



AN ISO 9001 & 14001 COMPANY

## **TENDER DOCUMENT**

NIT No. SRO/CON/ETS/248 dated 24.08.2024.

FOR

**Tender for “Construction of Admin & Production Block Civil works for Construction of New Technology Centre at Sriperumbudur, Tamil Nadu on Item rate basis”**

### **VOLUME – III**

**Price Bid**

#### **TENDER INVITING AUTHORITY**

Engineering Projects (India) Limited  
(A GOVT. OF INDIA ENTERPRISE)  
Southern Regional Office, Chennai,  
3D, EC Chambers, 92 GN Chetty Road  
T .Nagar, Chennai- 600 017

[Validate](#)[Print](#)[Help](#)[em Wise BoQ](#)Tender Inviting Authority: < **ENGINEERING PROJECTS (INDIA) LIMITED**Name of Work: < **Construction of Admin & Production Block Civil works for Construction of New Technology Centre at Sriperumbudur, Tamil Nadu on Item rate basis.** >Contract No: < **SRO/CON/ETS/248 dated 24.08.2024.** >Name of the  
Bidder/ Bidding  
Firm /  
Company :**PRICE SCHEDULE****(DOMESTIC TENDERS - RATES ARE TO GIVEN IN RUPEES (INR) ONLY)****(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only )**

NUMBER #	TEXT #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Item Code / Make	Quantity	Units	BASIC RATE Excluding GST In Figures To be entered by the Bidder in Rs. P	TOTAL AMOUNT Excluding GST Rs. P	TOTAL AMOUNT In Words
1	2	3	4	5	7	13	15
1.000	1.0) ARCHITECTURAL WORKS						
1.001	1.1) PLASTER WORKS						
1.002	1.1.1) External Wall Plaster						
1.003	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement : 5 coarse sand) and a top layer 6 mm thick cement plaster 1:3 (1 cement : 3 coarse sand) finished rough with sponge.	item1	2576.00	sqm		0.00	INR Zero Only
1.011	1.1.4) Internal Wall Plaster						
1.012	1.1.4.1) 12 mm cement plaster of mix 1:6 (1 cement : 6 coarse sand)	item2	4562	sqm		0.00	INR Zero Only
1.013	1.1.5) Cement Putty						
1.014	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.	item3	4562	sqm		0.00	INR Zero Only
1.016	1.1.7) Ceiling Plaster						
1.017	1.1.7.1) 6 mm cement plaster of 1:3 of Mix 1:3( 1 Cement:3 fine sand)	item4	233	sqm		0.00	INR Zero Only
1.018	1.1.8) Providing & Fixing chicken wire mesh / wired fabric (12.5mm x 24 SWG) in strips of 200 mm widths or as required over junctions between concrete & brick / block masonry at all heights and locations prior to plastering including drilling, nailing etc complete as directed by Engineer In Charge.	item5	330	sqm		0.00	INR Zero Only
1.019	1.1.9) Extra for providing and mixing water proofing material in cement plaster work in proportion recommended by the manufacturers	item6	280	Per bag of 50 kg cement used in the mix		0.00	INR Zero Only
1.022	1.2) FLOORING, SKIRTING AND DADO WORKS						
1.023	1.2.1) Kota Flooring						
1.024	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cementmortar 1 : 4 (1 cement : 4 coarse sand) : 25mm thick	item7	190	SQM		0.00	INR Zero Only
1.025	1.2.2) Kota stone Tread Risers						
1.026	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement: 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing, making machine cut groves as per drawing needs, making neccessary cutouts for railing including pre finished nosing in treads of steps of Kota stone complete.	item8	98	RM		0.00	INR Zero Only
1.030	1.2.4) Granite Stone Flooring						
1.031	Providing and laying Polished 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-in-Charge. Polished Granite stone slab jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent	item9	340	SQM		0.00	INR Zero Only
1.034	1.2.6) Granite stone Wall Cladding						
1.035	Stone tile (polished) work for wall lining over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and cement slurry @ 3.3 kg/sqm including pointing in white cement complete. 8mm thick Granite of any colour and shade	item10	110	SQM		0.00	INR Zero Only
1.036	1.2.7) Vitrified Tile Flooring						
1.037	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS : 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), including grouting the joints with white cement and matching pigments etc., complete. as per direction of Engineer in charge.						
1.038	1.2.7.1) Size of Tile 600x600 mm	item11	160	SQM		0.00	INR Zero Only
1.039	1.2.7.2) Size of Tile 800x800 mm	item12	330	SQM		0.00	INR Zero Only
1.040	1.2.8) Ceramic Tile Dado						

