

Please note that 'IFFCO (OWNER) SHALL SUPPLY REQUIRED CEMENT, REINFORCEMENT STEEL AND STRUCTURAL STEEL ON FREE ISSUE BASIS.'					
Civil, Structural & Architectural Work For AFBC Boiler Control Room					
SL #	ITEM DESCRIPTION	UNIT	Estimated Quantity	Tentative Rate (Rs.)	AMOUNT (Rs)
ARCHITECTURAL					
Wall cladding work					
1.0	Providing and laying autoclaved aerated cement blocks masonry with 600x200x100 size AAC blocks conforming to IS:2185 (part 3) in super structure above plinth level up to floor V level with RCC band at sill level and lintel level with approved block laying polymer modified adhesive mortar (RenderocS2 of Fosroc) on one coat of Nitobond AR primer all complete as per direction of Engineer-in-Charge. (The payment of RCC band and reinforcement shall be made for seperately).	Cu.m.	650	6571.23	4271299.5
2.0	Providing and laying damp-proof course 50mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand(zone-III) : 4 graded stone aggregate 20mm nominal size).	Sq.m.	62	310	19220
3.0	Providing & applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7kg per square metre on damp proof course after cleaning the surface with brushes and finally with apiece of cloth lightly soaked in kerosene oil.	Sq.m.	62	110	6820
Flooring					
4.0	Providing and laying 50 mm thick heavy duty cement concrete flooring with metallic hardener pigmented topping of 12 mm thick uniform graded treated iron particles. Under layer of 38mm thick cement concrete mix 1:2:4 (1 part cement, 2 parts sand and 4 parts stone chips 12.5 mm well graded) and top layer of 12mm thick metallic concrete shall consist of 12 mm thick layer of mix consisting metallic hardening compound is mixed in the ratio of 1 : 4 (1 metallic concrete hardener : 4 cement) by weight. Metallic hardener shall be dry mixed thoroughly with cement on a clean dry pacca platform. This dry mixture shall be mixed with stone aggregate 6 mm nominal size or as otherwise specified in the ratio of 1 : 2 (1 cement : 2 stone aggregate) and well turned over. Just enough water shall then be added to this dry mix as required for floor concrete.This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete as directed by the Engineer-in-Charge. Approved make : Ironite (India) Pvt. Ltd, Dolphin Floats Pvt Ltd., Sika India; Cico Technologies Ltd,. Ferro Chem India	Sq.m.	900	628.5	565650
5.0	Cement plaster skirting up to 15 cm height, with cement mortar 1:3 (1 cement : 3 coarse sand), finished with a floating coat of neat cement. 18 mm thick	Sq.m.	28	429.6	12028.8
6.0	Providing and laying semi- polished Kota stone 20 mm thk in flooring. Under bed shall average 30mm thk of 1 part cement,2 part sand : 4 parts stonechip by volume and brought to proper level. The kota stone slabs/tiles laid over under bed, pressed and tapped down with wooden mallet to the proper level, lifted and pressed again with thick cement slurry spread over the surface with fine joint finished including pigments, curing, grinding, etc. complete as per direction of Engineer-in-Charge.	Sq.m.	275	1474.78	405564.5
7.0	Providing polished Kota stone 20 mm thk in skirting of suitable height projecting 6mm from adjacent plaster all complete .as per direction of Engineer-in-Charge.	Sq.m.	45	1702.22	76599.9
8.0	Extra for pre finished nosing in treads of steps of Kota stoneas per direction of Engineer-in-Charge.	Mtr.	82	148.1	12144.2

