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 10 mm to 12 mm nominal size spreading @ 8 cudm/sqm thoroughly embedded in the 2nd layer using rough Shahbad/Kotah stone.	sq.m.	1433.00

10102	Providing and laying integral cement based treatment (Box type) for water proofing on the vertical surface by fixing specified stone slab 20 mm to 25 mm thick with cement slurry mixed with water proofing compound conforming to IS:2645 in recommended proportions with a gap of 20 mm (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) 20 mm thick with neat cement punning mixed with water proofing compound in recommended proportion complete at all levels and as directed by Engineer using rough Shahbad/Kotah stone.	sq.m.	1658.00
10103	Providing and fixing 15mm thick densified tenger edged eco friendly light weight Calcium Silicate false ceiling tiles <b>(like Aerolite Brand or Equivalent)</b> of approved texture Spintone/ Cosmos/ Fine Fissured or equivalent of size 595mm x 595mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanizing @ 120 grams per square metre. including both side) consisting of main "T" runner suitably spaced at joints to get required length and of size 24x38mm made from 0.33mm thick (minium) sheet, spaced 1200mm center to center, and cross "T" of size 24x28mm made of 0.33mm thick (Minimum) sheet to be inter locked at middle of the 1200x600mm panel to from grid of size on a Perimeter wall angle precoated steel of size 600x600mm, resting on periphery walls/ partitions (24x24x300mm) made of 0.40mm thick (minimum) sheet with the help of rawl plugs at 450mm and laying 15mm thick densified edges calcium silicate ceiling tiles of approved texture light fittings, fixture, smoke detectors etc., wherever required. Main "T" runners to be suspended from ceiling using G.I. slotted cleats of size 25x35x1.6mm fixed to celing using with 12.5mm dia and 50mm long dash fastners, level clips of size 85x30x0.8mm, spaced at 1200mm center to center along main "T" bottom exposed with 24mm of T-section shall be pre-painted with polyester baked paint, for all heights, as per specifications, drawings etc. complete.	Sqm.	1793.00

		(As Directed by Engineer in Charge)		
		Note: Only Calcium silicate false ceiling area will be measured from wall to wall. No deduction shall be made for exposed frames/ opening (cut outs) having area less than 0.30 sqm. The Calcium silicate ceiling tile shall have NRC value of 0.50 (Minimum), light reflection > 85% non-combustible as per B.S.476 part IV, 100% humidity resistance and also having thermal conductivity 0.043 w/m °K.		
		Hospitals, Offices and Commercial Buildings, Auditoriums and Cinema Hall, Educational Institutions, R&D Centers, Studios, Laboratories, Library, Canteen.		
10104		Providing and fixing <b>JIELI BRAND or Equivalent</b> resin coated <b>3mm thk UPVC</b> roof tiles sheets along with ridges/ valleys to required profile, including accessories such as tapping screws etc. excluding the cost of purlins rafter and trusses.	Sqm.	1688.00
10105		Providing & Fixing L angle ridge for roof sheets including accessories	Each	662.00
10106		Providing & laying mangalore tiles roof covering over M25 grade Precast Cement Concrete Rafters placed @ 60cm C/C apart fixed with adhesive such as Bal endura, Sika etc. over sloping roof slabs & precast concrete Battens including all material, labour, tools & plants all complete. (Cost includes mangalore tiles, rafters & battens)	Sqm.	894.00

CHAPTER XIV				
PLASTERING AND FINISHING WORKS				
Sr. No.		Description	Unit	Rate
11001		Lime punning with lime mortar 1:1 (1 lime putty : 1 fine sand)	sq.m	65.00
11002		Finishing fine with neeru over plaster	sq.m	41.00
11003		12mm cement plaster 1:3 (1 cement : 3 fine sand)	sq.m	204.00
11004		12mm cement plaster 1:4 (1 cement : 4 fine sand)	sq.m	191.00
11005		12mm cement plaster 1:5 (1 cement : 5 fine sand)	sq.m	185.00
11006		12mm cement plaster 1:6 (1 cement : 6 fine sand)	sq.m	179.00
11007		15mm cement plaster 1: 3 (1 cement : 3 fine sand) on the rough side of single or half brick wall.	sq.m	236.00
11008		15mm cement plaster 1: 4 (1 cement : 4 fine sand) on the rough side of single or half brick wall.	sq.m	221.00
11009		15mm cement plaster 1: 5 (1 cement : 5 fine sand) on the rough side of single or half brick wall.	sq.m	213.00
11010		15mm cement plaster 1: 6 (1 cement : 6 fine sand) on the rough side of single or half brick wall.	sq.m	206.00
11011		20mm cement plaster 1: 3 (1 cement : 3 fine sand)	sq.m	307.00
11012		20mm cement plaster 1: 4 (1 cement : 4 fine sand)	sq.m	286.00
11013		20mm cement plaster 1: 5 (1 cement : 5 fine sand)	sq.m	274.00
11014		20mm cement plaster 1: 6 (1 cement : 6 fine sand)	sq.m	265.00
11015		6mm cement plaster to ceiling 1: 3 (1 cement : 3 fine sand)	sq.m	156.00
11016		6mm cement plaster to ceiling 1: 4 (1 cement : 4 fine sand)	sq.m	148.00
11017		Extra for plaster to ceiling above 5m height from floor level for every additional height of one meter or part there of.	sq.m	101.00
11018		Neat Cement punning	sq.m	49.00
11019		Extra for plastering spherical ceiling	sq.m	70.00
11020		Extra for plastering groined ceiling	sq.m	81.00

11021		Extra for plastering flowing soffits.	sq.m	55.00
11022		12mm cement plaster 1:3 (1 cement : 3 coarse sand)	sq.m	204.00
11023		12mm cement plaster 1:4 (1 cement : 4 coarse sand)	sq.m	191.00
11024		12mm cement plaster 1:5 (1 cement : 5 coarse sand)	sq.m	187.00
11025		12mm cement plaster 1:6 (1 cement : 6 coarse sand)	sq.m	179.00
11026		15mm cement plaster 1: 3 (1 cement: 3 coarse sand) on the rough side single or half brick wall.	sq.m	236.00
11027		15mm cement plaster 1: 4 (1 cement: 4 coarse sand) on the rough side single or half brick wall.	sq.m	221.00
11028		15mm cement plaster 1: 5 (1 cement: 5 coarse sand) on the rough side single or half brick wall.	sq.m	213.00
11029		15mm cement plaster 1: 6 (1 cement: 6 coarse sand) on the rough side single or half brick wall.	sq.m	206.00
11030		20mm cement plaster 1: 3 (1 cement : 3 coarse sand)	sq.m	311.00
11031		20mm cement plaster 1: 4 (1 cement : 4 coarse sand)	sq.m	286.00
11032		20mm cement plaster 1: 5 (1 cement : 5 coarse sand)	sq.m	274.00
11033		20mm cement plaster 1:6 (1 cement : 6 coarse sand)	sq.m	265.00
11034		12mm cement plaster 1: 3 (1 cement ; 3 coarse sand) finished with a floating coat of neat cement.	sq.m	252.00
11035		Extra for providing and mixing water proofing material proportion recommended by the manufacturers.		
	a	12mm cement plaster 1: 3 (1 cement : 3 sand)	sq.m	10.00
	b	12mm cement plaster 1: 4 (1 cement : 4 sand)	sq.m	8.00
	c	15mm cement plaster 1: 3 (1 cement : 3 sand)	sq.m	11.00
	d	15mm cement plaster 1: 4 (1 cement : 4 sand)	sq.m	8.00
	e	20mm cement plaster 1: 3 (1 cement : 3 sand)	sq.m	12.00
	f	20mm cement plaster 1: 4 (1 cement : 4 sand)	sq.m	10.00
11036		18mm cement plaster in two coats under layer 12mm thick cement plaster 1:5 ( 1 cement : 5 coarse sand) and top layer 6mm thick with cement plaster 1: 3 (1 cement : 3 coarse sand) finished with sponge.	sq.m	283.00

11037		Extra for plastering exterior walls of height more than 10m from ground level for every additional height of 3m or part thereof.	sq.m	43.00
11038		Extra for plastering on circular work not exceeding 6m in radius		
	a	In one coat	sq.m	29.00
11039		Extra for plastering done on mouldings, cornices, or arch it raves including neat finish to line and level.		
	a	In one coat	sq.m	283.00
11040		18mm plastering with terrazzo finish rubbed and polished complete, under layer 12mm thick cement plaster 1: 3 (1 cement : 3 coarse sand) and top layer 6mm thick white black or white and black marble chips of 3mm and down 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.	sq.m	509.00
11041		12mm thick plain cement mortar bands in cement mortar 1:4 (1 cement: 4 fine sand)		
		1 meter long, 1 cm wide	Each	65.00
11042		18mm thick plain cement mortar bands in cement mortar 1:4 (1 cement : 4 fine sand)		
		1 meter long, 1 cm wide	Each	69.00
11043		12mm thick moulded cement mortar bands in cement mortar 1:4 (1 cement : 4 fine sand) cm per meter	Each	78.00
11044		18mm thick molded cement mortar bands in cement mortar 1:4 (1 cement : 4 fine sand) cm per meter	Each	81.00
11045		18mm pebble dash plastering under layer 12mm thick cement plaster 1: 3 (1 cement: 3 coarse sand) and top layer 6mm thick cement plaster 1: 4 (1 cement : 4 coarse sand) with pebbles of nominal size 3mm to 10mm	sq.m	387.00
11046		Rough cast plaster with a mixture of sand and gravel or crushed stone from 2.36mm to 12.5mm nominal size dashed over and including fresh plaster in two 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.		

	a	Natural cement finishing using ordinary cement	sq.m	502.00
11047		Pebble dash plaster with a mixture of washed pebble or crushed stone 6mm to 12.5mm nominal size dashed over and including fresh plaster in two layer, 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 ground hydrated lime by volume of cement.	sq.m	417.00
11048		Pointing on brick work with cement mortar 1: 3 (1 cement : 3 fine sand)		
	a	Flush pointing	sq.m	120.00
	b	Ruled pointing	sq.m	116.00
	c	Raised and cut pointing	sq.m	188.00
11049		Pointing on stone work, with cement mortar 1: 3 (1 cement: 3 fine sand)		
	a	Flush pointing	sq.m	170.00
	b	Ruled pointing	sq.m	170.00
	c	Raised and cut pointing	sq.m	291.00
11050		Extra for painting on walls on the outside at height more than 10m from ground level for every additional height of 3.0 m or part thereof.	sq.m	13.00
11051		White washing with lime on new work ( three or more coats) to give an even shade.	sq.m	44.00
11052		White washing with lime on old work ( two or more coats) to give an even shade.	sq.m	36.00
11053		White washing with whiting on new work ( three or more coats) to give an even shade.	sq.m	48.00
11054		White washing with whiting on old work(two or more coats) to give an even shade	sq.m	31.00
11055		White washing with whiting on old work ( one coat) to give an even shade.	sq.m	19.00
11056		Colour washing such as green, blue or buff on new work ( two or more coats) including a base coat of white washing with lime to give an even shade.	sq.m	52.00

11057		Colour washing such as green, blue or buff with lime on old work (two or more coats) to give an even shade.	sq.m	38.00
11058		Colour washing such as green, blue or buff on new work ( two or more coats) including a base coat of white washing with whiting to give an even shade.	sq.m	50.00
11059		Removing white or colour wash by scrapping, sand papering and preparing surface smooth including necessary repairs to scratches etc. complete.	sq.m	18.00
11060		Distempering with dry distemper of approved brand and manufacturer two or more coats of required shade on new work over and including priming coat of whiting to give an even shade.	sq.m	80.00
11061		Distempering with dry distemper of approved brand and manufacturer one or more coats of required shade on old work to give an even shade.	sq.m	42.00
11062		Distempering two or more coats with oil bound washable distemper of approved brand and manufacture and of required shade on new work over and including a priming coat with distemper primer of approved brand and manufacture to give an even shade.	sq.m	109.00
11063		Distempering (one/ more coat) with oil bound washable distemper of approved brand and manufacture and of required shade on old work to give an even shade.	sq.m	40.00
11064		Applying one coat of cement primer of approved brand and manufacture on wall surface.	sq.m	45.00
11065		Applying one coat of distemper primer of approved brand and manufacture on wall surface.	sq.m	40.00
11066		Finishing wall with waterproofing cement paint of approved brand and manufacture and of required shade on new work (three or more coats) to give an even shade.	sq.m	64.00
11067		Finishing wall with waterproofing cement paint of approved brand and manufacture and of required shade on old work (one or more coats) to give an even shade.	sq.m	43.00



11068		Finishing wall with superior quality waterproofing cement paint (super snow hem or equivalent) of required shade on new work (three or more coats) to give an even shade.	sq.m	90.00
11069		Finishing wall with superior quality waterproofing cement paint (super snow hem or equivalent) of required shade on old work (three or more coats) to give an even shade.	sq.m	42.00
11070		Removing dry or oil bound distemper by scrapping sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	sq.m	20.00
11071		Painting 2 coats with oil type wood preservative of approved brand & manufacture on new work.	sq.m	56.00
11072		Painting 1 coat with oil type wood preservative of approved brand & manufacture on old work.	sq.m	46.00
11073		Coal tarring two coats on new work using 0.16 and 0.12 liter of coal tar per sq.m. in the first coat and second respectively.	sq.m	59.00
11074		Coal tarring one coat on old work using 0.12 liter of coal tar per sq.m.	sq.m	40.00
11075		Applying priming coat consisting of a mixture of red lead, white lead and double boiled linseed oil in the ratio of 0.7 kg. 0.7 kg. 1 litre on wood work complete.	sq.m	72.00
11076		Applying priming coat with ready mixed primer of approved brand and manufacture on wood work complete.	sq.m	51.00
11077		Applying priming coat with ready mixed primer of approved brand and manufacture on steel work.	sq.m	43.00
11078		Applying priming coat with ready mixed red lead paint of approved brand and manufacture on steel work.	sq.m	43.00
11079		Painting two or more coats (excluding priming coat) with ordinary ready mixed paint of approved brand & manufacture in all shades except white or green on new work to give an even shade.	sq.m	84.00
11080		Painting one/ two more coats with ordinary ready mixed paint of approved brand & manufacture in all shades except white or green on old work to give an even shade.	sq.m	59.00

11081		Painting two or more coats (excluding priming coat) with superior quality ready mixed paint for steel work of approved brand & manufacture in all shades on new work to give an even shade.	sq.m	94.00
11082		Painting one or more coats with superior quality ready mixed paint of steel work of approved brand & manufacture in all shades on old work to give an even shade.	sq.m	65.00
11083		Painting two or more coats (excluding priming coat) with superior quality ready mixed paint for wood work of approved brand & manufacture in all shades on new work to give an even shade.	sq.m	80.00
11084		Painting one or more coats with superior quality ready mixed paint of wood work of approved brand & manufacture in all shades on old work to give an even shade.	sq.m	59.00
11085		Paints two coats on G. I. Sheet with superior quality ready mixed paint of approved brand and manufacture on new work to give an even shade.	sq.m	76.00
11086		Painting one or more coats on G.I. sheets with superior quality ready mixed paint of approved brand and manufacture on old work to give an even shade.	sq.m	51.00
11087		Spray painting with flat wall paints of approved brand and manufacture two or more coats on new work including priming coat of distemper primer of approved brand and manufacture to give an even shade.	sq.m	121.00
11088		Painting (two or more coats) with synthetic enamel paint of approved brand and manufacture in all shade or new work over and under coat of suitable shade with ordinary paint of approved brand and manufacture to give an even shade	sq.m	132.00
11089		Painting (one or more coats) with synthetic enamel paint of approved brand and manufacture in all shades on old work to give an even shade.	sq.m	61.00
11090		Painting (two or more coats) with aluminium paint of approved brand and manufacture on new work to give an even shade.	sq.m	88.00
11091		Painting (one or more coats) with aluminium paint of approved brand and manufacture on old work to give an even shade.	sq.m	62.00

11092		Painting (two or more coats) with acid proof paint of approved brand and manufacture in chocolate or black shade on new work to give an even shade.	sq.m	60.00
11093		Painting (one or more coats) with acid proof paint of approved brand and manufacture in chocolate or black shade on old work to give an even shade.	sq.m	43.00
11094		Painting (two or more coats) with black anticorrosive bitumastic paint of approved brand and manufacture on new work to give an even shade.	sq.m	78.00
11095		Painting (one or more coats) with black anticorrosive bitumastic paint of approved brand and manufacture on old work to give an even shade.	sq.m	55.00
11096		Painting (one or more coats) with black japan paint of approved brand and manufacture to give an even shade.	sq.m	58.00
11097		Wall painting (two or more coats) with plastic emulsion paint of approved brand and manufacture on new work to give an even shade.	sq.m	94.00
11098		Wall painting (one or more coats) with plastic emulsion paint of approved brand and manufacture on old work to give an even shade.	sq.m	67.00
11099		Varnishing (two or more coats) with copal varnish of approved brand and manufacture on new work including an under coat Bees waxing on wood work with local made wax polish in proportion of 2:1 5:1 0.5 (2 wax: 1.5 linseed oil: 1)		
	a	With glue sizing	sq.m	134.00
	b	With transparent wood filler.	sq.m	129.00
11100		Varnishing with (1 or more coats) with copal varnish of approved brand & manufacture on old work.	sq.m	63.00
11101		Oiling (two or more coats) with raw linseed oil on new work.	sq.m	52.00
11102		Oiling (one or more coats) with raw linseed oil on old work.	sq.m	42.00
11103		Bees waxing on wood work with local made wax polish in proportion of 2:1 5:1 : 0.5 (2 wax : 1.5 linseed oil 1 turpentine oil, 0.5 varnish by weight) on new work.	sq.m	96.00

11104		Bees waxing on wood work with local made wax polish in proportion of 2:1 5:1 : 0.5 (2 bees wax : 1.5 linseed oil 1 turpentine oil, .5 varnish by weight) on old work.	sq.m	60.00
11105		Polishing on wood work with ready made superior quality wax polish of approved brand and manufacture on new work.	sq.m	100.00
11106		Polishing on wood work with ready made superior quality wax polish of approved brand and manufacture on old work.	sq.m	59.00
11107		Floor polishing on masonry or concrete floors with superior quality wax polish of approved brand and manufacture.	sq.m	56.00
11108		Painting (two or more coats) on rain water, soil, waste & vent pipes and fittings with black anti-corrosive bitumanstic paint of approved brand and manufacture over a priming coat of ready mixed genuine red lead on new work:		
	a	50mm diameter pipes	Metre	30.00
	b	75mm diameter pipes	Metre	39.00
11109		Painting (one or more coats) on rain water, soil, waste & vent pipes and fittings with black anti-corrosive bitumanstic paint of approved brand and manufacture on old work:		
	a	50mm diameter pipes	Metre	24.00
	b	75mm diameter pipes	Metre	21.00
	c	100mm diameter pipes	Metre	27.00
	d	150mm diameter pipes	Metre	34.00
11110		Painting (two or more coats) on rain water, soil, waste & vent pipes and fittings with aluminium paint of approved brand and manufacture over a priming coat of ready mixed genuine red lead on new work:		
	a	50mm diameter pipes	Metre	34.00
	b	75mm diameter pipes	Metre	44.00
	c	100mm diameter pipes	Metre	61.00
	d	150mm diameter pipes	Metre	85.00
11111		Painting (one or more coats) on rain water, soil, waste & vent pipes and fittings with aluminium paint of approved brand and manufacture on old work:		
	a	50mm diameter pipes	Metre	22.00
	b	75mm diameter pipes	Metre	33.00
	c	100mm diameter pipes	Metre	45.00
	d	150mm diameter pipes	Metre	61.00