1.041	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	item13	850	SQM		0.00	INR Zero Only
1.042	1.2.9) Access/ False Floor						
1.043	Providing and fixing removable raised/false access flooring with system and its components of approved make for different plenum height with possible height adjustment upto 50 mm, comprising of modular load bearing floor panels supported on G.I. rectangular stinger frame work and G.I. Pedestal etc. all complete, as per the architectural drawings, as specified and as directed by Engineer-in-charge consisting of :						
1.044	a) Providing at required spacing to form modular framework, pedestals made out of GI tube of thickness minimum 2 mm and 25 mm outer diameter, fully welded on to the G.I. Base plate of size 100mm x 100mm x 3mm at the bottom of the pedestal tube, G.I. pedestal head of size 75mm x 75mm x 3.5 mm welded with GI fully threaded stud 16mm outer diameter with two GI Check nuts screwed on the stud for level adjustment upto 50mm, locking and stabilizing the pedestal head in position at the required level. The pedestals shall be fixed to the subfloor (base) through base plate using epoxy based adhesive of approved make or the machine screw with rawl plug.						
1.045	b) S stringers system in all steel construction hot dipped galvanized of rectangular size 570x20x30x0.80mm thick having holes at both ends for securing the stringers on to the pedestal head using fully threaded screws ensuring maximum lateral stability in all directions, the grid formed by the pedestal and stringer assembly shall receive the floor panel, this system shall provide adequate solid, rigid support for access floor panel, the system shall provide a minimum clear uninterrupted clearance between the bottom of the floor for electrical conduits and wiring etc. all complete as per the architectural drawings, as specified and as directed by the Engineer-incharge.						
1.046	c) Providing and fixing Access Floor panel of 600x600x32 mm medium grade Filled Steel anti static high pressure Lamination of 800H grade (FS800H). Access Floor panel shall be steel welded construction with an enclosed bottom pan with uniform pattern of 64 hemispherical cones. The top and bottom plates of Steel Gauges: top 0.6 mm and bottom 0.7 mm fused spot welded together (minimum 64 welds in each dome and 20 welds along each flange). The panel should be Corroresist epoxy coated for lifetime rust protection and cavity formed by the top and bottom plate is filled with Pyrogrip noncombustible Portland cementitious core mixed with lightweight foaming compound. The access floor shall be factory finished with Anti-static High Pressure laminate with Non Warp technology upto 1mm thickness for superior adhesion and Surface flatness within 0.75mm. The panel is to withstand a Concentrated Load of 363 kgs applied on area 25mm x 25mm without collapse in the centre of the panel which is placed on four steel blocks. The panel will withstand and Uniformly Distributed Load (UDL) minimum 1250 kg/sqm and an impact load of 50kg all complete as per the approved manufacturers specification and as per the direction of Engineer-in-charge. All specification must be printed on the side of the panel to ensure the quality of the product.						
1.047	450 mm Finished Floor Height (FFH).	item14	48	sqm		0.00	INR Zero Only
1.063	1.3) PAINTING WORKS						
1.064	1.3.1) OBD						
1.065	Distemping with oil bound washable distemper of approved brand and manufacture to give an even shade :						
1.066	New work (two or more coats) over and including water tinnable priming coat with cement primer	item15	4562	sqm		0.00	INR Zero Only
1.073	1.3.4) WeatherProof Exterior Paint						
1.074	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade :						
1.075	New work (Two or more coats applied @ 1.43 ltr/ 10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm)	item16	2576	sqm		0.00	INR Zero Only
1.082	1.3.7) Epoxy Paint						
1.083	Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete.						
1.084	On steel work	item17	45	sqm		0.00	INR Zero Only
1.090	1.4.1) 12.5 mm gypsum fire resistant board						
1.091	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c,	item18	268	sqm		0.00	INR Zero Only