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9.0	Supplying and laying true to line and level Anti-Skid, Full Body, Homogeneous & Granular finish Vitrified Tiles conforming to IS:15622-2006 & IS 4457-2007 and testing shall be made in accordance with IS:13630 [Non- modular sizes for tiles with Skid resistance > 0.5, Mohr's hardness > 5.0, Staining resistance: Class-1, Water Absorption: E < 0.5%], MOR > 35 N/sq.mm in Internal area of building e.g. Toilet Block, Passage, Corridor, Accessible Open Terrace etc. set in 20 mm sand cement mortar (1:4) and 2 mm thick cement slurry at back side of tiles using cement @ 2.91 Kg./Sqm laid after application slurry using 1.75 Kg of cement per Sqm below mortar only, joints grouted with admixture of white cement and colouring pigment to match with colour of tiles/ epoxy grout materials of approved make as directed and removal of wax coating of top surface of tiles with warm water and polishing the tiles using soft and dry cloth upto mirror finish complete including the cost of materials, labour and all other incidental charges complete true to the manufacturer's specification and direction of Engineer-in-Charge.				
	Sizes-600 mm x600mm x10 mm with breaking strength > 1500 N	Sq.m.	950	1461.8	1388710
	Sizes-400 mm x400mm x10 mm with breaking strength > 1500 N	Sq.m.	220	1231.75	270985
10.0	Providing and Supplying of False Flooring as per specifications given below: Supplying of Pedestal support made of 2mm thick of Stainless Steel (SS) as Base Plate size of 100x100mm. The base plate may be embossed for additional strength pedestal pipe 25mm to 30 mm dia OD x 2mm (Min. Tk.) stainless steel pipe of approx. 500 mm in length /depth as per site requirement to achieve finish floor height. Top portion of pipe threaded 100mm long with two nos. stainless steel nuts, & the bottom side of pipe welded. The base plate top head attachment shall be made of SS size of 100x100x3mm thick Sq. plate and welded with the round pipe 25 to 30mm OD x 19 to 24mm ID shape. All complete as per direction of engineer – in – charge	No	950	401.2	381140
11.0	Supplying of Stringer made of Stainless Steel size of 570mm long x 1.2 to 1.5 mm thick shape suitable SS-304 shall be provided. All complete as per direction of engineer - in - charge	No	2000	200.6	401200
12.0	Supply of false floor panel made of steel cementitious core top finished laminated size 600mm x 600mm x 35mm. All complete as per direction of engineer – in - charge	No	1000	1026.6	1026600
13.0	Installation / Fixing of False Flooring Work. The detailed specifications for False Flooring work is as given below: a) Pedestal support made of 2mm Tk. of Stainless Steel (SS) as Base Plate Size of 100 x 100 mm. The base plate may be embossed for additional strength pedestal pipe 25mm to 30 mm, dia OD x 2 mm (Min.Tk.) Stainless Steel pipe of approx. 750 mm in length / depth as per site requirement to achieve finish floor height. Top portion of pipe threaded 100mm long with tow nos. Stainless Steel Nuts & the bottom side of pipe welded. The base plate top head attachment shall be made of SS Size of 100 x 100 x 3mm Tk. Sq. Plate and welded with the round pipe, 25 to 30 mm OD x 19 to 24 mm ID Shape. b) Stringer made of Stainless Steel size of 570 mm long x 1.2 to 1.5 mm Tk. shape suitable SS-304 shall be provided. c) Floor Panel made of Metal with Cement Infill Panel Size of 600 x 600 x 35 mm Tk.	Sq.m.	400	371.7	148680
14.0	Providing and laying 2mm thick antistatic PVC flooring / skirting of approved shade,as per IS:3462 and laying as per IS:5318 all complete as per specification and direction of Engineer-In- Charge,	Sq.m.	520	3200	1664000
15.0	Providing and fixing 1st quality wall cladding (dado) in toilet with ceramic glazed tiles conforming to IS : 13753 of minimum thickness shall be as per manufacturers specification and drawing of approved make like SOMANY KAJARIA, JOHNSON make in all colours, shades design and prints except burgundy, bottle green, black of any size as approved by Engineer - in - charge in dados over 12mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with gray cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete..	Sq.m.	300	951.75	285525
	Plastering & painting				

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16.0	15 mm cement plaster of mix in bothside of wall cladding: (Necessary scaffolding shall be included in the scope of Bidder)				
	1:6 (1 cement: 6 coarse sand)	Sq.m.	7500	261.8	1963500
17.0	6 mm cement plaster of mix at the soffit of ceiling : (Necessary scaffolding shall be included in the scope of Bidder)				
	1:3 (1 cement : 3 fine sand)	Sq.m.	3100	203.3	630230
18.0	Distemping with 1st quality acrylic distemper (ready mixed) having VOC content less than 50 gms/litre, of approved manufacturer, of required shade and colour complete, as per manufacturer's specification.				
	Two or more coats on new work	Sq.m.	2500	87.15	217875
19.0	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete at the bothside of all interior and exterior walls and soffit of ceiling as per direction of engineer – in – charge.	Sq.m.	5585	115.15	643112.75
20.0	Wall painting with premium acrylic emulsion paint of interior grade , having VOC (Volatile Organic Compound) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour.				
	Two coats	Sq.m.	4850	113.9	552415
21.0	Applying priming coats with primer of approved brand and manufacture, having low VOC (Volatile Organic Compound) content.				
	With water thinnable cement primer on wall surface having VOC content less than 50 grams/litre	Sq.m.	7885	60	473100
22.0	Finishing walls with 100% Premium acrylic emulsion paint having VOC less than 50 gm/litre and UV resistance as per IS 15489:2004, Alkali & fungal resistance, dirt resistance exterior paint of required shade (Company Depot Tinted) with silicon additives.				
	New work (Two or more coats applied @ 1.43 litre/ 10 sqm. Over and including priming coat of exterior primer applied @ 0.90 litre/10 sqm.	Sq.m.	2570	146.2	375734
23.0	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :				
	Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture.	Sq.m.	700	121.55	85085