11112		Lettering with black japan paint of approved brand and manufacture.		
		*1 Letter of 1 cm height.	cm height / letter	41.00
11113		Re-lettering with black japan paint of approved brand and manufacture.		
		*1 Letter of 1 cm ht.	cm height / letter	32.00
11114		Removing old paint of polish with paint remover of approved brand & manufacture & preparing surface	sq.m	10.00
11115		Removing old paint with blow lamp and preparing surface	sq.m	12.00
11116		Providing and applying Synthetic elastomeric coating cum paint of reputed make such as Polysafe or equivalent conforming to relevant IS specification ready to use for bridge structures in saline atmosphere as to avoid salt concentration from marine environment, ultra-violet effects of the sun rays, fungus development and to protect the reinforcement from marine atmospheric effects in 3 coats including sand blasting, cleaning the concrete surfaces brushing and applying the polymerbased chemical coating with PRIMER, 1ST COAT and SECOND COAT at an interval of 24 hrs in approved shade and colour including scaffolding etc. (as directed by the Engineer-in-charge) complete with 5 yrs guarantee).	sq.m	520.00
11117		Painting three or more coats with acrylic exterior paint of approved brand and manufacture (Such as Dulex/ Asian Paints/ Sherwin Willians) including applying one coat of cement primer and one coat of surface treatment etc. complete.	sq.m	166.00
11118		Painting one or more coats of acrylic exterior paint of approved brand and manufacture (Such as Dulex/ Asian Paints/ Sherwin Willians) on old work including cleaning the surface with water etc. complete.	sq.m	91.00

11119		Providing and applying <b>white cement based putty</b> of average thickness 1.00mm of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	sq.m.	85.00
11120		Applying breathable, non-reactive, antifungal, and <b>water repellant Silane/ Siloxane chemical</b> as approved by Archaeological Survey of India/ Engineer, of approved brand and manufacture, diluted with solvent mineral Turpentine oil in the ratio of 1:12 (One part of approved chemical :12 Part of Turpentine oil), on the <b>exposed laterite masonry surface</b> with two or more coats to give uniform application of chemical on the surface, all complete as per direction of Engineer. (The rate is inclusive of all materials & labours).	sq.m.	57.00
11121		<b>Melamine polishing</b> on wood work (one or more coat)		
	a	Glossy	sq.m.	816.00
	b	Matt	sq.m.	825.00

CHAPTER XV				
DISMANTLING DEMOLISHING & REPAIRS WORK				
Sr. No.		Description	Unit	Rate
12001		Repairs to plaster in patches of 2.5 sq.m. and under including cutting the patch in proper shape and preparing and plastering the surface of the walls complete including disposal of rubbish to the dumping ground within 50m lead.		
		With cement mortar 1:4 (1 cement : 4 fine sand)	sq.m	267.00
12002		Fixing doors chowkhat in existing opening including embedding chowkhats in floor, cutting masonry for hold fasts embedding hold fast in cement concrete blocks with cement concrete 1:3:6 (1 cement ; 3 coarse sand : 6 graded stone aggregate 20mm nominal size) painting two coats of coal tar to sides of chowkhats and making good the damages to walls & floors complete including disposal of rubbish to the dumping ground within 50mts. lead.	Each	740.00
12003		Fixing windows chowkhat in existing opening including cutting masonry for hold fasts embedding hold fast in cement concrete blocks with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) painting two coats of coal tar to sides of chowkhats and making good the damages to walls complete including disposal of rubbish to the dumping ground within 50mts. lead.	Each	635.00
12004		Fixing clerestory windows chowkhat in existing opening including cutting masonry for hold fast embedding hold fast in cement concrete blocks with cement concrete 1:3:6 (1 cement ; 3 coarse sand : 6 graded stone aggregate 20mm nominal size) painting two coats of coal tar to sides of chowkhats and making good the damages to walls complete including disposal of rubbish to the dumping ground within 50mts. lead.	Each	606.00
12005		Providing and fixing wooden cleats to doors and windows with the approved fittings including removal of old cleats where necessary including painting, polishing of bees waxing to match the existing shade.		

	a	1 <sup>st</sup> class or 2 <sup>nd</sup> class indian teak wood cleats with brass hinges and screws.	Each	88.00
	b	1 <sup>st</sup> class or 2 <sup>nd</sup> class teak wood cleats with iron hinges and screws.	Each	113.00
12006		Supplying and fixing glass panes with putty and nails including removal of broken glass panes wherever necessary		
	a	Glass panes 2mm thick`	sq.m	848.00
	b	Glass panes 3mm thick	sq.m	761.00
	c	Frosted glass panes 2mm thick	sq.m	1176.00
12007		Supplying and fixing new wooden fillets wherever necessary		
	a	1 <sup>st</sup> class teak wood fillets.	Metre	46.00
	b	2 <sup>nd</sup> class Indian teal wood fillets	Metre	42.00
12008		Removal of old putty of glass panes	Metre	28.00
12009		Refixing of old glass panes with putty and nails	sq.m	331.00
12010		Supplying and fixing glass panes with wooden fillets including removal of broken glass panes and old wooden fillet wherever necessary but excluding the cost of wooden fillets.		
	a	Glass panes 2mm thick.	sq.m	846.00
	b	Glass panes 3mm thick	sq.m	758.00
	c	Frosted glass panes 2mm thick	sq.m	1173.00
12011		Laying manglore roofing tiles, ridges, valleys etc. complete on roofs over existing battens rafters etc. (Tiles to be issued by the department).	sq.m	79.00
12012		Renewing wooden battens in roofs including making good the holes in walls & painting with oil type wood preservative of approved brand and manufacture complete including removal of rubbish to the dumping ground within 50 meter lead :		
		Jamba wood beams	cu.m	55698.00
12013		Renewing wooden beams not exceeding 4.00 in length in roofs including making good the holes in walls & painting with oil type wood preservative of approved brand and manufacture complete including removal of rubbish to the dumping ground within 50 meters. Lead :		
		Second class matti wood beams	cu.m	112854.00



12021		Renewing wooded beams (above 4mt. upto 5 mt. length in roofs including making good the holes in walls and painting with oil type wood preservative of approved brand and manufacture complete including disposal of rubbish to the dumping ground within 50 meters lead.		
		Second class matti wood beams	cu.m	114503.00
12022		Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 mts. lead.	sq.m	23.00
12023		Raking out joints in lime or cement mortar and preparing the surface for repainting or replastering including disposal of rubbish to the dumping ground within 50 mts. lead.	sq.m	29.00
12024		Providing and fixing 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	289.00
12025		Supplying and fixing glass panes with new wooden fillets including removal of broken glass panes and old wooden fillets, wherever necessary .		
	a	Glass panes 2mm thick	sq.m	1152.00
	b	Glass panes 3mm thick	sq.m	1064.00
	c	Frosted glass panes 2mm thick	sq.m	1480.00
12026		Supplying and fixing 3mm thick acrylic sheet with putty nails, in door/ window shutters including removal of broken glass pane wherever necessary.	sq.m	391.00
12027		Demolishing lime concrete & disposal of material within 50 mts. lead.	cu.m	350.00
12028		Demolishing cement concrete 1:3:6 or richer mix including disposal of material within 50 m lead.	cu.m	922.00
12029		Demolishing cement concrete 1:4:8 or leaner mix including disposal of material within 50 m lead.	cu.m	586.00
12030		Demolishing R.C.C. work including stacking of steel bars & disposal of unserviceable within 50 mts. lead.	cu.m	1326.00
12031		Demolishing R.B. work including stacking of steel bars & disposal of unserviceable material within 50 mts. lead	cu.m	1192.00

12032		Extra for cutting reinforcement bars in R.C.C. or R.B. work	sq.m	458.00
12033		Extra for scraping, cleaning and straightening reinforcement from R.C.C. or reinforced brick work	qtl	345.00
12034		Demolishing brick work in mud mortar including stacking of serviceable and disposal or unserviceable material within 50 mts. lead.	sq.m	297.00
12035		Demolishing brick work in lime mortar with old mughal bricks including stacking of serviceable material & disposal of unserviceable material within 50 mts. lead.	cu.m	689.00
12036		Demolishing brick work in cement mortar including stacking of serviceable material & disposal of unserviceable material within 50 mts. lead.	cu.m	788.00
12037		Removing mortar from & cleaning bricks (stacks of cleaned bricks will be measured)	cu.m	1400.00
12038		Demolishing laterite stone masonry in cement mortar including stacking of serviceable material & disposal of unserviceable material within 50 mts. lead.	cu.m	933.00
12039		Dismantling dressed stone work ashlar face stone work, marble work or precast concrete work in cement mortar including stacking of serviceable material and disposal of unserviceable material within 50mts. lead.	cu.m	1086.00
12040		Dismantling wood work of sectional area 40 sq.cm. and above wrought framed and fixed in frames, other frames and trusses including stacking of material within 50 mts. lead (span upto 10 mtrs.)	cu.m	1709.00
12041		Dismantling wood work of area below 40 sq.cm. wrought framed and fixed in frames, other frames and trusses including stacking of material within 50 mts. lead	Metre	11.00
12042		Dismantling doors, windows and clearestory windows (steel or wood) shutters including chowkhats architrave holdfast etc. complete and staking within 50 mt. Lead		
	a	Of area 3 sq.m. and below	each	178.00
	b	Area beyond 3 sq.m.	each	227.00

12043		Taking out doors, windows and clerestory windows shutters (steel or wood) including stacking within 50 mts. lead		
	a	Of area 3 sq.m. and below	Each	94.00
	b	Area beyond 3 sq.m.	Each	111.00
12044		Extra for dismantling trusses, rafters, purlins etc. of wood work for every additional span of 1 mt. of part thereof beyond 10 meters.		
	a	Sectional area 40 sq. cms. And above	cu.m	246.00
	b	Sectional area below 40 sq. cms.	cu.m	10.00
12045		Extra for dismantling trusses, rafters, purlins etc. of wood work for every additional height of 1 mt. or part thereof Dismantling steel work in single sections in R.S., joists including dismembering and staking within 50mts. lead		
	a	Sectional area 40 sq.cm. and above	cu.m	381.00
	b	Sectional area below 40 sq.cms.	cu.m	55.00
12046		Dismantling steelwork in single sections in R.S., joists including dismembering and stacking within 50 mts. lead	qtl	166.00
12047		Dismantling steelwork in single sections in channels, angles, tees and flats including dismembering and stacking within 50 mts. lead	qtl	129.00
12048		Dismantling steelwork in built up sections in angles, tees, flats and channels including all gusset plates bolts, nuts, cutting dismembering and staking within 50 mts. lead	qtl	250.00
12049		Dismantling steel work in built up sections excluding dismembering & stacking within 50 mts. lead.	qtl	182.00
12050		Extra for dismantling trusses, rafters, purlins etc. of steel work, for every additional span of one meter or part thereof beyond 10 mts.	qtl	73.00
12051		Extra for dismantling trusses, rafters, purlins etc. of steel work, for every additional height of one meter or part thereof beyond 5 mts.	qtl	73.00
12052		Extra for making structural steel work required to be reerected	qtl	190.00
12053		Dismantling the tile work in floors and roofs laid in cement including stacking of materials within 50 meters lead for thickness of tiles 10mm to 25mm.	sq.m	273.00
12054		Demolishing dry bricks, pitching in floors drains etc., including stacking of serviceable and disposal of unserviceable material within 50	cu.m	518.00

		mts. lead.		
12055		Dismantling G.I. sheets roofing including ridges, hips valleys and gutters etc. and stacking the material within 50 meters lead.	sq.m	65.00
12056		Dismantling asbestos sheet roofing including ridges, hips valley and gutters and stacking the material within 50 meters lead.	sq.m	32.00
12057		Dismantling and removing mangalore roofing tiles from roofs including ridges, hips, valleys, sheets wind ties etc. but excluding battens, roof timber etc. and stacking materials within a distance of 50 mt.	sq.m	44.00
12058		Dismantling tiled roofing (mangalore or pot or country tiles) with battens etc. complete including stacking of serviceable material & disposal of unserviceable material within 50 mts. lead.	sq.m	67.00
12059		Demolishing thatch roofing including mats bamboo jafari etc. complete including stacking of serviceable material and disposal of unserviceable material within 50 mts. lead.	sq.m	31.00
12060		Dismantling ballies in posts purlins or rafters including stacking within 50 meters lead.	Metre	46.00
12061		Dismantling G.I. or asbestos rain water pipes with fittings and clamps including stacking the material within 50 mts. lead.		
		75mm to 150 mm dia.	Metre	32.00
12062		Dismantling barbed wire or flexible wire rope in fencing including making rolls and stacking within 50 meters lead.	qtl	1375.00
12063		Dismantling wooden trellies work in position excluding frames but including stacking the serviceable material within 50 meters lead.	sq.m	28.00
12064		Dismantling expanded metal or hard drawn steel wire with necessary battens & bending including stacking the serviceable material within 50 mts. lead.	sq.m	36.00
12065		Dismantling wooden boarding in linings of walls & partitions excluding supporting members but including stacking within 50 meters lead.		
	a	Upto 19mm thick	sq.m	26.00
	b	Thickness above 19mm and upto 25mm	sq.m	32.00
	c	Thickness above 25mm and upto 38mm	sq.m	36.00

12066		Dismantling precast concrete or stone slabs in walls, partition walls etc. including stacking within 50 meters lead.		
		Thickness upto 38mm	sq.m	108.00
		Thickness above 38mm and upto 75mm	sq.m	161.00
12067		Dismantling cement asbestos celotex or other ceiling or partition hard broad wall including stacking of serviceable materials and disposal of unserviceable materials within 50 mts. lead.	sq.m	25.00
12068		Dismantling and stacking with in 50 meters lead fencing posts or struts including all earth work and dismantling of concrete etc. in the base of:		
	a	T or l iron or pipes	Each	170.00
	b	R.C.C.	Each	274.00
12069		Cutting ballies or wooden posts of fencing at the point of projection above the concrete or ground & stacking the same within 50 mts. lead.	Each	38.00
12070		Dismantling rolling shutters, top covers and shafts etc. for replacement of springs ball bearing complete and refixing the shutter after replacement of springs and ball bearing (cost of replacement parts excluded) including all labour and returning the unserviceable parts to the department complete.	sq.m	209.00
12071		Dismantling of existing G.I pipe including disposal of unserviceable material and stacking of serviceable materials .		
	a	Upto 20 mm nominal bore	Metre	9.00
12072		Removing and refixing of door/ window shutters paneled or paneled and glazed including replacing of existing hionges chiseling etc complete as directed by Engineer- in – charge		
	a	Below 1 Sq.m area	sq.m	1136.00
	b	Above 1 Sq.m area	sq.m	1398.00

CHAPTER XVI				
LANDSCAPING & HORTICULTURE WORK				
Sr.No.		Description	Unit	Rate
13001		Supplying and stacking of good earth at site including royalty and carriage upto 1 km. (earth measured in stacks will be reduced by 20% for payment).	cu.m	460.00
13002		Rough dressing the trenched ground including breaking clods.	100 sq.m	117.00
13003		Fine dressing the trenched ground.	100 sq.m	232.00
13004		Spreading of sludge, dung manure or/and good earth in required thickness (cost of sludge, dung manure or/and good earth to be paid separately).	cu.m	68.00
13005		1) Grassing with "doob" grass including watering and maintenance of the lawn for 30 days or more till the grass forms of thick lawn free from weeds and fit for moving, including supplying good earth if needed. (Cost of "doob" grass not included )		
	a	2) In rows 15 cm apart in either direction.	100 sq.m	327.00
	b	2) In rows 7.5 cm apart in either direction.	100 sq.m	541.00
	c	3) In rows 5 cm apart in either direction	100 sq.m	727.00
13006		Digging holes in ordinary soil and refilling the same with the excavated earth mixed with manure or sludge in ratio of 2: 1 by volume (2 parts or stacked volume of earth after reduction by 20% and 1 part of stacked volume of manure after reduction by 40%) flooding with water, dressing including removal of rubbish & surplus earth if any with all leads & lifts (cost of manure or sludge of extra good earth if needed to be paid for separately)		
		Holes 1.2m dia and 1.2m deep	Each	507.00
13007		Providing and fixing M.S. flat iron tree guard 60cm dia & 2 m high above ground level, formed of 4 nos. 25 x 6mm and 8 nos. 25 x 3mm vertical M.S. flat iron rings in two halves, bolted together with 8mm dia and 30 mm long bolts including painting two coats with paint of approved brand and manufacture over a coat of priming, complete in all respects.	Each	3285.00

13008		Making tree guard 53cm dia and 1.5m high as per design from empty coat tar drums supplied from 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 outside of tree guard with a) A coat of Coal tar	Each	259.00
13009		Filling mixture of earth & sludge or manure in the desired proportion in trenches flooding with water and leveling (cost of supplying earth and sludge of manure and mixing excluded).	cu.m	95.00
13010		Excavation in dumped stones or mulba including stacking of serviceable & unserviceable material separately & disposal of unserviceable material lead upto 50m and lift upto 1.5m disposed material to be neatly dressed.	cu.m	267.00
13011		Excavation in water bound macadam road including stacking of serviceable & unserviceable material separately & disposal of unserviceable material lead upto 50m and lift upto 1.5m disposed material to be neatly dressed.	cu.m	366.00
13012		Tree guards made up of four panels of R.C.C. grade M 20 suitable reinforced (reinforcement not less than 7.20 kg) with smooth form finish size 1800mm x 600mm x 600mm with panel thickness of 40 mm provided with 14 SWG G.I. wire at top for tying (set of four panels	Each	1136.00

CHAPTER XVII				
WATER SUPPLY SEWERAGE, PLUMBING & SANITATION WORK				
<u>Plumbing &amp; Sanitation works</u>				
Sr. No.		Description	Unit	Rate
15601		Proving and fixing white vitreous china water closet squatting pan (Indian type w.c. pan) size 580 mm with 100 mm sand cast iron P. or S trap 10 litres high level P.V.C. flushing cister (of approved make) with fittings, rack bolts 32 mm diameter P.V.C telescopic flush pipe with fittings and clamps 25mm P.V.C. over flow pipe with specials & mosquito proof coupling of approved municipal design and nylon pull complete cutting and making good the walls and floors where required.		
	a	Long pan pattern W. C. Pan	Each	5555.00
	b	Orissa pattern W.C. pan	Each	5387.00
15602		Proving and fixing white vitreous china water closet squatting (European type w.c. pan) with seat and lid, C.P. brass hinges and rubber buffers 10 lts. High level P.V.C.. flushing cistern (of approved make ) with fittings, rack bolts 32 mm diameter P.V.C. telescopic flush pipe with fittings and clamps 25mm P.V.C.. over flow pipe with specials & mosquito proof coupling of approved municipal design and nylon. chain and pull complete, cutting and making good the walls and floors where required.		
	a	W.C. pan with white plastic seat and lid.	Each	6197.00
	b	W.C. pan with black plastic seat and lid.	Each	6197.00
15603		Providing and fixing white vitreous china pedestal type (European type) water closet with seat and lid, with C.I. brass hinges and rubber fittings 15 lts white vitreous china low level flushing cistern with fittings as brackets 40 mm white porcelain 3enameled flush bad, 25 mm overflow pipe with specials and mosquito proof coupling of approved municipal design complete, including cutting and making good the walls and floors where required.		
	a	W.C. pan with white plastic seat and lid	Each	6442.00
	b	W.C. pan with black plastic seat and lid.	Each	6442.00



15604		Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430 x 260 x 350 mm and 340 x 430 x 265 mm sizes respectively with pvc automatic flushing cistern with fittings, R.S. or C.I. brackets, standard size galvanised steel flush pipe and spreaders with brass unions & G.I. clamps complete, including painting of cister and fittings, cutting and making good the walls and floors where required.		
	a	One urinal basin with 5 litres p .v .c. automatic flushing cistern.	Each	11869.00
	b	Range of two urinal basin with 10 litres pvc. Automatic flushing	Each	7530.00
	c	Range of three urinal basins with 10 litres pvc. automatic flushing cistern .	Each	11178.00
	d	Range of four urinal basins with 15 litres pvc. automatic flushing cistern .	Each	17476.00
15605		Providing and fixing one piece construction white vitreous china squatting plate urinal with an integral longitudinal flushing pipe, 100mm dia half round channel, pvc. Automatic flushing cistern with fittings R.S. or C.I. brackets, standard size G.I. flush pipe for back and front flush with stadard spreader fittings, G.I. clamps, white vitreous china tiling 1200 mm high to front and side walls with white vitreous corners and angles set in neat cement standard urinal C.I. trap 65 mm diameter with vent arm & outlet grating & coupling in c.p. brass complete, including painting the cistern & fittings cutting and making good the walls and floors where required.		
	a	Single plate with 5 litres pvc. automatic flushing cistern.	each	#VALUE!
	b	Range of two squatting plates with 10 litres pvc automatic flushing cistern.	each	#VALUE!
	c	Range of three squatting plates with 10 litres pvc. automatic flushing cistern.	each	#VALUE!
	d	Range of four squatting plates with 15 litres pvc. automatic flushing cistern.	each	#VALUE!