1.092	including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound , jointing tapes , finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with : 12.5 mm thick tapered edge gypsum fire resistant board conforming to IS: 2095- Part I						
1.093	1.4.2) PVC Laminated Gypsum Tiles						
1.094	Providing and fixing tiled false ceiling of specified 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 24x25 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 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 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-in-charge.	item19	283	sqm		0.00	INR Zero Only
1.095	12.5 mm thick square edge PVC Laminated Gypsum Tile of size 595x595 mm, made of Gypsum plasterboard, manufactured from natural gypsum as per IS 2095 part I and laminated with white 0.16mm thick fire retardant PVC film on the face side and 12micron metalized polyester on the back side with all edges sealed with the face side PVC film which goes around and wraps the edges and is bonded to the edges and the back side metalized polyester film so as to make the tile a completely sealed unit.						
1.096	1.4.3) Providing & Fixing of Armstrong or Equivalent Soft Fibre Accosuticle Suspended System with Optra ( Vector) Edge tiles with armstron 38mmsemi concealed system or equivalent. The tiles should have Humidity resistance ( RH) of 95%, NRC 0.9-1.00, Light reflectance >85%, Thermal Conductivity K=NA w/m k, fire performance UK class0/class1( BS476PT-6 & 7), in module size of 600x600x20 suitable for Green Building application, with recycled content of 66% GW & 74% RW. ceiling system have Armstrong Silhouette 15mm suspension system having rotary stitching on all T sections, i.e. main runner ,1200mm special Tees ( ( without overide & end details) , need to be installed with suspension system of Armstrong make or equivalent. The tile & Grid System used together should carry a 30 year warranty.	item20	400	sqm		0.00	INR Zero Only
1.097	The rate shall include making cutouts for various lights, duct doors,grills for specified size etc for which no extra will be paid separately. Rate also include providing additional trims at the ends , middle & aroundd cutouts for light fittings/AC grills and providing additional supports from ceiling wheer main/cross members are cut due to light fittings/ACgrills etc; complete all as per trim detail drawing. Teh rate shall include the cove as per dwg ( no extra RMT will be paid for any cove patta) verticle as well horizontal surfaces as per detailed dwg. Actual " visible" surfaces of horizontal and verticle will be measured and paid						
1.108	1.4.5.5) Hydraulic Floor Spring for Doors						
1.109	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 upto 125 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-in-charge: stainless steel cover plate minimum 1.25 mm thickness	item21	10	each		0.00	INR Zero Only
1.110	1.4.6) Modular toilet Partitions: Providing & fixing in position 12mm thick High Pressure laminated Toilet cubicles of Size 1100mm(w)X1500mm(L)x 2100mm(Ht),door size 610mm(w)X1925mm( Ht) with SS legs including all necessary hardware's of SS304 & SS door nob, SS privacy thumb, SS Coat Hook, Door Stopper.Make merino titan box up series or equivalent	item22	96	sqm		0.00	INR Zero Only
1.111	1.5) DOORS, WINDOWS, GLAZING, CLADDING, FAÇADE ETC.						
1.112	1.5.1) Wood Work For Frames						
1.113	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length ( hold fast lugs or dash fastener shall be paid for separately).						
1.114	Second class teak wood	item23	1.022	cum		0.00	INR Zero Only
1.115	1.5.2) Dash Fasteners t door frames						
1.116	Providing and fixing carbon steel galvanised ( minimum coating 5 micron) dash fastener of 10 mm dia double threaded 6.8 grade (yield strength 480 N/mm2), counter sunk head, comprising of 10 m dia polyamide PA 6 grade sleeve, including drilling of hole in frame , concrete/ masonry, etc. as per direction of Engineer-in-charge.						
1.117	10X120mm	item24	80	each		0.00	INR Zero Only
1.120	1.5.4) Flush Doors						