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	Doors & windows				
24.0	Supply and fixing of mechanically operated Stainless Steel rolling shutter, construct of interlocking roll-formed 22 gauge stainless steel slat sections 3/8" deep and individually 1-1/4" high, with an overall width sized to suit door opening. Bottom bar is two, part press-bent and shop welded 16 gauge stainless steel members 1-1/4" in width and 2" in height. Members are to be 1-1/4" wide by 1-3/4" deep extruded steel guide sections with built-in upset shoulders to provide curtain retention. Each guide is fabricated with a bell mouth to provide smooth curtain operation. Mount steel stoppers to guides to prevent roll over and travel above finished bulkhead/soffit. Guides shall be fitted with a wool pile wear strip on the outside face and a rigid P.V.C. stripping on the interior face to ensure smooth and quiet operation and reduce wear. Fasten guides to masonry or structural supports with concealed fasteners at max. 2'-0". Optional members are to be two, part press-bent and shop welded 16 gauge stainless steel guides. Each guide is fabricated with a bell mouth to provide smooth curtain operation. Mount steel stoppers to guides to prevent roll over and travel above finished bulkhead/soffit. Fasten to masonry or structural supports with fasteners at max. 2'-0". Counterbalance: Construct of standard steel pipe of adequate diameter to prevent deflection exceeding 0.03" per foot of door width. Bracket Plates are constructing of minimum 1/8" thick steel plate. All stainless steel is to bed type of 304.All complete as per direction of engineer - in - charge.	Sq.m.	33	33630	1109790
25.0	Providing and fixing of factory made uPVC Sliding window (White Colour) of DUROPLAST comprising uPVC multi-chambered frame having in-built uPVC roller track on top and uPVC sash with wall thickness of 2.3mm (+-0.2 mm) duly reinforced with G.I. section 1.5 mm, wherever required All corners of frame and sash will be fusion welded. After placing glass of SAINT GOBAIN, PILKINTON, ASAHI in the sash, uPVC glazing bead, interlock, EPDM gasket, brush shall be provided including touch lock and rollers & proper drainage system shall be provided. Window Door will be fixed to the wall with 100mm long and 8mm dia. SS Fasteners and complete including glass and silicon sealant (SG18/DC995) in all respect as per				
	3 Track 3 Sash window frame of size 116 x 45 mm & Sash of size 46 x 62 mm with 4 mm thick clear toughened glass	Sq.m.	20	8177.05	163541
26.0	Providing and fixing of factory made uPVC casement window, door & partition (White Colour) of DUROPLAST comprising uPVC multi-chambered frame, Sash, & Mullion with wall thickness of 2.3mm (+-0.2 mm) duly reinforced with G.I. section 1.5 mm. All corners of frame and sash will be fusion welded. Mullion shall be welded / screwed. EPDM Gasket shall be provided in all frame, sash & mullion, wherever necessary. Thereafter, glass of SAINT GOBAIN, PILKINTON, ASAHI shall be provided in the sash with the help of uPVC glazing bead and hardware, i.e., friction hinge & multi point handle (in window) & 3D Hinges & Multipoint Lock (in door) shall be provided. Window / Door shall be fixed to the wall with 100mm long and 8mm dia. SS Fasteners and complete including glass and silicon sealant (SG18/DC995) in all respect				
a.	Casement Window frame of size 67 x 60 mm & Sash / Mullion of size 67 x 80 mm with 4 mm thick clear toughened glass	Sq.m.	45	7242.25	325901.25
b.	Casement Door frame of size 67 x 64 mm & Sash of size 67 x 110 mm & Mullion of size 67 x 78 mm. with 8 mm thick clear toughened glass	Sq.m.	21	9131.45	191760.45
c.	Semi glazed door Door frame of size 67 x 62 mm & Sash of size 67 x 115 mm & Mullion of size 67 x 78 mm. half portion with with 8 mm thick clear toughened glass at top and remaining made up of 38 mm thick block board of Century/ Green/Archidply and finished both side with 1 mm thick laminate Greenlam /Centurylam /Archidlam	Sq.m.	25	9131.45	228286.25