15606		Providing and fixing vitreous china wash basin with RS or C.I. brackets painted white, 15 mm C.P. brass pillar taps C.P. brass chain with rubber plug 32 mm C.P. brass waste of pattern, 32 mm diameter M.I. or C.P. brass trap and union complete, including cutting and making good the walls where required.		
	a	Flat back wash basin size 630 x 450mm with a pair of 15 mm C.P. brass pillar taps.	Each	7060.00
	b	Flat back wash basin size 630x 450mm with a single 15 mm C.P. brass pillar taps.	Each	6151.00
	c	Flat back wash basin size 550 x 400mm with a pair of single 15 mm C.P. brass pillar taps.	Each	6031.00
	d	Flat back wash basin size 550 x 400mm with a single 15 mm C.P. brass pillar taps.	Each	5122.00
	e	Angle back was basin size 600 x 480 mm with a pair of 15 mm C.P. brass pillar taps.	Each	4940.00
	f	Angle back was basin size 600 x 480 mm with single 15 mm C.P. brass pillar taps.	Each	4031.00
15607		Plugging the hole of wash basin if pillar tap is not to be provided.	Each	116.00
15608		Providing and fixing white vitreous china pedestal for was basin complete recessed at the back for the reception of pipes and fittings.	Each	2071.00
15609		Proving and fixing kitchen sink with R.S. or C.I. brackets C.P. brass chain with rubber plug 40 mm C.P. brass waste and 40mm M.I. or C.P. brass trap necessary unions complete, including painting the fittings, cutting and making good the walls where required.		
	a	White vitreous china sink size 600 x 450 x 200 mm	Each	4974.00
	b	White vitreous china sink size 600 x 450 x 250 mm	Each	4193.00
15610		Providing and fixing one piece construction bath tub size 1700 mm x 740 mm x 440 mm of desired shade including integral overflow & with detachable feet, a pair of 20 MM C.P. brass pillar taps, 40 mm c p. brass waste, 32 mm c.p. brass overflow,, c.p. brass chain with rubber plug 40 mm m.i or c.p. brass trap with union complete.		

	a	Fibre glass tub of desired shade	Each	12111.00
	b	Acrylic 1520 x 710 x 440 mm	Each	5703.00
	c	Acrylic 1680 x 750 x 440 mm	Each	5004.00
15611		Providing and fixing white vitreous china water closet squatting pan size 580 mm:		
	a	Long pan pattern (indian type) w.c. pan	Each	3042.00
	b	Orissa pattern w.c. pan	Each	2866.00
15612		Providing & fixing white vitreous china pedestal type (European type) water closet pan	Each	2259.00
15613		Providing & fixing a pair of white vitreous china 250 x 130 x 30 mm foot rests of standard pattern for squatting pan water closet.	Each	815.00
15614		Providing and fixing 15 litres low level white vitreous china flushing cistern of approved make with fittings such as lead, valveless syphon etc. and C. P. brass handle complete.	Each	2540.00
15615		Providing and fixing 12.5 lts. High level C.I. flushing cistern of approved make with in tegral fittings such as ball valve, ball lever G. I. Chain and pull complete.	Each	1006.00
15616		Providing and fixing 5 litres pvc. Automatic flushing cistern with fittings.	Each	7952.00
15617		Providing and fixing 10 litres pvc. Automatic flushing cistern with fittings.	Each	980.00
15618		Providing and fixing plastic seat with lid for pedestal type WC pan with CP brass hinges rubber buffers etc. complete		
	a	White plastic seat with lid.	Each	1678.00
	b	Black plastic seat with lid.	Each	1678.00
15619		Providing and fixing G.I. Chain with G.I. pull.	Each	164.00
15620		Providing and fixing G. I. Inlet connection for flush pipes connecting with W. C. pan.	Each	99.00
15621		Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430 x 260 x 350 mm and 340 x 430 x 265 mm respectively.	Each	2176.00
15622		Providing and & fixing white vitreous china wash basin including making all connection but excluding the cost of fittings :		
	a	Flat back wash basin of size 630 x 450 mm	Each	2582.00
	b	Flat back wash basin of size 550 x 400 mm	Each	1553.00

	c	Angle back wash basin of size 600 x 480 mm	Each	462.00
15623		Providing & fixing kitchen sink including making all connections excluding cost of fittings.		
	a	White vitreous china sink size 600 x 450 x 200 mm	Each	2014.00
	b	White vitresous china sink size 600 x 450 x 250 mm	Each	2029.00
15624		Providing and fixing C.P. brass chain and rubber plug complete for sink of wash basin.	Each	41.00
15625		Providing and fixing rubber plug for sink or wash basin	Each	167.00
15626		Providing and fixing C. P. brass waste for wash basins and sink		
	a	32 mm dia	Each	309.00
	b	40 mm dia.	Each	422.00
15627		Providing & fixing M.I. fisher union for wash basin and sinks :		
	a	32 mm dia .	Each	195.00
	b	40 mm dia	Each	232.00
15628		Providing and fixing C.P. bras or M. I. Trap for wash basin and sinks:		
	a	32 mm dia	Each	1419.00
	b	40 mm dia	Each	317.00
15629		Providing & fixing (4') 100 mm sand cast iron grating for gully floor or nahni trap.	Each	49.00
15630		Providing and fixing in position 32 mm diameter glavanised steel telescopic flush pipe complete including and cutting and making good the walls and floors.	Each	634.00
15631		Providing & Fixing In Position 25 mm diameter mosquito proof coupling of approved municipal design.	Each	402.00
15632		Providing and fixing 600 x 450 mm bevelled edge mirror of superior glass (of approved quality) complete with 6 mm thick asbestos sheet ground fixed to wooden cleats with C. P. brass screws and washers.	Each	2080.00
15633		Providing & fixing 600 x 120 mm glass shelf with C. P. brass brackets and guard rail complete fixed to wooden cleats with C. P. brass screws.	Each	618.00

15634		Providing & fixing c.p. brass towel rail complete with C.P. brass brackets fixed to wooden cleats with C. P. brass screws		
	a	750 x 20 mm size	Each	1539.00
	b	600 x 20 mm size	Each	1449.00
15635		Providing and fixing toilet paper holder :		
	a	C.P. brass	Each	857.00
	b	Polished wooden	Each	183.00
15636		Providing & fixing liquid soap container with C. P. brass lid and brackets fixed to wooden cleats with C. P. brass screws		
	a	Glass container	Each	1513.00
	b	Plastic container	Each	1413.00
15637		Providing & fixing soap dish chromium plated with brackets fixed to wooden cleats with CP brass screw	Each	857.00
15638		Providing & fixing sand cast iron spun soil, waste and vent pipes.		
	a	100 mm dia	Metre	790.00
	b	75 mm dia	Metre	687.00
	c	50 mm dia	Metre	559.00
15639		Providing & fixing M.S. holder bat clamps of approved design to sand cast iron cast iron spun pipe embedded in and including cement concrete blocks 10 x 10 x 10 cm of 1: 2:4 mix (1 cement ;2 coarse sand :4 graded stone aggregate 20 mm nominal size) including cost of cutting holes and making good the walls etc.		
	a	For 100 mm dia pipe	Each	126.00
	b	For 75 mm dia pipe	Each	118.00
	c	For 50 mm dia pipe	Each	115.00
15640		Providing & fixing sand cast iron bend of required degree with access door, insertion rubber washer 3mm thick bolts & nuts complete.		
	a	100mm	Each	551.00
	b	75mm	Each	465.00
	c	50 mm	Each	328.00
15641		Providing and fixing sand cast iron plain bend of required degree:		
	a	100mm	Each	472.00
	b	75mm	Each	448.00
	c	50 mm	Each	359.00
15642		Providing and fixing sand cast iron heel rest		

		sanitary bend :		
	a	100mm	Each	354.00
	b	75mm	Each	309.00
	c	50 mm	Each	240.00
15643		Providing and fixing sand cast iron double equal junction of required degree with access door, insertion rubber washer 3 mm thick bolts and nuts complete:		
	a	100 x 100 x 100 x 100mm	Each	1084.00
	b	75 x 75 x 75 x 75mm	Each	805.00
	c	50 x 50 x 50 x 50 mm	Each	672.00
15644		Providing and fixing sand cast iron double equal plain junction of required degree :		
	a	100 x 100 x 100 x 100mm	Each	962.00
	b	75 x 75 x 75 x 75msssm	Each	751.00
	c	50 x 50 x 50 x 50 mm	Each	542.00
15645		Providing and fixing sand cast iron single equal junction of required degree:		
	a	100 x 100 x 100 mm	Each	635.00
	b	75 x 75 x 75 mm	Each	454.00
	c	50 x 50 x 50 mm	Each	450.00
15646		Providing and fixing sand cast iron single equal junction of required degree with access door, insertion rubber washer 3 mm thick bolts and nuts complete:		
	a	100 x 100 x 100 mm	Each	784.00
	b	75 x 75 x 75 mm	Each	751.00
	c	50 x 50 x 50 mm	Each	528.00
15647		Providing and fixing sand cast iron double unequal junction of required degree with access door, insertion rubber washer 3 mm thick bolts and nuts complete:		
	a	100 x 100x 75 x 75 mm	Each	599.00
	b	100 x 100 x 50 x 50mm	Each	496.00
	c	75 x 75 x 50 x 50 mm	Each	379.00
15648		Providing and fixing sand cast iron double unequal junction of required degree :		
	a	100 x 100 x 75 x 75mm	Each	588.00
	b	100 x 100 x 50 x 50mm	Each	484.00
	c	75 x 75 x 50 x 50 mm	Each	399.00

15649		Providing and fixing sand cast iron single unequal junction of required degree with access door insertion rubber washer 3 mm thick bolts and nuts complete:		
	a	150 x 150 x 100 mm	Each	839.00
	b	100 x 100 x 75mm	Each	699.00
	c	100 x 100 x 50 mm	Each	557.00
15650		Providing and fixing sand cast iron single unequal junction of required degree :		
	a	150 x 150 x 100 mm	Each	770.00
	b	100 x 100 x 50mm	Each	670.00
	c	75 x 75 x 50 mm	Each	460.00
15651		Providing and fixing sand cast iron double equal plain invert branch of required degree :		
	a	100 x 100 x 100 x 100 mm	Each	962.00
	b	75 x 75 x 75 x 75 mm	Each	751.00
	c	50x 50 x 50x 50 mm	Each	542.00
15652		Providing and fixing sand cast iron single equal invert of required degree :		
	a	100 x 100 x 100 mm	Each	597.00
	b	75 x 75 x 75 mm	Each	411.00
	c	50x 50 x 50 mm	Each	290.00
15653		Providing and fixing sand cast iron double unequal plain invert of required degree :		
	a	100 x 100 x 75 x 75 mm	Each	795.00
	b	100 x 100 x 50 x 50 mm	Each	756.00
	c	75x 75 x 50x 50 mm	Each	648.00
15654		Providing and fixing sand cast iron single unequal invert branch of required degree :		
	a	100 x 100 x 75 mm	Each	938.00
	b	100x 100 x 50 mm	Each	617.00
	c	75x 75 x 50 mm	Each	533.00
15655		Providing and fixing sand cast iron off-set:		
	A 1)	100 mm off-set: 1) with 75 mm projection	Each	367.00
	2)	With 100 mm projection.	Each	453.00
	3)	With 150 mm projection.	Each	469.00
	4)	With 250 mm projection.	Each	662.00

	B 1)	75 mm off-set: 1) with 75 mm projection	Each	294.00
	2)	With 100 mm projection.	Each	373.00
	3)	With 150 mm projection.	Each	400.00
	4)	With 250 mm projection.	Each	577.00
	C 1)	50 mm off-set: 1) with 50 mm projection	Each	289.00
	2)	With 100 mm projection.	Each	331.00
	3)	With 150 mm projection.	Each	373.00
	4)	With 250 mm projection.	Each	443.00
15656		Providing and fixing sand cast iron door piece, insertion rubber washer 3mm thick bolts and nuts complete :		
	a	100 mm	Each	143.00
	b	75 mm	Each	113.00
	c	50 mm	Each	89.00
15657		Providing and fixing sand cast iron terminal guard:		
	a	100 mm	Each	379.00
	b	75 mm	Each	292.00
	c	50 mm	Each	270.00
15658		Providing and fixing sand cast iron collar:		
	a	100 mm	Each	362.00
	b	75 mm	Each	250.00
	c	50 mm	Each	223.00
15659		Providing and fixing sand cast iron pass over pipe:		
	a	100 mm	Each	947.00
	b	75 mm	Each	811.00
	c	50 mm	Each	778.00
15660		Providing lead caulked joint to sand cast iron , cast iron spun pies and fittings of dia :		
	a	100 mm	Each	272.00
	b	75 mm	Each	240.00
	c	50 mm	Each	205.00
15661		Providing and fixing m.s. stays and clamps for sand cast iron spun pipes of dia:		
	a	100 mm	Each	112.00
	b	75 mm	Each	117.00
	c	50 mm	Each	84.00



15662		Providing and fixing sand cast iron trap of self cleaning design with sand cast iron screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors :		
	a	100 mm inlet and 100 mm outlet.	Each	1268.00
	b	100 mm inlet and 75 mm outlet.	Each	1248.00
	c	100 mm inlet and 50 mm outlet.	Each	909.00
15663		Cutting chase in brick masonry walls for fixing 100 mm diameter sand cast iron pipes & making good the same with brick work in cement 1:3 (1 cement :3 fine sand)	Metre	506.00
15664		Cutting chase in brick masonry walls for fixing 50 mm diameter sand cast iron pipes & making good the same with brick work in cement 1:3 (1 cement :3 fine sand).	Metre	366.00
15665		Painting C.I. cistern with bit mastic or any other anti corrosive paint inside & white paint over a coat of ready mixed primer (of approved quality) on the outside surface of the cistern flush pipe, other fitting, etc complete for new work .	Each	523.00
15666		Painting sand cast iron, cast iron spun soil waste, vent pipe sand fitting with paint of any colour such as chocolate, grey of buff etc. over a coat of primer (of approved quality ) for new work .		
	a	50 mm diameter pipe	Metre	32.00
	b	100 mm diameter pipe.	Metre	58.00
15667		Repainting sand cast iron cast iron spun soil waste, vent pipes and fittings with paint of any colour such chocolate, grey or buff etc.		
	a	50 mm diameter pipe	Metre	19.00
	b	100 mm diameter pipe.	Metre	31.00
15668		Re-painting bath tubs 170 cm. Long with enamel paint.	Metre	436.00
15669		Providing and fixing white vitreous china type water closet squatting pan (european type w.c. pan) with flush valve Nelson/ similar) fully chromium plated with stop cock wall flanges flush pipe or elbow and vaccu.m breaker coupling etc. including cutting making good the walls and floors where required.	Each	3416.00

15670		Providing and fixing white vitreous china water closet squatting pan (Indian type w.c. pan) with flush valve Nelson/ similar) fully chromium plated with stop cock wall flanges flush pipe or elbow and vaccu.m breaker coupling etc. including cutting making good the walls and floors where required.		
		Long pan squatting w.c. pan.	Each	4520.00
15671		Providing and fixing flush valve (nelson or mimilar) fully chrominium plated with stop cock wall flange flush pipe or elbow and vaccu.m breaker coupling etc. complete :		
		For Indian or european W.C.	Each	1778.00
15672		Providing & fixing G.I. pipes complete with G.I. fittings & clamps, including cutting and making good the walls etc. (Internal Work)		
	a	15 mm nominal bore	Metre	188.00
	b	20 mm nominal bore	Metre	200.00
	c	25 mm nominal bore	Metre	241.00
	d	32 mm nominal bore	Metre	298.00
	e	40 mm nominal bore	Metre	346.00
	f	50 mm nominal bore	Metre	412.00
15673		Providing & fixing G.I. pipes complete with G.I. fittings including trenching & re-filling etc. (external work).		
	a	15 mm nominal bore	Metre	155.00
	b	20 mm nominal bore	Metre	160.00
	c	25 mm nominal bore	Metre	206.00
	d	32 mm nominal bore	Metre	237.00
	e	40 mm nominal bore	Metre	261.00
	f	50 mm nominal bore	Metre	283.00
	g	80 mm nominal bore	Metre	430.00
15674		Making connection of G. I. Distribution branch with G. I. Main 25 mm to 40 mm nominal bore by providing and fixing tee, including cutting and treading the pipe etc. complete	Each	551.00
15675		Making connection of G. I. Distribution branch with G. I. Main 50 mm to 80 mm nominal bore by providing and fixing tee including treading the pipe etc. complete	Each	651.00
15676		Fixing water meter & stop cock in G. I. Pipe line including cutting & treading the pipe and making long screw etc. complete (cost of water meter and stop cock to be paid separately)	Each	387.00