1.121	1.5.4.1) Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters						
1.122	1.5.4.2) 35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws & finishing as per Engineer in charge	item25	90	sqm		0.00	INR Zero Only
1.123	1.5.4.3) Extra for Providing and fixing flush doors with decorative veneering instead of non decorative ISI marked flush door shutters conforming to IS: 2202 (Part I) ON One side only	item26	62	sqm		0.00	INR Zero Only
1.124	1.5.4.4) Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of flush door shutters (over all area of door shutter to be measured).	item27	67	sqm		0.00	INR Zero Only
1.125	1.5.4.5) Extra for providing vision panel not exceeding 0.1 sqm in all type of flush doors (cost of glass excluded) (overall area of door shutter to be measured):						
1.126	1.5.4.5.1) Rectangular or Square	item28	200	sqm		0.00	INR Zero Only
1.128	1.5.6) FRP doors frames						
1.129	Providing and fixing Fiber Glass Reinforced plastic (FRP) Door Frames of cross-section 90 mm x 45 mm having single rebate of 32 mm x 15 mm to receive shutter of 30 mm thickness .The laminate shall be moulded with fire resistant grade unsaturated polyester resin and chopped mat. Door frame laminate shall be 2 mm thick and shall be filled with suitable wooden block in all the three legs. The frame shall be covered with fiber glass from all sides. M.S. stay shall be provided at the bottom to steady the frame.	item29	1	metre		0.00	INR Zero Only
1.130	1.5.7) FRP doors shutters						
1.131	30 mm thick Fiberglass Reinforced Plastic (F.R.P.) flush door shutter in different plain and wood finish made with fire retardant grade unsaturated polyester resin, moulded to 3 mm thick FRP laminate all around, with suitable wooden blocks inside at required places for fixing of fittings and polyurethane foam (PUF)/ Polystyrene foam to be used as filler material throughout the hollow panel, casted monolithically with testing parameters of F.R.P. laminate conforming to table - 3 of IS: 14856, complete as per direction of Engineer-in-charge.	item30	10	sqm		0.00	INR Zero Only
1.132	1.5.8) Toughened Glass Doors						
1.133	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-in-charge (Door Handle, Lock and Stopper To be paid separately)	item31	21	sqm		0.00	INR Zero Only
1.134	1.5.9) Providing and fixing ss 304-handles 600mm in length of dorma or equivalent make, complete as per direction of Engineer-in-charge.	item32	4	nos		0.00	INR Zero Only
1.135	1.5.10) Providing and fixing dorma or equivalent make universal corner lock with locking plate & including all necessary accessories with ss polish , complete as per direction of Engineer-in-charge.	item33	8	nos		0.00	INR Zero Only
1.136	1.5.11) Aluminum Doors Windows Ventilators						
1.137	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) , Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron)						
1.138	doors , windows,ventilators main frame	item34	687	kg		0.00	INR Zero Only
1.139	1.5.12) For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)						
1.140	doors windows shutter frames	item35	712	kg		0.00	INR Zero Only
1.141	1.5.13) Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item):						
1.142	1.5.13.1) With float glass panes of 5.0 mm thickness	item36	259	sqm		0.00	INR Zero Only
1.145	1.5.14) Prelaminated Particle Board						
1.146	1.5.14.1) Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling for bottom panel of 0.9m, fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge.- Pre-laminated particle board with decorative lamination on both sides	item37	220	sqm		0.00	INR Zero Only
1.147	1.5.15) Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete. Upto 5mm depth and 5mm width	item38	90	Metre		0.00	INR Zero Only
1.148	1.5.16) Structural Glazing						