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d.	Fixed partition frame of size 67 x 62 mm & Mullion of size 67 x 78 mm with 8 mm thick clear toughened glass	Sq.m.	350	13570	4749500
27.0	Providing and fixing of factory made uPVC Louver window (White Colour) of DUROPLAST comprising uPVC multi-chambered with wall thickness of 2.3mm (+-0.2 mm) duly reinforced with 1.5 mm thick G. I. Section. All corners of frame shall be fusion welded. Both vertical sides of the frame, adjustable louver mechanism having one lever shall be fitted with the provision of 6mm wired glass of SAINT GOBAIN, PILKINTON, ASAHI . Window will be fixed to the wall with 100mm long and 8mm dia. SS Fasteners and complete including glass and silicon sealant (SG18/DC995) in all respect as per direction of Engineer-In-	Sq.m.	25	4000	100000
28.0	Providing and fixing of hollow metal door at all levels from ISO 9001-2000 certified manufacturer. All hollow metal general doors with or without vision panel. Pressed Galvanised steel Single / Double leaf to required sizes of approved make shakti met-dor which consists of frame, shutter, infill and finish as detailed below and conforming to IS 277				
	Door frame shall be single rebate profile of size 100x57mm made out of 1.20mm thick galvanised steel sheet (18gauge). Frames should be Mitered and field assembled with self tabs. Frames should be provided with back plate bracket and anchor fasteners for installation on a finished plastered masonry wall opening. Once frame installed should be grouted with cement slurry if recommended on the clear masonry opening.				
	Door leaf should be 46mm thick fully flush double skin door with or without vision lite. Door leaf shall be manufactured from 0.8mm (22 gauge) minimum thick galvanised steel sheet. The internal construction of the door should be rigid with steel stiffeners / pads and reinforcement. The infill material shall be resin bonded honeycomb core. All doors should be factory prepped for receiving appropriate hardware and provided with necessary reinforcement for hinges, locks, and door closets. The edge should be interlocked with a bending radius of 1.4mm. For pair of door astragals had to be provided on the meeting stile for both active and inactive leaf.				
	All doors and frames shall be finished with etched primer coating, stove zinc phosphate primer and thermosetting polyurethane aliphatic grade paint of approved colour. The door leaf and frame shall have passed minimum 250hours of salt spray test. Rate should include supply and installation of door and all hardware including vision panel all complete as per drawing and direction of Engineer in charge.				
a.	H M Door Single leaf of size : 1000 x 2500 with 4 mm thick vision panel (150x250) with vision panel and hardware set including SS Butt hinge, SS Anchor fastner, SS tower bolt,Mortice latch & lock, SS pullout handle, Door stopper, Rubber buffer	No	3	8000	8000
b	H M Door Single leaf of size : 1200 x 2100 with 4 mm thick vision panel (150x250) and hardware set including SS Butt hinge, SS Anchor fastner, SS tower bolt,Mortice latch & lock, SS pullout handle, Door stopper, Rubber buffer	No	2	8200	16400
c	H M Door Single leaf of size : 1200 x 2300 with out vision panel and hardware set including SS Butt hinge, SS Anchor fastner, SS tower bolt,Mortice latch & lock, SS pullout handle, Door stopper, Rubber buffer	No	3	8400	25200
29.0	Glazing Curtain Wall System – Providing and fixing aluminium curtain wall system, the glass to be fixed at the outer side of the Aluminium frame of DOMAL section with two sides structural silicon sealant (SG18/DC995) and two side mechanical support with pressure plate and cap. The system should be without direct touch between in and out profiles to avoid acoustic transfer, the system to have a thermal analyst to ensure max. U-value of 2.7 w/sqm, every glass panel to be drained separately to avoid water chambers in the system and to assure easy detection of water problems and repair if required.	Sq.m.	135	15000	2025000
	(i) Specially designed mullions and transoms of extruded DOMAL aluminum sections shall be of 6063 alloy. Specially designed mullions and transoms of extruded aluminum sections shall be of 6063 alloy.				

