

Nagpur Metropolitan Region Development Authority

Subject : Providing Cement Based Water Proofing Treatment to Surfaces of Domes, Tunnel/Semi-Circular Slabs, Sloping Slabs etc. for the Project of Development of Shantivan Babasaheb Dr. B. R. Ambedkar Memorial and Socio-cultural Training center at Kh. No 128 Mz. Chicholi, Nagpur

Bill of Quantity

Sr. No.	Description	Quantity	Rate	Amount
1.	<p>Surface Preparation: Cleaning the surface with the wire brush and making it free of loose, dirt, dust, etc. Cleaning using fresh water hosing. Damaged Concrete Cracks: Open the shrinkage cracks into 'V' groove using proper mechanical tools. Ensure that the adjoining good cover is not disturbed and damaged. Clean and moisten the groove. Providing and applying Epoxy + silica sand 1:2 proportion mortar in the groove and finish at all heights, level and surface etc. complete. After 24 hours inspection, if required provide another levelling course over the same. Moisten the surface to get Saturated surface dry profile. Making surface ready to receive waterproofing solutions.</p> <p>Honeycomb Sealing: Providing and applying by opening all existing cracks and honeycomb present in concrete in U groove fashion. Dampening with water to clean and moist subtract. Providing and sealing all cracks-honeycombing joints using cementitious, adhesives made from a mixture of hydraulic binders aggregate and chemical admixtures as directed by Engineer In charge.</p> <p>Polymer Repairs to Damaged Concrete (Honeycomb Areas) : Removing loose concrete Cleaning the rebars with rust converter. Cleaning the concrete with compressed air. Applying two coats of Steel Protective Coating to the rebars. Applying bond coat of Polymer Modified Bonding Agent to the concrete and steel surface. Applying Polymer modified cement mortar to patch up the damaged concrete section in planks of 25 mm thickness. Curing the repaired surface for 3 days.</p> <p>Construction Joints Sealing: Providing and fixing PVC nozzle at 300mm c/c to seal crevices and capillaries present on construction joints. Injecting polymer based smooth cementitious slurry duly modified by adding expansive super fluid cementitious binder, non-shrink additives and injecting using manually operated pressure grouting pump at 3-7 kg/cm² till it reaches saturation level. Cutting protruding nozzle tips, plugging nozzle tip using sealant of approved make rapid hardening hydraulic cement as directed by Engineer In charge.</p> <p>Micro Fine Cement Grout : Providing and injecting Micro Fine Cement Grout in the ratio by grouting pump at a pressure @ 3-7 Kg/cm² or as directed by Engineer In charge etc complete. After grouting is completed after 24 hours, cut the nipples and seal it with polymer-modified mortar as per specifications given above. Considering 300 x 300 mm grid on honeycomb areas and 150mm c/c along the cracks.</p> <p>Waterproofing Coating: Providing and applying of two-component, high elasticity cementitious trowel applied High performance waterproofing system of approved make as directed by Engineer In charge for waterproofing @ 1.6 Kgs per Sqm before laying of tile. Apply the product on the surface of clean, dry substrates with a roller to form a layer at least into 2 coats of minimum 2.5mm thickness and then finish off the surface with the same trowel. Cover the product by membrane using class C2 cementitious adhesive.</p> <p>Polymer Plaster : Providing and applying levelling course for surface correction by modified polymer plaster of thickness varying from 12mm to 20mm.</p> <p>All the above water Proofing Treatment shall be inclusive of Providing & erecting suitable scaffolding at various heights according to profile, Providing electricity & water supply, supervision including all material, labour, transportation, lead, lifts, taxes /GST including Covering 05 Years Guarantee on Court Fee Stamp Paper Of Rs. 100/- all etc complete.</p> <p>Contractor has to give Additional Bank Guarantee of 10% of water proofing amount as Performance Security valid for 08 years from the date of Defect Liability Period. This Bank Guarantee will be released after successful completion of 10 years guarantee.</p>	3850.00 sqmt.		
	Total			

Amount in words : _____

Signature of Contractor