1.149	1.5.16.1) 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-in-Charge. (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).	item39	60	kg		0.00	INR Zero Only
1.150	1.5.16.2) Designing, fabricating, testing, protection, installing and fixing in position semi (grid) unitized system of structural glazing (with open joints) for linear as well as curvilinear portions of the building for all heights and all levels, including: (a) Structural analysis & design and preparation of shop drawings for the specified design loads conforming to IS 875 part III (the system must passed the proof test at 1.5 times design wind pressure without any failure), including functional design of the aluminum sections for fixing glazing panels of various thicknesses, aluminium cleats, sleeves and splice plates etc. gaskets, screws, toggles, nuts, bolts, clamps etc., structural and weather silicone sealants, flashings, fire stop (barrier)-cum-smoke seals, microwave cured EPDM gaskets for water tightness, pressure equalisation & drainage and protection against fire hazard including: (b) Fabricating and supplying serrated M.S. hot dip galvanised / Aluminium alloy of 6005 T5 brackets of required sizes, sections and profiles etc. to accommodate 3 Dimensional movement for achieving perfect verticality and fixing structural glazing system rigidly to the RCC/ masonry/structural steel framework of building structure using stainless steel anchor fasteners/ bolts, nylon seperator to prevent bimetallic contacts with nuts and washers etc. of stainless steel grade 316, of the required capacity and in required numbers.	item40	50	sqm		0.00	INR Zero Only
1.158	1.5.17) Rolling Shutter						
1.159	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters.						
1.160	1.5.17.1) 80x1.25 mm M.S. laths with 1.25 mm thick top cover	item41	65	sqm		0.00	INR Zero Only
1.161	1.5.17.2) Providing and fixing ball bearing for rolling shutters.	item42	24	each		0.00	INR Zero Only
1.162	1.5.17.3) Extra for providing mechanical device chain and crank operation for operating rolling shutters.						
1.163	1.5.17.5) Exceeding 16.80 sqm in area	item43	65	sqm		0.00	INR Zero Only
1.164	1.5.17.6) Extra for providing grilled rolling shutters manufactured out of 8 mm dia M.S. bar instead of laths as per design approved by Engineer-in-charge, (area of grill to be measured).	item44	30	sqm		0.00	INR Zero Only
1.165	1.5.18) Door Accessories						
1.166	1.5.18.1) Providing and fixing bright finished brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles of approved quality with necessary screws, etc. complete	item45	37	each		0.00	INR Zero Only
1.167	i) Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete :150X10mm	item46	37	each		0.00	INR Zero Only
1.168	1.5.18.3) Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete :250X10mm	item47	37	each		0.00	INR Zero Only
1.169	1.5.18.4) Providing and fixing bright finished brass handles with screws etc. complete:100 mm	item48	37	each		0.00	INR Zero Only
1.170	1.5.18.5) Providing and fixing bright finished brass handles with screws etc. complete:125 mm	item49	37	each		0.00	INR Zero Only
1.171	1.5.18.6) Providing and fixing bright finished brass hanging type floor door stopper with necessary screws, etc. complete	item50	37	each		0.00	INR Zero Only
1.172	1.5.18.7) Providing and fixing bright finished brass door latch with necessary screws etc. complete :250x16x5 mm	item51	37	each		0.00	INR Zero Only
1.173	1.5.18.8) Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm), with necessary accessories and screws etc. complete	item52	37	each		0.00	INR Zero Only
1.174	1.5.18.9) Grab bars/ pull bars made of SS 304 for disabled toilet doors	item53	2	each		0.00	INR Zero Only
1.175	1.5.18.10) Providing and fixing bright finished brass double acting spring hinges with necessary brass screws etc. complete :100mm	item54	12	each		0.00	INR Zero Only
1.176	1.5.18.11) Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868 ) transparent or dyed to required colour or shade, with necessary screws etc. complete : 200X10mm	item55	47	each		0.00	INR Zero Only
1.177	1.5.18.12) Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete : 125mm	item56	37	each		0.00	INR Zero Only
1.178	1.5.18.13) Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised(anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete:-Single rubber stopper	item57	37	each		0.00	INR Zero Only
1.179	1.5.18.14) Providing and fixing bright finished brass 100 mm mortice latch and lock, ISI marked, with six levers and a pair of anodised (anodic coating not less than grade AC 10 as per IS : 1868) aluminium lever handles of approved quality with necessary screws etc. complete.	item58	37	each		0.00	INR Zero Only

