

## **DEPARTMENT OF TECHNICAL EDUCATION**

Technical Education Division, Trichy- 20

Technical Education Circle, Chennai –25

**NAME OF WORK:** Provision of Worktable ,Aluminium Partition ,stainless steel hand rail for the main work of Construction of University Scientific Instrumentation Centre (USIC) at Palkalaiperur Campus of Bharathidasan University ,Trichy-24

**Tender Date:** 02.08.2022

**EMD:** 25408/-

Sl. No.	Qty	Description of work	(Figure and works)		Amount
			Rate	Unit	
1	18.00 m3 (Eighteen cubic metre only)	Earthwork excavation for foundation in all soils and sub soils to full depth as may be directed except in hard rock requiring blasting inclusive of shoring shuttering, bailing out water wherever necessary refilling the foundation with excavated earth other than sandy soil in layers of not more than 15 cm thick layers well rammed and depositing the surplus earth within compound in place shown by the departmental officers with an initial lead of 10 metre and initial lift of 2 metre and clearing and leveling the site etc., complete complying with standard specification and as directed by the departmental officers.		1m3 (One cubic metre )	

2		Supplying and fixing in position best approved of BIS quality PVC rain water down fall pipes having a pressure of 4 kg. / sq.cm including cost of necessary PVC shoe, PVC bend, cast iron gratings of required diameter and special clamps, brass screws, nails, etc., and fixing of cast iron gratings at junction of parapet and the RCC roof slab including finishing neatly etc., complete. The rate shall be inclusive of cast of removable cast iron grating. The PVC pipe shall be fixed in wall with special type of "U" clamp at the centre of the pipe line in addition to those for more than 3.0 metre pipe length, etc., complete complying with standard specification.			
a	36.00 Rm ( Thirty six Running metre only)	160mm dia		1 Rm (One Running metre)	
3		Supplying and fixing in position best approved of BIS quality PVC rain water down fall pipes having a pressure of 4 kg. / sq.cm including cost of necessary PVC shoe, PVC bend, cast iron gratings of required diameter and special clamps, brass screws, nails, etc., and fixing of cast iron gratings at junction of parapet and the RCC roof slab including finishing neatly etc., complete. The rate shall be inclusive of cast of removable cast iron grating. The PVC pipe shall be fixed in wall with special type of "U" clamp at the centre of the pipe line in addition to those for more than 3.0 metre pipe length, etc., complete complying with standard specification.			

a	15.00 Rm ( Fifteen Running metre only)	110mm dia		1 Rm (One Running metre)	
4		Supplying and fixing in position of the following PVC specials (SA) of approved quality and brand and conforming to IS specification including necessary adhesive etc.complete			
a	7.00 Nos ( Seven numbers only)	110mm dia PVC Elbow		1 No (Each)	
b	9.00 Nos ( Nine numbers only)	160mm dia PVC Elbow		1 No (Each)	
5		Supplying and Fixing in position best quality PVC Soil Waste pipes (6 Kg / Sqcm) of various sizes having ISI mark and providing leak proof joints including fixing to the wall with special PVC / MS clamps etc., and making connection to all sanitary fittings, dismantling masonry / RCC works wherever necessary and making good the dismantled portion to the original condition etc., complete complying with standard specification and as directed by the departmental officers. (The PVC pipe should be got approved by the Executive Engineer before use on works).			

a	45.00 Rm ( Forty five Running metre only)	160mm dia PVC soil pipe		1 Rm (One Running metre)	
b	98.00 Rm ( Ninety eight Running metre only)	75mm dia PVC soil pipe		1 Rm (One Running metre)	
6	7.50 m2 (Seven point five zero Square metre	Supplying and fixing of plain sheet glass -5.5 mm thick etc., Complete complying with standard specification and as directed by the departmental officers.		1m2 (One Square metre )	
7		Supplying and fixing of precast concrete well rings size of 600mm diameter -300mm height and thickness of 25 mm using cement concrete 1:2:4 (1 part of cement part of sand 4 part of aggregate ) the size of aggregate 10-12 mm and also using nominal reinforcement etc., Complete complying with standard specification and as directed by the departmental officers.			
a	40.00 m2 ( Forty Square metre only)	Soak pit		1m2 (One Square metre )	

8		Supplying and filling in stone jelly in trenches in layers etc., Complete complying with standard specification and as directed by the departmental officers			
a	8.00 m3 ( Eight cubic metre only)	40 mm H.B.G stone jelly		1m3 (One cubic metre )	
b	8.00 m3 ( Eight cubic metre only)	20 mm H.B.G stone jelly		1m3 (One cubic metre )	
9	7.00 Nos  (Seven Numbers only)	Supplying and fixing in position C.P two way bib cock with health faucet etc., complete complying with standard specification and as directed by the departmental officers. (The materials should be got approved by the Executive Engineer before use on works).		1 No (Each)	
10	276.00 m2 ( Two hundred and seventy six Square metre only)	Supplying, fabricating and fixing in position of Aluminium anodised colour matt finish Partition - 1/3 rd Glazed and 2/3 rd PLB. Using Alu. Section of 63.50x38.10x1.28mm both vertically and horizontally and the partition fixed with top with plain glass of 5.5 mm thick & bottom with 12mm thick MDF Board exterior grade both side prelaminated etc., Complete complying with standard specification and as directed by the departmental officers.		1m2 (One Square metre )	

