SUMMARY		
SR.NO.	ITEM DESCRIPTION	AMOUNT (Rs.)
1	DISMANTLING, CIVIL & INTERIOR, PLUMBING AND SANITARY WORKS	
2	MODULAR FURNITURES	
3	CHAIRS	
4	LOOSE FURNITURES	
5	ELECTRICAL WORKS	
6	HVAC WORKS	
7	Public Addressal System	
8	FIRE FIGHTING WORKS	
9	Fire Detection and Alarm System	
10	WLD & FKR	
11	BUY - BACK ITEMS (TO BE SUBTRACTED)	
	TOTAL	
	Discount if Any	
	Grand Total	

CIVIL & INTERIOR WORKS BOQ FOR SBI Nariman part 13th and 15th Floors

Sr No	Description	Units	Total QTY	Rate (Rs.)	Total (Rs.)
1	**Dismantling Work, CIVIL AND INTERIOR FURNISHING WORKS**				
1.1	**Dismantling Work**				
1.1.1	**Dismantling / Demolishing flooring** of all types i.e marble, floor tiles, pcc & carpet etc by manually or mechanical means including carting away/ disposal of all unserviceable material/ debris to a place approved by Mumbai Municipal Corporation outside bank premises. This shall be included for part 13th floor and 15th floors.	Lumpsum	1.00		
1.1.2	Demolishing **existing brick work** in Cement / RCC with door jambs, window sills, lintels, dado, etc manually/ by mechanical means and carting away unserviceable material / debris to a place approved by Mumbai Municipal Corporation outside bank premises. This shall be included for part 13th floor and 15th floors.	Cum	4.00		
1.1.3	Demolishing **existing door** jambs, window sills, lintels, dado, etc in cement/ concrete manually/ by mechanical means and carting away unserviceable material / debris to a place approved by Mumbai Municipal Corporation outside bank premises. This shall be included for part 13th floor and 15th floors.	Lumpsum	1.00		
1.1.4	Dismantling & removing **cables**, **old light fixtures, panels**, **raceways**, **old wiring, AHUs, HVAC ducting, other serviceable items,** Roller Blinds, storage, other loose furniture etc by manual or mechanical means and placing them to desired location within the premises as directed by Engineer in-charge/ Architect. Rates to include carting away unserviceable material / debris to a place approved by Mumbai Municipal Corporation outside bank premises. This shall be included for part 13th floor and 15th floors.	Lumpsum	1.00		
1.1.5	Carefully dismantling and removing the **existing partitions/doors** from exisitng cabins and walls without disturbing the structure/ adjacent wall/ ceiling including carting away unserviceable material / debris to a place approved by Mumbai Municipal Corporation outside bank premises. This shall be included for part 13th floor and 15th floors.	Lumpsum	1.00		
1.1.6	**Dismantling / Demolishing Workstations and Fixed Furniture** of all types i.e modular workstation, worlstaions, carpentry works, storages, etc by manually or mechanical means including carting away/ disposal of unserviceable material/ debris to a place approved by Mumbai Municipal Corporation outside bank premises. This shall be included for part 13th floor and 15th floors.	Lumpsum	1.00		
1.1.7	**Dismantling / Demolishing False flooring** by manually or mechanical means including carting away/ disposal of unserviceable material/ debris to a place approved by Mumbai Municipal Corporation outside bank premises. This shall be included for part 13th floor and 15th floors.	Sq.Mtr.	1000.00		
1.1.8	**Dismantling / Shifting of the Server racks and IT items to be shifted to basement** by manually or mechanical means including carting away/ disposal of unserviceable material/ debris to a place approved by Mumbai Municipal Corporation outside bank premises.This shall be included for part 13th floor and 15th floors.	Lumpsum	1.00		
	TOTAL DISMANTLING				
1.2	CORE CUTTING				
	Core cutting in existing R.C.C wall or slab upto 200 mm dia and up to 300 mm deep in size. The rate shall include making good of the core with air tight micro concreting and water proofing after completing the work. The work should be tested for leak proof to the satisfaction of the EIC / Architect.				
a	75 MM dia	NOS	6		
b	100 MM dia	NOS	6		

c	120 MM dia	NOS	6		
d	150 MM dia	NOS	6		
	TOTAL (CORE CUTTING)				
1.3	**MASONRY WORK & PLASTERING**				
1.3.1	**Cement Blocks Masonry**				
	Providing and constructing 100 mm thick **AAC block masonry**, Having rough surface to receive the plaster effectively, blocks conforming to IS 2185 (Part-III) masonry with approved block laying polymer modified adhesive mortar per manufacturer's instructions, including providing RCC patli beam(Lintel) of 100mm thick at every 1.00m c/c with 2 nos. 8 mm dia Tor bars and 6 mm dia links at 300 c/c in cement concrete of mix M 20, required formwork complete with raking out joints, curing, independent double legged scaffolding as per specifications etc. at heights, depths and leads as directed by PM to his entire satisfaction. Make: Siporex, Aerocon, Billtech, Ecolite, Ascolite Ultratech The rate shall also include closing the gap between the masonary and rcc beam/ slab finished to required slope as directed by engineer in charge. Note : - the width of joints not to exceed 10mm. The AAC block to withstand the standard fire for 240mins under uniform compressive load of 15 kg/m2 as per IS: 3809, BS : 476 part 20 and ISO 834 with certification.	SQM	156		
1.3.2	**Internal Plaster - 12mm thick**				
	Providing and applying internal plaster - average 12 mm thick in 2 or more coats including dash coat Cement Mortar 1:4 (1 cement : 4 fine sand) without neeru finish in all positions, levels and heights including finishing, shuttering, scaffolding, curing, etc., adding polypropylene fibre of approved quality in desired quantity per bag of cement as per manufacturers specifications complete as per directions of the EIC/ Architect. Cost to be inclusive of providing chicken mesh wherever applicable/instructed.	SQM	694		
1.3.3	**Ceiling Plaster - 6mm thick**				
	Providing and applying internal ceiling plaster - average 6mm thick including dash coat in Cement Mortar 1:4 (1 cement : 4 fine sand) without neeru finish in all positions, levels and heights including finishing, shuttering, scaffolding, curing, etc., adding polypropylene fibre of approved quality in desired quantity per bag of cement as per manufacturers specifications complete as per directions of the EIC/ Architect. Cost to be inclusive of providing chicken mesh wherever applicable/instructed.	SQM	470		
1.3.4	**Plain Cement Concrete**				
	Providing and laying in position ready mixed plain cement concrete, with cement content as per approved design mix and manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads and lifts, having continuous agitated mixer, manufactured as per mix design of specified grade for plain cement concrete work, including pumping of R.M.C. from transit mixer to site of laying and curing, excluding the cost of centering, shuttering and finishing, including cost of curing, 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 EIC/Architect. Flooring should be smooth enough to lay carpet,vinyl or any other soft floor Entire floor to be treated with 3 coats of water proofing.				
	Providing and laying in position cement concrete of M-15 grade at all floor levels including the cost of centering, shuttering and finishing.	CUM	1000		
1.3.5	**Polymer Modified Mortar**				
	Providing and applying polymer modified cementitious repair mortar of compressive strength not less than 25 MPa at 28 days, including surface preparation, removal of loose and deteriorated concrete, cleaning reinforcement, application of polymer bonding agent and placing repair mortar to required profile, curing and finishing complete as directed by Engineer-in-Charge.	SQM	300		
	a) REMOVAL OF RUST : Providing & applying approved rust remover to clean reinforcement bars & allowing it to react for specified time and cleaning the reinforcement of total rust by tapping or using mechanical wire brush around the reinforcement bars to give it a totally rust free finished steel surface using suitable tools and equipment.				
	b) PASSIVATOR COAT ON REINFORCEMENT : Providing and applying one component , Polymer modified cementitious anti-corrosive primer formulated to provide dual protection of a polymeric barrier and an integral corrosion-inhibiting system to existing and additional steel provided before patching of damaged areas, using suitable tools and equipment and using BASF approved make chemicals of Master Emaco P130 / Fosroc Nitoprime Zincrich / Sika Rustoff 100.				
	c) BOND COAT : Providing and applying bond coat on concrete surface by mixing high dispersion SBR latex like Master Emaco SBR2 of BASF or Nitobond SBR (Latex) of Fosroc with white cement in the ratio of 2:3. The mixing should be done to a lump free consistency for bond coat and screed mortar to be applied once the bond coat is tacky.				
	d) POLYMER MODIFIED MORTAR (PMM) : Providing and applying up to 50mm thick Polymer modified mortar in ratio 1:5:15 (1 part by wight of Polymer : 5 parts by weight of cement : 15 parts by weight of washed Quartz sand) to the damaged concrete portion in two layers with required w/c ratio for desired consistency. The mortar shall be applied by hand and finished the same by floating coat complete as per manufacturer's specifications including curing, etc. at all hight and locations complete. The approved brands are Master Emaco S348 of BASF / Renderoc HB-60 of Fosroc / Sikadur 41 of Sika.				
	The rates also includes all types of scaffolding as applicable, safety net, green cloth etc. Please Note: The Contractor should ensure that all stages (a to c) of Micro Concrete works to be passed by the Architect / Engineer-in-charge. The work has to be carried out at all heights / locations as per the instructions of Architect / Engineer-in-charge.				

1.3.6	**Micro Concrete**				
	Providing and pouring free-flow, non-shrink cementitious micro concrete of approved make (Fosroc Renderoc RG/RGL, SikaRep Microcrete-4, MasterEmaco equivalent) for filling voids, encasement, jacketing, repairing damaged RCC members, pedestals, bases and other structural/non-structural elements, including surface preparation, shuttering/formwork wherever required, mixing with water as per manufacturer's specification, placing, curing and finishing complete as directed by the Engineer-in-Charge.	KG	300		
	a) REMOVAL OF RUST : Providing & applying approved rust remover to clean reinforcement bars & allowing it to react for specified time and cleaning the reinforcement of total rust by tapping or using mechanical wire brush around the reinforcement bars to give it a totally rust free finished steel surface using suitable tools and equipment.				
	b) PASSIVATOR COAT ON REINFORCEMENT : Providing and applying one component Polymer modified cementitious anti-corrosive primer formulated to provide dual protection of a polymeric barrier and an integral corrosion-inhibiting system to existing and additional steel provided before patching of damaged areas, using suitable tools and equipment and using BASF approved make chemicals of Master Emaco P130 / Fosroc Nitoprime Zincrich / Sika Rustoff 100.				
	c) BOND COAT : Providing and applying bond coat on concrete surface by mixing high dispersion SBR latex like Master Emaco SBR2 of BASF or Nitobond SBR (Latex) of Fosroc with white cement in the ratio of 2:3. The mixing should be done to a lump free consistency for bond coat and screed mortar to be applied once the bond coat is tacky. d) MICRO CONCRETE : Providing and laying of prepacked dual shrinkage compensated polymer modified micro concrete up to 75mm thickness like Master Emaco S346 of BASF / Renderoc LA55 of Fosroc / SikaRep Microcrete 4 of Sika or equivalent material. Pouring in narrow locations including the formwork etc. complete as directed by Engineer-in-charge.				
	The rates also includes all types of scaffolding as applicable, safety net, green cloth etc. Please Note: The Contractor should ensure that all stages (a to c) of Micro Concrete works to be passed by the Architect / Engineer-in-charge. The work has to be carried out at all heights / locations as per the instructions of Architect / Engineer-in-charge.				
	TOTAL (MASONRY WORK & PLASTERING)				
1.3.7	**WATER PROOFING WORK**				
a	**Water proofing in toilets**				
	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces, toliets 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 EIC/Architect over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment.				
	(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 EIC/Architect 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 EIC/Architect to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs.				
	(c) After four 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 EIC/Architect.				
	(d) Finishing the surface with 20 mm thick jointless Cement Mortar of mix 1:4 (1 cement : 4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by EIC/Architect including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep.				
	(e) The whole area/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 with 5 days ponding test and 5 year waranty certificate to be provided and as directed and specified by the EIC/Architect.				
	With average thickness of 120-200 mm and minimum thickness at khurra as 65 mm.	SQM	150		
b	**Chemical Waterproofing**				
	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 along with 5 days ponding test and 5 year waranty certificate to be provided	SQM	150		
	TOTAL (WATER PROOFING WORK)				
1.4	**FLOORING & DADO WORKS**				
1.4.1	**Italian Marble flooring**				

	Providing and laying machine cut, mirror polished Marble stone flooring, in required design and in patterns in combination with Italian marble stones inlay of different colours, shades and finished surface texture etc., in linear as well as curvilinear portions of the building, storage tops, etc all complete as per the architectural drawings, with 18 mm thick stone slab laid over 20 mm (average) thick base of Cement Mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with white cement slurry @ 4.4 kg/sqm including pointing with white cement slurry admixed with pigment to match the marble shade including rubbing, curing and polishing, edge rounding (wherever required) etc., all complete as specified and as directed by the EIC/Architect. Cost inclusive of inlay work in curve shapes as per Architectural drawing. Providing and fixing italian marble skirting upto 100mm height as per approved make and shade. Tiles to be in pattern as per detailed drawings on Upto 75 mm thick cement morter bed of proportion 1:4. the rate should be inclusive of surface preparation, giving necessary slopes, cleaning joints and grouting them with approved 3mm thk spacers with epoxy grouting paste with pigmented additives to match shades of the tile and pvc spacer for neat detailing. Tile shall be free from any colour and size variation. Make for epoxy grouting: Laticrete /Dr.Fixit/ Roff Make: CMC, NITCO, AGL				
	Basic rate: Rs.7,000/- Per Sqmt	SQM	143		
1.4.2	**Italian Marble Wall Dado**				
	Providing and fixing machine cut, mirror polished stone work for wall lining including dado, skirting, risers of steps, columns etc., of required design and pattern where ever required, stones of different finished surface textured, on 12 mm (average) thick Cement Mortar 1:3 (1 cement : 3 coarse sand) laid and jointed with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc., all complete as per Architectural drawings and as directed by the EIC/Architect. Rate shall be inclusive of forming V or U groove or any other shape of size not more than 10 mm wide and 5mm depth to Italian marble/ composite marble dado/ granite at the horizontal & vertical joints at the required places including polishing to give high gloss finish. The rate shall include half round moulding required places including polishing to give high gloss finish etc., complete, as per the Architectural drawings and as directed by the EIC/Architect. Make: CMC, NITCO, AGL				
	Basic rate: Rs.7,000/- Per Sqmt	SQM	37		
1.4.3	**Vitrified Floor Tiles**				
	Providing and laying Vitrified tiles in floor with 100 mm skirting of different sizes (thickness to be specified by the manufacturer), conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS : 15477, in average 6 mm thickness, including epoxy grouting in matching shade of joints with 5mm spacers. The cost to include sealer treatment of approved makes. The rate shall be inclusive of application chemicals and Roffe whereas Rate shall also include providing and laying in position PCC of upto 4" thk beneath the floor finishes wherever level difference is observed to attain a uniform level all throughout the premises as per directions & instructions of the Architect etc complete. Providing and fixing vitirified tiles skirting upto 100mm height as per approved make and shade. Tiles to be in pattern as per detailed drawings on Upto 75 mm thick cement morter bed of proportion 1:4. the rate should be inclusive of surface preparation, giving necessary slopes, cleaning joints and grouting them with approved 3mm thk spacers with epoxy grouting paste with pigmented additives to match shades of the tile and pvc spacer for neat detailing. Tile shall be free from any colour and size variation. Make for epoxy grouting: Laticrete /Dr.Fixit/ Roff Make: Kajaria, Somany, Nitco				
A	**Size of Tile 600mmX1200mm of approved makes (Kajaria, Somany, Nitco)** **Basic rate: Rs. 1500/- per sqm**	SQM	2101		
B	**Size of Tile 900mmX900mm of approved makes (Kajaria, Somany, Nitco)- anti skid tiles** **Basic rate: Rs. 1350/- per sqm**	SQM	90		
1.4.4	**Vitrified Tiles in dado**				
	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joint with white cement & matching pigments etc., complete. Basic rate: Rs. 1000/- per sqm The rate shall be inclusive of edge moulding & end strips at the junction between the floor and the vertical surfaces and mouldings, T grooves etc complete as per the directions / to the satisfaction of the Architect including backing etc complete as directed by the Architect. Make: Kajaria, Somany, Nitco				
A	**Size of Tile 600mmX1200mm of approved makes (Kajaria, Somany, Nitco)** **Basic rate: Rs. 1500/- per sqm**	SQM	213		
B	**Size of Tile 900mmX900mm of approved makes (Kajaria, Somany, Nitco)** **Basic rate: Rs. 1350/- per sqm**	SQM	90		
1.4.5	**False Access Flooring**				

	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: (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 75mmx75mmx3.5 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.				
	(b) 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-in-charge.				
	(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 0.7mm 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 EIC/Architect. All specification must be printed on the side of the panel to ensure the quality of the product.				
A	300 mm Finished Floor Height (FFH)	SQM	84		
1.4.6	**Antistatic Vinyl Flooring**				
	Provide and install antistatic flooring system consisting of antistatic vinyl, materials designed to dissipate static electricity. Flooring shall have a surface resistance of 10^6 to 10^9 ohms, suitable for use in electronic assembly areas, data centers, laboratories, and clean rooms. Material shall be minimum 3 mm thick, resistant to chemicals, wear, and stains, with non-slip surface and anti-bacterial properties. Flooring to be installed over a smooth, dry, and properly prepared subfloor using manufacturer-approved self levelling conductive adhesive. Copper grounding strips and electrical grounding connections shall be included as required to ensure proper functionality. Finish and color to be selected from manufacturer's standard range and approved by the architect. Installation shall be carried out in accordance with manufacturer's specifications and industry best practices. Submit product data, test certifications, and samples for approval prior to installation. Completed flooring shall meet all relevant safety, ESD, and performance standards.	SQM	44		
	TOTAL (FLOORING & DADO WORKS)				
1.5	**DOORS, WOODWORKS, CARPENTRY**				
1.5.1	**Door jambs in step manner**				
	Providing and fixing in position 150 mm wide 18 mm thk pre-polished double granite jambs for window frames and Toilet door frames in step manner with minimum overlapping of 50mm, laid over 20mm thick base Cement Mortar 1:4 (1 cement : 4 coarse sand) and cement paste, including necessary rounding of visible edges of granite jambs on both faces. Rate includes making moulding & mirror polishing the edges, grouting the joints with white cement & matching pigment etc., all complete as per drawing and the direction of the EIC/Architect. (double patti would be considered and measured as single length X total width irrespective of single or double thickness) Basic rate: Rs 1500/- Per Sqmt	RMT	301		
1.5.2	**Granite Platforms**				
	Providing and fixing 18 mm thick, 600mm deep machine cut, mirror polished, premoulded and pre polished granite stone for kitchen platforms including front facias and skirting of required size/profile, approved shade, colour and texture The undercarriage frame of the counter shall be in sandwitch cadappa verticals with granite facia of size 6" to be fixed to verticals and top of the counter & nosing with edge polish including a cut-out for sink etc complete as per directions & instructions of the Architect using 20 mm thick base of Cement Mortar 1:4 (1 cement : 4 coarse sand). The vertical supports are to be made of 18+18 mm thick granite sandwiched together. All the Joints to be treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding, polishing to edges to give high gloss finish, making openings & holes of required size for fixtures and fittings etc., complete at all levels as per the architectural drawings as directed by the EIC/Architect. The Item includes cost of Indian Marble. Basic rate: Rs 1,500/- Per Sqmt	RMT	39		

1.5.3	**Fire Rated Double Leaf Glass Door (Lift lobby doors)**				
	Providing and fixing of tested fully glazed fire rated double/single leaf door with 120 minutes fabricated with aluminum powder coated frame (sizes as per the manufacturer specification). The door shutter would have a top rail and side rail and a bottom rail (sizes as per the manufacturer specification). The glass should be 11mm thick, clear 120 min fire rated Non Wired Toughened Interlayered glass. The glass should be held in its place with the help of 1.6 mm thick SS beading and a special ceramic tape with cross section as per the test evidence. The shutters should be fixed to the frame using SS Ball Bearing Hinges of size 100 mm x 89 mm x 3 mm thickness or equivalent. Beading should be attached using SS screws. The door should be fitted with Mortise Sash lock and door closer of approved equivalent. The inactive leaf should be fixed to the frame using 300 mm long tower bolt at top and 300 mm long tower bolt at bottom or approved equivalent. The profiles shall be filled with rock wool as per manufacturer specification. Rate should be inclusive of all hardware.The entire item is to be completed as per the direction of the EIC/Architect. Make: Shakti Hormann, Dorma, Matrix				
	The glass should be minimum 11 mm thick, non-wired, interlayered and toughened with 120 minutes stability and integrity. The glass should be held in a place with the help of stainless steel beading. The glass shall be of Saint gobain/AIS or approved equivalent. Rate should be inclusive of all hardware.The entire item is to be completed as per the direction of the EIC/Architect.				
	Fire rated 5 knuckle, 2 ball bearing butt hinges size 4" x 3" x 3mm, in SS304 satin stainless finish.				
	Fire rated rack and pinion door closer size 2-4 with standard arm and with two independent closing valves and latching speed adjustable by arm in silver finish.				
	Gravity type co-ordinator in satin stainless finish				
	Fire rated mortice dead lock with 55mm backset, 20mm square forend and prepared for euro profile cylinder including strike plate in satin stainless steel.				
	6 pin Euro profile double cylinder with both side keys operation under master key system in nickel finish having 3 nos. change keys				
	Escutcheons prepared for euro profile cylinder suitable for dead lock in satin stainless stee finish.				
	H-handle having length 450mm and 25mm dia, back to back pull handle in satin stainless steel/ aluminum powder coated as per approval. The pull handles should have supporting washer with raised bevelling on the outer surface.				
	Fire rated lever action flush bolt with 19mm projecting bolt having length 300mm in satin chrome finish				
	Dust excluding socket with 16mm dia hole, fully morticed on the floor in satin chrome finish				
	Self Adhesive smoke seal fixed on the Frame, Long Double Doorset having Width- 1 x 2000mm, Height- 2 x 2700mm. The seal should be fire tested, Durability over 1,000,000 cycles. Material: semi-rigid flame retardant PVCRigid PVC Base, Flexible elastomeric fins.				
	Automatic Drop down Seal of length 820 mm. Suitable Sealing Gap upto 15mm; . UL Listed, Durability over 1,000,000 cycles. Material : Body - Silver/ black anodised Aluminium, Gasket - Black,End Caps - Stainless Steel (Can be cut upto 610mm)				
	Floor stopper half dome with 45mm dia with fixing accessories in satin chrome finish				
	All Hardware make - Dorma, Hettich, Windor, Haffele				
A	**glass door with size 1500 X 2400MM (Double leaf door quantity for measurement shall be considered as one complete door)**	NOS	4		
1.5.4A	**Single Leaf Solid Door with Veneer Finish**				
	Providing and fixing Solid Core Flush Door of size **1050x2400mm** Shutter (IS - 2202) of 40 mm thk. finished both side with approved 4mm thk Veneer finish in melamine polish with provision for vision panel of size 750mm (h) x 250mm (w) Vision panel to be removed if not required. Door to be provided with aluminum frame 100x25mm as per approved make, shade and size in shop drawing. All edges of the door to be covered with necessary lipping with three coat of Melamine polish finish. The work should be completed as per specification. Rate should be inclusive of all hardware as given below.The entire item is to be completed as per the direction of the EIC/Architect Makes: Windor, Kubik, Ottic	NOS	30		
	4 Ball bearing butt hinges of size 4" x 3" x 3mm, in SS 304 and in satin stainless steel finish.				
	Rack and pinion door closer of size 2-4, with standard arm and with two independent closing valves and latching speed adjustable by arm in silver finish.				
	Mortice dead lock with 55mm backset, 20mm square forend, prepared for euro profile cylinder including strike plate in satin stainless steel finish.				
	6 Pin Euro Profile Double Cylinder with Both side Key operation Under Master Key System having Length 60mm (30mm+30mm) in nickel plated finish having 3 nos Change Keys.				
	Escutcheons prepared for euro profile cylinder suitable for dead lock in satin stainless steel finish				
	H-handle of length 450 and 22mm dia, back to back in satin stainless steel finish/ aluminum powder coated as per approval. The pull handles should have supporting washer with raised bevelling on the outer surface.				
	Floor stopper half dome with 45mm dia with fixing accessories, in satin Chrome finish				
	All Hardware make - Dorma, Hettich, Windor, Haffele				
	Veneer make - Merino, Greenlam, Century Veneers				
15.4B	**Single Leaf Solid Door with laminate finish (toilets)**				