1.180	1.5.18.15) Providing and fixing concealed latch for the sliding windows , with approved quality ,colour as matched the powercoating colour of aluminium window sections with necessary screws etc complete as per direction of Engineer- in-charge.	item59	74	each		0.00	INR Zero Only
1.185	1.5.20) Panic Bar						
1.186	Providing and fixing panic bar / latch (Double point) fitted with a single body, Trim Latch & Lock on back side of the Panic Latch of reputed brand and manufacture to be approved by the Engineer- in-charge, all complete	item60	34	each		0.00	INR Zero Only
1.187	1.5.21) Fire rated Doors						
1.188	Providing & Fixing two hour fire rated single / double leaf openable doors with fire retardant infill panel of "Shakti" or equivalent, of zinc coated steel frame, single rebate profile of size 100 x 57 mm with bending radius of 1.2 mm, fabricated using 1.20 mm thick galvanized steel sheet (18 gauge) and Fully flush type of 46 mm thick Single / Double leaf shutters, of Pressed Galvanized steel sheet conforming to IS 277, conforming to IS 3614 ( Part 2 ) 1992 BS467 ( Part 20 & 22 0 & ISO834, with electrostatic powder coating or polyurethane coating, including vision glass panel 300X450mm & fire rated all fixtures and fastenings as specified like SS double ball bearing butt hinges 3nos per shutter, tower bolts 1 no, door stoppers 2 no, SS Handle 19mm Dia, 250 mm long with both side key operation (as approved by the CONSULTANT) and two aldrops per shutter, and providing Master key, Grand master key etc complete as directed by Engineer In Charge.	item61	109	sqm		0.00	INR Zero Only
1.191	1.5.23) GRC Jali						
1.192	Providing & Fixing Glas Reinforced Jalli works cast in custom designed moulds as per design detail including frame to hold it.	item62	31	sqm		0.00	INR Zero Only
1.200	1.6.1) SS Railing						
1.201	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 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-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	item63	560.8	kg		0.00	INR Zero Only
2.066	2.4) REINFORCED CEMENT CONCRETE WORK						
2.067	FORMWORK						
2.070	2.4.1.2) Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc.	item64	24.96	sqm		0.00	INR Zero Only
2.071	2.4.1.3) Suspended floors, roofs, landings, balconies and access platform	item65	159.344	sqm		0.00	INR Zero Only
2.072	2.4.1.4) Lintels, beams, plinth beams, girders, bressumers and cantilevers	item66	280.62	sqm		0.00	INR Zero Only
2.073	2.4.1.5) Columns, Pillars, Piers, Abutments, Posts and Struts	item67	138.6	sqm		0.00	INR Zero Only
2.076	2.4.1.8) Small lintels not exceeding 1.5 m clear span, moulding as in cornices, window sills, string courses, bands, copings, bed plates, anchor blocks and the like	item68	40.416	sqm		0.00	INR Zero Only
2.081	Reinforcement Note:- 1) Thereinforcement consumed shall be measured as per client approved measurements. 2) The excess quantity of concrete more than allowable wastage shall be recovered from as per relavent ACC clauses						
2.082	2.4.2) Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.						
2.083	2.4.2.1) Thermo-Mechanically Treated bars HYSD Fe500D or more	item69	74300	kg		0.00	INR Zero Only
2.084	2.4.3) Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.						
2.085	2.4.3.1) Thermo-Mechanically Treated bars HYSD Fe500D or more	item70	7000	kg		0.00	INR Zero Only
2.086	Concrete						
2.087	2.4.4) Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work, using cement content as per approved design mix, manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work, including pumping of R.M.C. from transit mixer to site of laying , excluding the cost of cantering, shuttering finishing and reinforcement, including cost of admixtures in recommended proportions as per IS : 9103 to accelerate/ retard setting of concrete,improve workability without impairing strength and durability as per direction of the Engineer-in-charge. (Note :- Minimum Cement content shall be 350 kg/cum)						
2.089	2.4.4.2) All works above plinth level upto floor V level	item71	134	cum		0.00	INR Zero Only
2.092	2.4.5.1) Providing M-30 grade concrete instead of M-25 grade BMC/RMC. (Note:- Minimum Cement content shall be 360 kg/cum)						
2.094	2.4.5.1.2) All works above plinth level upto floor V level	item72	80	Cum		0.00	INR Zero Only
2.124	2.4.16) Providing and casting in Situ Reinforced Cement Concrete shall be minimum M25 for slab on grade or on floor with coarse aggregate of size 20mm downgraded excluding reinforcement but including side shuttering and construction in panels / staggered strip method, finishing the concrete with power floater and Ride on Trowel (ROT) as per the specifications, including providing necessary construction/ contraction / expansion /isolation joints as shown on drawing and joints required at various locations like equipment foundations, columns, walls, etc of size 5 mm wide x 50 mm deep & filling with Polysulphied sealant applied over primer laid as per manufacturer's specification/ drawings etc complete as directed by Engineer In Charge.	item73	743	cum		0.00	INR Zero Only