15677		Providing and fixing brass bib cock (heavy) of approved quality :		
	a	15 mm nominal bore	Each	384.00
	b	20 mm nominal bore	Each	680.00
	c	25 mm nominal bore .	Each	240.00
15678		Providing and fixing brass stop cock (heavy) of approved quality :		
	a	15 mm nominal bore	Each	253.00
	b	20 mm nominal bore	Each	313.00
	c	25 mm nominal bore .	Each	413.00
	d	32 mm nominal bore	Each	693.00
	e	40 mm nominal bore	Each	1140.00
	f	50 mm nominal bore .	Each	1320.00
15679		Providing and fixing brass full way valve (heavy) duty with wheel of approved quality :		
	a	15 mm nominal bore	Each	290.00
	b	20 mm nominal bore	Each	582.00
	c	25 mm nominal bore .	Each	880.00
	d	32 mm nominal bore	Each	1191.00
	e	40 mm nominal bore	Each	1489.00
	f	50 mm nominal bore .	Each	1048.00
	g	65 mm nominal bore .	Each	2071.00
	h	80 mm nominal bore .	Each	2434.00
15680		Providing and fixing ball valve (brass) of approved quality :		
	<b>a</b>	High pressure with P.V.C. floats:		
	1	15 mm nominal bore	Each	381.00
	2	20 mm nominal bore	Each	481.00
	3	25mm nominal bore	Each	590.00
	<b>b</b>	Low pressure with copper. floats :		
	1	15 mm nominal bore	Each	626.00
	2	20 mm nominal bore	Each	745.00
	3	25mm nominal bore	Each	927.00
	<b>c</b>	High or low pressure with plastic floats:		
	1	15 mm nominal bore	Each	309.00
	2	20 mm nominal bore	Each	331.00
	3	25mm nominal bore	Each	377.00
15681		Providing and fixing non-return valve of approved quality :		
	a	25 mm nominal bore	Each	572.00
	b	32 mm nominal bore	Each	657.00
	c	40 mm nominal bore	Each	692.00

	d	50 mm nominal bore	Each	793.00
	e	65mm nominal bore	Each	843.00
	f	80 mm nominal bore	Each	962.00
15682		Providing and fixing brass ferrule heavy C.I. mouth cover including boring tapping the main:		
	a	15 mm nominal bore	Each	368.00
	b	20 mm nominal bore	Each	584.00
	c	25 mm nominal bore .	Each	1039.00
15683		Providing and fixing P.V.C. connection pipe with brass unions 15 mm nominal bore:		
	a	30 cm (12") length .	Each	129.00
	b	37.5 cm (15") length .	Each	141.00
	c	45 cm (18") length .	Each	153.00
15684		Providing and fixing C.P. brass shower rose with 15 or 20 mm. Inlet:		
	a	100 mm diameter.	Each	279.00
	b	150 mm diameter.	Each	309.00
15685		Providing and fixing normal gauge polythene pipes of approved quality complete with special flange compression type fitting (of approved make) including trenching ad refilling etc (external work) (high density):		
	a	25 mm nominal bore.	Metre	114.00
	b	32 mm nominal bore	Metre	145.00
	c	40 mm nominal bore	Metre	145.00
	d	50 mm nominal bore	Metre	165.00
15686		Providing and fixing normal gauge ploythene pipes of approved quality complete with special flange compression type fitting of approved quality complete with special flange compression type fitting (of approved make including trenching and refilling etc. (external work), low density:		
	a	63 mm dia O.D.	Metre	247.00
	b	75 mm dia O.D.	Metre	271.00
	c	90 mm dia O.D.	Metre	417.00
15687		Providing and placing on terrace roof of floor two (1 <sup>st</sup> flor roof single piece rotational moulded polythene water storage tank having I S I mark and conforming to I S 12701; 1996.		
	a	200 lit .capacity	Each	1597.00

	b	500 lit. capacity	Each	3939.00
	c	1000 lit. capacity	Each	7738.00
15688		Extra for placing polythene tank on roof of floor three (2 <sup>nd</sup> floor roof)		
	a	200 lit. capacity	Each	229.00
	b	500 lit. capacity	Each	381.00
	c	1000 lit. capacity	Each	534.00
15689		Providing, laying and jointing glazed stone wear 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 :		
	a	100 mm diameter.	Metre	237.00
	b	150 mm diameter.	Metre	395.00
	c	230 mm diameter.	Metre	602.00
15690		Providing and 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 15 cm thick as per standard design :		
	a	100 mm diameter.	Metre	919.00
	b	150 mm diameter.	Metre	985.00
	c	230 mm diameter.	Metre	1221.00
15691		Providing and laying cement concrete 1:5:10 (1 cement :5 fine sand :10 graded stone aggregate 40 mm nominal size upto haunches of s.w. pipes including bed concrete 15cm thick as per standard design :		
	a	100 mm diameter S.W. pipe.	Metre	616.00
	b	150 mm diameter S.W. pipe	Metre	677.00
	c	230 mm diameter. S.W. Pipe	Metre	859.00
15692		Providing and fixing square-mouth S.W. gully trap grade 'A' complete with c.i. grating brick masonry chamber and water tight C.I. cover with frame of 300 x 300 mm size (inside the weight of cover to be not less than 4.53 kg). And frame to be not less than 2.72 kg as per standard design :		
	a	100 x 100 mm size P type	Each	2839.00
	b	150 x 100 mm size -P or S type	Each	2781.00
15693		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:		
	a	100 mm diameter .	Metre	32.00

	b	150 mm diameter	Metre	34.00
	c	230 mm diameter	Metre	39.00
	d	300 mm diameter	Metre	43.00
15694		Constructing brick masonry manhole or inspection chamber with second class bricks in cement mortar 1:5 (1 cement :5 fine sand) R.C.C. top slab with 1:2:4 mix (1 cement: 2 coarse sand ;4 graded stone aggregate 20mm nominal size foundation concrete 1:2:4 mix (1 cement ;2 coarse sand :4 graded stone aggregate 40mm nominal size) inside plastering 12 mm thick with cement mortar 1:3 (1 cement :3 coarse sand) finished with a floating coat of neat cement and making channels in cement concrete 1:2:4 mix (1 cement :2 coarse sand :4 graded stone aggregate 20 mm nominal size) neatly finished complete as per standard design.		
	a	Inside size 90 x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455 x610mm internal dimensions total weight of cover and frame to be not less than 38 kg. (weight of cover 23 kg.)	Each	11485.00
	b	Inside size 90 x80 cm and 60 cm deep including C.I. cover with frame (light duty) 455 x 610 mm internal dimensions total weight of cover and frame to be not less than 38 kg. (weight of cover 23 kg.)	Each	13938.00
	c	Inside size 1.2m x 90 cm and 90cm 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).	Each	26925.00
	d	Inside size 60 x 60cm and 60cm deep including C.I. cover with frame (light duty) 455x610mm internal diameter total weight of cover and frame to be not less than 38 kg. (weight of cover 23 kg).	Each	9635.00

15695		Constructing brick masonry manhole or inspection chamber with second class bricks in cement mortar 1:5 (1 cement :5 fine sand) R.C.C. top slab with 1: 1 1/2:3 mix (1 cement: 1 1/2 coarse sand ;3 graded stone aggregate 20mm nominal size foundation concrete 1:1 1/2:3 mix (1 cement ;1 1/2 coarse sand :8 graded stone aggregate 20mm nominal size) inside plastering 12 mm thick with cement mortar 1:3 (1 cement :3 coarse sand) finished with a floating coat of neat cement and making channels in cement concrete 1:2:4 mix (1 cement :2 coarse sand :4 graded stone aggregate 20 mm nominal size) neatly finished complete as per standard design.		
	a	Inside size 90 x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455 x610mm internal dimensions total weight of cover ad frame to be not less than 38 kg. (weight of cover 23 kg. )	Each	9342.00
	b	Inside size 90 x80 cm and 60 cm deep including C.I. cover with frame (light duty) 455 x 610 mm internal dimensions total weight of cover and frame to be not less than 38 kg. (weight of cover 23 kg.)	Each	11653.00
	c	Inside size 1.2m x 90 cm and 90cm 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).	Each	24013.00
	d	Inside size 60 x 60cm and 60cm deep including C.I. cover with frame (light duty) 455x610mm internal diameter total weight of cover and frame to be not less than 38 kg. (weight of cover 23 kg).	Each	8350.00
15696		Constructing brick masonry manhole or inspection chamber with second class bricks in cement mortar 1:5 (1 cement :5 fine sand) R.C.C. top slab with grade M 25 mix design with coarse sand and graded granitic or basaltic stone aggregate as per mix design requirements foundation concrete M 25 mix design with coarse sand graded granitic or basaltic stone aggregate as per mix design requirements inside plastering 12 mm thick with cement mortar 1:3 (1 cement :3 coarse sand) finished with a floating coat of neat cement and making channels in cement concrete 1:2:4 mix (1 cement :2 coarse sand :4 graded stone aggregate 20 mm nominal size) neatly finished complete as per		

		standard design.		
	a	Inside size 90 x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455 x610mm internal dimensions total weight of cover ad frame to be not less than 38 kg. (weight of cover 23 kg. )	Each	9438.00
	b	Inside size 90 x80 cm and 60 cm deep including C.I. cover with frame (light duty) 455 x 610 mm internal dimensions total weight of cover and frame to be not less than 38 kg. (weight of cover 23 kg.)	Each	11777.00
	c	Inside size 1.2m x 90 cm and 90cm 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).	Each	24147.00
	d	Inside size 60 x 60cm and 60cm deep including C.I. cover with frame (light duty) 455x610mm internal diameter total weight of cover and frame to be not less than 38 kg. (weight of cover 23 kg).	Each	8409.00
15697		Extra for depth for manholes : a) size 90 x 80 cm	Metre	6209.00
15698		Extra for depth for manholes : a) size 1.2 x 90 cm	Metre	7430.00
15699		Providing M.S. footrests including fixing in manholes with 20 x 20 x 10 cm cement concrete block 1:3:6 (1 cement :3 coarse sand :6 graded stone aggregate 20 mm nominal size) as per standard design :		
	a	With 20 x 20 mm square or round bar	Each	341.00
15700		Replacement of M.S. foot rests in manholes including dismantling concrete blocks and fixing with 20 cm x 20 cm x 10 cm cement concretes including 1:3:6 (cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size):		
	a	With 20mm x 20 mm square of round bar	Each	348.00
15701		Supplying and fixing C.I. cover without frame for manholes:		
	a	445x610 mm rectangular C.I. cover (light duty) weight of cover to be not less than 23 kg.	Each	4103.00
	b	500 mm dia C. I. Cover (medium duty) the weight of the cover to be not less than 58 kg.	Each	13279.00



15702		Making connection of drain or sewer line with existing manholes including braking 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:		
	a	For pipe 100 to 150 mm dia	Each	188.00
	b	For pipe 250 to 300 mm dia	Each	815.00
15703		Making chases upto 7.5x7.5 cm in walls including making good after housing G.I. pipe etc.	Metre	88.00
15704		Making soak pit. 2.5 m dia 3 m deep with 45x45 cm dry brick honey comb shaft and S.W. drain pipe 100 mm diameter, 1.8 m long complete filled with laterite stone aggregate 125 to 180 mm surrounded by laterite stone aggregate of 40 mm and down gauge as per standard design.	Each	28215.00
15705		Constructing soak pit 1.20m x 1.20m x1.20m filled with laterite stone aggregate 125 to 180 mm including S.W. drain pipe 100 mm diameter and 1.2m. long complete as per standard design. :	Each	3989.00
15706		Providing and fixing standard sand cast iron intercepting tap inside interception chamber (to be paid separately) including jointing with stiff mixture of cement mortar 1:1 (1 cement 1 fine sand) as directed by engineer-in-charge:		
	a	For 100 mm dia pipe.	Each	820.00
	b	For 150 mm dia pipe	Each	902.00
15707		Providing and fixing rigid PVC S.W.R. (soil, waste & rain water drainage pipes of approved including lubricant etc. complete (single/double) socketed:		
	a	110 mm dia	Metre	290.00
	b	75 mm dia	Metre	154.00
15708		Providing and fixing rigid PVC bend of required degree (of approved make) for S.W.R. drainage pipes of approved including lubricating.		
	a	110 mm dia	Each	358.00
	b	75 mm dia	Each	162.00

15709		Providing and fixing rigid PVC bend (approved make ) for S.W.R. pipes including lubricating etc complete bend with door :		
	a	100 mm dia	Each	199.00
	b	75 mm dia	Each	136.00
15710		Providing and fixing single tee of rigid PVC (approved make) for S.W.R. pipes including lubricating etc. complete, without door:		
	a	110 mm dia.	Each	515.00
	b	75 mm dia.	Each	237.00
15711		Providing and fixing single Tee of rigid PVC (approved make ) for S.W.R. pipes including lubricating etc complete, with door :		
	a	110 mm dia	Each	555.00
	b	75 mm dia	Each	246.00
15712		Providing and fixing single "Y" of rigid PVC (approved make ) for S.W.R. pipes including lubricating etc complete, without door :		
	a	110 mm dia	Each	158.00
	b	75 mm dia	Each	102.00
15713		Providing and fixing single "Y" of rigid PVC (approved make ) for S.W.R. pipes including lubricating etc complete, with door :		
	a	110 mm dia	Each	181.00
	b	75 mm dia	Each	114.00
15714		Providing and fixing double "Y" of rigid PVC (approved make ) for S.W.R. pipes including lubricating etc complete, without door :		
	a	110 mm dia	Each	246.00
	b	75 mm dia	Each	208.00
15715		Providing and fixing single "Y" of rigid PVC (approved make ) for S.W.R. pipes including lubricating etc complete, with door :		
	a	110 mm dia	Each	272.00
	b	75 mm dia	Each	229.00
15716		Providing and fixing nahani trap of rigid PVC (approved make ) for S.W.R. pipes including lubricating etc complete, without door :		
	a	110 mm dia	Each	128.00
	b	75 mm dia	Each	118.00
15717		Providing and fixing U.P.V.C. pipe clips (approved make ) for S.W.R. pipes :		
	a	110 mm dia	Each	40.00

	b	75 mm dia	Each	31.00
15718		Providing and fixing R.P.V.C. vent cowl:		
	a	110 mm dia	Each	63.00
	b	75 mm dia	Each	58.00
15719		Providing and fixing centrifugally cast iron confirming to IS 3989 / 84 soil waste and vent pipes NECO brand or equivalent.		
	a	75 mm dia.	Metre	749.00
	b	100 mm dia.	Metre	885.00
	c	150 mm dia.	Metre	1538.00
15720		Providing and fixing centrifugally cast iron bend confirming to IS 3989 / 84 plain of require degree.		
	a	75 mm dia.	Each	387.00
	b	100 mm dia.	Each	483.00
	c	150 mm dia.	Each	942.00
15721		Providing and fixing centrifugally cast iron confirming to IS 3989 / 84 bend of require degree with access door insertion rubber 3 mm thick bolts and nuts etc..		
	a	75 mm dia.	Each	387.00
	b	100 mm dia.	Each	465.00
	c	150 mm dia.	Each	556.00
15722		Providing and fixing centrifugally cast iron confirming to IS 3989 / 84 heel rest sanitary bend.		
	a	75 mm dia.	Each	199.00
	b	100 mm dia.	Each	223.00
	c	150 mm dia.	Each	466.00
15723		Providing and fixing centrifugally cast iron confirming to IS 3989 / 84 single equal plain junction of required degree.		
	a	75 x 75 x 75 mm	Each	389.00
	b	100 x 100 x 100 mm	Each	489.00
	c	150 x 150 x 150 mm.	Each	686.00
15724		Providing and fixing centrifugally cast iron confirming to IS 3989 / 84 single equal plain junction of required degree with access door insertion rubber 3 mm. thick with bolts.		
	a	75 x 75 x 75 mm	Each	545.00
	b	100 x 100 x 100 mm	Each	787.00
	c	150 x 150 x 150 mm.	Each	1760.00

15725		Providing and fixing centrifugally cast iron confirming to IS 3989 / 84 single equal plain invert (Y) branch of required degree.		
	a	75 x 75 x 75 mm	Each	414.00
	b	100 x 100 x 100 mm	Each	576.00
	c	150 x 150 x 150 mm.	Each	2452.00
15726		Providing and fixing centrifugally cast iron confirming to IS 3989 / 84 double equal plain junction of required degree.		
	a	75 x 75 x 75 x 75mm	Each	666.00
	b	100 x 100 x 100 x 100 mm	Each	811.00
	c	150 x 150 x 150 x 150 mm.	Each	1148.00
15727		Providing and fixing centrifugally cast iron confirming to IS 3989 / 84 double equal junction of required degree with access door insertion rubber washer 3 mm. thick, bolts and nuts complete.		
	a	75 x 75 x 75 x 75mm	Each	705.00
	b	100 x 100 x 100 x 100 mm	Each	870.00
	c	150 x 150 x 150 x 150 mm.	Each	1172.00
15728		Providing and fixing centrifugally cast iron confirming to IS 3989 / 84 double equal plain invert (Y) branch of required degree.		
	a	75 x 75 x 75 x 75 mm	Each	317.00
	b	100 x 100 x 100 x 100mm	Each	598.00
	c	150 x 150 x 150 x 150 mm.	Each	540.00
15729		Providing and fixing centrifugally cast iron conforming to IS 3989/84 collar.		
	a	75 mm dia.	Each	129.00
	b	100 mm dia.	Each	170.00
	c	150 mm dia.	Each	339.00
15730		Providing and fixing centrifugally cast iron terminal guard conforming to IS 3989 / 84		
	a	75 mm dia.	Each	153.00
	b	100 mm dia.	Each	158.00
	c	150 mm dia.	Each	321.00
15731		Providing and fixing centrifugally cast iron conforming to IS 3989/84 offset.		
	a) i	75 mm with 75 mm projection	Each	178.00
	ii	75 mm with 115 mm. projection	Each	199.00
	iii	75 mm with 150 mm projection	Each	223.00

	b)	100 mm with 75 mm projection	Each	223.00
	i	100 mm with 115 mm projection	Each	230.00
	ii	100 mm with 150 mm projection	Each	299.00
	iii	100 mm with 150 mm projection	Each	299.00
	c) i	150 mm with 75 mm projection	Each	406.00
	ii	150 mm with 115 mm projection	Each	444.00
	iii	150 mm with 150 mm projection	Each	525.00
15732		Providing and fixing centrifugally cast iron conforming to IS 3989/84 single unequal plain junction of required degree.		
	a	100 x 100 x 50 mm	Each	883.00
	b	100 x 100 x 75 mm.	Each	813.00
	c	150 x 150 m 100 mm	Each	1953.00
15733		Providing and fixing centrifugally cast iron conforming to IS 3989 / 84 single unequal plain invert branch of required degree.		
	a	100 x 100 x 50 mm	Each	358.00
	b	100 x 100 x 75 mm.	Each	427.00
	c	150 x 150 m 100 mm	Each	708.00
15734		Providing and fixing centrifugally cast iron conforming to IS 3989 / 84 single unequal invert branch with access door insertion rubber washer 3 mm thick with nuts bolts complete.		
	a	100 x 100 x 50 mm	Each	904.00
	b	100 x 100 x 75 mm.	Each	1163.00
	c	150 x 150 m 100 mm	Each	2119.00
15735		Providing and fixing centrifugally cast iron conforming to IS 3989 / 84 double unequal plan junction . bolts complete.		
	a	75 X 75 X 50 x 50 mm	Each	271.00
	b	100 x 100 x 50 x 50 mm	Each	328.00
	c	100 x 100 x 75 x 75 mm	Each	436.00
	d	150 x 150 x 100 x 100 mm	Each	752.00
15736		Providing and fixing centrifugally cast iron conforming to IS 3989 / 84 double unequal junction of required degree with access door insertion rubber washer 3 mm thick with nuts bolts complete.		
	b	100 x 100 x 50 x 50 mm	Each	974.00
	c	100 x 100 x 75 x 75 mm	Each	1348.00
	d	150 x 150 x 100 x 100 mm	Each	2132.00
15738		Providing and fixing NICKEL chrome plated copper alloy Fancy Pillar Cock rocket type Jaquar make or equivalent. Confirming to IS 8931;1993		

	a	15mm nominal bore	Each	1466.00
15739		Providing and fixing NICKEL chrome plated copper alloy Fancy BIB Cock Short Body Jaquar make or equivalent. Confirming to IS 8931;1993		
	a	15mm nominal bore	Each	868.00
15740		Providing and fixing NICKEL chrome plated copper alloy Fancy long body bib cock with wall flange Jaquar make or equivalent. Confirming to IS 8931;1993		
	a	15mm nominal bore	Each	1148.00
15741		Providing and fixing NICKEL chrome plated copper alloy Fancy two way long body bib cock with wall flange Jaquar make or equivalent. Confirming to IS 8931;1993		
	a	15mm nominal bore	Each	1012.00
15742		Providing and fixing NICKEL chrome plated copper alloy Fancy concealed stop cock with sheet flange 20mm Jaquar make or equivalent. Confirming to IS 8931;1993		
	a	20mm nominal bore	Each	1066.00
15743		Providing and fixing NICKEL chrome plated copper alloy Fancy concealed stop cock with sliding flange 15 mm Jaquar make or equivalent. Confirming to IS 8931;1993		
	a	15mm nominal bore	Each	568.00
15744		Providing and fixing NICKEL chrome plated copper alloy Fancy wall mixer with 115mm long bend pipe for connection to over head shower Jaquar make or equivalent. Confirming to IS 8931;1993		
	a	Wall mixer with 115 mm long bend pipe for connection to over head shower.	Each	3616.00
15745		Providing and fixing NICKEL chrome plated copper alloy Fancy wall mixer with 3 IN 1 SYSTEM WITH 115MM long bend pipe for connection to over head shower Jaquar make or equivalent. Confirming to IS 8931;1993	Each	4169.00
15746		Providing and fixing NICKEL chrome plated copper alloy Fancy wall mixer non telephonic shower system Jaquar make or equivalent. Confirming to IS 8931;1993	Each	3673.00