	Providing and fixing Solid Core Flush Door of size **1050x2400mm** Shutter (IS - 2202) of 40 mm thk. finished both side with approved 1mm thk Laminate finish with provision for vision panel of size 750mm (h) x 250mm (w) Vision panel to be removed if not required. Door to be provided with aluminum frame as per approved make, shade and size in shop drawing. All edges of the door to be covered with necessary lipping with three coat of Melamine polish finish. Door shall include (Black/Silver) and grill. Grill to be powder coated matching the door colour The work should be completed as per specification. Rate should be inclusive of all hardware as given below.The entire item is to be completed as per the direction of the EIC/Architect. Door to be provided with aluminum frame 100x25mm as per approved make, shade and size in shop drawing. Makes: Windor, Kubik, Ottic	NOS	4		
	2 Ball bearing butt hinges of size 4" x 3" x 3mm, in SS 304 and in satin stainless steel finish.				
	Rack and pinion door closer of size 2-4, with standard arm and with two independent closing valves and latching speed adjustable by arm in silver finish.				
	Mortice dead lock with 55mm backset, 20mm square forend, prepared for euro profile cylinder including strike plate in satin stainless steel finish.				
	6 Pin Euro Profile Double Cylinder with Both side Key operation Under Master Key System having Length 60mm (30mm+30mm) in nickel plated finish having 3 nos Change Keys.				
	Escutcheons prepared for euro profile cylinder suitable for dead lock in satin stainless steel finish				
	H-handle of length 450 and 22mm dia, back to back in satin stainless steel finish/ aluminum powder coated as per approval. The pull handles should have supporting washer with raised bevelling on the outer surface.				
	Floor stopper half dome with 45mm dia with fixing accessories, in satin Chrome finish				
	All Hardware make - Dorma, Hettich, Windor, Haffele				
1.5.5	**Fire Rated Single Leaf Metal Door with Vision Panel (elec, hub, server room)**	NOS	9		
	Supply of Metal Fire door of size **1200x2400mm** from ISO 9001:2015 certified Manufacturer . The door must have been manufactured with galvanised – GI sheet. All Fire doors must satisfy the requirement of latest IS 3614:2021 for Fire & Life Safety guidelines for 120 minutes Fire Rating with its Stability & Integrity for 120 minutes. The Prototype sample of the door must carry a prior test evidence as per IS 3614 part-2 / BS 476 Part 20 & 22 . The manufacturer must submit the copy of test evidence prior to start of production .The offered test certificate should either carries it's Validity or certificate must not be older than 5 years from CBRI / NABL Accreditated Lab . All doors should be finished with Powder coating in desired regular RAL Shades. Door frame shall be Single rebate profile of section 100 x 57 mm made out of 1.20mm thick galvanised steel sheet with a factory pre-punched groove so as to accomodate Fire & smoke seal size 10x4mm . Frames should be butt jointed and field assembled with bolting system for proper strength .Frames should be provided with back plate for anchor fasteners for installation on a finished plastered wall opening. The Air gap between Wall and frame can be filled with fire retardant sealant (payable in extra item).Door leaf should be minimum 46mm thick fully flush double skin door. Door leaf must be manufactured from 1.2mm (18 gauge) thick galvanised steel sheet. The door should be provided with reinforcement pads to receive appropriate Hardwares of Equivalent make. The Shutter shall be filled with proprietary infill material as per test evidence . Vision panels of size 750mm (h) x 250mm (w) required should be of 120 minutes fire rating and should be of non-wired type. Hardware to include panic bar push door handle. Rate should be inclusive of all hardware as specified below. The entire item is to be completed as per the direction of the EIC/Architect. Make: Shakti Hormann, Dorma, Matrix Godrej				
	4 Ball bearing butt hinges of size 4" x 3" x 3mm, in SS 304 and in satin stainless steel finish.				
	Rack and pinion door closer of size 2-4, with standard arm and with two independent closing valves and latching speed adjustable by arm in silver finish.				
	Mortice dead lock with 55mm backset, 20mm square forend, prepared for euro profile cylinder including strike plate in satin stainless steel finish.				
	6 Pin Euro Profile Double Cylinder with Both side Key operation Under Master Key System having Length 60mm (30mm+30mm) in nickel plated finish having 3 nos Change Keys.				
	Escutcheons prepared for euro profile cylinder suitable for dead lock in satin stainless steel finish				
	H/Offset -handle of length 600 and 22mm dia, back to back in satin stainless steel finish/ aluminum powder coated as per approval. The pull handles should have supporting washer with raised bevelling on the outer surface.				
	Floor stopper half dome with 45mm dia with fixing accessories, in satin Chrome finish				
	All Hardware make - Dorma, Hettich, Windor, Haffele				
1.5.6	**Fire Rated Single Leaf Metal Door with Vision Panel and panic bar (fire staircase)**	NOS	6		

	Supply of Metal Fire door of size 1050x2400mm from ISO 9001:2015 certified Manufacturer . The door must have been manufactured with galvanised – GI sheet. All Fire doors must satisfy the requirement of latest IS 3614:2021 for Fire & Life Safety guidelines for 120 minutes Fire Rating with its Stability & Integrity for 120 minutes. The Prototype sample of the door must carry a prior test evidence as per IS 3614 part-2 / BS 476 Part 20 & 22 . The manufacturer must submit the copy of test evidence prior to start of production .The offered test certificate should either carries it's Validity or certificate must not be older than 5 years from CBRI / NABL Accreditated Lab . All doors should be finished with Powder coating in desired regular RAL Shades. Door frame shall be Single rebate profile of section 100 x 57 mm made out of 1.20mm thick galvanised steel sheet with a factory pre-punched groove so as to accomodate Fire & smoke seal size 10x4mm . Frames should be butt jointed and field assembled with bolting system for proper strength .Frames should be provided with back plate for anchor fasteners for installation on a finished plastered wall opening. The Air gap between Wall and frame can be filled with fire retardant sealant (payable in extra item).Door leaf should be minimum 46mm thick fully flush double skin door. Door leaf must be manufactured from 1.2mm (18 gauge) thick galvanised steel sheet. The door should be provided with reinforcement pads to receive appropriate Hardwares of Equivalent make. The Shutter shall be filled with proprietary infill material as per test evidence . For Double leaf doors; astragal has to be provided in meeting style for both active and inactive leaf. Vision panels of size 750mm (h) x 250mm (w) required should be of 120 minutes fire rating and should be of non-wired type. Hardware to include panic bar push door handle. Rate should be inclusive of all hardware. The entire item is to be completed Make: Shakti Hermann, Dorma, Matrix, Godrej				
	4 Ball bearing butt hinges of size 4" x 3" x 3mm, in SS 304 and in satin stainless steel finish.				
	Rack and pinion door closer of size 2-4, with standard arm and with two independent closing valves and latching speed adjustable by arm in silver finish.				
	Mortice dead lock with 55mm backset, 20mm square forend, prepared for euro profile cylinder including strike plate in satin stainless steel finish.				
	6 Pin Euro Profile Double Cylinder with Both side Key operation Under Master Key System having Length 60mm (30mm+30mm) in nickel plated finish having 3 nos Change Keys.				
	Escutcheons prepared for euro profile cylinder suitable for dead lock in satin stainless steel finish				
	H-handle of length 300 and 22mm dia, back to back in satin stainless steel finish/ aluminum powder coated as per approval. The pull handles should have supporting washer with raised bevelling on the outer surface.				
	Floor stopper half dome with 45mm dia with fixing accessories, in satin Chrome finish				
	All Hardware make - Dorma, Godrej, Saint Gobain				
	Panic bar: Providing and fixing Dorma-Kaba panic bar (exit device) on exit door, fully compliant with EN 1125 standards, suitable for single-leaf doors up to 1500 mm width. Panic bar shall be non-handed, crossbar/push-bar type with horizontal locking mechanism, stainless-steel construction, concealed fixing, and certified for emergency egress. The assembly shall include latch mechanism, strike plate/keeper, end caps, and necessary accessories for complete installation. All materials, labour, and fittings shall be included to deliver a fully functional panic-exit device as per manufacturer's specifications.				
1.5.7	**Modular Aluminum Portal (Panels for installing switchboards next to all doors)**				
	Providing and fixing aluminum frame of same size as door frame as per architect's instructions and approved shop drawing. Aluminum frame shade shall match the door frame (RAL or silver anodized). Size of the aluminum portal shall be 300mm x 300mm. Front and back of the box shall be finished with 4mm thk veneer (same make and shade of veneer to be used as the door) with 3 coats of melamine polish including aluminum hat profile, SS transit profile as per apporoved ake and shade. Provision to be given for fixing the switchboard module as per approved make and size. Aluminum portal shall be installed next to each door as per approved drawings and architect's instructions. Make: Window, Kubik, Dorma, Otic	NOS	30		
1.5.8	**Fire Rated double Leaf Metal Door with Vision Panel (ahu room)**	NOS	4		
	Supply of Metal Fire door from ISO 9001:2015 certified Manufacturer . The door must have been manufactured with galvanised – GI sheet. All Fire doors must satisfy the requirement of latest IS 3614:2021 for Fire & Life Safety guidelines for 120 minutes Fire Rating with its Stability & Integrity for 120 minutes. The Prototype sample of the door must carry a prior test evidence as per IS 3614 part-2 / BS 476 Part 20 & 22 . The manufacturer must submit the copy of test evidence prior to start of production .The offered test certificate should either carries it's Validity or certificate must not be older than 5 years from CBRI / NABL Accreditated Lab . All doors should be finished with Powder coating in desired regular RAL Shades. Door frame shall be Single rebate profile of section 100 x 57 mm made out of 1.20mm thick galvanised steel sheet with a factory pre-punched groove so as to accomodate Fire & smoke seal size 10x4mm . Frames should be butt jointed and field assembled with bolting system for proper strength .Frames should be provided with back plate for anchor fasteners for installation on a finished plastered wall opening. The Air gap between Wall and frame can be filled with fire retardant sealant (payable in extra item).Door leaf should be minimum 46mm thick fully flush double skin door. Door leaf must be manufactured from 1.2mm (18 gauge) thick galvanised steel sheet. The door should be provided with reinforcement pads to receive appropriate Hardwares of Equivalent make. The Shutter shall be filled with proprietary infill material as per test evidence . For Double leaf doors; astragal has to be provided in meeting style for both active and inactive leaf. Vision panels of size 750mm (h) x 250mm (w) required should be of 120 minutes fire rating and should be of non-wired type. Rate should be inclusive of all hardware. The entire item is to be completed as per the direction of the EIC/Architect. Make: Shakti Hermann, Dorma, Matrix				
	4 Ball bearing butt hinges of size 4" x 3" x 3mm, in SS 304 and in satin stainless steel finish.				
	Rack and pinion door closer of size 2-4, with standard arm and with two independent closing valves and latching speed adjustable by arm in silver finish.				

	Mortice dead lock with 55mm backset, 20mm square forend, prepared for euro profile cylinder including strike plate in satin stainless steel finish.				
	6 Pin Euro Profile Double Cylinder with Both side Key operation Under Master Key System having Length 60mm (30mm+30mm) in nickel plated finish having 3 nos Change Keys.				
	Escutcheons prepared for euro profile cylinder suitable for dead lock in satin stainless steel finish				
	H-handle of length 300 and 22mm dia, back to back in satin stainless steel finish. The pull handles should have supporting washer with raised bevelling on the outer surface.				
	Floor stopper half dome with 45mm dia with fixing accessories, in satin Chrome finish				
	All Harware make - Dorma or equivalent				
	TOTAL (DOORS, WOODWORKS, CARPENTRY)				
1.6	**FALSE CEILING**				
1.6.1	**Gypsum Board False Ceiling (Cabins)**				
	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 25mm at 230 mm c/c, 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 EIC/Architect but including the cost of painting with pop and punning. 10mm aluminum Shadow profiles to be provided on periphery for all areas having gypsum false ceiling as per approved sample, shade and make. Making of grooves in gypsum ceiling shall be included as per architect's instructions and approval. Rate shall be inclusive of vertical gypsum band of height 330mm and cove. Make: Knauf, Saint Gobain, USG				
	12.5 mm thick tapered edge gypsum plain board conforming to IS: 2095- (Part I)	SQM	580		
1.6.2	**Mineral Fibre Board False Ceiling (Workstations and cabins)**				
	Providing and fixing mineral fibre false ceiling tiles at all heights of size 595X595 mm of approved texture, design and pattern. The tiles should have humidity resistance (RH) of 99%, NRC 0.9 - 1.0, Light Reflectance ≥ 85%, Thermal Conductivity k= 0.052-0.057 w/m K, Fire performance as per (BS 476 pt - 6 & 7) in true horizontal level suspended on interlocking T-Grid of hot dipped all round galvanized iron section of 0.33mm thick (galvanised @120 gsm) comprising of main T runners of 15x32 mm of length 3000mm, cross T of size 15x32 mm of length 600mm to form grid module of size 600x600mm suspended from ceiling using galvanised mild steel item (galvanised @80gsm) 50mm long 8mm outer diameter M-6 dash fasteners, 6mm diameter fully threaded hanger rod up to 1000mm length and L-shape level adjuster of size 85x25x2mm, spaced at 1200mm center to center along with 'T'. The system should rest on periphery walls/partitions with the help of GI perimeter wall angle of size 24x24x3000 mm made of 0.40mm thick sheet, to be fixed to the wall with the help of plastic rawl plug at 450mm centre to center & 40mm long drywall S.S. screws. The exposed bottom portion of all T-sections used in false ceiling support system shall be pre-painted with polyester baked paint, for all heights including the cost of making openings for light fittings, grills, diffusers, cutouts and required finishing suitably fixed, all complete The work shall be carried out as per specifications, drawings and as per directions of the engineer-in-charge. MAKE: Armstrong, Knauf, USG, Saint Gobain	SQM	642		
1.6.3	**Metal False Ceiling (UPS, Electrical, Server rooms)**				
	Providing and fixing tiled false ceiling of specified materials of size 595x595mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @120grams/sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38mm made from 0.30mm thick (minimum) sheet, spaced at 1200mm center to center to form a grid of 1200x600mm and secondary cross "T" of length 600mm and size 24x25mm made of 0.30mm thick (minimum) sheet to be interlocked at middle of the 1200x600mm panel to form grids of 600x600mm and wall angle of size 24x24x0.3mm 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 27x37x25x1.6mm fixed to ceiling with 12.5mm dia and 50mm long dash fasteners, 4mm GI adjustable rods with galvanised butterfly level clips od size 85x30x0.8mm and spaced at 1200mm center to center along with main T, bottom exposed width of 24mm 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. MAKE: Armstrong, Knauf, USG, Saint Gobain				

	GI Metal Ceiling lay in perforated Tegular edge global white colour tile of size 595x595mm and 0.5mm thick with 8mm drop, made of GI sheet having galvanizing of 100 gms/sqm (both sides inclusive) and 20% perforation area with 1.8mm 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 blck glass fiber acoustical fleece. MAKE: Armstrong,hunter douglas or approved equivalent	SQM	111		
1.6.4	**Multi-Metal width Plank Ceiling (Passages)**				
	Providing and Fixing horizontal level suspended metal ceilings comprising of Metalworks Multi-Width Plank system manufactured by Knauf Ceiling Solutions with Rectangular planks made of 120 gsm Galvanised Steel (GI) as per IS 277 (2003) in coated thickness of 0.5mm ± 0.05mm as per IS:513 (1994), post coated to Global White colour, suitable for architectural finishes and Interior applications, with double grid concealed system and butt joint planks. The plank width shall be 50mm / 100mm / 150mm / 200mm (nominal width) (actual width 30mm / 80mm / 130mm / 180mm), length ranging from 600mm to 3000mm. The plank shall have plain unperforated finish with square edge of suitable profile, having clear spacing of 20mm between alternate planks. The plank shall be electrostatically powder coated using RoHS compliant pure polyester powder to achieve coating thickness ranging from 60-80 microns. The powder coating shall pass Salt Spray Test for 750 Hours as per ASTM B117, QUV –A Test for 1000hours as per ASTM G-154 – (Cycle – 1) and Humidity test for 1000hours as per DIN 50017. The powder coating shall have an adhesion of GT0 as per EN ISO 2409. The shade variation across batches shall be delta E<1 using Excite/BYK Gardner instrument and gloss level of 25±5% at 60˚ as per ASTM D523. The grids shall comprise of Hat Carrier Bar of 120gsm galvanised steel (GI) slotted profile of 3000mm L x 33mm H x 78mm W x 1.0mm T. Accessories shall include Hat carrier bar splice (GI), Carrier bar hanger (GI), plank connector (GI), spring clamp (Spr. St.), wall anchor (GI), extruded Alu RA4F wall angle (1.2mm T) in Global White color, and pressure spring. An optional Filler strip (GI) to be used to close the gap between panels. **General Specifications:** Entire system to be designed in accordance with EN 13964 and TAIM e.V. quality guidelines suitable for Interior applications, having concealed Grid, Butt joint planks. **Panel Specifications:** Material: The MW Multi-width planks to be made of galvanized steel (GI) of minimum 120gsm hot dipped galvanization (both sides included) as per IS 277 (2003), zero or minimum spangled, in total coated thickness of 0.5mm ± 0.05mm as per in IS:513 (1994). **Dimensions:** The panel length varies between 600mm to 3000mm, plank width shall be 30mm / 80mm / 130mm / 180mm (nominal). The dimensional tolerances for length shall be ±0.5m up to 1000mm L; ±1.0mm between 1001 to 2000mm L; ±2.0mm between 2001 to 3000mm L. The dimensional tolerances for width shall be ±0.5m up to 200mm W. Dimensional Tolerances for plank length / plank width / plank	**SQM**	**359**		
	Edge detail: The planks shall have Square Edge. All planks in one line shall be connected to each other forming a hairline joint, while there should be a clear spacing of 20mm between alternate planks to form nominal widths of 50mm / 100mm / 150mm / 200mm and actual widths of 30mm / 80mm / 130mm / 180mm. **Upturns**: The long side of the plank shall have vertical upturns of minimum 15mm / 20mm (H) and shall be bent appropriately bent as per the manufacturer's specifications for providing snap-hook ends. The short side shall have open ends. **Surface Finish:** The planks shall be in plain unperforated finish (without any acoustical backing / felt). **Colour and finishes:** The plank surface shall be electrostatically powder coated (post coat) with pure polyester powder only, on visible side after mechanical production, using RoHS compliant powder from approved brands (Jotun / AckzoNobel / Tiger Drylac), to achieve coating thickness ranging from 60-80µ and architectural quality finish. The powder coating shall pass Salt Spray Test for 750 Hours as per ASTM B117, QUV –A Test for 1000 hours as per ASTM G-154 – (Cycle – 1) and Humidity test for 1000 hours as per DIN 50017, 250 hours of condensation test (as per DIN 50017 or DIN EN ISO 6270-1 Norms), UV resistance of 500 hours and 50% gloss retention (as per ASTM G 154 UVB-313 Norms). The powder coating shall have an adhesion of GT0 as per EN ISO 2409. The shade variation across batches shall be delta E (∆e) <1 measured using Excite/BYK Gardner instrument and gloss level of 25±5% at 60˚ as per ASTM D523. The plank shall be coated to Global White color as approved by the Architect or Engineer-in-charge. **Suspension System Specifications:** **Grids:** Primary Runners would be Galvanised steel (minimum galvanization 120gsm) Hat carrier bars of 3000mm(L) x 33mm(H) x 78mm(W) x 1.0mm(T), folded slotted profile. Filler strip (Optional) made of Galvanised steel (minimum galvanization of 120gsm) to be used if				

	Wall Molding: Wall Molding would include 19mmx32mm GI L-wall angle, pre-coated to Global White OR 25mm(W) x 25mm(H) x 4000mm(L) Extruded Alu RA4F wall angle (Al 6xxx), post-coated to Global White. **Suspension**: Suspension would be M6 GI threaded rod (up to 2000mm L) and/or 2.5mm GI hanger wire (2000mm L). **Installation Specifications:** **Primary and secondary runners Installation:** Hat Carrier Bars, spaced at 1200mm, to be suspended from ceiling using GI M6 threaded rods OR 2.5mm T GI hanger wires. Hanger wires must be wrapped tightly with 3 full wraps. The slots of every carrier bars shall match each other. The carrier bars be fastened to two adjacent walls using the wall anchor and bolts. Hat carrier bars to be at a maximum distance of 450mm (max.) to a perimeter wall or outside edge of a floating module. To join two pieces of continuous Hat carrier bars, a splice to be used. **Panel Installation:** Full size metalworks MW Multi-width planks to be hooked on to the tabs of Hat carrier Bars (in accordance with the shop drawings) along the long side. Field-cut Panels: Perimeter planks that require field cutting to fit on a wall trim option must have a minimum of 12mm edge resting on the horizontal surface of the wall moldings.				
1.6.5	**Axiom Channel (For all modular grid ceiling)** Material: Extruded aluminum, providing sharper edge detail than roll-formed steel. Installation: Involves Axiom Splice Plates (AXSPLICE2 or stainless steel) for connecting, and Axiom Tee-Bar Connector Clips (AXTBC/AXTBCSS) to attach directly to the grid, along with 12-gauge wire or 2-1/2" studs for suspension				
	Providing and fixing upto 100 mm high Axiom with Accessories	RMT	683		
	MAKE: Armstrong, Knauf, USG, Saint Gobain				
	TOTAL (FALSE CEILING)				
1.7	**PARTITION WORK**				
	General Specifications for partitions:				
	Main frame - For Partitions: Aluminium sections of 16 Gauge mentioned are out of size 50mm x 50 mm Aluminium section verticals at minimum 600mm Centre-Centre spacing approx. and For Panelling: 50mm x 25mm size Aluminium sections horizontal at 600mm Centre-Centre spacing approx. Extra frame below slab soffit for conduit to run above. All verticals shall be secured to the ceiling. Make: Jindal/MAAN/Hindalco				
	SKIN: - 303 BWR grade Plywood shall be screwed to frame work on both sides with joints as shown or directed. Make: Century/Green/Samrat/Mica				
	SKIRTING : In the same alignment, height as per detail drawings and architect's instructions in 303 BWR grade Plywood with a groove finished with laminate / veneer as the case maybe, or as directed by the Architect.				
	VENEER:- 4mm thk natural venner with matching superior approved grade to be fixed to the plywood having joints as shown or directed complete with melamine polish finish.				
	LAMINATE:- Approved laminate shall be of 1 mm thickness				
	Internal Laminate shall be fixed on plywood skins with glue having grooves as shown or directed. Internal surfaces at specified places shall be 0.8 mm thick as directed by Architect. The rates quoted for the items of partitions & paneling shall be inclusive of providing & fixing M.S. plate & brackets over & above the aluminium frame work as directed & wherever instructed for mounting the TV units & screens etc complete.				
	IMPORTANT NOTE ON THE DESIGN REQUIREMENTS APPLICABLE IN CASE OF ALL THE ITEMS OF PARTITIONS & PANELLING: - The design & the elevation of the various items under the heads: Partition & Panelling shall be at the complete discretion & directions / instructions of the Engineer in charge & Architects on site. Wherever instructed & directed, the rate shall include providing & fixing additional 6mm thk plywood backing over and above the 303 BWR grade Plywood so provided in the items of partition / panelling to form raised panel design at regular intervals as directed and to be finished with high end approved 4.0 mm thk veneer with high end melamine polish (proportion of gloss and matt as directed) with uniform shade & texture. Incase of 9mm thk plywood used instead of 6mm thk plywood for the raised panels for the items of Partition or Paneling works, the difference between the cost of 9mm thk plywood and 6mm thk plywood for the actual quantity of plywood used for the said partition or panelling items shall be measured and paid.				
	The level difference between the said raised panels and recessed panels shall be finished with approved designer moulding to be finished with high end (proportion of gloss and matt as directed) melamine polish and shall also include designer inlays to be finished with high end veneer with high end melamine polish, pattas & bands at various levels etc in veneer and melamine polish and combinations of raised and recessed panels with inlays etc complete to the complete satisfaction of the Architect and Engineer in charge.				