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	(ii) Coating of DOMAL Aluminum section will be done with 20 micron anodized or 50-60 micron pure polyester powder coating of required colour as per direction of Engineer-in-Charge.				
	(iii) Vertical mullions (150 x 56 mm with minimum 2.5 mm thickness at the back side) to be fixed to RCC beams / columns with designed Aluminum brackets and Stainless steel Anchor fasteners PVC ply / Teflon separator membranes between metal to metal joints.				
	(iv) Horizontal transoms (150 x 56 mm with minimum 2.5 mm thickness at back) to be fixed to vertical mullions with SS screws such that they are not seen in vision panels, forming grid systems of required size as per elevation drawings for vision and spandrel glazed panels.				
	(v) Heavy duty, best quality EPDM gaskets at joints and connection between Aluminum members.				
	(vi) Glazed curtain wall infill panels including approved fire-stop-cum smoke seal wherever applicable.				
	(vii) All components should be sealed for water proofing with silicon of Wacker, DOW corning make				
	a) Vision panel with glazed units of size as per design / drawing and consisting of 6 mm thick clear float toughened glass of approved shade with characteristics as per specification fixed in precise size on the outer face of the infill panel of approved make and glazed in fill panel to be formed by approved means of special structural quality silicone adhesive sealant layer manufactured by Wacker, Dow corning as per direction of Engineer-in-Charge. (Item includes Supplying, Installation and Fixing of Aluminium Frame with structural members, mullions, Transom, subframe, cover plate, fixtures etc. including supply installation of 6 mm thick toughened Glass including cost of sealants, brackets, fastners, screws, sleeve, spacer tap, backer rod, bolts, gasket, fixtures, double stage scaffolding, sales tax, excise duty, custom duty etc. etc. complete in all respect). The work is to be carried out by a Specialised Agency approved by the Engineer-in-Charge.				
30.0	Providing and fixing of Hollow metal fire rated doors as per IS 3614 part-1 & part-2 for stability and integrity. Pressed Galvanized steel conforming to IS 277 with the following specification. Recommended fire door shall have doors tested at CBRI or ARAI for maximum rating of 2hrs with vision panel. Test certificates should be available for vision lites /panels as part of the fire door assembly. Independent glass test certificates will not be accepted. Manufacturer test certificate shall cover doors both single and double leaf and all doors supplied should be within the tested specimen, deviation in specification and sheet thickness other than what is mentioned in the test certificates are not allowed. Proper label confirming the type of door and the hourly rating is mandatory. Approved manufacturer Shakti Met-dor or approved equivalent.				
	Door frame shall be double rebate profile of size 143 x 57 mm made out of 1.60mm (16gauge) minimum thick galvanized steel sheet. Frames shall be Mitered and field assembled with self tabs. All provision should be mortised, drilled and tapped for receiving appropriate hardware. Rubber door silencers should be provided on the striking jamb. Frames should be provided with back plate bracket and anchor fasteners for installation on a finished plastered masonry wall opening. Once frame installed should be grouted with cement & sand slurry necessary for fire doors on the clear masonry opening.				
	Door leaf shall be 46mm thick fully flush double skin door with or without vision lite. Door leaf shall be manufactured from 1.2mm (18gauge) minimum thick galvanised steel sheet. The internal construction of the door should be rigid reinforcement pads for receiving appropriate hardware. The infill material shall be resin bonded honeycomb core. All doors shall be factory prepped for receiving appropriate hardware and provided with necessary reinforcement for hinges, locks, and door closers. The edges should be interlocked with a bending radius of 1.4mm. For pair of doors astragals has to be provided on the meeting stile for both active and inactive leaf. Vision lite wherever applicable should be provided as per manufacturers recommendation with a beeding and screws from inside. The glass should be 6mm clear borosilicate fire rated glass of relevant rating of the door.				

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	All doors and frames shall be finished with etched primer coating, stove zinc phosphate primer and thermosetting polyurethane aliphatic grade paint of approved colour. The door leaf and frame shall have passed minimum 250 hours of salt spray test.				
	Rate should include supply and installation of door and hardware set as mentioned in the door and hardware schedule and direction of Engineer in charge.				
	i) 2Hrs Fire Rated Door Single leaf of size : 1000 x 2500	No.	2	24780	49560
	ii) 2Hrs Fire Rated Door Single leaf of size : 1200 x 2500	No.	3	29736	89208
	iii) 2Hrs Fire Rated Door Double leaf of size : 1200 x 2500	No.	10	29736	297360
	iv) 2Hrs Fire Rated Door Double leaf of size : 1500 x 2500	No.	1	37170	37170
31.0	Providing and fixing factory made single extruded WPC (Wood Polymer Composite) shutter 35 mm thick with hot stamping lamination of wooden texture finish of more than 14micron (similar to door frame) of required size comprising of virgin polymer of K value 58-60 (Suspension Grade), calcium carbonate and natural fibers (wood powder/ rice husk/wheat husk) and non toxic additives (maximum toxicity index of 12 for 100 gms) having minimum density of 650 kg/cum and screw withdrawal strength of 1800 N (Face) & 900 N (Edge), minimum compressive strength 50 N/mm ² , modulus of elasticity 850 N/mm ² and resistance to spread of flame of Class A category with property of being termite/borer proof, water/moisture proof and fire retardant and fixing with stainless steel butt hinges of required size with necessary full body threaded star headed counter sunk S.S screws all hardware with or without vision panel shall be as per drawings and as per direction of Engineer-In- Charge. Make : Vardhman composite India				
	a) 35 mm door panel (masonry opening size 1200x2100) with vision panel and hardware set including SS Butt hinge, SS Anchor fastner, Mortice latch & lock, Door stopper, Rubber buffer and door closer	Sq.m.	30	4792.65	143779.5
	b) 35 mm door panel (masonry opening size 800x2100) hardware set including SS Butt hinge, SS Anchor fastner, Sliding lock barrel bolt & SS pullout handle	Sq.m.	15	4792.65	71889.75
32.0	Providing and fixing factory made single extruded WPC (Wood Polymer Composite) solid door/window & other Frames/Chowkhat of size 125 x 65 mm with hot stamping lamination of wooden texture finish of more than 14 micron (similar to door shutter) comprising of virgin PVC polymer of K value 58-60 (Suspension Grade), calcium carbonate and natural fibers (wood powder/ rice husk/wheat husk) and non toxic additives (maximum toxicity index of 12 for 100 gms) fabricated with miter joints after applying PVC solvent cement and screwed with full body threaded star headed 55 screws having minimum frame density of 750 kg/cum, screw withdrawal strength of 2200 N (Face) & 1100 N (Edge), minimum compressive strength of 58 N/mm ² , modulus of elasticity 900 N/mm ² and resistance to spread of flame of Class A category with property of being termite/ borer proof, water/moisture proof and fire retardant and fixed in position with M.S hold fast/lugs/55 dash fasteners of required dia and length complete as per direction of Engineer-In- Charge. Make : Vardhman composite India				
	125 x 65 mm door frame	Mtr.	90	1301.65	117148.5
	False Ceiling				