15747		Providing and fixing NICKEL chrome plated copper alloy Fancy sink mixer with U shape swinging casted spout Jaquar make or equivalent. Confirming to IS 8931;1993	Each	3822.00
15748		Providing and fixing NICKEL chrome plated copper alloy Fancy TELEPHONIC SHOWER 1.5M FLEXIBLE TUBE WITH SWINGING WALL HOOK Jaquar make or equivalent. Confirming to IS 8931;1993	Each	3390.00
15749		Providing and fixing NICKEL chrome plated copper alloy Fancy BOTTLE TRAP ECONOMY TYPE 32MM Jaquar make or equivalent. Confirming to IS 8931;1993	Each	1345.00
15750		Providing and fixing NICKEL chrome plated copper alloy Fancy waste coupling 32 mm with 190 mm long connection pipe wall flange Jaquar make or equivalent. Confirming to IS 8931;1993	Each	492.00
15751		Providing and fixing chlorinated polyvinyl chloride (CPVC) pipes confirming to IS:15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipes with clamps at 1 mt. spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement and testing of joints complete as per direction of the Engineer-in-charge. Internal work exposed on wall (Medium duty SDR 13.5 pipe).		
	a	15 mm outer dia CPVC pipe	Metre	142.00
	b	20 mm outer dia CPVC pipe	Metre	186.00
	c	25 mm outer dia CPVC pipe	Metre	231.00
	d	32 mm outer dia CPVC pipe	Metre	320.00
	e	40 mm outer dia CPVC pipe	Metre	428.00
	f	50 mm outer dia CPVC pipe	Metre	626.00
15752		Providing and fixing chlorinated polyvinyl chloride (CPVC) pipes confirming to IS:15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipes with clamps at 1 mt. spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement and testing of joints complete as per direction of the Engineer-in-charge. Concealed work (medium duty SDR 13.5 pipe) including cutting chases and making good the walls etc.		
	a	15 mm dia nominal outer dia pipes.	Metre	157.00

	b	20 mm dia nominal outer dia pipes.	Metre	208.00
	c	25 mm dia nominal outer dia pipes.	Metre	268.00
	d	32 mm dia nominal outer dia pipes.	Metre	372.00
15753		Providing and fixing chlorinated polyvinyl chloride (CPVC) pipes confirming to IS: 15778 having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings CPVC solvent cement, trenching, refilling and testing of joints complete as per firectionof the Engineer in charge.(External work (heavy duty SDR 11 pipe)		
	a	15 mm nominal outer dia pipes	Metre	136.00
	b	20 mm nominal outer dia pipes.	Metre	171.00
	c	25 mm nominal outer dia pipes.	Metre	224.00
	d	32 mm nominal outer dia pipes.	Metre	300.00
	e	40 mm nominal outer dia pipes.	Metre	384.00
	f	50 mm nominal outer dia pipes.	Metre	590.00
15754		Providing and fixing 3 layer PP-R (Polypropylene Random copolymer) pipes SDR 7.4 UV stabilized & anti-microbialfusion welded, having thermal stabilityfor 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. (Internal work - exposed on wall)		
	a	PN-16 Pipe, 16 mm OD	Metre	94.00
	b	PN-16 Pipe, 20 mm OD	Metre	107.00
	c	PN-16 Pipe, 25 mm OD	Metre	150.00
	d	PN-16 Pipe, 32 mm OD	Metre	223.00
	e	PN-16 Pipe, 40 mm OD	Metre	344.00
	f	PN-16 Pipe, 50 mm OD	Metre	510.00
15755		Providing and fixing 3 layer PP-R (Polypropylene Random copolymer) pipes SDR 7.4 UV stabilized & anti-microbialfusion 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. (Concealed work including cutting chases and making good the walls etc.)		
	a	PN-16 Pipe, 16 mm OD	Metre	140.00



	b	PN-16 Pipe, 20 mm OD	Metre	155.00
	c	PN-16 Pipe, 25 mm OD	Metre	208.00
	d	PN-16 Pipe, 32 mm OD	Metre	298.00
15756		Providing and fixing 3 layer PP-R (Polypropylene Random copolymer) pipes SDR 7.4 UV 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 trenching, refilling & testing of joints complete as per direction of Engineer in charge. (External work)		
	a	PN-16 Pipe, 16 mm OD	Metre	89.00
	b	PN-16 Pipe, 20 mm OD	Metre	100.00
	c	PN-16 Pipe, 25 mm OD	Metre	142.00
	d	PN-16 Pipe, 32 mm OD	Metre	208.00
	e	PN-16 Pipe, 40 mm OD	Metre	319.00
	f	PN-16 Pipe, 50 mm OD	Metre	485.00
	g	PN-16 Pipe, 63 mm OD	Metre	768.00
	h	PN-16 Pipe, 75 mm OD	Metre	1056.00
	i	PN-16 Pipe, 90 mm OD	Metre	1596.00
15757		Providing and fixing 3 layer PP-R (Polypropylene Random copolymer) pipes SDR 11 UV 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 trenching, refilling & testing of joints complete as per direction of Engineer in charge. (External work)		
		PN-10 Pipe, 110 mm OD (SDR-11)	Metre	1587.00
15758		Providing and fixing 3 layer PP-R (Polypropylene Random copolymer) pipes SDR 11 UV 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 trenching, refilling & testing of joints complete as per direction of Engineer in charge. (External work)	-	-
		PN-16 Pipe, 160mm OD (SDR-11)	Metre	3396.00
15759		Providing and fixing white vitreous china Wall Hung type (European Type) water closet with seat and lid with C.I. brass hinges and rubber fittings with flush valve nelson/ similar fully chromium plated with stop cock, wall flanges, flush pipe or elbow and vacuum breaker coupling etc. including chair bracket/rag bolts, cutting & making good the walls and floors	Each	8735.00

		where required and concealed seat support - W.C. Pan with white plastic seat and lid		
15760		Providing and fixing white vitreous china flat back Large lipped front urinal basin of 590x375x390mm size with Urinal Valve Auto closing system with built in control cock & wall flange with fittings, spreader, R.S. or C.I. brackets, standard size C.P. Brass flush pipe and spreaders with C. P. brass unions & C. P. Brass clamps with waste fitting as per IS 2556, PVC trap with outlet grating and other couplings in CP Brass complete, including painting, fittings, cutting and making good the walls and floors where required. - Range of one urinal basin	Each	7703.00
15761		Providing & fixing bevelled edge mirror of superior glass (5mm thk) of approved Quality, shape & size complete with CP brass screws and washers, Cleats, CP studs etc Complete.	sq.m.	3550.00
15762		Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS 13983 including cutting of stone and making good the walls wherever required. Kitchen sink without drain board. with coupling & all accessories complete with choke stop strainer, Plain type having flat borders for correct sandwithing between the plaform top and bottom slabs complete.		
	a	Overall size 610mmx510mm (24"x20") bowl size 545mmx445mmx200mm (21 1/2"x 17 1/2"x 8") depth 200 mm. Glossy. 1.0mm thk,	Each	5878.00
	b	Overall size 610mmx460mm (24"x18") bowl size 560mmx410mmx215mm (22"x16"x8 1/2") Glossy. 1.0mm thk,	Each	5785.00
	c	Overall size 535mmx460mm (21"x18") bowl size 460mmx380mmx200mm (18"x 15"x 8") depth 200 mm. Glossy. 1.0mm thk.	Each	4989.00
15763		Providing and fixing Hand Shower (Health Faucet) with 8mm dia, ABS/brass body with double lock 1.00m long Flexible tube (Brass plated stainles steel flexible hose) and wall hook of approved quality confirming to IS standards.	Each	1375.00
15764		Providing and fixing NICKEL chrome plated copper alloy Fancy Two Way Bib Cock with single knob and wall flange conforming to IS 8931:1993 15mm nominal bore.	Each	1499.00

15765		Providing and fixing ASTM UPVC pipe, conforming to ASTM 2467 with ISO 14001, including all UPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step UPVC solvent cement and testing of joints complete as per direction of Engineer. Internal work - Exposed on wall.		
	I	SCH-40(blue)/(white)		
	a	20mm outer dia.	Metre	161.00
	b	25mm outer dia.	Metre	196.00
	c	32mm outer dia.	Metre	247.00
	d	40mm outer dia.	Metre	304.00
	e	50mm outer dia.	Metre	362.00
	f	63mm outer dia.	Metre	551.00
	g	75mm outer dia.	Metre	675.00
	h	90mm outer dia.	Metre	852.00
	i	110mm outer dia.	Metre	991.00
15766		Providing and fixing ASTM UPVC pipe, conforming to ASTM 2467 with ISO 14001, including all UPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step UPVC solvent cement and testing of joints complete as per direction of Engineer. Internal work - Exposed on wall.		
	I	SCH-80(blue)/(white)		
	a	20mm outer dia.	Metre	182.00
	b	25mm outer dia.	Metre	225.00
	c	32mm outer dia.	Metre	293.00
	d	40mm outer dia.	Metre	363.00
	e	50mm outer dia.	Metre	450.00
	f	63mm outer dia.	Metre	671.00
	g	75mm outer dia.	Metre	862.00
	h	90mm outer dia.	Metre	1224.00
	i	110mm outer dia.	Metre	1372.00
15767		Providing and fixing ASTM UPVC pipe, conforming to ASTM 2467 with ISO 14001, including all UPVC plain & brass threaded fittings, including jointing of pipes & fittings with one step UPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer. External work.		
	I	SCH-40(blue)/(white)		
	a	20mm outer dia.	Metre	134.00

	b	25mm outer dia.	Metre	175.00
	c	32mm outer dia.	Metre	214.00
	d	40mm outer dia.	Metre	247.00
	e	50mm outer dia.	Metre	305.00
	f	63mm outer dia.	Metre	512.00
	g	75mm outer dia.	Metre	636.00
	h	90mm outer dia.	Metre	813.00
	i	110mm outer dia.	Metre	803.00
15768		Providing and fixing ASTM UPVC pipe, conforming to ASTM 2467 with ISO 14001, including all UPVC plain & brass threaded fittings, including jointing of pipes & fittings with one step UPVC solvent cement, trenching ,refilling & testing of joints complete as per direction of Engineer. External work.		
	I	SCH-80(blue)/(white)		
	a	20mm outer dia.	Metre	156.00
	b	25mm outer dia.	Metre	204.00
	c	32mm outer dia.	Metre	260.00
	d	40mm outer dia.	Metre	306.00
	e	50mm outer dia.	Metre	394.00
	f	63mm outer dia.	Metre	631.00
	g	75mm outer dia.	Metre	822.00
	h	90mm outer dia.	Metre	1186.00
	i	110mm outer dia.	Metre	1361.00
15769		Extra for providing opening of required size & shape for wash basin/ kitchen sink in kitchen platform, vanity counter and similar location in marble/Granite/Cuddapah stone work, including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. complete.	Each	415.00
15770		Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS: 13983 including cutting of stone and making good the walls wherever required : Kitchen sink with drain board with coupling & all accessories complete with choke stop strainer, Plain type having flat borders for correct sandwithing between the plaform top and bottom slabs complete		
	a)	Overall size 1040mmx510mm (41"x20") bowl size 460mmx410mmx200mm (18"x 16"x 8") depth 200 mm. Glossy. 1.0mm thk,	Each	8362.00

15771		Providing and fixing NICKEL chrome plated copper alloy Fancy Bib Cock with extended lever handle and wall flange Confirming to IS 8931; 1993 15mm nominal bore	Each	1069.00
15772		Providing and fixing NICKEL chrome plated copper alloy Fancy Pillar Cock with extended lever handle and wall flange Confirming to IS 8931; 1993 15mm nominal bore	Each	1665.00

CHAPTER XVIII				
MISCELLANEOUS WORK				
Sr. No.		Description	Unit	Rate
18001		Constructing brick masonry chullah 0.75 x 0.45 x 0.23 mts. with two holes in cement mortar 1: 6 (1 cement : 6 coarse sand) fixing iron grating 15cms. diameter and finishing with mud and gobri plaster complete	Each	3628.00
18002		Providing and fixing 10cms dia flue of asbestos cement pipe with necessary specials including fixing in position with iron clamps complete.	Metre	143.00
18003		Providing & fixing 25 x 25 x 1.7mm (1" x 1" x 1/16") angle iron or 24 x 34mm (1" x 1/8") tread plate to RCC steps.	Metre	171.00
18004		Hollow glass block 20 x 20 x 10cms in wall laid in cement mortar 1:4 (1 cement: 4 fine sand) and pointed with cement mortar 1: 4 (1 cement: 4 find sand) with colour pigment as required	sq.m	3278.00
18005		Providing aluminum strips edging of size 38 x 12 x 3 mm to stairs.	Metre	192.00
18006		Providing and fixing 25mm dia G.I. pipes outlet in cement mortar 1:3 (1 cement : 3 fine sand) including cutting and making good the wall.	Metre	609.00
18007		Providing and fixing 40mm dia G.I. pipes outlet in cement mortar 1: 3 (1 cement : 3 fine sand) including cutting and making good the wall.	Metre	746.00
18008		Providing and fixing peg rack 75 x 10 x 2 cm thick of first class indian teak wood with three brass peg chromium plated of approved design.	Each	856.00
18009		Providing and fixing chases 75mm width 50mm deep average size in walls for conduit pipe and filling the same with cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm and down gauge) after the conduit pipe is full excluding the cost for 30 meters	Metre	84.00
18010		Supplying jamba wooden bally piles 150 mm mean diameter cut to length required (not exceeding 9 meters) and planted in position ready for driving:		

	a	Upto 2.5 meters long pile	Metre	172.00
	b	Above 2.50 meters upto 3.50 meters long pile	Metre	181.00
	c	Above 3.50meters upto 5.00 meters long pile	Metre	190.00
	d	Above 5.00 meters long pile	Metre	199.00
18011		Supplying jamba wooden bally piles 200 mm mean diameter cut to a length required (not exceeding 9 meters) and planted in position ready for driving:		
	a	Upto 2.5 meters long pile	Metre	206.00
	b	Above 2.50 meters upto 3.50 meters long pile	Metre	216.00
	c	Above 3.50 meters upto 5.00 meters long pile	Metre	227.00
	d	Above 5.00 meters long pile	Metre	239.00
18012		Heading and pointing whole bally piles 150mm diameter including only rings, providing and fixing pile shoes, cutting of heads after driving and taking out rings removing cut off portions to departmental store as specified.	Each	263.00
18013		Heading and pointing whole bally piles 200mm diameter including only rings, providing and fixing pile shoes, cutting of heads after driving and taking out rings removing cut off portions to departmental store as specified.	Each	333.00
18014		Driving down wooden piles of 150mm diameter either in vertical or battered work to approved lines and level through various strata including arranging all the appliances necessary for pile driving complete at site (portion in ground only to be measured)		
	a	Upto 2.5 meters long pile	Metre	294.00
	b	Above 2.50 meters upto 3.50 meters long pile	Metre	309.00
	c	Above 3.50 meters upto 5.00 meters long pile	Metre	324.00
	d	Above 5.00 meters long pile	Metre	341.00
18015		Driving down wooden piles of 200mm diameter either in vertical or battered work to approved lines and level through various strata including arranging all the appliances necessary for pile complete at site (portion in ground only to be measured)		
	a	Upto 2.5 meters long pile	Metre	314.00
	b	Above 2.50 meters upto 3.50 meters long pile	Metre	329.00
	c	Above 3.50 meters upto 5.00 meters long pile	Metre	346.00
	d	Above 5.00 meters long pile	Metre	363.00