	For all items of Interior Furnishing works & Furniture works, the basic rate of Laminate considered for all the specifications / BOQ items herein shall be Rs. 65 / Sq. Fts plus taxes (GST) whereas the basic rate of Veneer, which shall be high end, uniform and without any variations, 4.0 mm thk considered for all the specifications / BOQ items herein shall be Rs. 110 / Sq. Fts plus taxes (GST). Basic rate for Frosted / Designer film of 3M, Llumar or equivalent approved wherever mentioned separately shall be Rs. 90 / Sq. Fts plus taxes (GST). The basic rate would be the rate offered to the bidder by the vendor / supplier after discounts and excluding the cost towards transportation, freight, loading, unloading etc and also exclusive of taxes (GST). Necessary documentary evidence in the form of challans & Tax invoices, details of payments released to the vendor for the purchase of such materials & including the loading-unloading transport slips needs to be submitted at the time of billing without which the payment processing shall not be entertained.				
	Further, Corian wherever mentioned in the BOQ (For items of Panelling, Reception Counter, Furniture elements etc) shall be high end, of desired and approved color and adhering to the BOQ specifications. Corian thickness shall be 6mm thk for vertical surfaces & fascias and 12mm thk for horizontal surfaces shall be provided and with a basic rate of Rs. 1500 / Sq. Fts plus taxes (GST) for 6mm thk Corian and Rs. 1800 / Sq. Fts plus taxes (GST) for 12 mm thk Corian.				
1.7.1	**Full height Glass Partition**				
	Supplying and installing Single Glazed Glass partition of 10mm thick Toughened Glass using 100 mm wide Aluminium Frames upto ceiling height or as per the drawings. The Fixed glass shall be fixed using Profiles at Top & Bottom and at sides. The profile size shall be 45-54 mm Width x 25 mm Height and shall be fixed on to the floor/wall/ ceiling (i.e bottom /top /sides) as per the architect's design. H Junction profile shall be used at all Glass to Glass vertical joints, 90 Degree L Junction Profiles and T Junction profiles necessary as per design. In case of Glass overall panel, Overpanel Profiles shall be used. In case of Open glass edges End Profile shall be used. Profiles shall be suitable for Glass thickness of 12 mm. The Profile shall be Aluminium matt natural anodized, the Profile Manufacturer shall supply all the necessary clips, seals and installing accessories for the system. All Profiles shall have a minimum thickness of 2 mm excluding 20 Micron thick anodizing complete as specified by the Architect. The item is inclusive of profiles, glass and all other necssary accessories etc complete as per the manufacturer's specifications.				
	The frame work required to support the glazing system above the false ceiling is also required to be made as specified or as required for installing the glazing system. The same would be measured and paid seperately under the respective items.				
	Mode of measurement. In sqm. of visible finished area.				
	Makes:- Profile - Windor, Dorma, Kubik				
	Makes:- Glass, Saint Gobain, Asahi, Modiguard				
	Glass partition	SQM	212		
1.7.2	**Mirror**				
	Providing and fixing 6 mm thick mirror of approved make of required size on 12mm thick BWP (710) grade marine plywood backing. All edges of the glass are to be machine polished and finished. The glass shall be fixed to the plywood backing using approved double sided acrylic foam tape of required size as per the manufacturers specifications, architectural drawings and as directed by the EIC/Architect. (Item includes Ply backing and support). Rate shall be inclusive of making provision for LED cove light	SQM	39		
1.7.3	**Internal partitions with 50x50mm framework + 12mm ply skinning on both sides**				
A	Providing and fixing in position **internal opaque partitions full height upto the false ceiling but the frame work will be upto the ceiling. (Please Note: Partition only upto ceiling will be measured and paid for.)** Vertical & horizontal Frame work to be of 50 x 50 x 1.60 mm thick extruded aluminum section weighing not less than 0.836 kg/rmt with maximum distance of 450 mm c/c both ways or as directed. Aluminum extruded sections: Jindal, Hindalco or approved equivalent.	SQM	60		
B	12 mm thk exterior grade MR Grade ply to be fixed over the frame work on both sides. (But measurements of one side will be taken and paid for) Ply: Archid Ply, Duro, Century, Green.				
	item to be executed as above finished with:				
	12.5 mm thk gypsum board	SQM	60		
1.7.4	**Paneling with 25x50mm framework + 12mm ply skinning**				
A	Providing and fixing at Site Paneling to column / wall/ partitions; made of aluminium frame 25 mm x 50mm 16 gauge at 600mm centre to centre bothways with necessary packing of Teak wood members to achieve the size of column/ wall. on aluminium frame fix 12mm MR Ply finishfinishes as mentioned below as approved by EIC/Architect. The cost shall includes applying 2 or more coats of Anti-termite paint to internal surfaces. The Rate includes all materials, hardware, labours, polishing, making services/ electrical provisions/ access with necessary doors etc. as directed by Engineer in-charge/ Architect, complete.	SQM	1215		
B	Providing and fixing thermal insulation with Resin Bonded rock wool confirming to IS: 8183, having density 48 kg/m3, 50 mm thick, fixed in position. complete as per directions of Engineer-in-Charge. as per detail drawing, as specified and as directed by Architect & Site In charge.	SQM	1215		
C	12.5 mm thk gypsum board	SQM	1215		
1.7.5	**SKINNING /PANELING /BOXING**				
	Providing and fixing Plywood, Laminate, Gypsum Board, Calcium Silicate Board, S.S. Cladding, Cement Bonded Particle Board, Solid Surface, ACP, 6mm thick coloured lacquered Glass of approved quality & make for partitions, facias, skirtings, wall paneling, column paneling, ceiling paneling & soffit etc., of required width and size as per drawing including cost of making openings for switches, AC facias etc .The rate includes cost of adhesives like fevicol, nails, screws and other consumeables etc, to complete the work as per instructions of EIC/Architect.				
A	6 mm thk BWP grade (IS710) flexible plywood	SQM	20		

B	18/19 mm thk BWP grade (IS710) plywood	SQM	100		
C	1 mm thk matt SS corner guards of 304 grade	RM	20		
D	Providing and fixing Bottom Line Aluminum Hat Profile of 10mm thickness as shown in the dwg.	RM	200		
1.7.6	**MDF Paneling**				
	Providing and fixing MDF plain or flutted panelling as per design of 12/18mm thickness. Rate shall be inclusive of all necessary anodized aluminim hat profile/corner guard as per approved design. As per the shade and design approved by the architect. (Basic rate- Rs. 2500/- sq.m)	SQM	100		
1.7.7	**Fire rated glass partition**				
	120 MINUTES FULLY GLAZED VDSTM FIRE RESISTANT FIXED NON LOAD BEARING PARTITION SYSTEM PROVIDING INTEGRITY AND RADIATION CONTROL Supply and installation of tested Vetrotech Saint-Gobain VDSTM fully glazed fire rated fixed partition with 120 minutes of integrity and radiation control (EW 120) with symmetrical (BiDirectional) fire protection. The frames shall be imported cold rolled Forster profiles from Switzerland using DX52D+Z275-M-A-O steel sheets (As per EN standard EN 10327). The frames are cold rolled from 1.5 mm steel sheet to form a profile of 50 mm x 50 mm on all sides. The system shall be tested as per EN 1364-1 in an international accredited laboratory. The glass should be Contraflam Lite 14mm clear 120 min fire rated for Integrity, Radiation control (EW 120) and partially insulation (EI 20) Non Wired Toughened Interlayered glass with a light transmission of 86% and a sound reduction of 38 dB and manufactured in UL & TUV audited Facility and including UL-EU Certification (File number R38101) and compliant to class 1(B)1 category of Impact Resistance as per EN 12600. The glass shall be tested for 5000 hours of UV resistance. The glass shall provide bi-directional (Symmetrical) fire protection. The glass should be held in its place with the help of 1.5 mm cold rolled steel beading and Kerafix 2000 ceramic tape with cross section of 4 x 15 mm as per the test evidence. Beading shall be clipped on using Stainless Steel self-tapping screws fixed at a distance of 70 mm from the edges and 150 mm c/c henceforth. The glass panes are to be supported on non-combustible 6 mm Calcium Silicate setting blocks. The maximum glazing size shall be as per the test certification. The profile has to be fixed to the supporting construction by means of M10 or bigger steel bolts at every 150 mm from the edges and every 500 mm (approx.) c/c. The Partitions shall offer C4 level of wind resistance when tested as per EN12211 and shall provide class 4 level of air permeability as per EN 1026. The Partitions shall also be tested for class 5 of impact resistance when tested as per EN 13049. The Partitions shall also be tested for class 4 level of Mechanical strength when tested as per EN13115. The Partitions shall have water tightness level of 8A when tested as per EN 1027. Test Evidence - 1. The test report will be considered valid only if it contains the stamp and signature of the authorized signatory. Make: Saint Gobain, Asahi, Guardian	SQM	7		
	TOTAL (PARTITION WORK)				
1.8	**PAINTING & FINISHING WORKS**				
1.8.1	**Wall POP punning**				
	Providing and applying Plaster of Paris punning in average 6 mm thickness on walls, ceiling, beams and columns to bring the surface in plumb line and level including making the surface smooth, providing required grooves on top of skirting etc., complete as per directions of the EIC/Architect. (Note:- Rate to include cost of chipping and scrapping neeru or any other finish on the existing plastered surface/new plaster).	SQM	694		
1.8.2	**Synthetic Enamel Paint**				
	Providing and applying two or more coats synthetic enamel paint of approved make of required colour on existing or new wood/steel work to give an even shade. Rate includes surface preparation, one coat of primer and scaffolding etc., complete as per the direction of the EIC/Architect. Make: Asian, Berger, Nippon	SQM	45		
1.8.3	**Texture Paint**				
	Providing and applying textured paint coating of Asian Textured & Special Effects Paint, Dulux Ambiance or equivalent approved in any shade spray and approved texture coat, pebble, ripple, linea, marble, slate, special effects suzh as zig-zag, bloom, bubble, compact, rustik shade etc or as approved including base coat, maintaining material consumption rate as per manufacturers standards & specifications and upto any desired thickness on walls to the complete satisfaction of the Architect & Engineer in charge. The rate shall include scrapping, base coats as per manufacturers specifications, cleaning of the walls etc complete. Make: Asian, Berger, Nippon, Jotun	SQM	250		
1.8.4	**Duco Paint**				
	Duco paint shall be applied on interior wooden, MDF,wooden mouldings or metal surfaces as per approved design and finish. Surface preparation shall include sanding, filling, and application of primer to ensure a smooth base. Minimum three coats of Duco paint (nitrocellulose-based) shall be spray-applied in a dust-free environment for uniform finish. . Shades and gloss level shall be as per architect's approval. All application shall conform to manufacturer's specifications. Final finish shall be smooth, even-toned, and free from brush marks, bubbles, or undulations. Touch-ups, if required, shall be seamless. Make - Asian Paints,dulux, or approved	SQM	80		
1.8.5	**Velvett / Royal Emulsion paint**				

	Providing and applying two or more coats of Velvett / Royal Emulsion paint of approved colour on wall surfaces/ false ceiling with Birla Wall putty to obtain level and smooth surface followed by a coat of primer and wall pop punning as per manufacturer's specification. The first coat shall be brush applied and the final coat shall be roller finish. The rate shall include surface preparation & scaffolding including Birla Wall putty and primer etc., complete as per the direction of the EIC/Architect. Make: Asian, Berger, Nippon	SQM	1274		
1.8.6	**Wall paper**				
	Providing and fixing premium quality vinyl wall paper of minimum 300 micron thick of approved quality, pattern and shade with necessary adhesive etc., complete as per architectural drawing and direction of the EIC/Architect. Basic Rate Rs. 2500/- per sqm. Approved makes: Marshal, Muraspecs, D'decor, Vescom, Asian	SQM	553		
1.8.7	**Fluted Panel**				
	Supply of (single slat/double slat)having size of 2400x600x12mm(+/- 2mm) thickness, backing of 12 mm PET panel with front facia of 1 mm laminate. The product use for absorption of medium and high frequency range with NRC of 0.50 direct fix. Non-toxic, non-irritant, and fire compliance with safety standards confirm as per BS 476 Part 6 passes (Fire Propagation) & Part 7 class2 (Surface spread of flame) ,for interior applications- The product should be 100% make in india and OEM must have ISO CERTIFICATIONS- complying to- IGBC membership ISO 14184-2 (no formaldhyde) ISO 9001 (Quality Mangement System) ISO 14001 (Environmental Management System) ISO 45001 (Ocupational helth & safety management system) Environmental Product Declaration(EPD), Green Pro,ISO 14184-2(No Formaldehyde) Declare- Red List Free, Indoor Air Quality (IAQ) Make : UniVicoustic, Techno, Magvee	SQM	45		
1.8.8	**Lacquered Glass Finish**				
	Providing and applying 3 different colours and shapes and 8mm toughened lacquered glass panelling including all glass holes/ cutting wit fixing with studs/specified 3m/ equivalent make glue etc complete as per architects instructions. (Including lifting and delivery of glass on site etc and aluminium hat profile channel,corner guard channel as per design detail complete in all respect) Measurements shall be given only for the wall area, wastage measurements shall not be given extra. Cost to be inclusive of 6-8mm marine ply/exterior grade mdf panelling required for surface levelling with other finishing material on the back side of the lacquered glass. No cost shall be paid for wastage of material. Make: Saint Gobain, Form5, Asahi	SQM	208		
1.8.9	**PET Panel Finish**				
	P/f 9-12mm thk acoustical pet panel in partition /panelling / ceiling. Approved design of Acoustical Pet panel including 3 different shapes and colors/printed/CNC cut grooves design of pet panel,'V' Groove as per approved design pattern / laser cut designs. Rate shall be inclusive of required hardware as per detail dwg. Measurements shall be given only for the wall area, wastage measurements shall not be given extra. Cost to be inclusive of 6-8mm marine ply/exterior grade mdf panelling required for surface levelling with other finishing material on the back side of the pet panel. No cost shall be paid for wastage of material Basic rate of pet panel: 2500 Rs/ sqm Make: UniAcoustic, Techno, Continuum, TAP, Tranquil	SQM	196		
	Above item with double layer pet panels in minimum 3 colours	SQM	196		
	Above item with pet panel artwork in wall frames	SQM	15		
1.8.10	**Veneer Finish**				
	Providing, fixing on Architect recommended avg. 3-4 mm select natural veneer total cnc cut pattern as per design provided by architect. Scope includes fixing the same on MDF /ply on wall or ceiling by gluing with approved phenol formaldehyde based adhesive or approved equivalent overlaying on substrate without any gaps/air bubbles pressed uniformly to line level and plumb, item complete with all edge lipping/ moulding details as per architect with water based PU TW lipping mounted flush to surface as per detailed drawings and Architect's recommendations; all accessories, fixing implements, men material and lift up to 20 mt, finished complete and getting mock-up approved by Architect / Engineer in charge. Item to include water based PU polish in avg. 2 coats to approved colour staining. Item to be completed in all respects as per drawings & instructions from Project- in-charge Factory made design pattern (Basic rate of veneer-Rs.3500/ SQM) No cost shall be paid for wastage of material Make: Merino, Greenlam, Century Veneers	SQM	150		
1.8.11	**Laminate Finish**				

	Providing ,fixing on Architect recommended partition, avg. 1 mm thk select laminate of approved colour, make as approved, glued with approved phenol formaldehyde based adhesive or approved equivalent overlaying on substrate without any gap/air bubbles pressed uniformly to line level and plumb, item complete with all edge lipping with water based PU TW lipping mounted flush to surface as per detailed drawings and Architects recommendations: all accessories, fixing implements , men material and lift upto 20 mtrs. Finished complete with all necessary masking with min 10mm wide masking tape before applying polish to edge lipping and getting mock up approved by Architect/EIC . Item to be completed in all respects as per drawings and instructions from Project in charge. (Basic Rate of Laminate: Rs 150/SQM) Make: Merino, Greenlam, Century Laminates, Archid	SQM	60		
1.8.12	**Corian Finish**				
	Corian panelling including CNC cut and groove design Supplying and fixing of 6-12mm thk corian which shall include 3 different colours sheet on ply, cost to include CNC cut pattern of 12mm depth and 20mm wide groove design as per approved design sample as per architect on ply backing/ply ceiling finishing complete with buffing of corian. Rate shall be inclusive of backlit with lasercut design wherever applicable as per approved design and architect's instructions. (Basic rate: Rs.12000/SQM) No cost shall be paid for wastage of material Make: Dupont, tiara, solid surfaces, Granium	SQM	39		
	TOTAL (PAINTING & FINISHING WORKS)				
1.9	**MISCELLANEOUS**				
1.9.1	**Pelmet**				
	Providing and fixing in position pelmet of size 150 mm x 250 mm made of 12mm thick BWP marine grade plywood with approved laminate and 2 mm thick matching PVC edge banding including required framing and support from walls/slabs/beams.Rate shall be inclusive of required framing to support pelmet. Item to be completed in all respects with necessary supports from RCC slab as per drawings & instruction from EIC/Architect.				
	1mm thk non metallic decorative laminate with plain/wood grain finish of approved design	RMT	115		
1.9.2	**Frosted Film**				
	Providing & fixing 80 micron (minimum) thick non reflective, matte, frosted, scratch resistant, high performance resin coated polyster film with required frosting pattern on the glass surface complete as per direction of EIC/Architect. (Payment shall be made for the finished area of the film actually provided. Rate shall be inclusive of making openings up to 0.10 sqm area each).	SQM	107		
1.9.3	**Roller Blinds**				
	The Roller blind system consists of 38mm OD extruded out of Aluminium alloy 6063 T6 with silver anodized to provide an everlasting finish and luster, the rotary unit shall be 36mm in OD incorporating a clutch mechanism composed of low – flexing braided polyster cord with nylon core, Control Ball chain shall be composed of braided nylon cord (2mm dia) with high engineering grade plastic beads of 4.5mm diameter mounted co-axially on the cord with a pitch of 6.2mm (C-T-C) Bottom rail should be powder coated Aluminium flat bottom rail of 290 gm to finish it from the ends it should have rail end caps. The clutch will be at the tube. The return end cap bracket shall incorporate snap spring design to facilitate easy installation and removal for maintenance activities. The bracket shall be finished with a white color on each side providing an aesthetic finish. It should handle up to 5 Kgs of material. The clutch should mount flush to the face of the bracket which minimize the light gap between the shade and the window frame.	SQM	321		
	Seclusion fabric made up of 100% Polyester with acrylic coating of thickness 0.32 – 0.5mm (ISO 2286-3) and weighing 270 - 290 gsm per sqm (ISO 2286-2)with openness factor of 0% .Shrinkage% (Warp <0.5% Warp < 0.5%) As per ISO 4674. Colour fastness Grade 8 ISO105 B02:2014 > 5-6 AATCC TM 16.3-2014; Option 3; Xenon Arc lamp. C Make - Vista, serge ferrari, hunter douglas				
1.9.4	**Graphics + customized photo frames**				
	Supply & Installation of 0.08-0.1mm Non-PVC wall décor with adhesive where in wrap will be used as a base material for printing and to be covered with laminate film to protect the print from fading, which will come in a matte finish with approved artwork digitally, bubble free installation to be done on a smooth, dust free putty surface that has a coat of oil-based primer. Graphics to be in the form of 2D vinyl or 3D elements which include materials laminate, acrylic, metal as per approved design and approval. Certificate to image license and warranty for a period of 5 years to be submitted along with invoice. Cost shall be including purchasing/designing stock images and graphics and artworks design to be approved by architect & design. Make: 3M, or approved equivalent	SQM	35		
1.9.5	**Fire Exit Maps**				
	Size max 18 " X 12 ". (Sample Material to be approved from Architect)in foam board Basic Rate Rs 2000/No. Cost to include preparation of fire evacuation autocad drawings from Prolite vendor as required by fire officer	NOS	25		
1.9.6	**Glow Sign Boards**				
	Providing and fixing LED glow fire exit sign boards as per details Size: 12 inch x 6 inch, Decorative 8 mm clear transparent acrylic with LED Light. Basic Rate Rs 1100/no.	NOS	20		
1.9.7	**Push pull door signage**				