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33.0	Clip-in type, Un-perforated, Bevel edged stainless steel Tile Ceiling System: Providing & Fixing of Luxalon type Stainless Steel Tile False Ceiling System. Comprising of Tile of 600mm wide and 600mm long manufactured out of SS304 dull finish 0.5mm thick stainless steel. Tile ends will be raised with pips and stops to ensure positive engagement into the spring to enable for de-mounting of individual panels. The Tile sides will be sufficiently high to ensure a minimum deflection across the length of Tile. All Tiles will be bevel edged. The Tile shall be clipped into clip in profile of 0.5mm thick S.S. The clip in profile shall be supported from slab by means of rigid suspension of 4mm dia SS rod and other end shall hold the clip in profile. Length of rigid suspension shall be as per site requirement. Wherever the Wall & Tile meets, suitable 'L' Edge Profile made from 23mm x 23mm SS shall be used with Clip. SS of 4 mm dia wire suspensions shall be used. Item shall also includes for making necessary cut-out to fix light fittings, fire alarm system, smoke detector etc. as required in co-ordination with concerned Dept. All materials to be used shall be of SS – 304 Stainless Steel.	Sq.m.	1020	6560.8	6692016
34.0	Providing and fixing in position at all heights Rock wool (Roxul Rockwool) insulation of 50 mm thick and density 48Kg / Cum as per the drawing and as directed by the consultant and Engineer IN Charge. The Insulation material shall be made from non - combustible rock wool fibres and bonded together by thermosetting resins, the material shall be factory laminated with reinforced aluminium foil on one side, and other side provided with glass tissue lamination. Insulation shall have properties like to withstand temperature upto 750 degree Centigrade , water repellent, no effect of moisture, shall not absorb water by capillary action, and has low thermal conductivity values of 0.038 W/mk,at 40 0C for and tested in accordance with BS 874:1986 etc., complete as per Manufacturers Specification and the direction of Engineer in charge.	Sq.m.	1020	546.4	557328