11	27.00 m2 ( Twenty seven Square metre only)	<p>Supplying, fabricating and fixing in position of Aluminium anodised powder coated half panelled with 12mm thick both side prelaminated partile board at bottom and half glazed using 5.50mm thick plain glass at top double leaves door with 10 mm thick Aluminium grill .The outer frame shall be with aluminium box section 101.60x44.45x3.18m at 2.319kg/m and shutter frame made of section with vertical &amp;Top rail 50x44.45x2.50 mm @ 1.292 kg/m bottom rail 100x44.45x2.50 @ 1.974 kg/m .Lock rail 50x44.45x3.18m @ 1.292 kg/m Alu Clips 17.15x17.27x1.50mm @ 0.176 kg/m Alu handle 100x30mm @0.988 kg/m outer frames shall be with aluminium box section 101.60x44.45x3.18m at 2.319kg/m and with the following shutter frame and neccessary accessories such as aluminium clips rubber beading PVC felt ,handle for a length of shutter (both sides) locking arrangements furnitue fittings such as aluminum tower bolts.</p> <p>Manufacturing ,Supplying and fixing of stainless steel hand rails for staircase using 50mm dia 304L grade staunless steel pipe of 1.60mm thick at required locations to a height of 900mm from finished floor level welded to 38mm dia stainless steel pipe post of 1.00mm thick as vertical at 900 mm center with 2 nos of 25mm dia intermediate horizontal stainless steel pipe of 1.60 mm thick in between .The vertical pipe has to be welded to the 100x100x6mm MS base concrete .The rate is inclusive of The Charges for cutting bending welding grinding Polishing etc., Complete complying with standard specification and as directed by the departmental officers.</p>		1m2 (One Square metre )	
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12	27.00 m2 ( Twenty seven Square metre only)	Manufacturing, Supplying and Fixing of Stainless Steel Hand rails for staircase near wet riser using 50mm dia 304L Grade Stainless Steel pipe of 1.60mm thick will be provided with tubular supports made of 304L Grade Stainless Steel pipe of 25mm dia of 1.60mm thick welded to the railing. The supports will be grouted into the wall and provided with 93.00mm thick Stainless Steel circular base plate of 304 Grade. The rate shall included for grouting into concrete with necessary supporting arrangements the hand rail in floor polishing buffing, bonding, cutting, grinding, conveyance, welding charges, electrical charges, etc. complete		1m2 (One Square metre )	
13	50.50 m2 (Fifty point five zero Square metre only)	supply and fixing working table dimensions1.80mx0.90m 0.75m hts as providedtable plywood 19mm thick both side fro mica 0.08 mm thick base frame and vertical 75mmx75 mm types etc., complete complying with standard specification and as directed by the Departmental officers		1m2 (One Square metre )	
14	14.00 Rm ( Forteen Running metre only)	Manufacturing, Supplying and Fixing of Stainless Steel Hand rails for staircase near wet riser using 50mm dia 304L Grade Stainless Steel pipe of 1.60mm thick will be provided with tubular supports made of 304L Grade Stainless Steel pipe of 25mm dia of 1.60mm thick welded to the railing. The supports will be grouted into the wall and provided with 93.00mm thick Stainless Steel circular base plate of 304 Grade. The rate shall included for grouting into concrete with necessary supporting arrangements the hand rail in floor polishing buffing, bonding, cutting, grinding, conveyance, welding charges, electrical charges, etc. complete		1 Rm (One Running metre)	

15	43.00 m2 ( Forty three Square metre only)	Supplying, fabricating and fixing in position Aluminium Anodised natural colour matt finish Four track sliding window in all floors with Aluminium sections of Outer Frame bottom 92.34x46.00x1.50@1.637 kg/m,Top & vertical 92.34x29.70x1.50 at 1.066 kg/m, Shutter vertical 39x20x1.50 at 0.493 kg/m,Top & Bottom 39x20x1.50mm at 0.439 kg/m,Vertical locking arrangement 40x28x1.50 at 0.632 kg/m, the follwing sizes with necessary accessories such as rubber beadings, special hinges, lock, handle including supplying and fixing 4mm thick plain glass including cost of all materials , labours, power consumption required for fabrication , drilling holes in RCC column, slab, masonry walls wherever necessary with power drills to the required extent and make good to the original condition after fixing and also as directed.The aluminium sections are to be anodised with matt finish under electrically controlled in accordance with IS 1868 / 1962 for an average anodic film thickness 15 microns etc., complete.		1m2 (One Square metre )	
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16	60.03 m2 ( Sixty point zero three Square metre only)	Supplying, fabricating, erecting and fixing new GYP BOARD FALSE CEILING using 10mm thick plain sheets of approved quality and design suspended from ceiling using 'U' shaped GI channels of size 25mmx0.55mm thick at 1.2m c/c on both longitudinal and cross direction for vertical supports and fixing 'U' shaped GI channels of size 50mmx30mmx0.55mm thick at 0.90m c/c in cross direction and longitudinal direction respectively for horizontal support by using teak wood reapers at corners and intermediately fixing plaster of paris on the panel provided as per design/pattern given by the site Officer and finishing the ceiling surface with same plaster of Paris materials etc., Necessary openings should be made for providing spot lights, flourescent tubes in the ceiling by using kitply 12mm thick and opening should be covered with acrylic panel		1m2 (One Square metre )	
17	51.00 m2 ( Fifty one Square metre only)	Dismantling lime concrete with floor finish of following thickness with lime concrete of using 20mm thick including finishing the top smooth and forming thread lining and curing etc., complete complying with standard specification and as directed by the departmental officres		1m2 (One Square metre )	

18	334.00 m2 ( Three hundred and thirty fourSquare metre only)	Finishing the top of flooring with granolithic floor finish of following thickness with plain cement concrete of mix 1:2:4 (One cement, two sand and four aggregate) using 20mm / 10 to 12mm ISS gauge hard broken granite stone including finishing the top smooth and forming thread lining and curing etc., complete complying with standard specification and as directed by the Departmental officers		1m2 (One Square metre )	
		Total			
		GST @ 12%			
		Total			

Executive Engineer, PWD.,  
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