	SS Finish push and pull plate (push/pull will be continued as 1 pair)	NOS	30		
1.9.8	**Aluminum transition profile**				
	Providing and fixing extruded Aluminum transition profile made from alloy 6063 T5 with anodized or powder-coated finish in approved colour, suitable for carpet edge beading and transition between carpet and adjoining flooring. The profile shall be 10–25 mm wide and 3–8 mm high, with a thickness of approximately 1–1.5 mm. The work shall include all cutting, shaping, edge preparation and installation accessories, completed as per approved sample	RMT	20		
1.9.9	Natural Planters - 15-24" Height Base designer plants Make: Gamlaa, Verty Vista, Living Products, Go Green Supplying and installing potted plants.Rate shall be inclusive of necessary hanging support from ceiling, wall, partition etc. as per selection by architects. FRP material 14" base designer pot Basic rate of plant and pot : Rs.3500	NOS	40		
1.9.10	**Mirco Landscape Moss Plant** Paneling Basic rate - 5500/- sqm	SQM	35		
1.9.11	**Reception backlit logo**				
	Reception backlit Logo :- Made in form of 35mm Hollow acrylic box letters and icon With Buffing and same approved shade edge Smooth finish Duco paints coating with the approved shade Logo to be in following height. Length of the letters to be in proportion as per the approved Art work and details provided by the client/architect. Logo 718mm high- matel moulded x 1436mm Lengthfixing By Screwing, Wall side 25mm spacer, and logo lighting shadow is back side, LED is 6000K white Base plate is 1.2mm Brass glossy finish plate with back side 12mmm Molding and fixing by SS Stud SIZE : 1436mm X 718mm	NOS	1		
1.9.12	**Room Signage**				
	Room Signage-Supply and installation of 304 Grade SS Matt finish plate laser cut with same content UV print and fixing by 3M VHB tape. SIZE : 12" X 3"	NOS	15		
1.9.13	**Washroom Signage**				
	Washroom Signage-Supply and installation of 304 Grade SS Matt finish plate laser cut with same content UV print and fixing by 3M VHB tape. SIZE : 6" X6"	NOS	9		
1.9.14	**Name Plates**				
	Name Plate-Supply and installation of 304 Grade SS Matt finish plate laser cut with same content UV print and fixing by 3M VHB tape. SIZE : 12" X 3"	NOS	30		
1.9.15	**Wooden Coat Stand**				
	Supply and installation of wooden coat stand of approved design, size, and material, fabricated from seasoned hardwood with smooth edges and stable base support. The coat stand shall be finished with approved melamine/polish coating to achieve uniform surface finish and durability. The item shall be properly assembled, positioned at designated location, and made stable with necessary base support, complete in all respects as directed by Engineer-in-Charge.	NOS	13		
	TOTAL (MISCELLANEOUS)				
1.11	**CARPENTRY**				
	1.10				
1.11.1	**Over Head Storage (Depth 400 mm)**				
	Providing & fixing in position Over Head storage units of 400mm depth. Sides, top, bottom, shelves, vertical dividers are to be made of 19 mm thk BWP Marine Grade plywood. External and internal surfaces of the storage are to be finished with 1mm thick non metallic decorative laminate with plain/ wood grain finish of approved design. Shelves and vertical dividers are to be finished with 1.0 mm thick approved laminate on both the sides. Shelves are to be suitably supported on S.S.buttons. 9mm thick plywood finished with 1.0mm thick laminate on internal surface is to be provided as back of the unit.Rate shall be inclusive of open shelves as per design with provision for profile light. Shutters - Made of 19 mm thick BWP Marine Grade plywood finished with 1 mm thick laminate on external & internal surfaces. Second Class teak wood lippings are to be provided on all exposed plywood edge surfaces as per the drawing / instructions and to be finished with three or more coats of melamine polish. Unless otherwise specified in the drawing, the thickness of Teak wood lipping should be 6mm (min). All exposed woodwork to be finished with three or more coats of melamine polish. The entire item is to be completed in totality with necessary hinges, ball catchers, handles, hardware, consumables all etc, complete as per the directions of the EIC/Architect.	SQM	39		
	Hinge: Slow Motion HSM1M1-SS of EBCO or approved equivalent				
	Lock: 22/25mm P-WL-1-25-22 of (EBCO) or approved equivalent.				
	Tower Bolt : S.S.304 Round 75 MM (KICH) or approved equivalent				
1.11..2	**Pantry-Platform Shutter**				

	Providing & fixing shutters to the pantry counter. The frame to be provided on top and sides are to be made of 38x50 mm Second Class Teak wood finished with melamine polish. Shutters to be made of 19mm thk BWP Grade Marine Plywood (width of each shutter not exceeding 450mm) finished with1mm thick non metallic decorative laminate with plain/wood grain finish of approved design on both sides. Horizontal shelves are to be made of 19mm thk Plywood finished with 1mm thick approved laminate on both sides duly supported on S.S. shelf button. 6mm thick Second Class Teakwood lippings are to be provided on all exposed plywood edges finished with melamine polish. The entire item is to completed in totality with necessary hardware, consumables etc., as per the directions of the EIC/Architect.	SQM	39		
	Hinge: Slow Motion HSM1M1-SS of EBCO or approved equivalent				
	Lock: 22/25mm P-WL-1-25-22 of (EBCO) or approved equivalent.				
	Tower bolt				
	Handles				
1.11.3	**Reception Table**				
	Providing and placing in position Reception table of required shape and size. The entire structure to be made of 19mm thk BWP marine plywood along with 25x25mm MS framework supports vertically and horizontally as required. All external visible surfaces to be finished in 6 mm thk. corian as per approved make and shade along with 18mm thk italian marble as per detail drawing and all internal surfaces to be finished with 1mm thk. non-metallic decorative laminate with plain/wood grain finish of approved design and shade. The table top to be finished in corian with reverse waterfall edge as per approved shade. The table to have a fully extendable drawer pedestal (2no.) finished with of approved colour and shade as per details. Drawer to be complete with hardware installed. non-metallic decorative laminate with plain/wood grain finish of approved design and shade. Drawer to be complete with hardware installed as directed to consist of the following: multi-purpose locks as specified,100mm SS handles, fibre keyboard trays, space for CPU unit etc complete as per details and Architect/EIC approval. Provision for cove light to be made as specified in the drawing. (cove light shall be paid separately). The entire table is to be completed as per the architectural drawing and as per directions of EIC/ Architect.				
	Multi purpose locks				
	Soft Closing ball Bearing Drawer Slides STDS50-35SS-SC (EBCO)or approved equivalent				
	Cable Organiser-ZINC (DIA60mm) CO60ZN1 (EBCO) or approved equivalent				
	SS handles				
	Keyboard tray				
	Size 3000x1050x750mm	NOS	1		
1.11.4	**Trap door**				
	Providing and fixing trap door made of aluminum powder coated inner/outer frames/corner fittings finished with gypsum board liner, sealing strips between inner and outer frames including concealed hinges, snap touch latch etc., complete. The entire item is to be completed in totality as per manufacture's specifications and directions of the EIC/Architect.				
A	Size 450 x 450 MM	NOS	8		
B	Size 600 x 600 MM	NOS	8		
C	Size 600 x 1200 MM	NOS	8		
1.11.5	**Main Display Shelf - Veneer Finish - DMD & CGM**				
	Providing and fixing open book shelf , fabricated out of 19 mm BWP marine ply .Average depth of the storage will be 450 mm .All external surfaces to be finished with 4 mm thk. veneer with 3 coats of mellamine polish. All shelves also to be made of 19 mm thk marine ply and finished in 4.0 mm veneer. Open shelves, display niche as per approved design shall be provided. Shape of the shelves shall be in approved design pattern.All shelves shall have provision of LED profile Light.	SQM	12		
1.11.6	**TV Console - Veneer Finish - DMD & CGM**				
	Providing and fixing storage units as per drawings and as per the site requirements. The sides, vertical dividers, top and bottom of the unit are to be made of 19 mm thick BWP grade marine plywood (710). Top of the unit to be finished with approved 18mm thk Marble mirror polished marble with bevelled edges over 19 mm thick BWP marine grade plywood. The back side of unit shall be 9 mm thick BWP marine grade plywood. The sides of the storage unit to be finished with 4mm thk veneer with melamine polish on both sides. Shutters are to be made of 19 mm thick BWP marine grade plywood, 4mm thk veneer in melamine polish including key holes. 75mm high skirting to be provided all around. All internal surfaces are to be finished with 1 mm thick laminate of approved make and shade. The item also includes hinges, locks, magnetic push mechanism, ball catchers, necessary cut-out etc., for services complete as per the directions of EIC/ Architect. Basic rate for Marble: Rs.5000/- Per Sqmt. Basic Rate of Veneer - Rs 2500/sqm. Rates includes hardwares which are mentioned below.				
	Hinge: Slow Motion HSM1M1-SS of EBCO or approved equivalent				
	Lock: 22/32mm P-WL-1-32-25 of (EBCO) or approved equivalent.				
	Tower Bolt: (SS 304) Round 250mm of (KICH) or approved equivalent				
	Magnetic push mechanism				
	SIZE 450 Deep	SQM	20		
1.11.7	**Niche FHS - Veneer Finish**				
	Providing and fixing custom-made storage and display unit fabricated from marine plywood with curved/custom profiles as per approved design, having two shutters and open display niches. All external surfaces shall be finished with natural veneer and melamine polish, while internal surfaces shall be finished with laminate. All exposed edges shall be provided with matching veneer lipping/PVC edge banding. Rate shall include all necessary hardware, handles, hinges, locks, fittings, labour, materials, polishing, and complete installation as per approved drawings and architect's instructions.	SQM	441		

	Hinge: Slow Motion HSM1M1-SS of EBCO or approved equivalent				
	Lock: 22/32mm P-WL-1-32-25 of (EBCO) or approved equivalent.				
	Tower Bolt: (SS 304) Round 250mm of (KICH) or approved equivalent				
	Magnetic push mechanism				
	TOTAL (LOOSE FURNITURE)				
	TOTAL (DISMANTLING & CIVIL & INTERIOR FURNISHING WORKS)				
1.12	**SANITARY AND PLUMBING WORKS**				
1.12.1	**European Water closet**				
	Providing and fixing wash down **wall mounting EWC-P** of approved shade, conforming to Pattern 2 of IS: 2556 (Part -II), with SWR Self it Soil PVC pipe and plug bend as per specifications; glazed vitreous / Coloured European Water Closet with Conceal cistern (IS-2326), with grouting the CI chair in side the floor/wall, rubber gaskets, connecting PVC 110mm dia soil pipe with PVC coupling, nuts, with dual flush valve of 32 mm, and solid verity heavy duty plastic seat cover as per IS-2548, of approved make; making hole in walls and making good etc. compete				
A	Wall Mounted EWC. Makes- Jaquar or equivalent. Basic rate: Rs. 22000/-	NOS	21.00		
B	Dual Flush Valve : Make : Jaquar or equivalent. Basic rate: Rs. 4500/-	NOS	21.00		
1.12.2	**Health Faucet**				
	Providing and fixing of **Health Faucet**, with 8mm Dia,1Rmt Long pvc Tube and Wall Hook accessories to complete the item.				
A	Health Faucet Make : Jaquar or equivalent. Basic rate: Rs. 4500/-	NOS	21.00		
1.12.3	**Counter top Wash Basin**				
	Providing and fixing **White glazed vitreous Counter Top Wash Basin**, size 550x460 mm dia., 1 no, 32 mm CP Bottle trap with extension piece to wall flange with rubber adopter for waste connection and waste coupling.; with rack bolt fittings including PVC flexible connection, rubber plug, 32 mm dia CP brass waste coupling, CP Bottle trap, quarter turn Stop Cock and CP Swan neck sensor type Pillar Cock with CP wall flange, waste coupling etc complete including cutting and making good the walls wherever required including all its associated CP fittings including napkin rings of approved makes as per sample approved by the architect/ Engineer. The rates should be inclusive of connecting water supply & drain pipelines				
A	Counter Top Wash Basin Make :Jaquar or equivalent. Basic rate: Rs. 10000/-	NOS	18.00		
B	Bottle Trap Make :Jaquar or equivalent. Basic rate: Rs. 3000/-	NOS	18.00		
1.12.4	**Sensor Basin Tap**				
	Providing and fixing **Basin Tap** , with required braided pipes from basin mixer tap to angular stop cock etc complete. (For Society Office, Gym & Club House Area)				
A	Sensor Basin Tap Make : Jaquar or equivalent. Basic rate: Rs. 18000/-	NOS	18.00		
1.12.5	**Towel Rail**				
	Providing and fixing **Towel rail** of approved make including, providing and fixing C.P. brass screws, making holes in walls and making good.				
A	Towel Rail Make : Jaquar or equivalent. Basic rate: Rs. 3500/-	NOS	9.00		
1.12.6	**Soap Dispenser Sensor**				
	Providing and fixing **C.P. brass liquid soap Dispenser** of approved make. Including providing and fixing screws, washers, cutting and making good the walls. (For Common Area WCs)				
A	Sensor Soap Dispenser Make : Jaquar or equivalent. Basic rate: Rs. 5000/-	NOS	9.00		
B	Wastebin ring with dustbin Make: CWC3 Swing Circular Waste Ring Euronics	NOS	9.00		
1.12.7	Providing and fixing in position Askon make Single Blower Stainless Steel Silent Hand Dryer, (H) 265 x (W) 200 x (D) 115 mm (Min) in Stainless Steel brush finish etc complete	NOS	9.00		
1.12.8	**Tissue paper dispenser**				
	Supplying and placing in position tissue paper dispenser of pre-approved make/manufacture, and one refill of tissue with pair of fixing screws and fixing material complete, to the entire satisfaction of the Architects. **Make : Euronics or equivalent Model No. : EP28 Auto HRT or of equivalent make from Dyson or Kohler catalogue. Basic rate: Rs. 27000/-**	NOS	9.00		
1.12.9	**Coat Hook**				
	Providing and fixing in position best Indian make **C.P. brass Double Coat Hook** fixed into wall with C.P.brass screws and rawl plugs etc. complete including cutting and making good the walls etc.				
A	Double Coat Hook Make :Jaquar or equivalent. Basic rate: Rs. 6000/-	NOS	21.00		
1.12.10	**Sink**				
	Providing and fixing **Stainless steel sink of size 1550x 545 mm**, bowl size should be 460x460x230mm with one side drain R.S. or C.I. Painted brackets painted, 40mm dia. C.P. waste, C.P. brass chain and rubber plug, strainer with necessary C.P. brass unions complete including painting the fittings and cutting and making good the walls wherever required, with CP Tap etc. complete.				
	Kitchen Sink Make : Nirali. Model No. : Luxor NG Big or equivalent. Basic rate: Rs. 30000/-	NOS	3.00		
A	Sink Tap Make : Jaquar or equivalent. Basic rate: Rs. 18000/-	NOS	3.00		
1.12.11	**Angle Valve**				

	Providing and fixing **15mm C.P. brass angle valve** with C.P. copper connecting pipe 450 mm long and nuts, washer and brass flange complete, including cutting and making good the wall where required. (For Wash Basin, Kitchen, Washing Machine & Geyser)				
A	Angle Valve Make : Kohler. Model No. : Jaquar or equivalent. Basic rate: Rs. 2500/-	NOS	18.00		
1.12.12	**2 way bibcock**: Supplying, Installing, testing and commissioning approved make CP two way Touchless Bibcock with fixing materials complete, to the entire satisfaction of the Architects **Make : Jaquar or equivalent. Basic rate: Rs. 5500/-**	NOS	18.00		
1.12.13	**Urinal with sensor**				
	Providing and Fixing White glazed vitreous Chinaware urinals with integrated sensor including all fittings like CP brass flush pipe, CP brass spreaders with unions and clamps (all in CP brass), CP brass waste coupling 40 mm dia, inlet connection, concealed 'Z' CI brackets etc., all complete including cutting and making the good the walls and floors wherever required as per the architectural drawings, manufacturers specifiaction and as directed by the EIC / architect complete in all respects.				
1.12.14	Touchless urinal Make :Jaquar or equivalent. Basic rate: Rs. 15000/-	NOS	9.00		
1.12.15	**Urinal Partition**				
	Providing and fixing frameless urinal partition of approved make made up of compact laminate as per approved make and shade. Rate includes patch fittings etc., as directed by the EIC / Architect.				
	Basic rate: Rs. 5000/- Make: Jaquar or equivalent	NOS	9.00		
1.12.15	**Nahni Trap/ Floor drain**				
	Providing & fixing **SS Nahni trap** of 75mm dia diameter, with necessary distance piece of 75mm dia pipe and 150x150mm SS grating, making necessary SLAB /WALL holes and cutting walls, cawl etc complete.				
A	Make : Jaquar or equivalent. Basic rate: Rs. 4500/-	NOS	33.00		
1.12.16	Supply and fixing of swing type handicap grab bar made of stainless steel, 32 mm diameter, with hinged/foldable mechanism, complete with mounting flange, anchor fasteners, and necessary hardware, securely fixed to wall to ensure stability and safety as per accessibility standards.	NOS	3.00		
1.12.17	**Water Supply system**				
	Providing, fixing and laying in position CPVC pipes and fittings of specified class. Jointing shall be followed as per manufacturer recommendations / CPWD specifications. Rate includes brass threaded fittings like elbows, tees, unions, sockets and jointing materials etc., including testing of pipes to required pressure, chasing in walls, making good of the same etc., complete in all as per the directions of EIC / Architect. The fittings and specials such as tees, elbows, couplers, bends, enlargers etc., with CPVC brass threaded combination / transition specials such as male adapters brass threaded female adapters, brass FPT Tee, Brass FPT elbow etc., including necessary drilling holes, chasing walls and making the same good in as directed by the Engineer in-charge. Joints.Wherever the pipes are crossing through the walls pipes should have sleeves in the wall and between pipe and sleeve should be sealed with silicone sealent.Annular space between pipe and sleeve provided wherever the pipes are crossing the wall will be sealed with glass wool in between & fire sealent compound at either end . Cost shall be inclusive of all hangers, clamps, brackets etc. shall be of galvanized iron unless specified otherwise and then supply of the same shall also be included for rates under this head. Also rates including flusing and chemical cleaning of pipes.Charges for Labelling of pipe as per color schedule over painted surface of the pipes				
	40 mm dia	RMT	40.00		
	32 mm dia	RMT	30.00		
	25 mm dia	RMT	30.00		
	20 mm dia	RMT	30.00		
	15 mm dia	RMT	30.00		
1.12.18	**Plumbing soil pipe CI:**				
	Providing, fixing and laying in position centrifugally cast CI spun soil pipes of first quality as per IS: 3989 including CI fittings like bends, tees with or without plug including making lead caulked / dripseal joints and testing, laid in floor slab to the required slope or clamping to wall and ceiling including painting of exposed pipes with 2 coats of approved paint over one coat primer as directed by EIC/ Architect. The fittings and specials such as tees, elbows, couplers, bends, enlargers etc., with CPVC brass threaded combination / transition specials such as male adapters brass threaded female adapters, brass FPT Tee, Brass FPT elbow etc., including necessary drilling holes, chasing walls and making the same good in as directed by the Engineer in-charge. Joints.Wherever the pipes are crossing through the walls pipes should have sleeves in the wall and between pipe and sleeve should be sealed with silicone sealent.Annular space between pipe and sleeve provided wherever the pipes are crossing the wall will be sealed with glass wool in between & fire sealent compound at either end . Cost shall be inclusive of all hangers, clamps, brackets etc. shall be of galvanized iron unless specified otherwise and then supply of the same shall also be included for rates under this head. Also rates including flusing and chemical cleaning of pipes.Charges for Labelling of pipe as per color schedule over painted surface of the pipes.				

	75 mm diameter	RMT	15.00		
	110 mm diameter	RMT	15.00		
1.12.19	**Plumbing soil pipe PVC:**				
	Providing, fixing and laying in position PVC pipes of first quality type A 6kg/cm2 as per IS: 13592 including fittings like bends, tees, single or double Y with or without plug including solvent cement joints and testing, laid in floor slab to the required slope or clamping to wall and ceiling as directed by EIC/ Architect. The fittings and specials such as tees, elbows, couplers, bends, enlargers etc., with CPVC brass threaded combination / transition specials such as male adapters brass threaded female adapters, brass FPT Tee, Brass FPT elbow etc., including necessary drilling holes, chasing walls and making the same good in as directed by the Engineer in-charge. Joints.Wherever the pipes are crossing through the walls pipes should have sleeves in the wall and between pipe and sleeve should be sealed with silicone sealent.Annular space between pipe and sleeve provided wherever the pipes are crossing the wall will be sealed with glass wool in between & fire sealent compound at either end . Cost shall be inclusive of all hangers, clamps, brackets etc. shall be of galvanized iron unless specified otherwise and then supply of the same shall also be included for rates under this head. Also rates including flusing and chemical cleaning of pipes.Charges for Labelling of pipe as per color schedule over painted surface of the pipes				
	75 mm diameter	RMT	75.00		
	110 mm diameter	RMT	75.00		
	62 mm diameter	RMT	30.00		
1.12.20	**Rest Room Cubicles - Toilet Modular Partitions**				
	Providing & fixing Toilet Cubicle of approved make made of heat, bacteria, water, chemical, scratch, impact resistant 12mm thick solid compact laminate panels / high pressure laminate (HPL) compact boards. Finish of the solid compact laminate panels / high pressure laminate (HPL) compact boards should be of approved make and shade, which includes doors, pilasters & intermediate panels finished with approved texture/shade as per the detail drawings & as per IS 2046 (Indian Standard) and as per fire retardant BS-476/97 standard. (Make: Classique-Evergreen model of Greenlam Sturdo or approved equivalent). The rate shall be inclusive of providing and fixing in position necessary hardware made out of Stainless steel (grade 304) as per manufacturer's specifications and Architects instructions like (1) Door Knob, (2) Gravity Hinges, (3) Thumb turn lockset with Occupancy indicators, (4) Coat hooks with Door stopper (5) U-Channels, (6) Adjustable foot/pedestal, (7) Top rail with Corner connector (8) Rubber noise deafening tape (9) Screws & wall Plugs. The top fitting should consist of SS round top rail which will get fixed with pilasters, with SS panel tube holder, SS corner bend (connected with top rail) will be used on the corner of cubicle in absence of brick wall, SS wall fixing is used only on the wall which will hold the SS top rail. All screws will of 304 Grade in stainless steel with satin finish. All pilasters are supported by stainless steel Bottom Cladding. The base of the stainless steel bottom cladding will be anchored to the floor with a clearance height upto 150mm				
A	Toilet Cubicle with standard dimension of 2025mm Height x 1000mm Width x 1550mm Depth, which includes 600mm door size width.	NOS	21.00		
1.12.21	**Linear Floor Grating**				
	Supply and fixing of stainless steel (SS 304) Linear floor grating with removable top grating and matching SS tray/channel below, of approved size and thickness, suitable for drainage application. The scope includes fabrication of SS frame, fixing of tray with proper slope towards outlet, positioning and leveling within floor finish, and provision of necessary supports, anchor fasteners, and sealing arrangement. The tray shall be connected to the existing drainage line including outlet nozzle, coupling, and required fittings to ensure proper discharge. The grating shall be properly aligned, flush with finished floor level, and securely fixed, complete in all respects.	RMT	3.00		#VALUE!
	SANITARY & PLUMBING WORKS				**Rs. -**
2	**Modular Furnitures**				
	Contractor has to provide mockup at the site , the mentioned make for approval of Bank bofore giving order to the company, No extra payment will be given for providing the mock up				
2.1	**P & F LINEAR WORKSTATIONS @ 1500 X 600 X 1050 HT**	**Nos**	**18**	-	Rs. -

	CHAMFER EDGE TABLE TOP : 25 MM thk. Prelaminated Particle Board with 2mm PVC Edge band on all side. Table top at 750mm height from floor level. Cut-out provision for Access flap as required. UNDERSTRUCTURE : Designer MS Tapered Leg made up of 50x75MM verticals and Horizontal Connecting member made up of 40x40MM MS pipe finished in Powder coating. Cross members made up of 40x40MM MS Section finished in Powder coating are connected to Legs with Brackets for table support. WIRE MANAGMENT : Continuous single tier raceway finished in Powder coating with provision of electrical leg / vertical duct at intermediate distance to take out cable from floor to raceway. PRIVACY SCREEN 450 MM ht. : 18MM Thk Magnetic fabric Privacy Panel with Special Aluminium frame finished in powder coating MAIN SPINE MODESTY 300MM FROM FLOOR (SHARING / NON SHARING) .: MS PERFORATED MODESTY. ACCESS FLAP 450MM LENGTH : Powder coated Aluminium Access flap					
2.2	**P & F CURVILINEAR WORKSTATIONS @ 1500 X 600 X 1050 HT**	**Nos**	84			
	Make: Spacewood, Featherlite, Godrej, Geeken **TOP :** The table top is made of 25mm thick Prelaminated Particle Board (OSL) conforming to IS 12823:1990 with 2mm PVC edge lipping using Kliberit-779.6 glue . The table top undergoes a distributed load test for deflection by applying a 0.027kg/mm load on top and a concentric load test by applying a 90kg load on the weaker section. Top to be provided with reverse waterfall edge detail.					
	UNDERSTRUCTURE : - **HOCK LEGS :** Designer MS Tapered Leg made up of 50x75MM verticals and Horizontal Connecting member made up of 40x40x1.6mm thick M.S. pipe conforming to IS-Grade 4932 with a powder-coated finish up to 50 to 60 microns. **Cross Members:** 40mm x 40mm x 1.6mm MS LIP section with a powder-coated finish conforming to IS 13871:1993. **Assembly:** Cross members shall be mounted by end brackets. The cross member end bracket shall be made of 3mm thick IS 513:2008 CRCA sheet with a powder-coated finish up to 50 to 60 microns. **Aluminum section:** The aluminum privacy panel section is a constructional member of the understructure and shall be made of aluminum extrusion conforming to IS 733:1983 with a powder-coated finish up to 50 to 60 microns.					
	WIRE MANAGMENT : Single-tier triangular cable tray shall be made of 0.7mm CRCA sheet conforming to IS 513:2008. The cable tray can be used as side access or top access. Electrical leg is made using 40x40x1.6mm thick M.S. pipe conforming to IS-Grade 4932 with a powder-coated finish up to 50 to 60 microns. Cable Trays: Single workstation: 100x90mm. Back-to-back workstation: 210x90mm.					
	MODESTY MAIN SPINE 300MM FROM FLOOR : Modesty made up of 18mm thick prelaminated particle board with 2mm thick PVC edgebanding					
	PRIVACY SCREEN 28mm thick MAGNETIC FABRIC 300 MM HT : Screen with Pinup framed in 28mm thick aluminium extrusions finished in powder coating					
	ACCESS FLAP 450 MM LENGTH : Powder coated Aluminium Access Flap					
2.3	**PEDESTAL - 1B+1F WITH CUSHION @ 400 X 450 X 560+30 HT**	**Nos**	102		Rs.	-
	Make: Make: Spacewood, Featherlite, Godrej, Geeken **Pedestal Body Panels:** LH, RH, and back made of 18mm thick Prelam (OSL) particle board as per IS 12823:1990 with 2mm PVC lipping glued with Kliberit-779.6 glue. Distributed Load Test: 0.027 kg/mm load on top. Concentric Load Test: 90 kg load on the weaker section **Assembly:** Wooden dowels and knock-down fittings. Screws and corner fittings for structural stability. Base Fitting: Mounted on M6 levellers or 40mm Nylon casters. **Drawers : Structure:** 0.7mm thick CRCA sheet, powder-coated (50–60 micron), as per IS 513:2008. **Front Panel:** 18mm thick Prelam (OSL) particle board with 2mm PVC lipping, glued with Kliberit-779.6. **Handles:** Finger grove handle **Locking:** Centralized locking system					
2.4	**KEYBOARD TRAY & CPU TROLLEY FOR WORKSTATIONS**	**Nos**	123		Rs.	-
	KEYBOARD TRAY: Keyboard tray shall be manufactured from 1.0 mm thick CRCA steel sheet with folded and rounded edges for strength and safety. The tray shall be mounted below the worktop using heavy-duty telescopic ball-bearing slides to ensure smooth pull-out and push-in operation. The tray shall be capable of accommodating a standard keyboard and mouse and shall be finished with epoxy polyester powder coating matching the workstation frame colour. Approximate size shall be 550 mm (W) x 300 mm (D).					