18016		Providing anti – termite treatment to buildings conforming to I.S.S. 6113 part II 1971 (revised) including adopting precautions for health hazards and safety measures as required therein with the cost of all materials, chemicals, plants, equipments required for the treatment and furnishing a guarantee for a minimum period of 10 years from the date of completion including eradicating any infestation of termite free of cost during the guaranty period complete. (The payment will be made on plinth of the building.		
	a	Pre-construction	sq.m	82.00
	b	Post construction	sq.m	88.00
18017		Boring holes vertically true to line and form for R.C.C. bored piles of required diameter in all strata except hard rock including removing slush, all kinds of soil and rock, percolating water etc. complete from the above to keep ready for concrete after placing reinforcement but excluding the cost of providing and laying concrete and reinforcement.		
	a	500mm dia bore : 1) upto 12m from ground	Metre	2857.00
	1	Above 12m but upto 15m depth add 5%	Metre	3000.00
	2	Above 15m and upto 18 m depth add 5%	Metre	3150.00
	b	400mm dia bore : 1) upto 12m from ground	Metre	1980.00
	1	Above 12m but upto 15m depth add 5%	Metre	2079.00
	2	Above 15m and upto 18 m depth add 5%	Metre	2183.00
	c	300mm dia bore : 1) upto 12m from ground	Metre	1432.00
	1	Above 12m but upto 15m depth add 5%	Metre	1503.00
	2	Above 15m and upto 18 m depth add 5%	Metre	1578.00
	d	600mm dia bore : 1) upto 12m from ground	Metre	3734.00
	1	Above 12m but upto 15m depth add 5%	Metre	3920.00
	2	Above 15m and upto 18 m depth add 5%	Metre	4116.00
18018		Providing and laying reinforced cement concrete 1:1.5:3 (1 cement 1.5 coarse sand : 3 graded stone aggregate 20mm nominal size) in bored piles of specified diameter at the approved workability and compaction as per the discretion of the Engineer-in-charge including all operation for placing the concrete, lifting the casing in stages etc. but excluding the cost of reinforcement.		
	a	500mm dia bore : 1) upto 12m depth from G.L.	Metre	2190.00



	1	Above 12m but upto 15m add 10%	Metre	2409.00
	2	Above 15m but upto 18 m add 10%	Metre	2650.00
	b	400mm dia pile : 1) upto 12m depth from G.L.	Metre	1492.00
	1	Above 12m but upto 15m depth add 10%	Metre	1641.00
	2	Above 15m but upto 18 m. depth add 10%	Metre	1805.00
	c	300mm dia pile : 1) upto 12m depth from G.L.	Metre	924.00
	1	Above 12m but upto 15m depth add 10%	Metre	1017.00
	2	Above 15m but upto 18 m depth add 10%	Metre	1118.00
	d	600mm dia pile : 1) upto 12m depth from G.L.	Metre	3020.00
	1	Above 12m but upto 15m depth add 10%	Metre	3321.00
	2	Above 15m but upto 18 m depth add 10%	Metre	3654.00
18019		Providing and laying reinforced cement concrete of grade M 25 (mix design) with coarse sand and graded granitic or basaltic aggregate 20mm nominal size as per mix design requirements in bored piles of specified diameter at the approved workability and compaction as per the discretion of the Engineer-in-charge including all operation for placing the concrete, lifting the casing in stages etc. but excluding the cost of reinforcement.		
	a	500mm dia pile : 1) upto 12m from G.L.	Metre	2415.00
	1	Above 12m but upto 15m depth add 10%	Metre	2656.00
	2	Above 15m but upto 18 m depth add 10%	Metre	2922.00
	b	400mm dia pile : 1) upto 12m from G.L.	Metre	1636.00
	1	Above 12m but upto 15m depth add 10%	Metre	1799.00
	2	Above 15m but upto 18 m depth add 10%	Metre	1979.00
	c	300mm dia pile : 1) upto 12m from G.L.	Metre	1005.00
	1	Above 12m but upto 15m depth add 10%	Metre	1105.00
	2	Above 15m but upto 18 m depth add 10%	Metre	1216.00
	d	600mm dia pile : 1) upto 12m from G.L.	Metre	3343.00
	1	Above 12m but upto 15m depth add 10%	Metre	3677.00
	2	Above 15m but upto 18 m depth add 10%	Metre	4045.00

18020		Providing and laying reinforced cement concrete of grade M 30 ( mix design) with coarse sand and graded granitic or basaltic aggregate 20mm nominal size as per mix design requirements in bored piles of specified diameter at the approved workability and compaction as per the discretion of the Engineer-in-charge including all operations for placing the concrete, lifting the casing in stages etc. but excluding the cost of reinforcement.		
	a	500mm dia pile : 1) upto 12m from G.L.	Metre	2433.00
	1	Above 12m but upto 15m depth add 10%	Metre	2676.00
	2	Above 15m but upto 18 m depth add 10%	Metre	2944.00
	b	400mm dia pile : 1) upto 12m from G.L.	Metre	1647.00
	1	Above 12m but upto 15m depth add 10%	Metre	1812.00
	2	Above 15m but upto 18 m depth add 10%	Metre	1993.00
	c	300mm dia pile : 1) upto 12m from G.L.	Metre	1012.00
	1	Above 12m but upto 15m depth add 10%	Metre	1113.00
	2	Above 15m but upto 18 m depth add 10%	Metre	1224.00
	d	600mm dia pile : 1) upto 12m depth from G.L.	Metre	3369.00
	1	Above 12m but upto 15m.	Metre	3706.00
	2	Above 15m and upto 18 m.	Metre	4076.00
18021		Providing and laying reinforced cement concrete of grade M 35 ( mix design) with coarse sand and graded granitic or basaltic aggregate 20mm nominal size as per mix design requirements in bored piles of specified diameter at the required workability and compaction as per the direction of the Engineer-in-charge including all operation for placing the concrete, lifting the casing in stages etc. but excluding the cost of reinforcement.		
	a	500mm dia pile : 1) upto 12m from G.L.	Metre	2447.00
	1	Above 12m but upto 15m depth add 10%	Metre	2692.00
	2	Above 15m but upto 18 m depth add 10%	Metre	2961.00
	b	400mm dia pile : 1) upto 12m from G.L.	Metre	1657.00
	1	Above 12m but upto 15m depth add 10%	Metre	1822.00
	2	Above 15m but upto 18 m depth add 10%	Metre	2004.00
	c	300mm dia pile : 1) upto 12m from G.L.	Metre	1017.00
	1	Above 12m but upto 15m depth add 10%	Metre	1118.00

	2	Above 15m but upto 18 m depth add 10%	Metre	1230.00
	d	600mm dia pile : 1) upto 12m from G.L.	Metre	3389.00
	1	Above 12m but upto 15m depth add 10%	Metre	3728.00
	2	Above 15m but upto 18 m depth add 10%	Metre	4101.00
18022		Providing and laying reinforced cement concrete of grade M 40 ( mix design) with coarse sand and graded granitic or basaltic aggregate 20mm nominal size as per mix design requirements in bored piles of specified diameter at the approved workability and compaction as per the discretion of the engineer-in-charge including all operation for placing the concrete, lifting the casing in stages etc. but excluding the cost of reinforcement.		
	a	500mm dia pile : 1) upto 12m from G.L.	Metre	2460.00
	1	Above 12m but upto 15m depth add 10%	Metre	2706.00
	2	Above 15m but upto 18 m depth add 10%	Metre	2977.00
	b	400mm dia pile : 1) upto 12m from G.L.	Metre	1665.00
	1	Above 12m but upto 15m depth add 10%	Metre	1832.00
	2	Above 15m but upto 18 m depth add 10%	Metre	2015.00
	c	300mm dia pile : 1) upto 12m from G.L.	Metre	1021.00
	1	Above 12m but upto 15m depth add 10%	Metre	1124.00
	2	Above 15m but upto 18 m. depth add 10%	Metre	1236.00
	d	600mm dia pile : 1) upto 12m from G.L.	Metre	3408.00
	1	Above 12m but upto 15m depth add 10%	Metre	3749.00
	2	Above 15m but upto 18 m depth add 10%	Metre	4124.00
18023		Providing and fixing G.I. chain link mesh 6.35cm x 6.35 cm x 10 gauge (2.5" x 2.5" x 10 gauge) fixed with angle iron posts and struts by G.I. or M.S. staples at 20cms apart with welding with the iron posts (placed at 3 meters centre to centre) including providing barbed wire stiffeners (shall weigh 9.33 kg. per 100 meters minimum) at top and bottom with barbed wire stiffers by binding wires at 50cms centre to centre complete as per the direction of the Engineer – in – charge (angle iron posts struts, earthwork and concrete for fencing posts and struts to be paid separately)	Metre	281.00

18024		1.2 mt. height fencing with 1.20mt. R.C.C. posts of standard 30 design placed at 3 mt. apart embedded in cement concrete blocks, corner, end & every 10th post to be strutted with 9 horizontal lines & two diagonals of barbed wire 9.33 kg/100 mt. minimum between two posts, fitted and fixed with G.I. stapples on wooden plug tied to 6mm bar nib with binding wire (cost of posts, struts, earthwork and concrete to be paid separately)		
	a	G.I. barbed wire	Metre	174.00
	b	M.S. barbed wire	Metre	160.00
18025		Supplying 30 cms minimum girth jamba wood ballies at site to required length	Metre	109.00
18026		1.2 mts. high fencing with 1.20 mt. jamba ballie posts 30cm girth (min) placed at 2.5 mts. apart embeded in cement concrete blocks, corner, end and every 12 <sup>th</sup> post to be strutted provided with 6 horizontal lines and two diagonal of barbed wire 9.38 kg/ 100 mts. minimum between two posts, fitted and fixed with G.I. staples including coal tarring of ballies complete (cost of post, struts, earth work and concrete to be paid for separately)		
	a	G.I. barbed wire	Metre	129.00
	b	M.S. barbed wire	Metre	117.00
18027		1.8 mts. high fencing with 2.50 mts. jamba ballie posts 30 cms girth (min) placed at 2.5 mts. apart embeded in cement concrete blocks, end and every 12 <sup>th</sup> post to be strutted provided with 9 horizontal lines and two diagonal of barbed wire 9.38 kg/ 100 mts. minimum between two posts, fitted and fixed with G.I. staples including coal tarring of ballies complete (cost of post, struts, earth work and concrete to be paid for separately)		
	a	G.I. barbed wire	Metre	181.00
	b	M.S. barbed wire	Metre	160.00
18028		2.4 mts. high fencing with 3.30 mts. jamba ballie posts 30cms girth (min) placed at 2.5 mts. apart embeded in cement concrete blocks, corner, end and every 12 <sup>th</sup> post to be strutted provided with 12 horizontal lines and two diagonal of barbed wire 9.38 kg/ 100mts. minimum between two posts, fitted and fixed with G.I. staples including coal tarring of ballies complete (cost of posts, struts, earth work and concrete to be paid for		

		separately)		
	a	G.I. barbed wire	Metre	234.00
	b	M.S. barbed wire	Metre	212.00
18029		Providing weep holes of clear size 15 cms high and 8 cms wide in concrete walls as per drawing and direction of engineer in charge with 30 cms thick jungle wood planks to form a box of clear dimensions of the weep hole and keeping the same in position with a slope of about 1 verticle to 20 horizontal towards drainage face while laying the concrete complete.	sq.m	280.00
18030		Treatment of timber piles in a hot mixture of tar and creosote oil in the proportion of 20 litres of coal tar to 25 litres of creosote oil for a period of 4 minutes dipping including the cost of all materials fuel and labour complete.	sq.m	28.00
18031		Providing and fixing R.C.C. 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate granitic or basaltic stone aggregate 12.5 mm nominal size) benches including finishing and plastering the exposed surface with cement mortar 1: 3 (1 cement : 3 fine sand) thickness not exceeding 6mm on exposed surface to give smooth and even surface except on the seat & the back of the bench which shall be of marble mosaic chips finished, rubbed and polished to granolithic finish top layer 6mm thick with white black coloured marble chips of sizes from smallest to 4mm nominal size laid in cement marble powder mix 3: 1 (3 white cement : 1marble powder) by weight in proportion of 4 cement marble powder mix : 7 marble chips by volume with under layer 12mm thick cement plaster 1: 3 (1 cement: 3 coarse sand) incl. finishing the rear and bottom sides with waterproofing cement pant of approved brand and required shade (3 or more coats) to give an even shade complete	Each	3700.00
18032		Plastering with cement mortar 1:4 (1 cement : 3 fine sand) 20mm thick with a floating coat of neat cement on walls for making black board including painting with black japan paint (one or more coats)	sq.m	439.00
18033		Providing at site 1.8m long RCC standard posts with wooden plugs or 6mm bar nibs.	Each	615.00
18034		Supplying at site 2.00 m long RCC standard struts	Each	485.00

18035		Providing and fixing prefabricated compound gate of G.I. pipes 40 – 50 mm dia (medium) with 12mm M.S. square bars of G.I. pipes grill work as per drawing including providing & fixing locking arrangements, pintals, hold fast embedded in cement concrete 1:2:4 (1 cement: 2 coarse sand : 4 granitic or basaltic aggregate 20mm nominal size) including applying priming coat with ready mixed red lead paint and painting 2 or more coats with superior ready mixed paint of approved brand and manufacture in all shades as per direction complete.	sq.m	3843.00
18036		Solid PVC door frame in plain colour : Providing and fixing factory made polyvinyl chloride (PVC) Door Frame in plain colour manufactured of size 100mm x 45mm with a wall thickness of 5mm(±0.25), made out of extruded 5mm (±0.25) thick PVC Sheet of Density 600 Kgs /Cbm Manufactured by an ISO-9000 certified Company, and by joining 3nos. heat bent PVC sheet sections. The inside section of size 90x30mm shall be made from plain colour PVC sheet of 5mm(±0.25) thickness. The inside section will be covered by sticking two sections of size 30x35mm and 70x45mm made from 5mm(±0.25) thick plain PVC sheet. The frame shall be mitre cut at two corners and joined with 4nos. of 150mm long brackets of 15mm x 15mm M.S. Square tube. The two vertical door frames are to be reinforced with 40mm x 20mm M.S. tube of 19 guage through out the frame. The door frame shall be fixed to the wall using 8/100mm long M.S. Screws through the frame by using anchor fastners. A minimum of 4nos. of screws to be provided for each vertical member & minimum 2nos. for horizontal member etc. complete as per manufactures specification and direction of Engineer-in-charge.	Metre	443.00

18037	<p>Solid PVC door frame in prelaminated colour : Providing and fixing factory made polyvinyl chloride (PVC) Door Frame in Prelaminated colour of the size 50mm width, 47mm height with a wall thickness of 5mm(<math>\pm 0.25</math>), made out of extruded 5mm(<math>\pm 0.25</math>) thick PVC Sheet of Density 600 Kg /Cbm Manufactured by an ISO-9000 certified Company , having pattam width of 50mm and thickness of 10mm providing weather seal Non-woven self adhesive gasket throughout the frame. All three frame lengths reinforced with 19mmx19mm M.S.square tube of 19 gauge. mitre cut at two corners and joined with 2nos. of 150mm long brackets of 15mmx15mm M.S. square tube. The door frame shall be fixed to the wall using 8/100mm long M.S. Screws through the frame by using PVC fasteners. A minimum of 4nos. of screws to be provided for each vertical member &amp; minimum 2nos. for horizontal member etc. complete as per manufacturers specification and direction of Engineer-in-Charge.</p>	Metre	506.00
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18038	<p>Providing and fixing 30mm thick factory made solid panel (PVC) door shutter consisting of frame made out of M.S.tubes of 19 guage thickness and size of 40mm x 20mm for stiles as well as top, lock &amp; bottom rail. M.S.Frame shall have a coat of metal primer of approved make and manufacture. M.S.Frame shall be covered with heat moulded prelam / Plain 'C' channel made from 5mm (<math>\pm 0.25</math>) thick PVC Sheet of Density 600 Kg /Cbm Manufactured by an ISO-9000 certified Company, of size 30 thickness, 110mm width forming stiles in which 100 mm should be flat &amp; 5mm should be taper, and 5mm (<math>\pm 0.25</math>) thick, 135mm wide PVC Sheet for top rail and bottom rail in which 125 mm should be flat &amp; 5mm taper on either side of panel. also for lock rail 145 mm sheet ,125 mm should be flat &amp; 5 mm taper on either side . An additional 5mm thick PVC strip of 20mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent cement adhesive . Panelling of 10mm Prelam PVC sheet to be fitted in the M.S.Frame welded/sealed to the stiles &amp; rails with 30mm wide x 5mm(<math>\pm 0.25</math>) thick PVC sheet beading on either side and additional 30mm wide PVC beading as gap insert below top and bottom rail joined together using solvent cement adhesive.15mm thick (5mm(<math>\pm 0.25</math>) x 3) , 20mm wide cross PVC sheet as gap insert for top &amp; bottom rail. Door to be fixed with frame with 3 Nos. M.S powder coated butt hinges of size 100mm*25mm*2mm and 50mm long steel screws drilled suitable to pass through both the walls of the M.S tube. Other hardware of door should be fixed with 25mm*8mm size steel screws etc. complete as per direction of Engineer-in-charge, manufacturer's specification and drawing.</p>	sq.m	2531.00
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18039	<p>Providing and fixing 30mm thick FACTORY MADE BOTH SIDE PRELAM SOLID PANEL PVC DOOR SHUTTER consisting of frame made out of M.S tubes of 19 guage thickness and, size 19 X 19mm for styles and 15 X 15mm for the top and bottom rails, M.S frame shall have a coat of metal primer of approved make and manufacture . M.S.frame shall be covered with heat moulded PVC 'C' channel made from 5mm(<math>\pm 0.25</math>) thick sheet of density 600kg/cbm manufactured by an ISO- 9000 certified company, of size 30mm thickness, 50mm width to form styles and 5mm(<math>\pm 0.25</math>) thick and 75 mm wide PVC sheet for the top rail, lock rail and bottom rail on either side of the panel . An additional 5mm(<math>\pm 0.25</math>) thick PVC strip of 20mm width is to be stuck on the bottom side of the 'c' channel . Panelling of 5mm(<math>\pm 0.25</math>) thick PVC sheet to be fitted inside the M.S frame welded/sealed to the styles and rails with 5mm(<math>\pm 0.25</math>) x 30mm PVC sheet beading on either side and joined together with solvent cement adhesive etc., 10mm thick ( 5mm(<math>\pm 0.25</math>) x 2nos.) , 20mm wide cross PVC sheet as gap insert for the top rail &amp; bottom rail. Door to be fixed to frames with 3 nos. M.S powder coated butt hinges of size 100mm*25MM*2mm using 32mm long steel screws drilled suitable to pass through both the walls of the M.S tube. Other hardwares should be fixed with 19*6mm size steel screws, Complete as per direction of Engineer-in-Charge.</p>	sq.m	3386.00
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18040	<p>Solid core PVC moulded door in plain colour Providing and fixing 35mm thick factory made Moulded door shutter- Wood free consisting of frame made out of M.S. tubes of 19gauge thickness and size of 25mm x 25mm for stiles, top and bottom rails. M. S. frame shall have a coat of steel primers. The inner panel shall consist of 25mm thick High Density EPS / PUF conforming to IS 4671-1984 bonded with 2mm thick sheet of density 700kg/cbm manufactured by an ISO-9000 certified company termite proof, water proof and fire resistant moulded PVC Sheet with 2, 4, 6 raised panel design in different plain and / or prelam colours after routing the Moulded design on one side &amp; 2mm plain and /or prelam PVC sheet on other side of the EPS./ PUF The edge of panel to be sealed with lipping of 10mm wide PVC sheet baton (made by sticking 2nos. PVC sheets of 5mm( ) thickness using PVC solvent cement) and stile sides 25mm (5mm x 5) thick and 30mm width PVC Sheet fitted along M.S. tube for lock provision &amp; for lock height 5mm( ) thick PVC sheet of size 150mm x 100mm fixed with upper &amp; lower face of inner side of EPS Panel etc. complete as per direction of Engineer-in-charge, manufacturer's specification and drawing.</p>	sq.m	4506.00
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18041	<p>Solid core PVC moulded door inprelaminated colour : Providing and fixing 35mm thick factory made Moulded door shutter - Wood free consisting of frame made out of M.S. tubes of 19gauge thickness and size of 20mm x 40mm for stiles as well as top, bottom &amp; lock rail . M. S. frame shall have a coat of metal primer of approved make &amp; manufacturer. The inside panel shall consist of 20mm thick multichamber hollow PVC section of 1mm wall thickness, bonded using solvent cement / cynoacrylate adhesive with 5mm(<math>\pm 0.25</math>) thick moulded PVC sheet of Density 600 Kg/cbm manufactured by an ISO-9000 certified company . with 2, 4, 6 raised panel design in plain / prelam colours after routing the Moulded design on one side of the inside panel . 5mm(<math>\pm 0.25</math>) plain / prelam PVC sheet to be pasted using solvent cement / cynoacrylate adhesive on other side of the Hollow PVC section. All the four edge of the panel to be sealed with lipping of 10mm thick &amp; 20 mm wide PVC sheet baton (made by sticking 2Nos. foam PVC sheets of 5mm(<math>\pm 0.25</math>) thickness using PVC solvent cement adhesive.Door edge lipping to be painted with PVC ink of matching colour of Plain/Prelam mouded PVC sheet of door .20 mm thick (5 mm x 4 nos.)thick PVC sheet to be given for lock provison at lock height . Door to be fixed with frame with 3 nos. stainless steel butt hinges of size 100mm*25mm*2mm and 50mm long steel screws drilled suitable to pass through both the walls of the M.S tube.other hardwares should be fixed with 25mm*8mm size steel screws etc, complete as per direction of Engineer-in-charge, manufacturer's specification and drawing.</p>	sq.m	5566.00
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18042		PVC false ceiling grid type : Providing and fixing PVC False Ceiling consisting of 600mm x 600mm, 5mm( $\pm 0.25$ ) thick Plain PVC sheet of 600 kg/Cbm Density Manufactured by an ISO-9000 certified Company, used as panel insert in a frame work made using anodized aluminum T-section of sizes 1" x1" (25x25mm, 19 gauge or 1mm thick) in square pattern of grid sizes of 2'x2'(600x600mm). The aluminum frame work is supported from the ceiling with the help of 'J' hook and G.I. wire / 6mm M.S. rods of required sizes to maintain proper level etc. The aluminum framework is supported on side wall with the use of aluminum L-section of size 1"x1" (25x25mm) angles etc. Complete as per direction of Engineer-In-charge, manufacturer's specification & drawing.	sq.m	1333.00
18043		PVC wall paneling :Providing and fixing PVC sheet Wall Paneling of thickness 5mm ( $\pm 0.25$ ) consisting of panels of desired size stuck on inner frame work of 50mm wide strips of 5mm ( $\pm 0.25$ ) thick Prelam PVC sheet. The panel & strips shall be of 600 kg/Cbm Density Manufactured by an ISO-9000 certified Company. The strips should have in their center a groove of 6mm width and 1mm depth for sinking the head of the screw used to fix the strips to the wall vertically at an equal interval of 10" between two PVC strips. The PVC strips shall be fixed to the wall using 65mm long M.S. screws through the groove in the strip by using PVC fasteners. The distance between two screws shall not be more than 200mm. A groove of 2mm may be left at the joint of two panels for aesthetic looks. The exact size of the panel and correspondingly of the grid may vary depending on the size of the wall. Optionally a strips of 5mm( $\pm 0.25$ ) thick PVC sheet of width 75mm feathered at the edges shall be stuck at the places where two panels are joined, using solvent cement.	sq.m	1768.00