2.125	2.4.16.1) Extra over above item of slab on grade and floor slab, for Vacuum processing of concrete slab to remove surplus water using TREMIX VACUUM SYSTEM or approved equivalent including necessary surface vibration, floating of surface with power trowel after vacuum processing to obtain clean, smooth / broom & level finished surface etc. complete as directed by Engineer In Charge.	item74	3715	sqm		0.00	INR Zero Only
2.126	2.4.17) Providing controlled joint of size 5 mm wide x 25 mm deep for slab on grade by saw cutting with approved mechanical means including & filling with Polysulphide sealant etc. complete as per manufacturer's specification/ drawings and as directed by Engineer In Charge. Note: The groove making shall be done with mechanical saw and operation shall be carried out within 48 Hrs concreting etc complete.	item75	1500	metre		0.00	INR Zero Only
2.127	2.4.18) Machine Foundations in grade M30 concrete with 20 mm downgraded coarse aggregate, including making pockets, grooves, slots, aligning and inserting anchor bolts, etc as may be necessary, as directed by Engineer In Charge. (Excluding cost of Anchor bolts, and the same shall be paid separately)	item76	20	cum		0.00	INR Zero Only
2.156	2.6) WATERPROOFING WORK						
2.157	2.6.1) Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying : a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. This layer will be allowed to air cure for 4 hours. b) Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.	item77	276	sqm		0.00	INR Zero Only
2.158	2.6.2) Providing and laying in sunken area with broken AAC Block laid, consolidated, finished smooth, including finishing the top layer with 20 mm water proof cement mortar 1 : 4 (1 cement : 4 coarse sand) with approved water proofing compound as per manufacturer specifications etc. all complete as per directions of the Engineer-in-Charge.	item78	80	cum		0.00	INR Zero Only
2.159	2.6.3) Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment.						
2.160	b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand ) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs.						
2.161	c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge. d) Finishing the surfaces with 20 mm thick jointless cement mortar of mix 1:4 (1 cement : 4 coarse sand) admixed with waterproofing compound conforming to IS :2645 and approved by Engineer in charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300 x 300 mm square and 3 mm deep.						
2.162	e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer-in-Charge .						
2.163	2.6.3.1) With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	item79	573	sqm		0.00	INR Zero Only
2.164	2.6.4) U.G. TANK / OH WATER TANKS – INTERNAL AREAS						
2.165	2.6.4.1) Providing & Applying 2 coats of CFTRI approved, waterproof coating with high performance two component pre-packed cementitious waterproofing, with a mix ratio of (liquid: Powder), parts by wt. - 1:1.4 @ 2.2 Kg/sqm to achieve DFT of 1.5mm over the wall & floor surface as per the manufacturers' specification & drawing with the turnkey execution to be done by the manufacturer through its in house subsidiary execution company and with 10 years composite warranty against leakages, to be provided by the principal manufacturer / civil contractor. All the coats to be applied in right angle to each other. The coating shall have following properties: Tensile strength : 2.6 N/mm2 as per ASTM D 412, Elongation at break, % : 120 as per ASTM D 412, Adhesion strength : 1 N/mm2 as per ASTM D 4541, crack bridging : 2mm as per ASTM C 836, Water penetration (5 bar pressure) : 1% as per BS EN 12390, Hardness, Shore A : 60 as per ASTM D 2240, RCPT permeability : 92% as per ASTM C 1202-97, including proper surface preparation as per manufacturers' specification, cleaning work, removal of loose concrete and filling cracks with polymer modified mortar using SBR Latex, URP. All the honeycombed areas & construction joints shall be identified and injected with cement slurry admixed with expansive additive, AM @ 225gms / bag of cement.	item80	60	Sqm		0.00	INR Zero Only