	CPU TROLLEY: CPU trolley shall be fabricated from MS/CRCA steel construction and finished with epoxy polyester powder coating. The trolley shall be provided with adjustable width supports to accommodate different CPU cabinet sizes. It shall be mounted on heavy-duty nylon castors for easy movement and maintenance access. The trolley shall be provided with locking arrangement and anti-slip supports for safe placement of the CPU cabinet. Complete with all necessary hardware, accessories and installation.				
	ACCESSORIES: Each workstation position shall be provided with one pull-out MS powder-coated keyboard tray and one movable MS powder-coated CPU trolley complete in all respects.				
2.5	**PA CABIN TABLE** **MAIN TABLE @ 1500 X 750 X 750 MM HT** **SIDE TABLE @ 1350 X 600 X 750 MM HT** **PEDESTAL @ 400 X 450 X 670 MM HT** **BACK STORAGE @ 1500 X 450 X 750 MM HT** **Make: Make: Spacewood, Featherlite, Godrej, Geeken**	**Nos**	7		Rs. -
	TOP : The table top is made of 25mm thick Prelaminated Particle Board (OSL) conforming to IS 12823:1990 with 2mm PVC edge lipping using Kliberit-779.6 glue . The table top undergoes a distributed load test for deflection by applying a 0.027kg/mm load on top and a concentric load test by applying a 90kg load on the weaker section. Top to be provided with reverse waterfall edge detail.				
	UNDERSTRUCTURE : - **HOCK LEGS :** Designer MS Tapered Leg made up of 50x75MM verticals and Horizontal Connecting member made up of 40x40x1.6mm thick M.S. pipe conforming to IS-Grade 4932 with a powder-coated finish up to 50 to 60 microns. **Cross Members:** 40mm x 40mm x 1.6mm MS LIP section with a powder-coated finish conforming to IS 13871:1993. **Assembly:** Cross members shall be mounted by end brackets. The cross member end bracket shall be made of 3mm thick IS 513:2008 CRCA sheet with a powder-coated finish up to 50 to 60 microns.				
	Wire management : Electrical wires shall be carried from 100x100mm vertical duct or Snake (Vertigo), vertical duct shall be made of 0.7mm CRCA sheet confirming to IS 513:2008. Horizontally wire shall float in switch mounted box 400LX174DX125H shall be made of 0.7mm CRCA sheet confirming to IS 513:2008.Switch mounting box directly screwed to table top from the bottom side. Switch plate is provided on Switch Mounting Box for mounting electrical standard switch plate. Switch Plate shall be made up of 1.5mm CRCA sheet confirming to IS 513:2008 and switch plate can be screwed on switch mounting box by using 8x15mm Pan Head ST Screw. Access flap will be fitted on work top				
	MODESTY MAIN SPINE 300MM FROM FLOOR : Modesty made up of 18mm thick prelaminated particle board with 2mm thick PVC edgebanding				
	ACCESS FLAP 450 MM LENGTH : Powder coated Aluminium Access Flap				
	PEDESTAL @ 400 x 450 x 670 mm ht : 2 Book & 1 File Drawer pedestal with Castor / Leveller finish in 18 MM thk. Prelaminated Particle Board 2MM PVC Edge band. Drawers are made up of 0.7mm thick CRCA with telescopic slides for mobility. Provision of Centralized lock for Drawers and side Finger groove				
	Cabin table with side and back credenza constructed with a 19mm thk BWP grade plywood or MDF, finished with laminate on all exposed surfaces.				
2.6	**GM - CABIN TABLE** **MAIN TABLE @ 2250 X 900 X 750 MM HT** **HAT SIDE TABLE @ 1200 X 600 X 750 MM HT** **PEDESTAL @ 400 X 450 X 670 MM HT** **BACK STORAGE @ 1050 +450 MM EXTENDED TOP X 450 X 750 MM HT** **Make: Make: Spacewood, Featherlite, Godrej, Geeken**	**Nos**	6		Rs. -

	TOP : The table top is made of 25mm thick Membrane top . The table top undergoes a distributed load test for deflection by applying a 0.027kg/mm load on top and a concentric load test by applying a 90kg load on the weaker section. Top to be provided with reverse waterfall edge detail. UNDERSTRUCTURE : - HOCK LEGS : SS Designer MS Tapered Leg made up of 50x75MM verticals and Horizontal Connecting member made up of 40x40x1.6mm thick M.S. pipe conforming to IS-Grade 4932 with a powder-coated finish up to 50 to 60 microns. Cross Members: 40mm x 40mm x 1.6mm MS LIP section with a powder-coated finish conforming to IS 13871:1993. Assembly: Cross members shall be mounted by end brackets. The cross member end bracket shall be made of 3mm thick IS 513:2008 CRCA sheet with a powder-coated finish up to 50 to 60 microns. Wire management : Electrical wires shall be carried from 100x100mm vertical duct or Snake (Vertigo), vertical duct shall be made of 0.7mm CRCA sheet confirming to IS 513:2008. Horizontally wire shall float in switch mounted box 400LX174DX125H shall be made of 0.7mm CRCA sheet confirming to IS 513:2008.Switch mounting box directly screwed to table top from the bottom side. Switch plate is provided on Switch Mounting Box for mounting electrical standard switch plate. Switch Plate shall be made up of 1.5mm CRCA sheet confirming to IS 513:2008 and switch plate can be screwed on switch mounting box by using 8x15mm Pan Head ST Screw. Access flap will be fitted on work top MODESTY DESIGNER : Modesty made up of 18mm thick Membrane fluted modesty ACCESS FLAP 450 MM LENGTH : Powder coated Aluminium Access Flap PEDESTAL @ 400 x 450 x 670 mm ht : 2 Book & 1 File Drawer pedestal with Castor / Leveller finish in 18 MM thk. Prelaminated Particle Board 2MM PVC Edge band. Drawers are made up of 0.7mm thick CRCA with telescopic slides for mobility.				
2.7	**DGM CABIN TABLE** **MAIN TABLE @ 2100 X 900 X 750 MM HT** **SIDE TABLE @ 1200 X 600 X 750 MM HT** **PEDESTAL @ 400 X 450 X 670 MM HT** **BACK STORAGE @ 1500 +450 MM EXTENDED TOP X 450 X 750 MM HT** **Make: Make: Spacewood, Featherlite, Godrej, Geeken**	**Nos**	17		Rs. -
	TOP : The table top is made of 25mm thick Membrane top . The table top undergoes a distributed load test for deflection by applying a 0.027kg/mm load on top and a concentric load test by applying a 90kg load on the weaker section. Top to be provided with reverse waterfall edge detail.				
	UNDERSTRUCTURE : - **HOCK LEGS : SS** Designer MS Tapered Leg made up of 50x75MM verticals and Horizontal Connecting member made up of 40x40x1.6mm thick M.S. pipe conforming to IS-Grade 4932 with a powder-coated finish up to 50 to 60 microns. **Cross Members:** 40mm x 40mm x 1.6mm MS LIP section with a powder-coated finish conforming to IS 13871:1993. **Assembly:** Cross members shall be mounted by end brackets. The cross member end bracket shall be made of 3mm thick IS 513:2008 CRCA sheet with a powder-coated finish up to 50 to 60 microns.				
	Wire management : Electrical wires shall be carried from 100x100mm vertical duct or Snake (Vertigo), vertical duct shall be made of 0.7mm CRCA sheet confirming to IS 513:2008. Horizontally wire shall float in switch mounted box 400LX174DX125H shall be made of 0.7mm CRCA sheet confirming to IS 513:2008.Switch mounting box directly screwed to table top from the bottom side. Switch plate is provided on Switch Mounting Box for mounting electrical standard switch plate. Switch Plate shall be made up of 1.5mm CRCA sheet confirming to IS 513:2008 and switch plate can be screwed on switch mounting box by using 8x15mm Pan Head ST Screw. Access flap will be fitted on work top				
	MODESTY DESIGNER : Modesty made up of 18mm thick Membrane fluted modesty				
	ACCESS FLAP 450 MM LENGTH : Powder coated Aluminium Access Flap				
	PEDESTAL @ 400 x 450 x 670 mm ht : 2 Book & 1 File Drawer pedestal with Castor / Leveller finish in 18 MM thk. Prelaminated Particle Board 2MM PVC Edge band. Drawers are made up of 0.7mm thick CRCA with telescopic slides for mobility. Provision of Centralized lock for Drawers and side Finger groove				
	Cabin table with side and back credenza constructed with a 19mm thk BWP grade plywood or MDF, finished with laminate on all exposed surfaces.				
2.8	**CGM CABIN TABLE** **MAIN TABLE @ 3000 X 900 X 750 MM HT** **HAT SIDE TABLE @ 1500 X 600 X 750 MM HT** **PEDESTAL @ 400 X 450 X 670 MM HT** **BACK STORAGE @ 1350 +450 MM EXTENDED TOP X 450 X 750 MM HT** **Make: Spacewood, Featherlite, Godrej**	**Nos**	4		Rs. -

	Make: Make: Spacewood, Featherlite, Godrej, Geeken Supply and installion of cabin table along with side storage unit of size 3000mm(l)x450mm(w)x750mm(h) and back storage unit of size 1500(l)x450mm(w)x750mm(h) (or sizes as specified in the drawings) constructed with a 19mm thk BWP grade plywood or MDF, finished with natural wood veneer (e.g., teak, oak, walnut) on all exposed surfaces. Veneer shall be minimum 4 mm thick and finished with 3 coats of melamine polish. Tabletop shall be minimum 25 mm thick with smooth, rounded and have reverse waterfall edges, and supported on gable ends, box-type base frame as per design. All joints shall be concealed and securely fixed. Drawer units to be made with soft-close channels and laminated internal finish. Provision for cable management, modesty panel, and integrated grommets to be provided as per design. Dimensions, design, veneer selection, and polish shade to be approved by architect prior to fabrication. All exposed surfaces shall be free of defects and finished uniformly. Complete assembly and finishing to be done at site as per approved shop drawings.				
2.9	**DMD CABIN TABLE** **MAIN TABLE @ 3000 X 900 X 750 MM HT** **HAT SIDE TABLE @ 1200 X 600 X 750 MM HT** **PEDESTAL @ 400 X 450 X 670 MM HT** **BACK STORAGE @ 1650 +450 MM EXTENDED TOP X 450 X 750 MM HT** **Make: Spacewood, Featherlite, Godrej**	**Nos**	3		Rs. -
	Make: Make: Spacewood, Featherlite, Godrej, Geeken Supply and installion of cabin table along with side storage unit of size **3000mm(l)x450mm(w)x750mm(h)** and back storage unit of size 1500(l)x450mm(w)x750mm(h) (or sizes as specified in the drawings) constructed with a 19mm thk BWP grade plywood or MDF, finished with natural wood veneer (e.g., teak, oak, walnut) on all exposed surfaces. Veneer shall be minimum 4 mm thick and finished with 3 coats of melamine polish. Tabletop shall be minimum 25 mm thick with smooth, rounded and have reverse waterfall edges, and supported on gable ends, box-type base frame as per design. All joints shall be concealed and securely fixed. Drawer units to be made with soft-close channels and laminated internal finish. Provision for cable management, modesty panel, and integrated grommets to be provided as per design. Dimensions, design, veneer selection, and polish shade to be approved by architect prior to fabrication. All exposed surfaces shall be free of defects and finished uniformly. Complete assembly and finishing to be done at site as per approved shop drawings.				
2.11	**FULL HEIGHT STORAGE @1500 X 450 X 2400 MM HT** **Make: Spacewood, Featherlite, Godrej, Geeken**	**Nos**	61		Rs. -
	TOP: 18MM Thick Prelaminated Particle Board with 2MM PVC edge band on all edges				
	CARCASS (Body/ Shutter / Back) : 18MM thick Prelaminated Particle Board with PVC edge band on all exposed edges.				
	SHELF : shelf made of 18MM thick Prelaminated Particle Board with PVC edge band on all edges				
	SHUTTERS : Lockable Swing shutters with Finger Groove				
	HARDWARE : Hettich Hinges, Lock				
	TOTAL OF MODULAR FURNITURES				**Rs. -**
3	**CHAIRS**				
3.1	**Mid back mesh chairs (workstations)**	**Nos**	**92**		**-**
	Make : Godrej Featherlite, Durian Back frame and seat shroud are plastic. Lumbar height adjusts over 50mm to provide additional lower back support and is available as an option on mesh back chairs only. Arm height can adjust independently within a 80mm range to help relieve upper back and shoulder fatigue. Comfort dial has 3 settings to adjust back recline: (1) upright lock, (2) boosted setting, (3) full recline. Seat height adjusts within a 120mm range with a pneumatic adjustment mechanism. Arm caps pivot independently 30 degrees inward and 30 degrees outward. Arm depth can retract 50mm to allow users to get closer to the worksurface. Arm width adjusts 30mm each, 60mm overall. Grasp arm and move in or out. Seat depth adjusts within a 55mm range to accommodate users of varying leg lengths. Five-arm base is available in plastic, painted silver aluminum or polished aluminium. Basic rate: 10000/- Rs				
3.2	**Cabin Chairs**	**Nos**	**20**		**-**

	Make : Godrej Featherlite, Durian Hi back Chair with head-rest The comfort dial allows you to select one of four positions to adjust the amount of back tension and recline. Height, width, pivot and depth adjustable armrests provide personalized support for your arms. The adjustable seat depth allows individuals to achieve long-term comfort. Seat depth adjusts within a 64mm range to accommodate users of varying leg lengths. Back frame and seat shell are plastic. Lumbar height adjusts 108mm to provide additional lower back support. Arm caps can pivot independently 30° in and 30° out to accommodate individual user preferences. Seat Height adjusts within a 127mm range with a pneumatic adjustment mechanism. Arm width adjusts 115mm overall to support forearms in neutral position. Arm height can adjust independently within a 102mm range to help relieve upper back and shoulder fatigue. Arm depth can retract 77mm to allow user to get closer to the worksurface and into tight corners. Passive seat edge angle allows the front edge of the seat to flex 39mm to relieve pressure under the user's thighs. Five-arm base is available in plastic or polished aluminum. 127mm pneumatic seat-height adjustment. Basic Rate: 24000/- Rs				
3.3	**Cabin Visitor Chairs**	**Nos**	**60**		**-**
	Make : Godrej Featherlite, Durian Mid-back chair The comfort dial allows you to select one of four positions to adjust the amount of back tension and recline. Height, width, pivot and depth adjustable armrests provide personalized support for your arms. The adjustable seat depth allows individuals to achieve long-term comfort. Seat depth adjusts within a 64mm range to accommodate users of varying leg lengths. Back frame and seat shell are plastic. Lumbar height adjusts 108mm to provide additional lower back support. Arm caps can pivot independently 30° in and 30° out to accommodate individual user preferences. Seat Height adjusts within a 127mm range with a pneumatic adjustment mechanism. Arm width adjusts 115mm overall to support forearms in neutral position. Arm height can adjust independently within a 102mm range to help relieve upper back and shoulder fatigue. Arm depth can retract 77mm to allow user to get closer to the worksurface and into tight corners. Passive seat edge angle allows the front edge of the seat to flex 39mm to relieve pressure under the user's thighs. Five-arm base is available in plastic or polished aluminum. 127mm pneumatic seat-height adjustment. Basic Rate: 9600/- Rs				
3.4	**CGM & DMD Cabin Chairs**	**Nos**	**7**		**-**

	Make : Godrej Featherlite, Durian Model: Thrill Executive Cushion High back chair Leatherette (Godrej), Featherlite, Hermann Miller, Steelcase Basic rate - Rs. 45,000/- 1. SEAT/BACK ASSEMBLY: The back is made up of 1.2 ±0.1cm. thick hot-pressed plywood & seat is made up of 1.5 ±0.1cm. thick hot-pressed plywood measured as per QA method described in OCP-QLTA-P14-18 and upholstered with fabric upholstery covers and moulded Polyurethane foam. The back foam is designed with contoured foam lumbar support. The seat has extra thick foam on front edge to give comfort to popliteal area.The Recron filling done in seat & back (Executive chairs only) for extra fluffiness and comfort in chair. The chair dimensions are: Width (W): 77.0CM, Depth (D): 77.0CM, Height (H): 114.0-221.5 CM, Seat Height (SH): 45.0-54.5 CM 2. HIGH RESILIENCE (HR) POLYURETHANE FOAM: The HR polyurethane foam is moulded with density = 45±2 kg/m3 and hardness load 14 ± 2 kgf as per IS:7888 for 25% compression. 3. ARMRESTS (THRILL Executive CHAIR) : The 3-way adjustable armrest is is made of die-cast aluminium with buffing finish designed with the following features : •Up-Down adjustment–7 steps (7.0 ± 0.5cm range) •It has to & fro movement along with Swivel adjustment. 4. CENTER TILT SYNCHRO MECHANISM WITH MULTI LOCK : The mechanism is designed with the following features: • 360° revolving type. • 3 position locking with anti shock mechanism. • Tilt tension adjustment 5. TUBULAR VISITOR FRAME (Thrill Executive Chair): The Buffed polished tubular frame is				
	TOTAL OF CHAIRS				**₹ 0**
4	**LOOSE FURNITURES**				
4.1	**Lounge Chairs (DGM cabins)**				
	Supply and installion of high-end lounge chair of size 750(l) x 750(d) x 900 (h)mm suitable for executive lounge areas. Chair frame shall be constructed from seasoned hardwood, wooden finish as per approval or powder-coated metal for durability and stability. Seat and backrest to be ergonomically contoured, upholstered with high-density PU foam (minimum 40 kg/m³) and finished in premium fabric, leatherette, or genuine leather, as approved by the architect. Upholstery shall be wrinkle-resistant, flame-retardant, and available in a range of colors. Armrests, where provided, shall be cushioned and finished to match overall aesthetics. Legs or base to be made of powder-coated metal with anti-skid floor glides. All materials must be low-VOC and conform to international durability and safety standards. Product samples, material swatches, and shop drawings to be submitted for approval from Architect/EIC before procurement and installation. Basic rate - Rs. 35,000/- MAKE- Spacewood, Featherlite, Albans, Godrej, Durian	NOS	40.00		
4.2	**3 seater sofa**				
	Supply and installation of three/two-seater waiting area sofa of size 21000(l) x 650(d) mm. The sofa shall have a durable internal frame made of kiln-dried hardwood or powder-coated MS (mild steel), designed for heavy-duty use. Seat and back cushions shall be made from high-density polyurethane foam (minimum 32–40 kg/m³) to ensure comfort and long-term shape retention. Upholstery shall be high-quality fabric or leatherette that is UV-resistant, stain-resistant, and easy to maintain. Armrests shall be integrated or cushioned, designed for ergonomic comfort. Sofa legs or base shall be made of powder-coated metal with non-marking floor glides. All materials must be low-VOC and conform to international durability and safety standards. Product samples, material swatches, and shop drawings to be submitted for approval from Architect/EIC before procurement and installation. Basic rate - Rs.70,000/- MAKE- Spacewood, Featherlite, Albans, Godrej, Durian	NOS	12.00		
4.3	**2 seater sofa**				
	Supply and installation of three/two-seater waiting area sofa of size 1500(l) x 650(d) mm. The sofa shall have a durable internal frame made of kiln-dried hardwood or powder-coated MS (mild steel), designed for heavy-duty use. Seat and back cushions shall be made from high-density polyurethane foam (minimum 32–40 kg/m³) to ensure comfort and long-term shape retention. Upholstery shall be high-quality fabric or leatherette that is UV-resistant, stain-resistant, and easy to maintain. Armrests shall be integrated or cushioned, designed for ergonomic comfort. Sofa legs or base shall be made of powder-coated metal with non-marking floor glides. All materials must be low-VOC and conform to international durability and safety standards. Product samples, material swatches, and shop drawings to be submitted for approval from Architect/EIC before procurement and installation. Basic rate - Rs.50,000/- MAKE- Spacewood, Featherlite, Albans, Godrej, Durian	NOS	7.00		
4.4	**Single seater sofa**				