18044	<p>PVC insulated wall paneling : Providing &amp; fixing Insulated PVC wall Paneling shall consist of PVC Insulated panels having wall thickness 2mm( <math>\pm 0.25</math>) PVC sheet of 700 Kg/CBM density manufactures by an ISO - 9000 certified company and the desired thickness of EPS ( dependent on ther insulation required) screwed into the wall using screws of adequate length. The screw shall be placed at a distance of 150 mm and shall be 25 mm from the edge of insulated panel on all from side of the panel. The PVC strips are 4 mm ( <math>\pm 0.25</math>) thick PVC sheet of width 75 mm feathered at the edges shall be stuck using solvent cement adhesive at the palces where two panels are joined ,so as to cover the screw of both the panels, using solvent cement 90 degree sheet heat bend strips of 4 mm thick PVC sheet of width 75 mm X 75 mm feathered at the edges shall be stuck at wall joints/ Pillars etc. complete as per the direction of engineer in charge, manufactures specification &amp; drawing.</p>	sq.m	2382.00
18045	<p><b>SOLID PVC WINDOW FRAME AND SHUTTER:</b>  Frame: of size 50mm x42mm consisting of frame made out of M.S. tube of 19 gauge of size 15mm x 15mm and Solid PVC sections made from 4.25mm thick sheet (4mm (<math>\pm 0.3</math>) PVC foam sheet laminated with 0.25mm Rigid PVC sheet) of density 900 kg/cbm density manufactured by an ISO-9000 certified company, suitably joined using PVC solvent cement so as to prefixed in wall. In wall using hold fasts M.S. window grill should be fixed suitably with Solid PVC sections mitre cut on corners complete as per direction of Engineer-in-charge and manufacturer's specification.</p> <p>Shutter: consisting of frame made out of M.S. tube of 19 gauge of size 15mm x 15mm for style, top, bottom rail. M.S. frame shall have a coat of steel primers of approved make and manufacture. M.S. frame shall be covered with 4.25mm thick sheet (4mm (<math>\pm 0.3</math>) PVC foam sheet laminated with 0.25mm rigid PVC sheet) of density 900 kg/cbm density manufactured by an ISO-9000 certified company, white colour rigid heat moulded PVC 'C' Channel of size 62mm x 25mm x 50mm of the window shutter forming stiles &amp; rails. Glass panel and Wire mesh will be fitted externally in the clear space available</p>	sq.m	6059.00

		between stiles and rails and fixed using window shutter PVC beading of size 12mm x 8mm complete as per direction of Engineer-in-charge and manufacturer's specification.		
18046		Long open time epoxy bonding agent for bonding old concrete to new concrete	sq.m	522.00
		Providing and applying structural grade bonding agent a two component, solvent less epoxy resin based. It shall be formulated to meet the requirement of ASTM C881 Type 2, Grade 2, Class B & C. The Bonding agent shall exhibit minimum open time of 6 hours and shall exceed the tensile strength of concrete in terms of its adhesive bond strength. This epoxy system on mixing yields an adhesive for internal or external bonding of renderings, granolithic toppings, and new concrete to old concrete. Item is inclusive of all tools, plant, labour, materials including necessary scaffolding, etc complete.		
18047		Acrylic bonding agent for bonding repair mortar	sq.m	443.00
		Providing and applying on a well prepared surface polymer bonding agent. The product shall have minimum solids of 40%. The polymer shall be capable of being used as bonding agent and shall have pull-off bond strength not less than 1 MPa. All scaffolding, ladders, supporting materials etc. complete. Rates shall be inclusive of all labour, materials, tools and plant etc. complete.		
		COATINGS		
18048		High build, Crack-bridging, Elastomeric, protective and waterproof coating for Concrete & Masonry specially for concrete surfaces of bridges	sq.m	521.00

		Providing and applying on a well prepared vertical surface which is single component, high performance, acrylic resin based coating for long term protection of concrete & masonry from aggressive atmospheric gases such as, carbon dioxide, sulphur dioxide and chloride ions. The product shall be applied in minimum two coats to achieve total DFT of 300 Microns. The product must be crack-bridging high elongation type with elongation at break, exceeding 300% & tensile strength exceeding 2.5 MPa. The system shall exhibit excellent bond strength with the substrate at least exceeding 1.5 MPa, when tested as per ASTM D 4541. All scaffolding, ladders, supporting materials etc. complete. Rates shall be inclusive of all labour, materials, tools and plant etc. complete.		
18049		Pitch extended epoxy coating to protect marine and waste water handling structures coal tar epoxy protection coating in splash zone, sewage treatment plants		
		Providing and applying on a well prepared concrete surface which is high build, pitch extended epoxy , a 100% solids, solvent free, tough abrasion resistant protective coating. The product shall exhibit excellent bond strength with the substrate at least exceeding 2.5 MPa, when tested as per ASTM D4541. The product shall be formulated to have high build thickness exceeding 150 microns per coat on average and shall be applied to achieve overall thickness of 300 microns in two coats. The product shall be formulated to resist exposure to accelerated weathering test as per ASTM D4587 and shall not exhibit any flaking or blistering. All scaffolding, ladders, supporting materials etc. complete. Rates shall be inclusive of all labour, materials, tools and plant etc. complete.	sq.m	337.00
18050		Corrosion inhibitor treatment specially for splash zone of bridge, jetty concrete surfaces		

		Providing and applying on a well prepared surface penetrating deeply into concrete and providing organofunctional molecules to inhibit the electrochemical corrosion process between the rebar and the chloride ions, oxygen and moisture. The product shall be applied at an average rate of 600 ml/m <sup>2</sup> in two to three coats. The product shall exhibit excellent depth of penetration and shall react with the concrete substrate and form a permanent chemical bond. The product shall have measurable reduction in the corrosion current of concrete after 28 days of application at site. All scaffolding, ladders, supporting materials etc. complete. Rates shall be inclusive of all labour, materials, tools and plant etc. complete.	sq.m	1990.00
18051		Deep penetrating and reactive water repellent coating for protection heritage structure surfaces		
		Providing and applying on a well prepared vertical /Horizontal surface which is solvent free liquid based on a monomeric alkylalkoxysilane. The amount to be applied depends to a large extent on how absorbent the substrate is. In practice, it has to be determined by a trial impregnation. The product shall be based on pure silane formulation, and free of siloxane and solvents. The material shall be mixed and applied fully in accordance with the manufacturer's instructions. All scaffolding, ladders, supporting materials etc. complete. Rates shall be inclusive of all labour, materials, tools and plant etc. complete.	sq.m	544.00
18052		<b>GROUTS</b>		
		Low viscosity epoxy resin with long pot life for crack injection for structural repairs.		



		Providing and Supplying which is two-component epoxy injection resin, low viscosity resin system having viscosity less than 350 cps at ambient temperatures. The injection resin shall be high strength in excess of 55 MPa at 1 day & 65 MPa at 7 days. The product shall exceed 55 MPa in flexural strength at 7 days and shall exceed 15 MPa in slant sheer bond strength. The product shall have minimum pot life of 30 minutes at ambient temperatures. The injection resin shall comply with ASTM C881, Type 1 & 4, Grade 1, Class B & C. The injection resin must have pass rating for shrinkage test as per ASTM C881 and shall be impermeable.. All scaffolding, ladders, supporting materials etc. complete. Rates shall be inclusive of all labour, materials, tools and plant etc. complete.	kg	1197.00
18053		Rapid curing flowable epoxy grout with high early strength under base plates.		
		Providing and Supplying which is rapid-curing, high flow, filler-extended epoxy resin grout. The grout shall exhibit high early strengths by exceeding compressive strength of 75 MPa at 1 day and 100 MPa at 7 days; shall exceed flexure strength of 25 MPa at 7 days. The formulation shall be of 100% solids and free of solvents. All scaffolding, ladders, supporting materials etc. complete. Rates shall be inclusive of all labour, materials, tools and plant etc. complete.	litre	551.00
18054		Ultra-high strength, high-precision, dual shrinkage compensated, free flow cementitious grout for machine , column base plates		
		Providing and Supplying approved which is dual shrinkage-compensated, cementitious grout shall be hydraulic-cement based free-flow, high strength grout that complies with ASTM C1107. The grout shall have compressive strength minimum of 35 MPa at 1 day and 75 MPa at 28 days; flexure strength minimum of 9 MPa at 28 days. The grout must exhibit positive volumetric expansion in plastic stage as well as hardening stage. Grout must be flowable at 0.15 w/c ratio and shall have fresh wet density in excess of 2200 Kg/m <sup>3</sup> . The grout must be accredited by reputed testing institute for dynamic load resistance test of 2 million cycles with no sign of cracking or strength loss. All scaffolding, ladders, supporting materials etc. complete. Rates shall	litre	144.00

		be inclusive of all labour, materials, tools and plant etc. complete.		
18055		Pure epoxy resin based anchoring mortar for anchoring of rebars		
		Providing and Supplying which is a two-component, thixotropic, pure epoxy resin based chemical anchoring mortar. The product is specially designed for applications where heavy loads under critical conditions are to be fixed in concrete. Both components of Masterflow® 935, packed in a single cartridge with separate compartments, are correctly mixed in the mixing nozzle during application. The product should be styrene free formulation and shall have very low shrinkage, even on big diameters. All scaffolding, ladders, supporting materials etc. complete. Rates shall be inclusive of drilling of requisite holes in concrete , all labour, materials, tools and plant etc. complete.	litre	6446.00
18056		High strength, dual-shrinkage compensated, micro-concrete for concrete repairs.		
		Providing and laying which is dual shrinkage-compensated, cementitious micro-concrete, high strength, high flow, single component cementitious formulation. The repair micro-concrete shall have compressive strength minimum of 55 MPa at 7 day and 65 MPa at 28 days. The repair mortar shall not require polymer bonding agent as primer. All scaffolding, ladders, supporting materials etc. complete. Rates shall be inclusive of all labour, materials, tools and plant etc. complete.	litre	139.00
18057		High strength, fibre reinforced, thixotropic repair mortar.		
		Providing and applying on a well prepared vertical surface which is dual shrinkage - compensated, cementitious patch repair mortar, high strength single component mortar modified with fibres. The repair mortar shall have compressive strength minimum of 20 MPa at 1 day and 70 MPa at 28 days. The repair mortar shall not require polymer bonding agent as primer and shall be thixotropic consistency, capable of applying 50mm thick in single layer. All scaffolding, ladders, supporting materials etc. complete. Rates shall be inclusive of all labour, materials, tools and plant etc. complete.	litre	161.00

18058		One component, anti-corrosion primer for reinforcement.		
		Providing and applying on a well prepared vertical surface Thorostructurite primer which is anti-corrosion primer for steel reinforcement shall be a single component polymer- modified, cement-based compound. The primer shall be formulated to provide dual protection of a polymeric barrier and an integral corrosion-inhibiting system. The primer shall exhibit quick drying within 10 minutes and shall have adhesive bond strength greater than 5 Kg/cm <sup>2</sup> when tested as per ASTM D4541. The product shall exhibit good abrasion resistance by maintaining less than 60 mg/1000 cycle wear loss when subjected to ASTM D4060, CS 17 wheel on Taber abrasion machine. All scaffolding, ladders, supporting materials etc. complete. Rates shall be inclusive of all labour, materials, tools and plant etc. complete.	litre	395.00
18059		STRUCTURAL RETROFITTING		
		Mbrace Glass and Carbon fibre sheets for structural retrofitting.		
		Providing and applying on a well prepared primed surface MBrace Fibre system as a externally bonded fibre reinforcement enveloped in MBrace saturant resin. Primer used shall be Mbrace primer or equivalent . Primer is the concrete bonding adhesive for use with the fiber Composite Strengthening System. It is a 100% solids low viscosity epoxy resin able to cure in the presence of moisture and at temperatures as low as 2°C. When applied to sound concrete PRIMER gives high tensile bond strength to the fiber COMPOSITE STRENGTHENING SYSTEM. MBrace Saturant resin or equivalent is the easy-to-apply, 100% solids material that permits adhesion of a lightweight sheet, within the fiber Composite Strengthening System. When cured with the tow sheet, Saturant resin produces a high performance composite system for use in external structural repair or upgrade applications. Coneresive 2200 putty or equivalent shall be used for the concrete smoothing for use with the fiber Composite Strengthening System. It is 100% solid, non-sag paste epoxy resin material.		

		All scaffolding, ladders, supporting materials etc. complete. Rates shall be inclusive of all labour, materials, tools and plant etc. complete.		
	a	Mbrace glass fiber ( Mbrace G sheet EU 900 @900 GSM(Glass Fibre Unidirectional))		
		The product shall have Modulus of elasticity of 73KN/mm <sup>2</sup> and Tensile strength at break of 3400N/mm <sup>2</sup> . and Ultimate strain of 4.5 %.	sq.m	3491.00
	b	Mbrace carbon fiber ( Mbrace CF 240/200 - Unidirectional Carbon Fiber Reinforcement System High Tensile CF) or equivalent.		
		The product shall have Modulus of elasticity of 73 KN/mm <sup>2</sup> and Tensile strength at break of 3800N/mm <sup>2</sup> . and Ultimate strain of 1.55 %.	sq.m	5103.00
	c	Mbrace carbon fiber ( Mbrace CF 240/400 - Unidirectional Carbon Fiber Reinforcement System High Tensile CF) or equivalent		
		The product shall have Modulus of elasticity of 73 KN/mm <sup>2</sup> and Tensile strength at break of 3800N/mm <sup>2</sup> . and Ultimate strain of 1.55 %	sq.m	6037.00
18060		Structural retrofitting with Carbon Mbrace Laminate.		
		Providing and applying on a well prepared primed surface Mbrace carbon fiber laminate system as a externally bonded fibre reinforcement with Mbrace adhesive of BASF make or equivalent.Primer used shall be Mbrace primer or equivalent . Primer is the concrete bonding adhesive for use with the fiber Composite Strengthening System. It is a 100% solids low viscosity epoxy resin able to cure in the presence of moisture and at temperatures as low as 2°C.When applied to sound concrete PRIMER gives high tensile bond strength to the fiber COMPOSITE STRENGTHENING SYSTEM. Mbrace Laminate Adhesive is a two component solventless epoxy system which when mixed yields a non slumping, fast curing adhesive. concreive 2000 puttyor equivalent shall be used for the concrete smoothing for use with the fiber Composite Strengthening System. It is 100% solid, non-sag paste epoxy resin material.	sq.m	2497.00

		All scaffolding, ladders, supporting materials etc. complete. Rates shall be inclusive of all labour, materials, tools and plant etc. complete.		
		Mbrace carbon laminate grade 165/2500 - 50x1.4.		
		The product shall have Modulus of elasticity of 165KN/mm <sup>2</sup> and Tensile strength at break of 2500N/mm <sup>2</sup> . and Ultimate strain of 1.3 %. Laminate should essentially have peel ply system on both the sides and surface of the laminate shall be rough for good bonding with the adhesive.		
18061		WATERPROOFING		
		Spray applied fast curing, heat resistant polyurethane seamless waterproofing membrane		
		Providing and applying on a well prepared horizontal surface Coniroof 2111 of <i>BASF make or equivalent</i> Supply and Installation of BBA Approved spray applied waterproofing membrane system, a multi-layered system comprising, primer, waterproofing membrane. The product shall have the green label certificate. The primer shall be CONCRESSIVE 2525 or equivalent, a two component, solvent free epoxy resin based. The fast-drying primer shall be CONCRESSIVE 2525 or equivalent, a two component, solvent free epoxy resin based. It shall be formulated to meet the requirements of non tainting for usage in food storage and potable grade structures. It shall be fully compatible with CONCRESSIVE Range of repair mortars. Dried, graded MASTERTOP SRA no. 3 sand or equivalent is immediately and evenly spread over the entire wet surface by hand or mechanically. When sufficiently cured the surface is vacuumed to remove any loose sand. Waterproofing Membrane: The waterproofing membrane shall be CONIPUR M 800 or equivalent, a solvent free two component spray applied system. Ladders supporting materials etc. complete. Rates shall be inclusive of all labour, materials, tools and plant etc. complete.	sq.m	3396.00