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	Roof treatment and waterproofing				
35.0	Extra for providing and mixing water proofing material in cement concrete work in doses by weight of cement as per manufacturer's specification. Make : BASF, SIKA, FOSROC, DR FIXIT	Per 50 Kg Cement	17	56.55	961.35
36.0	Grading roof for water proofing treatment with Cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size)	Cu.m.	55	4762	261910
37.0	Providing and applying fibre reinforced elastomeric liquid water proofing membrane with resilient acrylic polymers having Sun Reflectivity Index (SRI) of 105 on top of concrete roof in three coats @10.76 litre/ 10 sqm. One coat of self-priming of elastomeric waterproofing liquid (dilution with water in the ratio of 3:1) and two coats of undiluted elastomeric waterproofing liquid (dry film thickness of complete application/system not less than 500 microns). The operation shall be carried out after scrapping and properly cleaning the surface to remove loose particles with wire brushes, complete in all respect as per the direction of Engineer-in-Charge.	Sq.m.	1100	415.65	457215
38.0	Providing and laying pressed clay tiles (as per approved pattern 20 mm nominal thickness of approved size) on roofs jointed with cement mortar 1:4 (1 cement : 4 coarse sand) mixed with 2% integral water proofing compound, laid over a bed of 20 mm thick cement mortar 1:4 (1 cement : 4 coarse sand) and finished neat complete.	Sq.m.	1100	569.6	626560
	Toilet and pantry fixtures				
39.0	Providing and fixing white vitreous china "Wall mounted" type water closet (European type W.C. pan) with seat and lid, conforming to IS : 2556; including with "Jaquar" make Metropole Flush Valve (Model- FLV-1085DFP), Dual Flow 32mm Size (Concealed Body) With Concealed Shut Off Provision & Rectangular Dual Flush Plate (ABS Chrome Plated), with 32mm control cock & Elbow set complete with adjustable Sleeve and Wall Flange; with all fittings and fixtures complete including cutting and making good the wals and floors wherever required. (colour- Star White) - "S" Trap type W.C. Pan with ISI marked matching plastic seat and lid with Steel hinges. (Make :- "Hindware"- Ultra. cat no.-20006. without Cistern)	Each	8	8000	64000
40.0	Providing and fixing of health faucet (commode shower) with ss Hook and 1.5 M SS flexible tube pipe Make: JAGUAR (ALD-CHR-565)	Each	8	1500	12000
41.0	Providing and fixing 8 mm dia C.P. / S.S. Jet with flexible tube upto 1 metre long with S.S. triangular plate to European type W.C. of quality and make as approved by Engineer - in - charge.	Each	8	297.55	2380.4
42.0	Providing and fixing CP brass toilet paper holder of JAQUAR (AKP-35751P) .	Each	8	800	6400
43.0	Providing and fixing white flat back large urinal of HINDWARE (60002) and auto closing concealed Urinal Flush Valve complete for urinals of JAQUAR-PRS-CHR-073 with Elbow set & wall flanges including all consumable, tools, tackles, labor etc. all complete as per direction of engineer - in - charge.	Each	11	8000	88000
44.0	Providing & fixing Angular stop cock of JAQUAR (FLR-5053N) .	Each	30	1100	33000
45.0	Providing and fixing white vitreous china Wash Basin (HINDWARE-10045) with C.I. Brackets, 15 mm C. P. wall mounted pressmatic pillar cock auto closing system (JAQUAR PRS-CHR-031), 2 mm C.P. brass made waste coupling length 130mm and 32 mm C.P. Brass Made Bottle Trap size 200x300mm fittings and fixtures complete including Painting of fittings and cutting and making good the wall and floors wherever required as per direction of engineer - in - charge.	Each	10	6000	60000
46.0	Providing and fixing Push Button Soap Dispensers of JAQUAR-SDR-WHT-DJ0010F Including all necessary fittings.	Each	7	1750	12250
47.0	Providing and fixing of 5 mm thick beveled edge mirror(600X450) of approved make and quality, frame less fixed with SS studs , 6 mm waterproof ply in the back etc complete in all respectsper direction of engineer - in - charge. Make-Modi guard/saint-gobain .	Each	10	183.05	1830.5

SL #	ITEM DESCRIPTION	UNIT	Estimated Quantity	Tentative Rate (Rs.)	AMOUNT (Rs)
48.0	Providing and fixing Stainless Steel A ISI 304 kitchen sink as per IS:13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required : Kitchen sink with drain board of ELEGANCE large (NIRALI)				
	560 x 410 mm bowl depth 215 mm and over all size - 1145 x 510 mm	Each	2	5155	10310
49.0	Providing and fixing 32 mm flexible SS waste pipe for sink or wash basin including SS waste fittings complete.	Each	12	150	1800
50.0	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut Granite for pantry 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 as per direction of Engineer-In- Charge.	Sq.m.	5	3908.3	19541.5
51.0	Providing and fixing brass towel rail (chrome) all complete with brackets fixed to wall with CP brass screws with concealed fittings arrangement of approved quality 600 mm long towel rail of JAQUAR (ACN-1111N)	Each	7	250	1750
52.0	Providing and fixing bib cock (long body)of JAQUAR-FLR-CHR-5047N .	Each	8	1500	12000
53.0	Curved shaped urinal partition (900 x450) with of 8 mm frosted glass with chrome finish of Jaquar (JSE-CHR-810UC450X) all complete as per direction of Engineer-in-charge.	Sq.m.	4.5	10000	45000
54.0	Supplying, fitting and fixing Half round ceramic urinal channel of CERA (cat no: S9030104) size 640 x 150 mm	Mtr.	12	800	9600
	Plumbing, Sanitary pipes				0
55.0	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes as per IS 15778 (2007). , having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. Concealed work, including cutting chases and making good the walls etc.				0
	15 mm nominal outer dia Pipes	Mtr.	28	409.65	11470.2
	20 mm nominal outer dia Pipes	Mtr.	20	478.15	9563
	25 mm nominal outer dia Pipes	Mtr.	70	561.95	39336.5
56.0	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes as per IS 15778 (2007), having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints and necessary MS Cup lock scaffolding as required for fixing all complete as per direction of Engineer in Charge. External work				
	25 mm nominal dia Pipes	Mtr.	30	326.65	9799.5
	32 mm nominal dia Pipes	Mtr.	30	413.7	12411
	40 mm nominal dia Pipes	Mtr.	36	536.75	19323
	50 mm nominal dia Pipes	Mtr.	62	791.65	49082.3
57.0	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :				
	50 mm nominal bore	Each	2	869.2	1738.4
	25 mm nominal bore	Each	2	497.15	994.3
	40 mm nominal bore	Each	4	678.4	2713.6
	32 mm nominal bore	Each	2	581.25	1162.5
58.0	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.				