	Supply and installation of single-seater sofa chair of size 800(l) x 700(d) x 725(h)mm. The internal frame shall be made of seasoned hardwood or powder-coated mild steel for structural stability and durability. Seat and backrest cushions shall be upholstered with high-density polyurethane foam (minimum 32–40 kg/m³) for lasting comfort and shape retention. Upholstery to be high-quality fabric or leatherette that is stain-resistant, easy to clean, and fire-retardant. The base shall be supported on powder-coated metal legs with anti-skid floor protectors. Design must offer ergonomic support, with optional integrated or upholstered armrests for additional comfort. All materials must be low-VOC and conform to international durability and safety standards. Product samples, material swatches, and shop drawings to be submitted for approval from Architect/EIC before procurement and installation. Basic rate - Rs. 30,000/- MAKE- Spacewood, Featherlite, Albans, Godrej, Durian	NOS	7.00		
4.5	**Circular center table**				
	Supply and installation of circular center table of 600mm diameter. Tabletop shall be made of 1 mm thick wooden finish laminate or corian with polished beveled edges, securely fixed over a supporting sub-frame as per approved make and shade. Frame and base shall be constructed from powder-coated mild steel in a designer profile,. Metal parts to be epoxy powder-coated in approved finish. Understructure to be made out of 20mm MS powder coated legs to ensure stability and load-bearing capacity with anti-scratch floor glides. All components to comply with durability, safety, and aesthetic standards for high-traffic public use. Product samples, material swatches, and shop drawings to be submitted for approval from Architect/EIC before procurement and installation. Basic rate - Rs. 20,000/- MAKE- Spacewood, Featherlite, Albans, Godrej, Durian	NOS	27.00		
	TOTAL OF LOOSE FURNITURES				
5	**ELECTRICAL WORKS**				
5.1	**SECTION A - PANELS AND DISTRIBUTION BOARDS**				
5.1.1	Supply installation testing commissioning of double door distribution board **6 way VTPN (MCCB DB)** recessed in walls and parrtitions compplete with tinned Copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required.. No fabricatedd DB shall be alloud Input : 125A 4Pole, 25KA, MCCB Output: 63A, C- Curve , TP MCB-6 Nos	Each	2		
5.1.2	Supply installation testing commissioning of **12 way (4 + 36), Double door horizontal type** three pole and neutral, sheet steel, **MCB Distribution Board**, double door IP 43 415 V, on surface/ recess, complete with tinned Copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required.	Nos	9		
5.1.3	Supply installation testing commissioning of **12 way, SPN Double door DB,** single pole and neutral, sheet steel, **MCB Distribution Board**, 240 V, double door. on surface/ recess,complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. [For Emergency supply]	Nos	3		
5.1.4	Supply installation testing commissioning of following suitable MCB/ RCBO/ RCCB in MCB DB complete with connections as required.				
a	40 A to 63 A rating, 415 V, 10 kA, "C" curve, Four Pole MCB [For Lighting and Power]	Nos	14		
b	40 A to 63 A rating, 415 V, 10 kA, "D" curve, FOUR Pole MCB [For UPS]	Nos	3		
c	6-25A,100 mA sensitivity, 2-Pole RCBO (residual current breaker with overcurrent short circuit 10 kA and earth leakage protection)	Nos	6		
d	6-25A,100 mA sensitivity, 2-Pole RCCB (Residual Current Circuit Breaker)	Nos	30		
e	6 A to 32 A rating, 240/ 415 V, 10 kA, "C" curve, SP MCB [For Lighting and Power]	Nos	164		
f	6 A to 32 A rating, 240/ 415 V, 10 kA, "D" curve, SP MCB [For UPS]	Nos	120		
	TOTAL FOR SECTION A - PANELS AND DISTRIBUTION BOARDS				
5.2	**SECTION B - LT CABLES, CABLE TRAYS, FLOOR TRUNKING**				
5.2.1	Supply, Laying and termination of following 1100V grade **armoured cable** having sector / circular shaped aluminium conductor XLPE insulated cores, laid up, PVC tape wrapped inner sheathed, GI strip / wire armoured and overall extruded PVC sheathed confirming to IS: 7098, laid along with 2 Runs of 12 SWG GI Wire with glands and lugs, ferruling cable tag on both ends, etc. on wall/ trusses/ pole or laid in provided trench/ pipe as per specification and route shown at site and further as directed by Bank / Architect.				
a	3.5 C x 185 sq. mm. Aluminium conductor with (12 SWG) GI earth wire (2 runs)	Rmt	30		
b	4 C X 16 sq. mm. Copper conductor with (12 SWG) GI earth wire (2 runs)	Rmt	60		
c	4C X 10 sq. mm. Copper conductor with (12 SWG) GI earth wire (2 runs)	Rmt	500		
d	4 C X 6 sq. mm. Copper conductor with (12 SWG) GI earth wire (2 runs)	Rmt	240		
e	3 C X 4 sq. mm. Copper conductor with (12 SWG) GI earth wire (2 runs)	Rmt	200		
f	3 CX 2.5 sq. mm. Copper conductor with (12 SWG) GI earth wire (2 runs)	Rmt	175		

5.2.2	Supplying and installing **300 mm width X 50 mm depth X 1.6 mm thickness** of perforated **Hot Dipped Galvanised Iron Cable Tray** (Galvanisation thickness not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts and nuts, etc. as requirred including bends, tees and all accessories complete as required as per layout or directed by Bank / Architect.	Rmt	75		
5.2.3	Supplying, laying and fixing of **300 mm (width) x 38 mm (height) x 1.6 mm (thick) - 3 compartment Raceways (for power/ data/ voice)** under Floor Trunking made of **275 GSM Zinc coated galvanised steel sheet** of minimum 1.6 mm thick, specially treated corrosion proof rectangular profiles for high tensile strength, top and bottom plates are double folded and welded together to the full height of the tracks to give the required rigidity and incuding cutting floor chases as per requirement and mending good the damages clearing the debris as per requirement all complete and also **Trunking should be factory fabricated and alteration/modification will not be accepted.** All joints between two trunking shall be fixed and sealed with standard jointing sleeves as per manufacturer's recommendations	Rmt	600		
5.2.4	Supplying, laying and fixing of **350 mm x 350 mm x 90-110 mm (height) (3 compartment) Access Box** having body made of Galvanised Steel Sheet and top cover made of SS304 stainless steel	Nos	80		
5.2.5	Supplying, laying and fixing of 350 mm x 350 mm x 60-75 mm (height) (3 compartment) **Junction Box** Epoxy coated trap lid to prevent any rust accumulation on the exposed parts Smooth curves on all the 4 sides of the pillars to ensure safety of Cat 6 cables, when pulled Excellent load bearing capacity of 3.6 tons on the trap lid Adjustable levelling screws on all 4 sides to match any floor finish	Nos	60		
5.2.6	Supplying and installing of 100 mmX 100mm X1.6 mm thick Hot Dipped Galvanised Iron wall trunking with cover for Distribution Board Wiring with all accessories and complete as required.	Rmt	50		
	TOTAL FOR SECTION B - LT CABLES, CABLE TRAYS, FLOOR TRUNKING				
5.3	**SECTION C - EARTHING**				
5.3.1	**Chemical Earthing** Supply, Installation, Testing and commissioning of maintenance free earthing comprising of Electrode of 32 mm diameter Low Carbon Steel with 250 micron molecular Copper bonded earthing rod of Length 3m long with 25 kg Carbon based environment friendly back fill ground enhancing compound required to fill up the excavated earth with required quantity complete in all respect. [Chemical earthing]	Nos	2		
5.3.2	**GI Earth Strip** Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	Rmt	300		
5.3.3	**GI Earth Wire** Supplying and laying GI earth wire of high purity of different sizes used for earthing or any other purposes on wall with necessary G. I. Clamps fixed on wall/ cable/ conduit with screws in an approved manner (8 or 10 SWG GI wire)	Rmt	100		
5.3.4	**Single Core Copper Earth Cable** Supply, installation, connection and commissioning of following sizes of 1.1 KV grade PVC flexible Cu conductor cable				
a	1C X 16 sq mm Cu PVC Flexible cable for Earthing	Rmt	50		
b	1C X 6 sq mm Cu PVC Flexible cable for Earthing	Rmt	25		
5.3.5	**Copper Earth Bus** Supplying and installation of 32 x 6 Copper Earth bus	Rmt	8		
	TOTAL FOR SECTION C - EARTHING				
5.4	**SECTION D - POINT WIRING**				
5.4.1	Light Point from DB Supply, installation, testing and commissioning of point wiring for lights / fans / plug points / bell point etc. in FR Rated heavy duty PVC conduit of suitable diameter, surface or recessed mounted complete with junction box, joints, bends, switch box, cover plate etc. including 1.1 KV grade 2 x 2.5 sq. mm.Copper multi-stranded PVC insulated FRLSH wires alongwith 1 x 1.5 sq. mm. Copper multi-stranded PVC insulated FRLSH wires as earth wire. The work shall be completed with all material, labour, chiselling, making good surface etc. in cordination with civil agency complying with IE rules, regulations, standards and local supply authority requirements.All accessories shall be of same make as that of conduit. [**Primary point** from MCB DB to first light point/ occupancy sensor]	Nos	25		
5.4.2	Light Point from DB Supply, installation, testing and commissioning of point wiring from light to light/ ocupansy sensor to ocupancy sensoretc. in FR Rated heavy duty PVC conduit of suitable diameter, surface or recessed mounted complete with junction box, joints, bends, switch box, cover plate etc. including 1.1 KV grade 2 x 2.5 sq. mm.Copper multi-stranded PVC insulated FRLSH wires alongwith 1 x 1.5 sq. mm. Copper multi-stranded PVC insulated FRLSH wires as earth wire. The work shall be completed with all material, labour, chiselling, making good surface etc. in cordination with civil agency complying with IE rules, regulations, standards and local supply authority requirements.All accessories shall be of same make as that of conduit. [**Secondary poin**t from MCB DB to first light point/ occupancy sensor]	Nos	25		

5.4.3	Primary Light Point Supply, installation, testing and commissioning of point wiring with 3 x 1.5 sq mm 650 V pvc insulated FRLSH wire from switch board for lights / fans / plug points / bell point etc. in FR Rated heavy duty PVC conduit of suitable diameter, surface or recessed mounted complete with junction box, joints, bends, switch box, cover plate etc. including circuit wiring 1.1 KV grade 2 x 2.5 sq. mm.Copper multi-stranded PVC insulated FRLSH wires alongwith 1 x 1.5 sq. mm wires from DB to switch board and switch board to switch board. PVC insulated FRLSH wires as earth wire with modular surface/recessed mounted switch. The work shall be completed with all material, labour, chiselling, making good surface etc. in cordination with civil agency complying with IE rules, regulations, standards and local supply authority requirements. All accessories shall be of same make as that of conduit. [Primary point from d.b to switch board to first light point.	Nos	100		
5.4.4	Secondary Light Point Supply, installation, testing and commissioning of point wiring with 3 x 1.5 sq. mm 650 v pvc insulated FRLSH wire loping from light to light etc. in FR Rated heavy duty PVC conduit of suitable diameter, surface or recessed mounted complete with junction box, joints, bends, switch box, cover plate etc. including curcit wiring 1.1 KV grade 2 x 2.5 sq. mm.Copper multi-stranded PVC insulated FRLSH wires alongwith 1 x 1.5 sq. mm wires from DB to switch board and switch board to switch board. PVC insulated FRLSH wires as earth wire with modular surface/recessed mounted switch. The work shall be completed with all material, labour, chiselling, making good surface etc. in cordination with civil agency complying with IE rules, regulations, standards and local supply authority requirements. All accessories shall be of same make as that of conduit. looping from light to light.	Nos	200		
5.4.5	**PVC Conduit** Supplying and fixing of following sizes FR heavy duty PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
a	25 mm	Rmt	50		
b	32 mm	Rmt	50		
5.4.6	**Submain Wiring** Wiring for submain wiring alongwith earth wire with the following sizes of FRLSH PVC insulated Copper conductor wires in surface/ recessed FR rated heavy duty conduit as required. [cost should include cabling along with FR rated heavy duty PVC Conduit]				
a	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire.	Rmt	100		
b	2 X 4 sq. mm + 1 X 4 sq. mm earth wire.	Rmt	100		
5.4.7	**Primary Power Point (UPS and Raw powerpoint)** Supply, installation, testing and commissioning of following UPS/ Raw Power outlets along with modular switch (Push to ON and Push to OFF), modular plate, suitable GI box along with FR rated heavy duty PVC Conduit and blanking plate wherever required complete in all respect. The switch boards are to be concealed inside the partition of the cubicles/ walls/ modular partition grooves along with making good chases to the damaged portion of the wall, column to uphold the architectural beauty. The item shall include supply and laying of 3C X 4 Sq, mm. (P+N+E) FRLSH Copper conductor flexible cable of 1.1 KV grade from the UPS/ Raw Power DB to the respective power outlets through pre laid conduits/ raceways and terminations at both end complete in all respect.The tagging annd ferruling of cables is to be done at both ends. [For work station/ printer/ cabin working table/ reception/ meeting hall area etc.]				
a	supply and installation of 3nos modular 5 A 3pin sockets below table and 1 NOS 16A modular switch above table including wiring modular junction box etc. (UPS Point from DB to first point along with 3C X 4sq mm cable)	Nos	90		
b	supply and installation of 2nos modular 5 A 3pin modular sockets + 2nos 5A modular switch above table including wiring modular junction box etc. (Raw powerpoint from DB to first point along with 3C X 4sq mm cable)	Nos	90		
c	With 1 no. 3 module modular switch boards with 1 no. of 6/16A, 240 V modular socket (Shuttered) controlled by 1 no. 16A modular switch from DB to first point along with 3C X 4sq mm cable	Nos	50		
5.4.8	Secondary Power Point (UPS/ Raw powerpoint loop from primary as mentioned above) Supply, installation, testing and commissioning of following UPS/ Raw Power outlets along with modular flat switch (Push to ON and Push to OFF with LED indicator), modular plate, suitable GI box and blanking plate wherever required complete in all respect. The switch boards are to be concealed inside the partition of the cubicles/ walls/ modular partition grooves along with making good chases to the damaged portion of the wall, column to uphold the architectural beauty. The item shall include supply and laying of 3C X 2.5 Sq, mm. (P+N+E) FRLSH Copper conductor flexible cable of 1.1 KV grade from one Power Point to next power outlets through pre laid conduits/ raceways and terminations at both end complete in all respect.				
a	supply and installation of 3nos modular 5 A 3pin sockets below table and 1 NOS 16A modular switch above table including wiring modular junction box etc. (UPS loop Point)	Nos	300		
b	supply and installation of 2nos modular 5 A 3pin modular sockets + 2nos 5A modular switch above table including wiring modular junction box etc. (Raw loop powerpoint)	Nos	300		
c	With 1 no. 8 module modular switch board with 3 nos. of 6A, 240 V modular sockets (Shuttered) controlled by 2 no. 6A modular switch with LED indicator **[For TV Point] loop from switch board.**	Nos	50		
d	With 1 no. 3 module modular switch boards with 1 no. of 6A, 240 V modular socket (Shuttered) controlled by 1 no. 6A modular switch	Nos	70		
e	With 1 no. 3 module modular switch boards with 1 no. of 6/16A, 240 V modular socket (Shuttered) controlled by 1 no. 16A modular switch.	Nos	20		

5.4.9	Primary Power Point (UPS/ Raw powerpoint) Supply, installation, testing and commissioning of following UPS/ Raw Power outlets along with modular flat switch (Push to ON and Push to OFF with LED indicator), modular plate, suitable GI box and blanking plate wherever required complete in all respect. The switch boards are to be concealed inside the partition of the cubicles/ walls/ modular partition grooves along with making good chases to the damaged portion of the wall, column to uphold the architectural beauty. The item shall include supply and laying of 3C X 2.5 Sq, mm. (P+N+E) FRLSH Copper conductor flexible cable of 1.1 KV grade from one Power Point to next power outlets through pre laid conduits/ raceways and terminations at both end complete in all respect.				
a	With 1 no. 3 module modular switch boards with 1 no. of 6A, 240 V modular socket (Shuttered) controlled by 1 no. 6A modular switch **[For Miscellaneous, standalone power points and Xerox Machine etc.]**	Nos	100		
5.4.10	Industrial type socket outlet Supplying and fixing 20 amps, 240 volts, SPN industrial type, socket outlet, with 2 pole and earth, metal enclosed plug top alongwith 20 amps "C" curve, DP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	Nos	6		
5.4.11	Shifting,removal of all connected cables and re-installation of existing electrical panel including required cables in server room at 13th floor (another location at 13th floor and 15th floor) complete as required as per site requirement.	Job	1		
	TOTAL FOR SECTION D - POINT WIRING				
5.5	**LIGHT FIXTURES**				
	LED LIGHT FIXTURES (COMMERCIAL TYPE ONLY)				
5.5.1	**Recessed Downlighter-1** Supplying, installation, testing and commissioning of Recessed mounted **15 W** Round Shape Downlighter with high performance LEDs, suitable for mounting with POP/ Armstrong/Grid ceiling, pressure die-cast aluminium heat sink & PC diffuser in white powder coated finish with integral electronic low THD (<10%) LED driver, High efficiency long life SMD LED package in integral module with lumen efficacy of ≥110 lm/W , with deep recessed, glare free, Powered by an integrated driver, SELV Output electronic LED driver (SMPS based constant current supply) with Output Short-circuit protection, Surge protection & other reliability test. Lumen Output of 1320 to 650 lumens.CRI >80, Color temperature **4000K/5700K**, THD <10% and PF >0.95,IP40,IK03.Life class of 50,000 hrs @ L70B50, Operating Temperature:-10 TO +35 DEG.C; Input Supply Voltage Range:140-270 V, Frequency :50-60 HZ; Internal Surge Protection:3 KV; Protection : Reverse Polarity, Open & Short Circuit. DRIVER SAFETY REQUIREMENT STANDARDS :IS 15885-2-13, PHOTO BIOLOGICAL SAFETY NORMS: IS 16108, BIS Certified., CERTIFICATION: LM 79 FOR LUMINAIRE LM 80 FOR LED SOURCE. The cost includes termination from ceiling rose to light fixture with 3Cx 1.5 Sq mm FRLS copper flexible cable and suitable flexible conduit. Fixture should be suitable for 130- 150 mm ceiling cutout and height of fixture should be ≤50mm **[For Cabin/Workstation]** **Havells - Ziva Deep Recessed or Signify Greenperform sleek or Wipro Mollis or equivalent in approved makes as approved by Bank/ Architect**	Nos	300		
5.5.2	**Linear Luminaire 2** Supplying, installation, testing and commissioning of LED **25 W** , Suspended/ Recessedlinear 4ft luminaire (60 to 70 mm width) suitbale for mounting with POP/ Armstrong/Grid/ actual ceiling with safety chain, fixture made of Aluminum extruded housing in white/silver powder coated finish and plastic moulded end caps.High transmittance Prismatic diffuser for glare free.High efficiency long life LED package in integral module with lumen efficacy > 100 Lm/W and viewing angle of 120° to ensure better uniformity.Powered by an integral isolated low THD electronic LED driver (SMPS based constant current supply) with output short circuit protection, surge protection. Lumen Output of 2000 to 2500 lumens.CRI >80, Color temperature **4000K/5700K,** THD <10% and PF >0.90,IP20,IK03.Life class of 50,000 hrs @ L70B50, Operating Temperature:-10 TO +45 DEG.C; Input Supply Voltage Range:140-270 V, Frequency :50-60 HZ; Internal Surge Protection:4 KV; Protection : Reverse Polarity, Open & Short Circuit. DRIVER SAFETY REQUIREMENT STANDARDS :IS 15885-2-13, BIS certified; PHOTO BIOLOGICAL SAFETY NORMS: IS 16108; CERTIFICATION: LM 79 FOR LUMINAIRE LM 80 FOR LED SOURCE. The cost includes termination from ceiling rose to light fixture with 3Cx 1.5 Sq mm FRLS copper flexible cable and suitable flexible conduit **(Corridor, Lift Lobby, Reception,Cabin and Office area)** **Havells- Destello series or Signify Pureline or Wipro Axeon/ Inspiro or equivalent in approved makes as approved by Architect**	Nos	7		

5.5.3	**Linear Luminaire 3** Supplying, installation, testing and commissioning of LED **40W** , Suspended/ Recessed linear 8ft. luminaire (60 to 70 mm width) suitbale for mounting with POP/ Armstrong/Grid/ actual ceiling with safety chain, fixture made of Aluminum extruded housing in white/silver powder coated finish and plastic moulded end caps.High transmittance Prismatic diffuser for glare free.High efficiency long life LED package in integral module with lumen efficacy > 100 Lm/W and viewing angle of 120° to ensure better uniformity.Powered by an integral isolated low THD electronic LED driver (SMPS based constant current supply) with output short circuit protection, surge protection. Lumen Output of 4500 to 5000 lumens.CRI >80, Color temperature **4000K/5700K**, THD <10% and PF >0.90,IP20,IK03.Life class of 50,000 hrs @ L70B50, Operating Temperature:-10 TO +45 DEG.C; Input Supply Voltage Range:140-270 V, Frequency :50-60 HZ; Internal Surge Protection:4 KV; Protection : Reverse Polarity, Open & Short Circuit. DRIVER SAFETY REQUIREMENT STANDARDS :IS 15885-2-13, BIS certified; PHOTO BIOLOGICAL SAFETY NORMS: IS 16108, CERTIFICATION: LM 79 FOR LUMINAIRE LM 80 FOR LED SOURCE. The cost includes termination from ceiling rose to light fixture with 3Cx 1.5 Sq mm FRLS copper flexible cable and suitable flexible conduit **(Lift Lobby, Reception and Workstation Passage)** **Havells- Destello series or Signify Pureline or Wipro Axeon/ Inspiro or equivalent in approved makes as approved by Architect**	Nos	27		
5.5.4	**(2'X2') Luminaire** Supply, Installation, Testing and Commissioning of **36W,** 2x2 Panel recess mounting luminaire with high performance LEDs, suitable for Armstrong/Grid ceiling with safety chain.CRCA powder coated white after phosphochromate treatment and High transmittance opal diffuser with special glare cut optics.High efficiency long life LED package in integral module with System lumen efficacy of >100 lm/W and viewing angle of 120° to ensure better uniformity. UGR values below 19 at 4H*8H across and along the line of sight, Compliance to EN-12464-1 : Luminaire luminance < 3000 cd/m2 between 65-90 deg elevation angle. Powered by an independent Isolated, SELV Output electronic LED driver (SMPS based constant current supply) with Output Short-circuit protection, Surge protection & other reliability test. Lumen Output of 2400 to 2800 lumens.CRI >80, Color temperature **4000K/ 5700K**, THD <10% and PF >0.95,IP20,IK03.Life class of 50,000 hrs @ L70, Operating Temperature:-10 TO +45 DEG.C; Input Supply Voltage Range:140-270 V, Frequency :50-60 HZ; Internal Surge Protection:4 KV; Protection : Reverse Polarity, Open & Short Circuit. DRIVER SAFETY REQUIREMENT STANDARDS :IS 15885-2-13, BIS certified; PHOTO BIOLOGICAL SAFETY NORMS: IS 16108, D; CERTIFICATION: LM 79 FOR LUMINAIRE LM 80 FOR LED SOURCE. The cost includes termination from ceiling rose to light fixture with 3Cx 1.5 Sq mm FRLS copper flexible cable and suitable flexible conduit. **Havells- Plano G2 or Signify Fullglow or Wipro Immaculate NXG or equivalent in approved makes as approved by Architect**	Nos	60		
5.5.5	**Tube Light-Batten** Supply, Installation, Testing and Commissioning of **36W** linear 4ft LED integrated batten made of ultra slim co-extruded polycarbonate channel with housing part in white finish & diffuser part in reeded opal finish.White finish ABS end caps with decorative circular coloured polycarbonate cap snap fitted on the end cap to enhance the aesthetic of the fixture. These end caps are snap-fitted to the fixture.High efficiency long life LED with lumen efficacy of 100 lm/W with viewing angle of 120º.Powered by an integral isolated low THD electronic LED driver (SMPS based constant current supply) with output short circuit protection, surge protection.Can be fixed directly into the wall/ ceiling by means of mounting SS clips provided with the fixture. Lumen Output of 1500 TO 2000 lumens with System efficacy of > 90lm/W .CRI >80, Color temperature **6500K**, THD <10% and PF>0.95,IP20 . Life class of 35,000 hrs @ L70, Operating Temperature:-10 TO +45 DEG.C; Input Supply Voltage Range:140-270 V, Frequency :50-60 HZ; Internal Surge Protection: 4KV; Protection : Reverse Polarity, Open & Short Circuit. DRIVER SAFETY REQUIREMENT STANDARDS :IS 15885-2-13,BIS CERTIFIED; PHOTO BIOLOGICAL SAFETY NORMS: IS 16108, CERTIFICATION: LM 79 FOR LUMINAIRE LM 80 FOR LED SOURCE. The cost includes termination from ceiling rose to light fixture with 3Cx 1.5 Sq mm FRLS copper flexible cable and suitable flexible conduit. **(AHU & Electricals Room.)** **Havells- Lumiline or Signify SmartBright or Wipro OPtima or equivalent in approved makes as approved by Architect**	Nos	20		
5.5.6	Supply Installation,Testing and Commissioning of **LED Strip** of 5W/meter alongwith Driver 5 meter, having color temprature of 4000K/3000K for cove with all accessories etc. The cost includes termination from ceiling rose to light fixture with 3Cx 1.5 Sq mm FRLS copper flexible cable and suitable flexible conduit **(Cove lighting)** **Havells- Flexiline or Signify Flexcove or Wipro LS27 or equivalent in approved makes as approved by Architect.**	Rmt	300		
5.5.7	Supply Installation,Testing and Commissioning of **32 mm x 25 mm LED profile light in conceled / surface** alongwith Driver with all accessories. 24W, 2/4ft conceled 1100/2200mm(With required suspension kit) LED batten with System efficacy is 115 lm/W. . IP20 protection given.The rated life of LED at 50,000 hrs with compliance to LM80. CCT of LED to be 4000K/ 6500K along with CRI≥80.LM 80-08 compliant LEDs should be provided. Product should have IP20 protection. LEDs used in the product shall comply with EN 62471 for Photo-biological safety and certificate for the same from manufacturer shall be provided. The drivers used is EMI/EMC complaint,SDCM < 5, with a power factor of more than 0.9, having a surge protection of minimum 3.5 KV with short circuit and reverse polarity protection. The THD maintained at less than 10% with driver operating temperature range of 0°C to 45°C Product is suitable to operate in 140 - 270V Ac range. service life is 5000K as per L70B50. The cost includes termination from ceiling rose to light fixture with 3Cx 1.5 Sq mm FRLS copper flexible cable and suitable flexible conduit . **approved by Architect.**	Rmt	30		