		It is highly reactive and can only be applied by special, two component spray equipment. UV Top Coat: The top sealer for use on exposed areas shall be Conipur TC459 or equivalent based on aliphatic polyurethane, pigmented, single component; moisture curing, UV and weather resistant. Conipur TC459 or equivalent should be stirred well and applied evenly by spraying. The rates are inclusive of labor, tools and tackles. All scaffolding, ladders, supporting materials etc. complete. Rates shall be inclusive of all labour, materials, tools and plant etc. complete.		
18062		An elastomeric, cementitious, waterproof coating for concrete and masonry.		
		Providing and applying on a well prepared vertical surface Masterseal 550EL of <i>BASF make or equivalent</i> elastomeric flexible, two component polymers modified cementitious composite system that requires no addition of water at the site. The product shall be applied in minimum two coats to achieve total DFT of 1mm. The material shall be mixed and applied fully in accordance with the manufacturer's instructions. The product shall exhibit at least 40% elongation at ambient & 30% elongation in under water condition with tensile strength greater than 20 Kg/cm <sup>2</sup> . The product shall resist 1.5 bars pressure when tested as per DIN 1048 at 2mm DFT. When applied at 2mm DFT, elastomeric coating shall be able to bridge crack up to 0.5mm width. All scaffolding, ladders, supporting materials etc. complete. Rates shall be inclusive of all labour, materials, tools and plant etc. complete.	sq.m	384.00
18063		Synthetic membrane of plasticized PVC in Fire resistant version for basement		

		Providing and laying on a well prepared horizontal / vertical surface 2 mm Masterpren BG FR of <i>BASF make or equivalent</i> which is a synthetic membrane made of plasticised PVC of fire resistant manufactured by twin coloured co-extrusion method. The product shall have a Puncture resistance of atleast 1100 mm as per DIN 16726-5.12. All scaffolding, ladders, supporting materials, fuse welding etc. complete. Rates shall be inclusive of all labour, materials, tools and plant etc. complete. Rate shall be paid on net area covered.	sq.m	1496.00
18064		Synthetic membrane of masterpren TPE for roof		
		Providing and laying on a well prepared roof surface 1.2 mm Masterpren TPE of <i>BASF make or equivalent</i> which is modified polyolefin, in two-colour version (sand grey/black), obtained by co-extrusion, which allows it to be produced in a single layer a liner with different physical-chemical properties on the two sides. It has a polyester mesh reinforcement. The product shall have a Tear Resistance of 300 N as per DIN 53363. All scaffolding, ladders, supporting materials etc. complete. Rates shall be inclusive of all labour, materials, tools and plant, fuse welding etc. complete. Rate shall be paid on net area covered.	sq.m	1610.00
18065		Liquid, cold-applied elastomeric waterproofing membrane system.		
		Providing and applying on a well prepared vertical surface Sonoshield HLM 5000 of <i>BASF make or equivalent</i> one-component, moisture-curing, bitumen-modified polyurethane elastomeric waterproofing membrane for exterior below-grade or between-slab applications. The product shall be applied in minimum two coats to achieve total DFT of 1.25 mm. The materials shall be mixed and applied fully in accordance with the manufacturer's instructions. This material has got very high Elongation Almost >600%. All scaffolding, ladders, supporting materials etc. complete. Rates shall be inclusive of all labour, materials, tools and plant etc. complete.	sq.m	915.00

18066		Providing fusion bonded epoxy to reinforcing bars as per IS:13620-1993 specification for a thickness of 175 +- microns including testing of coating at plant, extra cost for careful handling using PVC coating, binding wires instead of G.I. wires, touching up the material supplied, repair work etc. complete as per detailed specifications MORT&H section 1600 etc. complete and as per the Direction of Engineer in charge.(Steel to be paid separately)	tone	16396.00
18067		Removing old loose bottom or side cover of RCC slab, beam, columns etc. rubbing surface of concrete steel using wire brush and applying 2 coats of Alkaline rust converting primer (Feovert) after a waiting time of 6 hrs between coats and then applying another anti corrosive protective coating system ) for reinforcement bars (IPNet-RB) Conforms to IS-2770 Part-1 (Pull out Test) ASTM-3963-86 (Adhesion Test) and then applying concrete penetrating corrosion inhibitor (EPCO-KP100) and applying bonding new to old concrete (Epibond) Conforms to ASTM-C-882-87 and plastering on the fresh bond coat with Polymer Modified Mortar (Monobond) with 20mm C.M 1:3 and finishing coat of 6mm C.P 1:3 (1 Cement : 3 Sand ) incl. cost of transport etc. as per dir of EIC. All the chemicals will be of <i>Krishna Conchem Products Pvt. Ltd. or Equivalent.</i>	sq.m	2086.00
18068		Applying two coats of alkaline rust converting primer, Feovert on the rebars, after wire brushing to remove loose rust spalls, with time interval of 6-8 hour between the coats. incl. cost of transport etc. as per dir of EIC. All the chemicals will be of <i>Krishna Conchem Products Pvt. Ltd. or Equivalent.</i>	sq.m	142.00
18069		Applying IPNet-RB (Anti – corrosive coating) to the exposed reinforcement in two coats by brush with time interval of minimum 7 hours between each coat. Conforms to IS-2770 Part-1 (Pull out Test) ASTM-3963-86 (Adhesion Test). Sprinkling dry quartz sand over the second coat of IPNet-RB when freshly applied etc. complete. incl. cost of transport etc. as per dir of EIC. All the chemicals will be of <i>Krishna Conchem Products Pvt. Ltd. or Equivalent.</i>	sq.m	353.00



18070		Providing and mixing EPCO KP 200 of <i>Krishna Conchem Products Pvt. Ltd. or approved equivalent</i> concrete penetrating corrosion inhibiting admixture in the concrete at the rate 2 kg per cum. Of concrete. (Admixture to be added into wet concrete as per manufacturer's specification)	Cu.m.	638.00
18071		Applying EPCO-KP-100, concrete penetrating corrosion inhibitor by spray/ brush to the concrete so as to maintain the dosage of 4 Sqmt / Lt. In one or two application etc. complete. incl. cost of transport etc. as per dir of EIC. All the chemicals will be of <i>Krishna Conchem Products Pvt. Ltd. or Equivalent.</i>	sq.m	253.00
18072		Applying one coat of structural grade epoxy bonding coat (EPIBOND) Conforms to ASTM-C-882-87 to the prepared concrete surface to be repaired / strengthened. This is applied prior to the application of polymer repair mortar /microconcrete to have monolithic action between old concrete surface and new polymer repair mortar /micro-concrete. It is essential to ensure that the concrete surface is free from loose material, dust, dirt, etc., before applying bonding coat. incl. cost of transport etc. as per dir of EIC. All the chemicals will be of <i>Krishna Conchem Products Pvt. Ltd. or Equivalent.</i>	sq.m	527.00
18073		Repairs to the deteriorated /damaged areas of RCC elements in the structures shall be carried out by using Polymer modified repair mortar. The polymer modified mortar is applied when the epoxy bonding coat is still tacky. In one application 20 mm thickness shall be built. Subsequent layer shall be built with one bond coat of Polymer modified cement slurry. The Polymer modified repair mortar shall have the following specifications: <ul style="list-style-type: none"> <li>• Cement (OPC) : 100 kg</li> <li>• Clean river sand - 2.36 mm down : 300 kg Or 30-80 Graded quartz sand</li> <li>• Polymer latex (Monobond) : 10 kg</li> <li>• Water : 30 litre (Approx)</li> </ul> Cure by spraying periodically with water for 3 days and allow to dry for next 5 days. incl. cost of transport etc. as per dir of EIC. All the chemicals will be of <i>Krishna Conchem Products Pvt. Ltd. or Equivalent.</i>	sq.m	1130.00

18074		Waterproofing of sunken slabs, toilet blocks, terraces on slabs under brickbats, roofs, watertanks. Cleaning the surface and filling cracks (if any), applying EPCO ACR wherever necessary, Providing and Moistening the surface with water to render it saturated. Mix Cement and Monobond WF in the ratio of 1.25 kg to 1 by weight and stir continuously. Apply minimum 2 coats with an interval of 12 hours minimum between the coats. Fix fiber mesh while the first coat is still tacky. Cure with sprinkling of water 3-4 times a day. incl. cost of scaffolding transport etc. as per dir of EIC. All the chemicals will be of <i>Krishna Conchem Products Pvt. Ltd. or Equivalent</i>	sq.m	691.00
18075		Providing & mixing SUPERCON-333 in external plaster as plasticizer for workability improvement & to make the plaster denser while reducing the water cement ratio, at 200gms per bag of cement. To be used in plaster externally to concrete stone or brick surfaces using approved screened sand including preparing the base, watering and applying incl. cost of transport etc. as per dir of EIC. This does not include the cost of plaster material & plastering labourAll the chemicals will be of <i>Krishna Conchem Products Pvt. Ltd. or Equivalent</i> .	sq.m	40.00
18076		Applying 2 coats of Aliphatic Acrylate, Anti-corrosive and Anti-Carbonation coating system (solvent based) on the external phase of plaster. Thoroughly wire brush the surface of plaster to remove loose dust. Apply Monopol-456 by brush with Intercoat interval of 6 hours between the coats. Ensure uniformity of material while taking from the can by shaking it thoroughly. Cleaning of brushes by thinner. Ensure the surface of plaster to be dry prior to application. incl. cost of transport etc. as per dir of EIC. All the chemicals will be of <i>Krishna Conchem Products Pvt. Ltd. or Equivalent</i> .	sq.m	458.00

18077		Providing and Applying one coat of primer followed by 2 coats of Aliphatic Acrylic system-elastomeric, Anti-corrosive and Anti-Carbonation coating system (water based) on the external phase of plaster. Thoroughly wire brush the surface of plaster to remove loose dust. Apply Monopol-456-HB by brush with Intercoat interval of 6 hours between the coats. Ensure uniformity of material while taking from the can by shaking it thoroughly. incl. cost of transport etc. as per dir of EIC. All the chemicals will be of <i>Krishna Conchem Products Pvt. Ltd. or Equivalent.</i>	sq.m	240.00
18078		Cleaning the surface and filling cracks (if any), applying epoxy putty wherever necessary, Providing and applying 3 coats of High performance moisture compatible corrosion resistant Food grade non toxic epoxy stearate coating (WATERSEAL) having impermeable film withstanding to hydrostatic pressure up to 5 kg/cm <sup>2</sup> with a DFT of 250 microns on the prepared RCC surface. If there is honey combing or excessive unevenness in the surface then 10mm plaster in CM 1:3 should be applied on the entire surface followed by application of 2 coats of WATERSEAL with a DFT of 150 microns. incl. cost of scaffolding transport etc. as per dir of EIC. All the chemicals will be of <i>Krishna Conchem Products Pvt. Ltd. or Equivalent.</i>	sq.m	778.00
18079		Providing and applying two coats of Coal Tar Epoxy (Corroseal TE 321) on concrete surface including preparing the surface by cleaning using wire brushes, cloth, broom etc. Complete as per manufacture specification for portion below ground level. Conforms to ASTM-B-117. Incl. cost of transport etc. as per dir of EIC. All the chemicals will be of <i>Krishna Conchem Products Pvt. Ltd. or Equivalent.</i>	sq.m	328.00
18080		Providing and applying 2 coats of Anti-corrosive, chemically resistant coal tar extended epoxy coating system for below & above waterline application (Normal Wet & Underwater Application) (EPCO-2020-TX) having an adhesion of minimum 3.0 N/mm <sup>2</sup> (ASTM-D-4541) and a DFT of 300-350 microns in 2 coats and having excellent chemical resistance against acids, alkalies and salts. Incl. cost of transport etc. as per dir of EIC. All the chemicals will be of <i>Krishna Conchem Products Pvt. Ltd. or Equivalent.</i>	sq.m	358.00

18081		Crack filler for plasters, IPS, cement sand screeds and non – structural cracks. Do Not open the cracks, Clean the cracks so as to free them from oil, dust, loose particles etc. Moisten the surface with water, Fill cracks with EPCO – ACR using spatula or a putty knife. While applying avoid formation of cavity or bubbles. After filling , allow the surface to dry for at least 24 hours. Apply in layers at 24 hours interval. If the depth of the crack is more than 10mm. incl. cost of scaffolding transport etc. as per dir of EIC. All the chemicals will be of <i>Krishna Conchem Products Pvt. Ltd. or Equivalen.</i>	Metre	134
18082		Drilling holes of specified dia., fixing it with PVC nozzles, sealing the diaphragm with Epoxy Sealant, EPCO-1010, allow it air cure for minimum 8 hours, cutting nozzles after grouting and sealing it with EPCO-1010 etc. complete as directed. Injecting low viscous high molecular weight polymer, MONOPOL with pressure created by compressor and epoxy injector with accessories. The pressure shall be not exceeding 3-4 kg/cm <sup>2</sup> . Grouting to be done in cracks till the nozzle refuses to accept the grout or it flows from the adjacent nozzles etc. complete. incl. cost of scaffolding transport etc. as per dir of EIC. All the chemicals will be of <i>Krishna Conchem Products Pvt. Ltd. or Equivalent.</i>	sq.m	2331.00
18083		GROUTS for Crack Injection Grouting Ultra-fine cementitious single component crack injection for structural repairs. Providing and supplying Ultra-fine cementitious grout Alccofine 1109SR manufactured by <i>M/s Counto Micro-fine Products Pvt Ltd, Goa or equivalent.</i> Material should comply to IS 14343 for Marsh Cone Viscosity of 35 to 45 seconds, shall have the Particle Size Distribution with d <sub>95</sub> <12 microns and minimum compressive strength of grout more than 30 MPa at 7 days. Water to grout powder ratio should not be more than 0.6 for marsh cone viscosity and compressive strength test.	sq.m	293.00
18084		Galvalume Flashings: Supply & Fixing of 0.5 mm thick Galvalume capping / Flashing from inside for Ridge and skylight areas.	Metre	470.00

18085		Aluminium Flashings: Supply & Fixing of 0.90 mm thick Aluminium Flashing as specified under first layer above In same PVDF finish of Panels up to 578mm Girth	Metre	1174.00
18086		Skylight - <i>Danpalon Or Equivalent</i> Day light Panel System: Supply & fixing of 16mm thick 600 mm width MULTIWAL MULTICELL polycarbonate system consist of: The panels shall be uniform in color with an integral Microcell core. In a cross section, the core shall be constructed of tight cells with 6 walls. Panels will be supplied with Vertical Standing Seam at both sides of the panel Snap-on connector to interlock the panels shall have a grip-lock double tooth locking mechanism to ensure maximum uplift capability & shall be of same color as that of panel for aesthetic appeal. NOTE : Necessary Steel structure to be provided by the Steel fabricator. Skylights framework to be raised by 200 mm from Roof Pan level.	sq.m	7433.00
18087		Supply & fixing of <i>Latchway's or equivalent</i> fall protection system with Constant Force® Post suitable for aluminium roofing sheets using 4 Aluminium clamps as per the layout provided by the architect/engineer in charge. Note: Removable Transfasteners and Lanyard not included in this as they are generally available with cleaning contractors.	Metre	7942.00
18088		Providing, fabricating & fixing in position high performance, cross linked, closed cell, non-absorbent, cellular polyethylene joint filler with nominal density 60-100 kg/m <sup>3</sup> for expansion joints. The material should have recovery of min. 95% after 50% compression.	per cm depth per cm width per m length	5.00
18089		Providing and fixing 50x50mm snap-on PVC/Vinyl/ Acrylic 90 Degrees angles surface mounted corner guards as edge protection. It should have hi impact resistance, chemical and stain resistance. The inner extruded aluminium continuous retainer should be fixed to wall/concrete surface with non corrosive fasteners which are compatible with aluminium retainer. Adjustable top & bottom matching end caps, high impact vinyl acrylic snap-on matt finished, consisting of PVC cover, base, top end etc complete. 900 to 1200 high.	Metre	1144.00

18090		Providing and fixing 140x38mm Hand rail cum Crash Guard fixed on wall/concrete at about 900-1000mm high from finished floor comprising of continuous aluminium rail retainer with bumper cushion, Quick lock bracket, adjustable rail mounting base with impact absorbing strip, in/out corner conditions, end cap and high impact PVC/ vinyl/ acrylic snap-on textured surface cover complete in all respects.	Metre	2047.00
18091		Providing & fixing in position traction matting antiskid clear tape 2 inch wide (50mm) for staircase having Granite Treads. The antiskid clear tape should be mineral coated slip resistant material with pressure sensitive adhesive including cleaning, degreasing, priming to mask the surface (if required), pressing using rubber roller etc. complete.	Metre	126.00
18092		Providing and laying 120 microns waterproof plastic film/sheet as per IS 14611-1998 as a separation/slip membrane laid flat without creases and with minimum overlap of 200mm at joints, nailed to underneath Plain Cement concrete, if required as directed.	sq.m	65.00
18093		Fabrication and fixing of Aluminium composite panel cladding with thick 3mm/ 0.25mm ACP sheets, aluminium framework, with 50 X 25 X 1.2 mm thick sections. Silicon sealants etc. including accessories complete.	sq.m	3079.00
18094		Fabrication and fixing of Aluminium composite panel cladding with thick 4mm/ 0.25mm ACP sheets, aluminium framework, with 50 X 25 X 1.2 mm thick sections. Silicon sealants etc. including accessories complete.	sq.m	3787.00

18095	<p>Providing and Fixing 30mm thick "RAJSHRI" BRAND FACTORY MADE INTERNAL PVC FLUSH DOOR SHUTTER - WOOD FREE consisting of frame made out of M.S. tubes of 19gauge thickness and size of 20mm x 40mm for stiles as well as top, bottom &amp; lock rail . M. S. frame shall have a coat of metal primer of approved make &amp; manufacturer. The inside panel shall consist of 20mm thick multichamber hollow PVC section of 1mm wall thickness, bonded using solvent cement / cyanoacrylate adhesive with 5mm(<math>\pm 0.25</math>) thick Plain/Prelam PVC sheet of Density 600 Kg/Cbm manufactured by an ISO-9000 certified company , on both side of the inside panel . All the four edge of the panel to be sealed with lipping of 10mm thick &amp; 20 mm wide PVC sheet baton (made by sticking 2Nos. PVC sheets of 5mm(<math>\pm 0.25</math>) thickness using PVC solvent cement adhesive. Door edge lipping to be painted with PVC ink of matching colour of Plain/Prelam moulded PVC sheet of door .20 mm thick (5 mm x 4 nos.)thick PVC sheet to be given for lock provison at lock height . Door to be fixed with frame with 3 nos. stainless steel butt hinges of size 100mm *25mm *2mm and 50mm long steel screws drilled suitable to pass through both the walls of the M.S tube.other hardwares should be fixed with 25mm*8mm size steel screws etc, complete as per direction of Engineer-in-charge, manufacturer's specification and drawing.</p>	sq.m	4308.00
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