SL #	ITEM DESCRIPTION	UNIT	Estimated Quantity	Tentative Rate (Rs.)	AMOUNT (Rs)
	110 mm diameter	Mtr.	140	305.05	42707
59.0	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion.				
	110 mm Coupler	Each	9	117.8	1060.2
	Single tee with door of 110x110x110 mm	Each	9	203.3	1829.7
	110 mm Shoe (Plain)	Each	9	113.8	1024.2
60.0	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with SS screws of required length, including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.				
	110 mm	Each	70	283.9	19873
61.0	Supply of UPVC pipes (B Type) & fittings conforming to IS-13592-1992				
	a) Single Socketed 3 Meter Length - 110 mm.	Mtr.	33	330	10890
	b) Single Socketed 1.8 Meter Length - 110 mm.	Mtr.	27	198	5346
	c) Coupler - 110 mm.	Each	8	39	312
	d) Plain Tee- 110 mm.	Each	5	81	405
	e) Door Tee - 110 mm.	Each	5	92	460
	f) Bend 45° - 110 mm.	Each	8	80	640
	g) Bend 87.5° - 110 mm.	Each	8	59	472
	h) Vent Cowl - 110 mm.	Each	2	150	300
	i) Pipe Clip - 110 mm.	Each	30	14	420
	j) 110 X 110 P Trap - 75 mm.	Each	8	200	1600
	k) Multi Floor Trap with Top tile & Strainer - 75 mm	Each	18	250	4500
	l) Single Socketed 1.8 Meter Length - 75 mm.	Mtr.	70	126	8820
	m) Plain Y - 75 mm.	Each	5	150	750
	n) Bend 87.5° - 75 mm.	Each	6	35	210
	o) Plain Tee - 75 mm.	Each	5	46	230

SL #	ITEM DESCRIPTION	UNIT	Estimated Quantity	Tentative Rate (Rs.)	AMOUNT (Rs)
	Misc.				
62.0	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., 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 including fixing accessories such as nuts, bolts, fasteners etc.and all fabrication shall be as per construction drawing and direction of Engineer-In- Charge, fasteners etc.).	Kg	350	575.45	201407.5
63.0	Providing and fixing mild steel. grill work for windows weighing 21 Kg/sqm using M.S. flats, or M.S. square rods, or combination of M.S. flats and square rods as per approved design, drawing including cutting steel sections and welding ,grinding to get a smooth surface to required pattern with a coat of red lead primer, including the cost of all materials, scaffolding, labour, curing, HOM of equipment's and machineries, with all leads and lifts loading and unloading charges, transportation cost and conveyance of all other materials & all other incidental charges etc complete for successful completion of work as per specifications and as directed by the Engineer-in charge.	kg	75	183.5	13762.5
64.0	Providing and fixing 16 mm M.S. Fan clamps of standard shape and size in R.C.C. slab, including laying of 20mm dia PVC pipes cabling and GI wires for cable pulling, anchoring clamp to reinforcement bar complete in all respect,	NO	30	171.15	5134.5
65.0	Cutting walls and making the same good with plaster for laying concealed PVC pipe with GI wire for electrical cable pulling complete in all respect for concealed wiring work. Cable is not included under the scope. Item includes supply of PVC pipe				
a.	20mm dia PVC pipe	RM	3000	200	600000
b.	25mm dia PVC pipe	RM	500	250	125000
66.0	Cutting walls and making the same good with plaster for laying and fixing GI gang box for modular / electrical switch board / LAN wiring / telephone socket etc.				
a.	For telephone socket	NO	30	50	1500
b.	For I/O socket of system	NO	30	50	1500
c	For switch board with 3-6A switch and 1-6A receptacle	NO	40	150	6000
d	For Switch board with 3-6A switch and regulator	NO	4	150	600
e	For 2-6A switch and 2 -3pin 6A socket	NO	30	150	4500
	Total				35821414

NOTE:

1.0 COST OF CEMENT AND REINFORCEMENT STEEL IS EXCLUDED FROM UNIT RATE

2.0 ALL ABOVE RATES ARE INCLUSIVE OF GST