5.5.8	**Occupancy cum Presence Sensor** Supplying, installation, testing and commissioning of ceiling recessed daylight - occupancy ON/OFF sensor with passive infra-red (PIR) based sensors, Recess mounted, movement cum presence detector with dual lens, 360 degree angle of view. Detection range for presence 6 m x 8 m. Detector should have separate off time delay setting (up to 30 mins) and a daylight override function to disable artificial light in case of excess daylight. The range of lux level setting should be available from 250-1000 lux.(Sensor should have provision of masking a portion of sensing field with retractable shield as required to prevent nuisance detection from adjacent doorways or corridors. Sensor should have daylight override feature available making it possible to prevent automatic switch on of lights when sufficient daylight is available for additional savings.). Similar to Philips Cat: LRM1071 or equivalent	Nos	50		
	TOTAL - LIGHTING FIXTURES				
	TOTAL ELECTRICAL WORKS				
6	**HVAC WORKS**				

6.1	**CHILLED WATER PIPING, VALVES & ACCESSORIES (INCLUDING INSULATION) - SECTION 'A'**				
6.1.1	**CHILLED WATER PIPING - SECTION 'A'**				
	Supplying, laying/ fixing, testing and commissioning of following nominal sizes of chilled water piping inside the building (with necessary clamps, vibration isolators and fittings but excluding valves, strainers, gauges etc.) duly insulated with following closed cell elastomeric nitrile rubber of minimum 45 Kg / cu m density, thermal conductivity 0.037 W/MK or better at 20 deg mean temperature class 'O' insulation applied by suitable adhesive complete including repairing of damage to building etc. as per specifications and as required complete in all respect.				
	Note: The Pipes of sizes 150mm & below shall be M.S. 'C' class as per IS : 1239 and pipes size above 150mm shall be welded black steel pipe heavy class as per IS: 3589, from minimum 6.35mm thick M.S. Sheet for pipes upto 350 mm dia. and from minimum 7mm thick MS sheet for pipes of 400 mm dia and above. (Added Specs as per SBI requirement : Pre Coated with Elastomeric foam based on synthetic rubber (NBR) with reinforced Glass Cloth)				
	Vendor to employ "Class A" welder for pipe welding. Contractor should submit the certificate for the same.				
a	80mm dia. (32 mm thick insulation)	Rmt	55		
b	32 mm dia(19 mm thick insulation)	Rmt	50		
c	25 mm dia(19 mm thick insulation)	Rmt	30		
6.1.2	**CONDENSATE DRAIN PIPING**				
	Supplying, Installation, testing and commissioning of Extra Hard PVC 6 kg/cm2 class drain piping duly insulated with 9 mm class 'O' insulation & necessary supports.				
a	50 mm NB	Rmt	12		
b	32 mm NB	Rmt	58		
6.1.3	**Balancing Valve**				
	BALANCING VALVE WITH BUILT IN MEASURING FACILITY with C I Body flanged construction with EPDM coated disc with long pitch ith protected out pipe insulation & PN 16 pressure rating for chilled hot water circulation as specified.				
a	80mm NB	Nos.	3		
6.1.4	**Butterfly valves**				
	Supplying, fixing, testing and commissioning of following valves, strainers, gauges in the chilled water plumbing duly insulated to the same specifications as the connected piping and adequately supported as per specifications. BUTTERFLY VALVE (MANUAL) with CI body SS Disc, Nitrile Rubber Seal & O-Ring PN-16 pressure rating for chilled water/hot eater circulation as specified				
a	80mm NB	Nos.	18		
6.1.5	**3 Way Modulating Valve**				
	Supply, installation, testing & commissioning of 3 way Diverting ON/OFF valves of forged brass body in a single body, flow regulation cartridge assembly shall be precision ground, 304 SS and shall be available in three KPaD control range, minimum flow range shall be capable of being activated by minimum 10 KPa & shall be capable of controlling flow with in ± 5% of rated flow. The actuator shall be for ON/OFF operation of valve & shall be suitable for 230 ± 10% V & 50 ± 3% Hz. The valves shall be complete with thermostat & control wiring.				
a	80mm NB	Nos.	5		
6.1.6	**Ball Valve for Drain, Ductable & Header Tapping**				
	Supply, installation, testing and commissioning of ball valves complete with heavy duty PN 16 bronze forged body, chrome plated bronze ball and control level etc. Insulation shall be as per the connected chilled water piping.				
a	32 mm NB	Nos.	3		
6.1.7	**Y Strainers**				

	Y-STRAINER of Ductile CI Body flanged ends with stainless steel strainer for Chilled / Hot Water Circulation including insulation as specified.				
a	80mm NB	Nos.	3		
6.1.8	**Miscellaneous**				
a	Supply, installation, testing and commissioning of Automatic Air vents - 15/25mm dia.		3		
b	Providing and fixing in position the industrial type pressure gauges with gun metal / brass valves complete as required	Nos.	6		
c	Providing & fixing in position industrial type mercury thermometers complete etc. as required.	Nos.	6		
6.1.9	**Rubber Below**				
	Supply / Installation / Testing / commissioning Single Arch Rubber Bellows of following sizes :				
a	80mm NB	Nos.	6		
6.1.10	Reducers, M.S. 'C' class as per IS : 1239, Seamless				
a	100mm X 80mm	Nos.	6		
	SUB TOTAL - SECTION 'A'				
6.2	**AIR HANDLING UNITS (SMART AHUs) - SECTION 'B'**				
	Air Handling Units & Fan Coil Units (With Thermal Break Profile)				
	Supply / Installation / Testing / commissioning Of Floor Mounted Horizontal Integrated Air Handling Units (With EC Fans) of following specifications:				
	Panel: 43mm +/- 2mm thick double skin sandwich panels with rockwool insulation of density 60 kg/cum, The sheet thickness shall be minimum 1.00 mm for the outer skin and 0.8 mm thickness for the inner skin of GI.				
	Filtration Section: It shall be provided with 2 stage combination filters, washable type of MERV-8 + MERV-13 filtration levels				
	Coil Section: Chilled Water Coil 6/8 row deep constructed with Aluminium fins of minimum 0.11mm thickness and copper tubes of minimum 29 Gauge thickness. The coil section shall be equipped with factory fitted pressure independent control valves. The coil face velocity shall not exceed 2.5m/sec.				
	UV Lamp : AHU coil mounted UVGI system for maintaining Indoor Air Quality & Deep Coil Cleaning. The system must include UV modules with parabolic reflectors to ensure that no stray UV-C radiation is leaked. Calculated lamp watts per square foot of coil shall demonstrate greater than 7 watts per square foot of coil. The UVGI Equipment shall be listed to UL 1995 and UL 2043. UVGI system supplied must be in strict conformity with the specifications.				
	Drain Pan: Condensate drain pan shall be fabricated from 18G SS-304 powder coated, Double insulated with 19mm thick closed cell elastomeric insulation.				
	Fan Section : Backward Curved High Efficiency, Low Noise Plug type EC fans, Vibration isolators, Fan section access door, fire retardant canvass connection at fan suction and damper at the outlet of unit. Vision Window to be provided for the motor section.				
	The selections for Floor mounted units shall be done considering the optimum Efficiency & Low Noise level with compact design of the units. The Noise Levels shall be ≤ 60 dBA at 2m distance from the AHU casing perpendicular to air flow path and ≤ 64 dBA at 1m from the mixing box & supply air damper in the air flow path.				
	The Filters & UVGI system for the cooling coil shall be supplied and installed by AHU manufacturer at factory only.				
	Terminal box with MCB, Control Box, auto/manual selector switch & internal power/ control wiring to be provided by the AHU manufacturer. Potentiometer also to be provided for manual controlling of the EC Fan.				
	In-Built Electrical starter Panel with Auto / Manual switch and incomer power terminal.				
	Instrumentation Kit to be provided to give out the following option: 1> Supply air temperature 2> Return air temperature 3> Chilled water in temperature 4> Chilled water out temperature 5> DP switch across filter for filter clog				
	Controller module with RS 485 port compatible with BMS, on board MODBUS protocol with touch screen to display following: 1> EC fan operation status 2> Chilled water valve operation status 3> AHU power consumption 4> Chilled water in/out Temp 5> Common Alarm Controller shall also have fire trip alarm to shut AHU in case of signal from fire panel				

	Quoted cost shall include control & starter panel, transformer for Energy valve, copper armoured cable from control panel to motor, copper earthing, copper armoured control cabling and hook-up to its controller. The control & starter panel shall be complete with necessary control, including OLP, SPP, ON/OFF push buttons with ON indications, 2 nos. non polarised NO-NC contacts tripping on signal from Fire Dampers / Fire Alarm Panel.				
	Cost of In-Built VFD, In-Built Panel (for all units), DDC Controller, Power & Control Cabling (for all units) to be included				
	AHU may be assembled at site by manufacturer if required as per site condition.				
	ISP ≤ 50 mm				
	The AHU selection shall be :				
	AHU TR / CFM / ESP (mm Wg) / Type				
6.2.1	**34 / 13600 / 38 / Floor Mounted**	Nos.	3		
6.2.2	**Fan Coil Units (FCU'S) - Concealed, Ceiling Hung, Horizontal Type - Mid Static 3RD with Dual Fluid (CHW + CHW) Type** **The FCU shall be suitable for operating on existing water cooled as well as air cooled chiller.**				
	Supply, installation, testing & commissioning of ceiling suspended, horizontal type of blow through design, complete with 3 row deep copper tube and aluminium fins dual chilled water coil & CHW System, very low noise centrifugal blower & motor, fabric filter, stainless steel duly insulated main & auxiliary drain pans, electrical terminal strip, copper pipes for coil connections, wiring in conduit upto thermostat box. The unit shall be complete with fire retardant flexible connection at the outlet.				
	The FCU motor shall be three speed type & shall be suitable for single phase, 220±6% volts, 50Hz electrical supply.				
	The necessary supporting mechanism with GI suspension rods, GI channel, dash fasteners & vibration isolators to be included.				
	Cost of Digital Thermostat and approx. 6m connected cabling will be included in the FCU Cost.				
	The FCU capacities shall be :				
	2.0TR (CHW + CHW) - Server Room (10~12mm ESP) (1W+1S)	Nos.	2		
6.2.3	Supply of Remote control				
a	Corded Remote control for Ductable	Nos.	2		
6.2.4	Supply of factory Fitted Insulated Valve station consist of Ball Valve, Ball Valve with Strainer & electronic PIBCV valves in a single body with Auxiliary drain tray as per specifications suitable for the above mentioned chilled water cassette units.	Sets	2		
6.2.5	Supply, Installation, testing & Commissioning of Thermostat with inbuilt microprocessor based controller with SV PV to modulate electronic PIBCV valves.	Sets	2		
6.2.6	Sequential Timer				
	Supply, installation, testing, commissioning of Sequential Timer 4/6/8/12 Hrs. settings with all cabling require from unit to timer and other accessories	Nos.	1		
	SUB TOTAL - SECTION 'B'				
6.3	**VENTILATION FANS - SECTION 'C'**				
	INLINE / CABINET FANS				
	The inline fans & Cabinet fans shall be complete with Centrifugal fan, unit casing access door, A/C contractor to include all accessories for installation of inline fan.				
	Inline Ducted Circular / Rectangular fans shall be direct driven type with all accessories etc. complete as per specifications & drawings shall be included.				
	(Installation of fans shall mean unloading, lifting-shifting, positioning, levelling & installation in place)				
6.3.1	**Propeller Exhaust Air Fan** : Supply / Installation / Testing & Commissioning of Wall Mounted Exhaust Air Units of following capacities :				
a	350 CFM	Nos.	1		
6.3.2	**EXHAUST AIR CABINET FAN :-** Supply, installation, testing and commissioning of Exhaust air cabinet Fan with motor				
a	550 CFM (Static pressure upto 15 mm)	Nos.	1		
b	300 CFM (Static pressure upto 15 mm)	Nos.	2		
	SUB TOTAL - SECTION 'C'				
6.4	**SHEET METAL WORKS - SECTION 'D'**				

6.4.1	Supply, Installation, Testing, Commissioning of FACTORY / SITE FABRICATED rectangular sheet metal ducts, as per specifications detailed in tender, made of Class VIII GP sheet as per SMACNA Standard for medium pressure air flow with MS angle/TDF flanges, supports, anchor fasteners, food grade gaskets, elbows, splitter dampers, vanes, hangers, supports, bends, transitions, reducers, end caps, collars and RTV sealant etc in accordance with the approved shop drawings. it is mandatory to use factory fabricated ducts for minimum 85% of the ducting system. Use of Site fabricated ducts should be restricted to only 'to suit' pieces.				
	Cold rolled sheets continuous galvanized sheet steel with zinc coating as per class VIII confirming to IS:277-1962 (revised)(where ever specified) of LFQ (Lock Forming Quality) grade. Galvanizing shall be of 120gms/sq. m (Total coating on both sides)				
	The fabrication of the ducting system for air-conditioning & Ventilation shall confirm to SMACNA-1995 standards ("HVAC Duct Construction Standards - Metal and Flexible - Second Edition - 1995"-SMACNA).				
	G.I. Sheet Metal Duct **(Rectangular)**				
a	1.25mm Ducting - 18 G	m^2	26		
b	0.8mm Ducting - 22 G	m^2	55		
c	0.63mm Ducting - 24 G	m^2	975		
6.4.2	**Grilles & Diffusers**				
	Supply, installation, testing and commissioning of following sizes of				
	Aluminium extruded powder coated continuous grilles with 4 side flanges (colour to match as per architects requirements) In extruded aluminium construction, powder coated. One way/ 2 way fixed deflection - 15deg. with end flanges as required and as shown in the drawings.				
	Note : If required Contractor should blank off the extra portion of				
	grille without additional cost and provide deflection of 0 deg to 45 deg without extra cost				
	Non Vission Door Grille				
	SITC of door transfer grilles with Aluminium construction and including all accessories as specified. Door grille is made of high quality 1.1mm thick Extruded Aluminium sections, and has one side frame with 28mm flange and 40mm depth. The Louvers are made of 1.1mm thick Extruded Aluminium and is shaped to avoid any direct vision & light through the Grill. Louvers are spaced 20mm apart. The Frame and Louvers are Epoxy powder coated.	m^2	5		
6.4.3	Supply, installation, testing and commissioning of GI volume control duct damper complete with neoprene rubber gaskets, nuts, bolts, screws linkages, flanges etc., as per specifications.	m^2	2		
6.4.4	Supplying, Fixing, testing and commissioning of fire dampers in supply air duct/main branch and return air path as and where required of required sizes i/c control wiring, the damper shall be motorized and spring return so as to close the damper in the event of power failure automatically and open the same in case of power being restored. The spring return action shall be inbuilt mechanism and not externally mounted. The damper shall also be closed in the event of fire signal complete as required and as per specifications.				
a	Fire dampers	m^2	5		
b	Actuators	Nos.	6		
6.4.5	**Double Canvass Connections**				
a.	Supply, installation, testing and commissioning of Flexible double Canvass Connections for AHU, FCU & FAN. Supply, fabrication & installation of double canvass (fire retardant) flexible connection as per drawings & specifications.	Nos.	9		
6.4.6	Supplying, Fixing, installation, testing and commissioning of powder coated extruded aluminium continuous Supply/ Return Air Grills in confirmation to SMACNA/IS and as per specifications complete etc. as required.	m^2	26		
6.4.7	Supplying, Fixing, installation, testing and commissioning of thermal insulated flexible duct of following sizes duly supported at regular interval as per site requirement etc. in confirmation to SMACNA/IS and as per specifications complete etc. as required.				
a	250 mm dia	Rmt	6		
b	200 mm dia	Rmt	11		
c	150mm dia	Rmt	19		
6.4.8	**Disc Valves (Round)**				
	Supply, installation, testing and commissioning of Al. extruded powder coated Supply Air Disc Valve (Round). Supply, installation and adjusting of disc valves suitable for exhausting toilet foul air, comprising of an adjustable center cone and coupling sleeve made of Aluminium sheet duly epoxy painted with approved colour. The disc valve shall be fitted with a galvanized steel installation frame and the sleeve shall incorporate a foam-rubber gasket for airtight sealing. The center cone should be adjustable for balancing and with a locking arrangement to maintain the desired flow rate.				
a	150mm Dia	Nos.	9		

6.4.9	Collar Damper				
	Supply, installation, testing and commissioning of Al Collar damper	m^2	7		
6.4.10	Supply Air Diffusers for Modular / Gypsum				
	Supply, installation, testing and commissioning of Al. extruded powder coated Supply Air diffuser with inbuilt butterfly damper & insulated plenum box with Suitable for 600mm x 600mm Gypsum ceiling / Modular Ceiling Provide damper arrangement. Damper should be aluminium powder coated, multiple flap type. Overall size given below. Also with 16 G GSS Butterfly dampers (spigot) with brass bush and operating handle. The damper shall have multiple controlling option and should have provision to lock at any point. The damper should be suitable to the actual CFM. The 4-way square supply air terminal should be in Al powder coated construction with easily removable central core & 4-way uniform air distribution. Factory Installed G.I plenum black painted from inside shall be mounted with a circular neck to accept the insulated flexible duct from side. (Diffuser Shall be with full size 24"x24" Louver with OBD and plenum with insulation/ required neck size connection & as per approved sample. Qty shall be as per approved layout.)				
	32mm nitrile Insulated Plenum with Following Sizes				
a	Outer : 375 x 375 (Square Diffuser) without VCD Neck Size : 225 x 225	Nos.	34		
b	Outer : 600 x 600 (Square Diffuser) without VCD Neck Size : 300 x 300	Nos.	15		
c	Outer : 600 x 600 (Square Diffuser) without VCD Neck Size : 225 x 225	Nos.	58		
d	Outer : 600 x 600 (Square Diffuser) without VCD Neck Size : 375 x 375	Nos.	3		
e	Outer : 450 x 450 (Square Diffuser) without VCD Neck Size : 300 x 300	Nos.	4		
6.4.11	**RETURN AIR Diffusers**				
	Supply, installation, testing and commissioning of Al. extruded powder coated return Air diffuser without damper flush type and removable core construction. Overall size given below.				
	32mm nitrile Insulated Plenum (Square Diffuser)				
a	Outer : 375 x 375 (Square Diffuser) without VCD Neck Size : 225 x 225	Nos.	34		
b	Outer : 600 x 600 (Square Diffuser) without VCD Neck Size : 300 x 300	Nos.	15		
c	Outer : 600 x 600 (Square Diffuser) without VCD Neck Size : 225 x 225	Nos.	58		
d	Outer : 600 x 600 (Square Diffuser) without VCD Neck Size : 375 x 375	Nos.	3		
e	Outer : 450 x 450 (Square Diffuser) without VCD Neck Size : 300 x 300	Nos.	4		
6.4.12	Supply, installation, testing & commissioning of Z-Piece for Return Air with internal acoustic insulation as per drawing complete				
a	650 x 250	Nos.	1		
b	500 x 250	Nos.	31		
	SUB TOTAL - SECTION 'D'				
6.5	**THERMAL & ACOUSTIC INSULATION - SECTION 'E'**				
6.5.1	Supplying and fixing of 19 mm thickness duly laminated aluminum foil of mat finish closed cell Nitrile rubber (Class "O") insulation on existing duct after applying suitable adhesive for Nitrile rubber. The joints shall be sealed with 50 mm wide and 3mm thick self adhesive nitrile rubber tape insulation				
a	19mm thick	m^2	1,050		
6.5.2	Acoustic Insulation For Main Ducting Supply installation of 15 mm thick open cell elastomeric nitrile rubber foam fire retardant class "1", as per the approved shop drawings/ specifications. Density 150+/-10 Kg/m3	m^2	76		
6.5.3	Supplying, fixing acoustic lining on wall and ceiling of AHU rooms With 50mm thick, density 32 kg/cu.m resin bonded glass fiber insulation friction fixed in 610mm x 610 mm frame work made of 25X50X50X50X25 mm made out of 0.6mm thick GI sheet U shaped channel and covered with reinforced fiber glass tissue and finished with 0.80 mm perforated aluminium sheet etc. complete as Required and as per specifications. The insulation shall have fire performance such that it passes class "0" as per BS-476 Part 6 and Class "1" as per BS-476 Part 7 for surface spread of flame as per BS Standards and B-1 as per DIN Standards.	m^2	175		
	SUB TOTAL - SECTION 'E'				