2.166	Making of angle fillets all around the periphery of the wall with polymer modified mortar using SBR Latex, URP, etc, complete. Protection Cum Hygiene Coat: Providing & applying 2 coats of two component, water-based epoxy resin with additive fillers, anti-algae, anti-fungal, Non-flammable, Non-toxic, hygiene cum damp-proof coating @ 4 sqm / Kg, as directed by the manufacturer with the turnkey execution to be done by the manufacturer through its in house subsidiary execution company and with 10 years composite warranty against leakages, to be provided by the principal manufacturer / civil contractor. The coating shall be Certified by CFTRI as per 21 CFR 175 – 300 of US – FDA. Mixing Ratio (Base: Hardner: Water) – 1:1:1, Specific Gravity : 1.2, Water vapour permeance : 244.48 g/m2/24 hrs, as per IS 7809/Pt 2/1977, Adhesion strength: 2.5 N/mm2 as per ASTM D 4541 : 02, as per manufacturers' specification, etc, complete as directed by engineer in charge.						
2.184	2.6.9) PARAPET WALL	item81	27.46	sqm		0.00	INR Zero Only
2.241	2.8) BLOCK WORK						
2.243	2.8.1A) Providing and laying autoclaved aerated cement blocks Masonry of thickness 100mm with AAC blocks in proper line and level in superstructure above plinth level up to floor V level, in polymer adhesive as recommended by block manufactures or from saint gobain weber or leticrete make, including all scaffolding, staging, curing, all lifts, all labour, hire and fuel charges for all tools and plants employed etc. complete to the satisfaction of the Engineer-in-charge and as directed. Rate shall include providing Concrete Binders in proportion 1:2:4 (1 cement : 2 Coarse sand : 4 Aggregates), 75mm thick reinforced with 2 nos. of 8 mm dia Fe 500 bars, RCC binders to be at every 1 metre interval from floor level. The rate to be inclusive of cost of reinforcement and formwork, cover blocks for reinforcement and all other incidental charges etc., all complete and as directed. The rate shall also include closing the gap between the masonry and RCC beam / slab finished to required slope as directed by the Engineer-in-charge. Note:- The width of the joints shall not exceed 10mm.	item82	4.5	cum		0.00	INR Zero Only
2.246	2.8.3A) Providing and laying autoclaved aerated cement blocks Masonry of thickness 150mm/200mm/230mm/300 mm with AAC blocks in proper line and level in superstructure above plinth level up to floor V level, in polymer adhesive as recommended by block manufactures or from saint gobain weber or leticrete make, including all scaffolding, staging, curing, all lifts, all labour, hire and fuel charges for all tools and plants employed etc. complete to the satisfaction of the Engineer-in-charge and as directed. Rate shall include providing Concrete Binders in proportion 1:2:4 (1 cement : 2 Coarse sand : 4 Aggregates), 75mm thick reinforced with 2 nos. of 8 mm dia Fe 500 bars, RCC binders to be at every 1 metre interval from floor level. The rate to be inclusive of cost of reinforcement and formwork, cover blocks for reinforcement and all other incidental charges etc., all complete and as directed. The rate shall also include closing the gap between the masonry and RCC beam / slab finished to required slope as directed by the Engineer-in-charge. Note:- The width of the joints shall not exceed 10mm.	item83	457.55	cum		0.00	INR Zero Only
Total in Figures						0.00	INR Zero Only
Quoted Rate in Words						INR Zero Only	