

Bill of Quantity (BOQ)

ROOF WATERPROOFING AT POWER HOUSE BUILDING AND MILL BUILDING .

Item No.	Description of Items	UOM	Qty	Unit Rate	Amount (Rs)
	ROOF WATERPROOFING AT POWER HOUSE BUILDING AND MILL BUILDING .				
A	ROOF TREATMENT WORK SLOPED ROOF PORTION : Providing ,shifting ,lifting ,supplying,fixing,placing and laying of all water proofing treatment of roof of power house building (38m elevation) and Mill building (80m elevation) by stepwise application of following :-				
1	SURFACE PREPERATION along with repairing of shrinkage cracks as per directions of Engineer In charge.				
2	Fixing of RIGID INSULATION (EXTRUDED PLYSTRENE BLOCK) of 50mm thickness, shall be laid and fixed as per approved method (with adhesive/manufacture recommended of approved make, may have to be applied on the board against which concrete shall be placed.) over screed concrete. Fillets at junction of roofs and vertical walls shall be provided with same insulating material.				
3	Application and fixing of (1:4) CEMENT SAND PLASTER 15mm thick over polystyrene block with CHICKEN WIRE MESH .				
4	Covering the same with ELASTOMERIC MEMBRANE -1.5mm thick minimum, (which shall be anchored at the vertical brick or RCC wall by (1:4) sand cement mortar and timber all along				
4a	Primer coat- A single coat of this primer shall be applied by brush/spray with airless spray equipment over to be prepared bed as an adhesion coat with an application rate 6-8 sqm per liter depending on the surface porosity.				
4b	Finishing coat - The finishing coats shall consist of two successive liquid coatings of high solid content urethane pre-polymers materials to form an elastomeric membrane. Application shall be brushed or sprayed to form a uniform joint less elastomeric membrane .The overall dry film thickness shall be 1.5mm subject to minimum 750 gm/sqm/coat application.	SQM	9300		
5	The entire area shall be laid and finished with PRESSED PRECAST CONCRETE TILES, (size minimum-600mmx600mm) of 20mm thickness on (1:4) cement sand mortar under bed.				
6	Supplying, mixing and pouring neat CEMENT SLURRY along the groves of pressed precast tiles by leaving top 15mm gap.				
7	The roof treatment shall be finished good by providing, application of POLYSUPHIDE/POLYURTTTHANE/SILICON JOINT SEALENT in both direction of the pressed tiles as per drawing.				
8	Minimum 50mm Groove at parapet wall to be filled up with 1:4 CEMENT AND SAND MORTOR over extended water water proofing treatment and finished good.				
9	Finishing of fillet portion shall be done with neat cement finish with coving of 150mm above finished surface.				

	<ul style="list-style-type: none"> • Rate should be inclusive of surface preparation, along with repairing of shrinkage cracks , lifting , shifting of all materials to roof of respective building , provision of all types of tools, tackles, gadgets, chasing , chamfering at all corners neat cement at required , safety norms, platfroms, walkways ,staggering and scaffolding ,fixing of tiles, Conducting leak proof test , any other works to complete the work as per EIC) • Guarantee shall be for materials and workmanship for period of minimum of 10 years. 				
B	ROOF TREATMENT WORK FLAT ROOF PORTION : Providing ,shifting ,lifting ,supplying,fixing,placing and laying of all water proofing treatment of roof of power house building (38m elevation) and Mill building (80m elevation) by providing required slope by stepwise application of following :-				
1	SURFACE PREPERATION along with repairing of shrinkage cracks as per directions of Engineer In charge.				
2	<u>SCREED CONCRETE :</u> Providing , supplying, lifting shifting ,mixing , placing in grade ,compacting , finishing of 40 mm thick average Screed concrete with proportion(1:2:4) cement , sand and aggregate over flat roof over power house building (38m elevation) and Mill building (70m elevation) to match the desired slope as mentioned in the drawing and technical specification as per directions of engineer in charge.				
3	Fixing of RIGID INSULATION (EXTRUDED POLYSTYRENE BLOCK) of 25 mm thickness, shall be laid and fixed as per approved method (with adhesive/manufacture recommended of approved make, may have to be applied on the board against which concrete shall be placed.) over screed concrete. Fillets at junction of roofs and vertical walls shall be provided with same insulating material.				
4	Application and fixing of (1:4) CEMENT SAND PLASTER 15mm thick over polystyrene block with CHICKEN WIRE MESH .				
5	Covering the same with ELASTOMERIC MEMBRANE -1.5mm thick minimum, (which shall be anchored at the vertical brick or RCC wall by (1:4) sand cement mortar and timber all along				
5a	Primer coat- A single coat of this primer shall be applied by brush/spray with airless spray equipment over to be prepared bed as an adhesion coat with an application rate 6-8 sqm per liter depending on the surface porosity.	SQM	8200		
5b	Finishing coat - The finishing coats shall consist of two successive liquid coatings of high solid content urethane pre-polymers materials to form an elastomeric membrane. Application shall be brushed or sprayed to form a uniform joint less elastomeric membrane .The overall dry film thickness shall be 1.5mm subject to minimum 750 gm/sqm/coat application.				
6	The entire area shall be laid and finished with PRESSED PRECAST CONCRETE TILES, (size minimum-600mmx600mm) of 20mm thickness on (1:4) cement sand mortar under bed.				
7	Supplying, mixing and pouring neat CEMENT SLURRY along the groves of pressed precast tiles by leaving top 15mm gap.				
8	The roof treatment shall be finished good by providing, application of POLYSUPHIDE/POLYURTTTHANE/SILICON JOINT SEALANT in both direction of the pressed tiles as per drawing.				

	9	Minimum 50mm Groove at parapet wall to be filled up with 1:4 CEMENT AND SAND MORTOR over extended water water proofing treatment and finished good.				
	10	Finishing of fillet portion shall be done with neat cement finish with coving of 150mm above finished surface.				
		<ul style="list-style-type: none"> • Rate should be inclusive of surface preparation, along with repairing of shrinkage cracks , lifting , shifting of all materials to roof of respective building , provision of all types of tools, tackles, gadgets, chasing , chamfering at all corners neat cement at required , safety norms, platfroms, walkways ,staggering and scaffolding ,fixing of tiles, Conducting leak proof test , any other works to complete the work as per EIC) • Guarantee shall be for materials and workmanship for period of minimum of 10 years. 				
C		Providing , supplying, mobilising , erecting , operating , maintaining motor driven winch builder hoist of 1 MT capacity with with structural frame structure made anti twisting straightened steel, to be assembled at site, provided with limit switch and heavy duty safety lock for transporting construction materials and manpower from Ground level to various heights of power house and mill building to a minimum height of travel 40m to a maximum height of travel 80 m. (Rate also shall be inclusive of all types of maintenance, spare parts, third party inspection, site safety clearance, safety, PPES, staging, scaffolding , life lines, gangway, loading and unloading platforms for the builder hoist, welding complete in all respect, dismantling and removal from site and made good the location to original condition).	Per Hoist/Month	18		
TOTAL COST						
GST (applicable)						
GRAND TOTAL COST						

(Total Cost in Words:)

Notes:

Please note to submit your offer considering GST provision and its related input tax credit benefits to be passed on to OPGC.