6.6	**BY PASS VAV - SECTION 'F'**				
	Supply/Installation/Testing/Commissioning of Bypass type VAV Box with Thermostat, necessary cabling, Centralised Controller for VFD operation & BMS connectivity for following air quantities -				
	Ultimate airflow control with airflow sensor				
	Specially designed inlet construction facilitates smooth air pattern at inlet				
	Precise air delivery throughout the entire operating range & regardless of the installed inlet conditions.				
	Cross flow sensors & pressure sensing tubes to be embedded in casing				
	Protection to cross flow sensors & pressure sensing tubes				
6.6.1	**For Rectangular Ducting Module**				
	VAV units shall be fabricated of 22 gauge steel, mechanically sealed with gasket & leak resistance construction. It shall have industry standard round inlet to accept either flexible or rigid duct.				
	There should be internally lined casing utilizing open cell elastomeric nitrile foam rubber, fiber free, super silent & microban resistant.				
	Round damper blade shall be constructed of elastomeric gasket sandwiched between two heavy-duty 22 gauge galvanized steel plates, resulting in low-air leakage.				
	Shaft shall be with Delrin bearings and a position indicator for easy identification of damper angle.				
	There shall be 25mm flange connection on the discharge plenum.				
	VAV Terminal Box: Heavy duty 22 gauge casing construction with circular inlet spigot. Industry standard inlet collars with rectangular outlet connection. Internally lined casing utilizing open cell elastomeric nitrile foam rubber, fiber free, super silent & micro ban resistant. Geared combination damper with double nylon bushings for smooth & friction free operation. Standard flange connection on discharge plenum.				
	Actuator : Electronic Modulating damper actuator for adjusting dampers with Control modulating 2...10 V for temperature control to supplying comfort air to the space to satisfy room thermostat demand				
a	CFM Range 100 - 400	Nos.	3		
b	CFM Range 200 - 700	Nos.	21		
c	CFM Range 250 - 1100	Nos.	6		
d	CFM Range 400 - 1600	Nos.	3		
6.6.2	VAV Wiring				
a.	CAT-6 Cable for Thermostat to VAV	RMT	97		
b.	2C x 0.5sqmm Copper Flexible Cable for Looping of VAV	RMT	245		
6.6.3	PVC Conduit for VAV Control Cabling				
a.	25 mm	RMT	245		
6.6.4	PVC Conduit for Thermostat to VAV				
a.	20 mm	RMT	92		
	SUB TOTAL - SECTION 'F'				
	TOTAL HVAC WORKS				
8	**PUBLIC ADRESSAL SYSTEM**				
1	**SECTION A - PUBLIC ADDRESSAL SYSTEM**				
1.1	**Speakers** Supplying, Installation, Testing and Commissioning of 'CEILING SPEAKER, 6W, ABS, 2" + BACK BOX FOR LC5 SPEAKER.	Each	48		
1.2	Voice Evacuation system with integration with Fire Panel ALONG WITH AMPLIFIER	EACH	3		
1.3	EXISTING AMPLIFIER	EACH			
1.4	Cable Supply and laying 2x1.5 sqmm multi stranded copper conductors cable, twisted,Shielded, FRLSH sheathed, armoured control cables.	Meter	500		
1.5	Supply , installation of volume control overide	nos	36		
1.6	Testing, Commissioning of above speakers with seamless intergration with existing PA main controller , amplifier or any other equipments required for 100 % working all complete.	Job	1		
	TOTAL FOR SECTION A - PUBLIC ADDRESSAL SYSTEM				
9	**FIRE FIGHTING SYSTEM**				
1	**SECTION B - FIRE FIGHTING SYSTEM**				

1.1	**Sprinkler** Providing, fixing, testing and commissioning of 15mm dia quartzoid bulb type following sprinklers of rating 68 degree centigrade with required accessories All sprinklers shall be provided with adjustable escutcheons (face plate) with stainless steel finish. All accessories of sprinkler such as escutcheons etc. shall be of same make as that of sprinkler				
	Pendent Sprinklers K=80, TEMP=68deg C Chrome finish, Standard Response. UL Listed / FM approved.	Each	141		
	Upright Sprinklers K=80, TEMP=68deg C Chrome finish, Standard Response, UL Listed / FM approved.	Each	141		
1.1.1	Extended Coverage Horizontal Sidewall Sprinkler TEMP=68deg Chrome finish, Standard Response. UL Listed / FM approved.	Nos.	72		
1.1.2	Rosette Plate from the original sprinkler manufacturer, chrome finished, UL Listed / FM approved.	Nos.	282		
1.1.3	Flow Switch.	Nos.	1		
1.1.4	Flexidrop SS, 1.5m long, braided type, FM approved.	Nos.	1		
1.1.6	Ball Vale - 25 Nb	Nos.	1		
1.1.7	Sight Glass - 25 Nb	Nos.	1		
1.1.9	Ball Vale - 50 Nb	Nos.	0		
1.1.11	Supplying, installing, testing and commissioning of pressure gauges, glycerine filled with SS siphon tube, globe valve and cock 150mm dial, range - 0 to 24 kg/cm2 complete.	Nos.	1		
1.1.12	Structural steel for supports	Kgs.	400		
1.2	**Supply, Installation, Testing and Commissioning (SITC) of the following:**				
1.2.1	GI ERW pipe as per IS 1239 heavy gauge upto 150 mm dia and as per IS 3589 6.3mm thick FE330 grade above 150 mm dia complete with grooved fittings, supports, fire resistant silicon epoxy coating etc. complete as per drawing.				
1.2.1.3	100 NB	Mtrs.	45		
1.2.1.4	80 NB	Mtrs.	117		
1.2.1.5	65 NB	Mtrs.	225		
1.2.1.6	50 NB	Mtrs.	270		
1.2.1.7	40 NB	Mtrs.	180		
1.2.1.8	32 NB	Mtrs.	205		
1.2.1.9	25 NB	Mtrs.	265		
1.2.4.1	100 NB	Nos.	2		
1.3	**Wet type Sprinkler Installation Alarm Control Valve 14 bar and 10 bar rating with matching grooved flanges, complete with test and drain vaves, water motor gong , Bypass arrangement, pressure gauges etc. complete.**				
1.3.3	100 mm dia	Meter	35		
1.3.4	80 mm dia	Meter	90		
1.3.5	65 mm dia	Meter	165		
1.3.6	50 mm dia	Meter	220		
1.3.7	40 mm dia	Meter	180		
1.3.8	32 mm. dia	Meter	155		
1.3.9	25 mm dia	Meter	190		
1.4	**Sprinkler Flexible Pipe** Supplying, installation, testing and commissioning of sprinkler flexible pipe (UL Listed) of stainless steel complete with 15 NPT on reducer thread with maximum working pressure of 175 PSI test pressure of 875 PSI (Burst) with branch line (Inlet) 25mm NPT male thread to sprinkler head (Outlet) 15mm NPT female thread with reducer, nipple, 2 side brackets, center bracket, stockbar of following sizes:				
1.4.1	1500 mm	Each	35		
1.4.2	1000 mm	Each	142		
1.5	**Butterfly Valve** Supplying, fixing, testing and commissioning of double flanged butterfly valve of PN 1.6 rating with bronze/gunmetal seat duly ISI marked complete with nuts, bolts, washers, gaskets conforming to IS 13095 of following sizes as required :				
1.5.2	100 mm dia	Each	2		
1.5.5	50 mm dia	Each	4		
1.6	**RRL Hose** Supplying and fixing 63 mm dia, 15 m long RRL (Reinforced Rubber Lined) hose pipe with 63 mm dia male and female couplings duly bound with GI wire, rivets etc. conforming to IS 636 (type-A) as required:				
1.6.1	Gun Metal	Set	1		

1.7	**First-Aid Hose Reel** Supplying and fixing first-aid Hose Reel with MS construction spray painted in post office red, conforming to IS 884 complete with the following as required: 20 mm nominal internal dia water hose thermoplastic (Textile reinforced) type -2 as per IS: 12585 20 mm nominal internal dia gun metal globe valve and nozzle. Drum and brackets for fixing the equipmets on wall. Connections from riser with 25 mm dia stop gun metal valve and M.S. Pipe and socket				
1.7.1	40 m	Set	3		
1.8	**Flow Switch** Providing and fixing flow switch in following sizes M.S. pipe including Connection etc as required.				
1.8.1	100 mm dia	Each	3		
1.8.2	150 mm dia	Each	2		
1.9	**Pressure Gauge** Supplying and installing pressure gauge of following dia., 0-300 PSI or 0-14 kg per cm square fitted with 12/15 mm dia. pad cock valve and G.I. pipe, elbow etc. complete in all respect				
1.9.1	150 mm dia.	Each	2		
1.9.2	100 mm dia.	Each	5		
1.1 0	**Fire Extinguishers** Supplying and fixing trolly mounted fire extinguishing hand appliances complete in all respect as below:				
1.1 0.1	Supplying and laying trolly mounted ABC powder type fire extinguisher as per IS : 13849 /15683 of 6 kg capacity with necessary accessories.	Each	28		
1.1 0.2	Supplying and laying trolly mounted Carbon Dioxide (CO_2) fire extinguisher of 4.5 kg. capacity cartridge type conforming to IS 2878 /15683 complete in all respect.	Each	2		
1.1 0.3	Supplying and laying Clean Agent standalone ceilling mounted fire extinguisher of 5 kg. capacity with auto discharge mechanism when temperature rises above 68° C, applicable on Class A, B, C and electrically started fire, conforming to IS 2878 /15683 complete erected with necessary MS Hanging rod.	Each	2		
1.1 0.4	Supplying and laying Clean Agent standalone ceilling mounted fire extinguisher of 10 kg. capacity with auto discharge mechanism when temperature rises above 68° C, applicable on Class A, B, C and electrically started fire, conforming to IS 2878 /15683 complete erected with necessary MS Hanging rod.	Each	1		
	TOTAL - FIRE FIGHTING SYSTEM				
10	**FIRE ALARM SYSTEM**				
1	**SECTION C - FIRE DETECTION AND ALARM SYSTEM**				
1.1	**SITC of UL & FM listed Microprocessor based Intelligent and electronically addressable 2 Loop Fire Alarm with telephone. The panel shall be equipped with 15% spare capacity on each loop with each loop having a minimum of 125 detectors and 125 devices in one loop. Complete with 240 volts AC power supply, automatic battery charger, 24 volts SLA maintenance free batteries sufficient for 24 hours normal working, 30 minutes alarm condition. MS Powder coated Housing complete with Detection & Notification Circuits. It should give alert signal to BMS for integration through Modbus**	Each	1		
1.2	**Multisense Smoke Detector** Supplying, installation, testing and commissioning of Addressable Smoke Detector with sounder base. Detector shall have sensitivity range of 0.5 to 4.0% obs/ft. The detector shall have multi co-operative sensing technology for faster response and avoid false alarms. The detector shall have twin bi-colour LED for 360 deg viewing. Addressing shall be with user friendly rotary decimal switches. Designed to meet UL268, 7th Edition	Each	86		
1.3	**Multi-Criteria Thermal Detector** Supplying, installation, testing and commissioning of Addressable Multi-criteria Photo-Thermal Detector with sensitivity range of 0.5 to 4.0% obs/ft.The intelligent multi criteria detection device shall include the ability to combine the signal of the thermal sensor with the signal of the photoelectric signal in an effort to react hastily in the event of a fire situation. It shall also include the inherent ability to distinguish between a fire condition and a false alarm condition by examining the characteristics of the thermal and smoke sensing chambers and comparing them to a database of actual fire and deceptive phenomena. The detector shall have twin bi-colour LED for 360 deg viewing. Addressing shall be with user friendly rotary decimal switches. Designed to meet UL268, 7th Edition	Each	0		

1.4	**Duct Smoke Detector** Supplying, installation, testing and commissioning of Addressable Duct Smoke Detector. The duct detector shall have an air velocity rating from 100 to 4000 ft/min. The detector shall have twin bi-colour LED for 360 deg viewing. Addressing shall be with user friendly rotary decimal switches. Detector shall meet the UL 268 7th edition requirement	Each	10		
			0		
1.5	**Response Indicator** Supplying, Installation, Testing and Commissioning of Response Indicator on surface/recessed MS Box having two LED, metallic cover complete with all connections etc as required.	Each	110		
			0		
1.6	**Isolator Module** Supplying, Installation, Testing and Commissioning of Isolator Module for Isolating short / dewired / loose circuits with automatic resetting arrangement. Isolator Base can also be proposed, however in that case needs to be considered with each detector and module. The device shall have an LED which shall blink in normal state and get steady on activation to monitor the heath status of the device.	Each	14		
			0		
1.7	**Control Module** Supplying, Installation, Testing and Commissioning of Addressable Control Module for Sounder cum Strobes. The control module shall provide supervised NAC output rated at 24VDC, 2A. The device shall have an LED which shall blink in normal state and get steady on activation to monitor the heath status of the device. Addressing shall be with user friendly rotary decimal switches. Module shall be supplied with mounting plate from OEM for ease of installation and maintenance	Each	12		
			0		
1.8	**Relay Module** Supplying, Installation, Testing and Commissioning of Addressable Relay Module for AHU, Access Control, Lifts, Staircase Pressurization and other Third Party Outputs. The relay module shall provide DPDTcontact rated at 24V DC, 2A. The device shall have an LED which shall blink in normal state and get steady on activation to monitor the heath status of the device. Addressing shall be with user friendly rotary decimal switches. Module shall be supplied with mounting plate from OEM for ease of installation and maintenance	Each	4		
1.90	**Manual Call Point** Supplying, Installation, Testing and Commissioning of Addressable Manual Call Point **(Break glass type)**. The device shall have an LED which shall blink in normal state and get steady on activation to monitor the heath status of the device	Each	8		
			0		
1.1 0	**Sounder cum Strobe** Supplying, Installation, Testing and Commissioning of Sounder cum Strobe rated at 75 dBA @ 3m for Audible annunciation and 75cd flashintg at 1 Hz for visual indication.	Each	6		
			0		
1.11	**Monitor Module** Supplying, Installation, Testing and Commissioning of Addressable Monitor Module for flow switches, fire fighting status and other Third Party Inputs. The monitor module shall monitor potential free contacts. The device shall have an LED which shall blink in normal state and get steady on activation to monitor the heath status of the device. Addressing shall be with user friendly rotary decimal switches. Module shall be supplied with mounting plate from OEM for ease of installation and maintenance.	Each	6		
			0		
1.12	**Cable** Supplying and laying of 2x1.5 sqmm twisted fire alarm armoured cable, 600/1000V rated with annealed copper conductor having XLPE insulation, steel wire armouring and FRLSH outer sheathof red colour complete with all the required fixing accessories in complete as required.	Meter	1400		
			0		
1.13	Supply, Installation, testing and commissioning of 8 loop Microprocessor based Intelligent Analog Addressable with each loop catering to 127 devices or 127 modules, 127 Detector per Loop Fire Alarm Panel with 10% overall spare capacity for any interior layout changes during execution work and having BACNET compatibility for integration with BMS System	Each	0		
			0		
1.14	Testing, Commissioning of above fire detection and alarm system with existing fire control panel as per the direction of Client/Archirtect/Consultant complete in all respect for 100% working.	Job	2		
1.15	Voice Evacuation system with integration with Fire Panel		0		
1.16	Supply & Installation of Booster Amplifire shall be compacted above voice evacuation system with having a point of Mic & Audio with usb connectivity		0		
	TOTAL FOR SECTION C - FIRE DETECTION AND ALARM SYSTEM				
11	**FKR & WLD SYSTEM**				
1	**SECTION D - WATER LEAK DETECTION SYSTEM**				

1.1	**Supervising Panel** **Supplying, Installation, Testing and Commissioning of Supervising Panel with Enclosure with LCD Display (4 Lines* 20 English Display): monitor up to 100 of locating panels/modules. Powered with 230 VAC. Dust and splash proof IP65 protection and Capable of monitoring 20,000 meters of Sensing Cable, Once the alarm condition has been cleared, the System shall be capable to reset itself automatically. Fail Safe Loop Back system to be provided. The Panel shall have the event history minimum 896 events**	Each	1		
			0		
1.2	**Sensor Interface Module** **Supplying, Installation, Testing and Commissioning of Sensor interface module along with Enclosure with relay, 230 Vac. Sensor Interface Module monitors up to 200 meters (656 feet) sensing cable. When liquid is detected, the Sensor interface module unit indicates the leak and switches a relay to provide local voltage-free contact closure. Sensor interface module can also communicate to a host monitoring system or directly to a PLC or other host system using standard protocols.Liquid Leak Locating Zonal Module (RS485 Modbus+1 relay without Buzzer) with Fail safe loop back system. If there is a cable break at any point along the sensing cable, the sensing cable length still in connection to the control units shall continue to function and detect leak (if any). This Fail-Safe Loop Back feature (Class A wiring) shall be incorporated as necessity to enhance the system capability. provision for adjusting the sensitivity**	Each	1		
			0		
1.3	**Modular Leader Cable** **Supplying and laying of Modular Leader cable shall be a minimum 3 mtrs connection cable with one end prepared for connection to terminals in control panel / module, and with socket-type plastic connector at other end to connect to the sensor cable / jumper cable.**	Each	1		
			0		
1.4	**Water Sensing Cable** **Supplying and laying of water sensing cable shall be resistant to corrosion. It shall detect the presence of Water as well as slightly corrosive and conductive fluids. The cable shall be constructed of total four wires (two sensing wires and 1 no of Continuity wire and 1 no. of return insulated wires. The cable shall be constructed with no metal parts exposed to the environment.**		0		
	Water Sensing cable, 10 meters / 33 feet	Each	4		
			0		
1.5	**Connectors** **Supplying and fixing of Connectors - Use Jumper cable connector kit only if installing connector kits on bulk sensing cable.**	Each	5		
			0		
1.6	**Hold-down Clips** **Supplying and fixing of Hold-down clips to attach on sensing cables to flat surfaces. To be applied after every 1 meter of Sensing cable**	Packet	1		
			0		
1.7	**Tags** **Supplying and fixing of High-visibility yellow tags to identify sensing cable and record mapped distance. Package contains a permanent marker.Tag attaches to sensing cable by sticking on itself. Use a tag on each length of cable and at mapping points. To be applied after every 3 mtrs.**	Packet	1		
			0		
1.8	**Terminates Sensing Circuit** **Supplying, Installation, Testing and Commissioning of Terminates sensing circuit (Endcaps); has pin-type plastic connector. Required at end of sensing circuit and ends of all branches.**	Each	1		
	TOTAL FOR SECTION N - WATER LEAK DETECTION SYSTEM				
	FKR SYSTEM				
2	**SECTION D - GAS SUPPRESSION SYSTEM**				
2.1	FK-5-1-12 - GAS (kg) -OEM Factory Filled as specified.	Kg	250		

2.2	SITC of PESO Approved UL Listed/Vds Approved Seamless FK-5-1-12 Cylinder and Valve Assembly, OEM Factory filled with FK-5-1-12 Suppression Liquid, pressurised to 25 bar or 42 bar or 70 bar 120 L Cylinder	No.	2		
2.3	SITC of PESO Approved UL Listed/Vds Approved Seamless FK-5-1-12 Cylinder and Valve Assembly, OEM Factory filled with FK-5-1-12 Suppression Liquid, pressurised to 25 bar or 42 bar or 70 bar 120 L Cylinder	No.			
2.4	SITC of PESO Approved UL Listed/Vds Approved Seamless FK-5-1-12 Cylinder and Valve Assembly, OEM Factory filled with FK-5-1-12 Suppression Liquid, pressurised to 25 bar or 42 bar or 70 bar 80 L Cylinder	No.			
2.5	SITC of PESO Approved UL Listed/Vds Approved Seamless FK-5-1-12 Cylinder and Valve Assembly, OEM Factory filled with FK-5-1-12 Suppression Liquid, pressurised to 25 bar or 42 bar or 70 bar 68 L Cylinder	No.			
2.6	SITC of UL Listed High Pressure Nitrogen Pilot Cylinder and Valve Assembly & Pressure Gauge, Safety Burst Disc and facility to mount Low Pressure Switch. Should be capable of Operating up to 12 Novec Cylinders, or actuation tubing of up to 50 meters length. SS Actuation Piping of 200 Mtr per Pilot Cylinder with all fittings on Actuation piping to be considered in this line item. Contractor to submit Design Calculation & Testing to be conducted for actuation tubing between pilot cylinders for DC hall system.	No.			
2.7	SITC of UL Listed/Vds Approved Electrical Actuator for Master Cylinder.	No.	1		
2.8	SITC of UL Listed/Vds Approved Local Manual Actuator	No.	1		
2.9	SITC of UL Listed/Vds Approved Pneumatic Actuator Shipping Assembly with actuation hose & Elbow.	No.	1		
2.1 0	SITC of UL Listed/Vds Approved Discharge hose with Manifold Check Valve for above Cylinders, complete with Listed Adapters & Accessories as required.(only Discharge Hose considered)	No.	1		
2.11	SITC of Actuation Hose	No.	1		
2.12	SITC of Cylinder Strap	No.	2		
2.13	SITC of Silent Type UL Listed/Vds Approved Nozzles, 360 Deg / 180 Deg Throw, selection as per approved hydraulic flow calculations. (For DC Hall) The Noise at 3 feet distance from Nozzle at the Time of Discharge Should be less than 100 dB. (Actual Nos, Sizes and orifices of the Nozzles shall be as per Software flow calculations,Minimum Coverage of Nozzles Should be as per tender Specification).	No.	10		
2.14	SITC of UL Listed/Vds Approved Cylinder Discharge Pressure Switch, Shall be installed on the piping manifold.	No.	1		
2.15	SITC of UL Listed/Vds Approved Cylinder Low Pressure Switch.	No.	1		
2.16	SITC of NOVEC pipes Sch 40; ASTM A106 Gr B, as per flow calculations for the specific hazard volume and stand to hold, position & Support the Manifold and Piping properly. Complete with Pressure testing for piping with nitrogen as per NFPA 2001 & Flushing with Nitrogen prior to handover. Class 400 flanged joint shall be used as per NFPA 2001, (Note-Manifold Should be Sch80)	Lot	1		
2.17	Gas Release panel with hooter cum strobe abd battery backup	No.	1		
2.18	SITC of UL / VdS Listed Manual Abort Stations with DPDT Relay, The Abort will be monitored simultaneously by Fire Alarm and BMS System.Each Unit is provided with a hammer and chain for breaking the protective glass.	No.	1		
2.19	SITC of UL / VdS Listed Manual Release Stations with DPDT Relay and Protective Cover, The Release switch will be monitored simultaneously by Fire Alarm and BMS System.Each Unit is provided with a hammer and chain for breaking the protective glass.	No.	1		
2.2 0	Nitrogen Test	No.	1		
2.21	**Towards Conducting Room Integrity Test : Door Fan test to meet the Requirements of the NFPA 2001, and predicting the efficacy of the Protected Area Enclosure from the perspective of Fire Suppression. Pipig test**	No.	1		
2.22	Caution Label , (Gas discharge sticker LED- Do not enter), (Gas discharge sticker LED-Evacuate)	No.	1		
			0		
	TOTAL - FKR				
11	**Buy Back**				
	Buyback of removed items from 13th floor (part) and 15th floor (full) only (i.e. excluding incoming cables, DBs, panels) as instructed by Bank/ Architect partitions, work stations, frames, aluminum frames, false ceiling, glass items, tables, false flooring with supports, wires, cables, lights, fixtures, switches, AHUs, Ducting allied accesories from AHU room only.	Ls	-1		