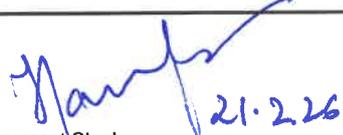
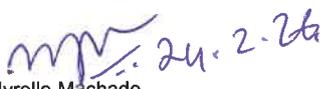


The World Spa Apartment Owners Association

BOQ-B2 TERRACE WATERPROOFING WORK

S.NO	Description of item	Unit	QTY	Rate	Amount
	General notes :-				
	(i) The Contractor Shall be submit the samples of all material & TDS. to the Project Manager for approval and finalization of samples.				
	ii) The rates should be inclusive of all lead , lifts, height, scaffolding etc. complete.				
	iii) Rates include the cost of protection needed for finishing the work during the contractual period /handling over the project.				
	iv)The contractor should quote the rate after visitng the site & referring the , tender documents etc. The rate should include all necessary for complete the job arrangements as				
1	Terrace Waterproofing				
1.1	Removing of existng Brick bat coba				
	Carefully dismantle and remove existing brick bat coba of any thickness or depth from roof, including breaking up, loosening, and clearing down to the specified base level. The rate shall include necessary tools, labour, protection of adjoining surfaces, cleaning of the exposed surface, and disposal of debris outside the site premises as directed by the Engineer-in-Charge.	Sqm	284		
1.2	Cleaning of Surface and Removing Loose Material				
	Cleaning of existing surface thoroughly by removing all loose particles, dust, dirt, oil, grease, and any other foreign material using wire brush, air blower, or water jet as required to ensure a clean and sound surface for subsequent treatment or application.	Sqm	284		
1.3	PU COATINFG (Polyurethane Coating)				
	(A)Making 50mm width Covng/ Gola at Vertical and horizontal joint with polymer modified cement mortar (1:4 Ratio with 3% of Plyomer weight of Cement)after apply polymer base bond coat. (B) Find out cracks on vertical and horizontal Surface, open it to 10mm vide groove and clean it thoroughly by wire brush and Air Blower and Apply Polymer mix bond coat. When bond coat stated getting sticy fill grooves with polymer modified cement mortar and left it for dry. (C) After repaire of cracks, make surface dust free , Supply and apply 1st coat of PU coating all over the Surface and left it for dry, (D) After dried of 1st coat, 2nd coat of PU coating shall be applyied all over the first coat and left it for dry for 48 hrs. Make- Fosroc, Pidilite, MYK or equivalent Note:- Poymd Test After completion of the waterproofing Treatment for 72 Hours.	Sqm	284		
1.4	Geotextile				
	Providing & Laying of 120 GSM Geotextile over the coating for protection.	Sqm	284		
1.5	PCC for protection of waterproofing Cement concrete of ratio 1:3:6				
	Providing and laying in position cement concrete of specified grade 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate Avrage 100mm nominal size) at all levels. Including 40mm*3mm Glass Strips Size of Panel 900*900mm	Sqm	284		
2	Parapet Plaster Work				
2.1	Chipping of loose /damaged Plaster				
	Dismantling/Chipping off loose plaster of any thickness in damaged areas of parapet walls, including removal of all loose material by chiseling, cleaning the surface with wire brush, and disposal of debris from site as directed by the Engineer-in-Charge. The work shall be carried out carefully to avoid damage to the structure.	Sqm	95		
2.2	Chemical Treatments				
2.2.1	Reinforcement Cleaning & rust removal				
	Cleaning Reinforcement bars loosely with hand wire brush and apply alkaline chemical rust remover with brush and removing loose particals after 6 hrs of applications and washing throughly with water all complete. Approved Product: Rustoff 100-Sika/ Reebaklens RR (Forsroc) / Rustkleen (BASF) / Rust Remover -Dr. Fixit / equivalent)	Rm	28		
2.2.2	Zinc rich Primer				
	P/a Zinc rich Primer on the Chemically treated old rebars to the concrete as per manufacturer's Specification)/ Dr. Fxit /Sika /BASF Product: Nitozinc Primer of Forsroc / Friazinc® R -Sika / Epoxy Zinc Primer of Dr. Fxit /equivalent product of BASF/ Sri krishna conchem00	Rm	28		
2.2.3	Polymer Modified Cementitious Bonding Coat				

	Providing, mixing and applying polymer modified cementitious bonding coat @2.2kg per Sqm of surface area mixed with SBR Latex adhesive with specified proportion as per manufactures specification on chipped portion of RCC. Rate includes cost of cement & all other materials also. Note :Surface Area of concrete where the Bond Coat has been applied shall be measured for payment, Products :BA30 of Xchem Polymer/ Nitobond AR of Forsroc / masterEmaco 141 of BASF / SUPER LATEX of Dr. Fixit or equivalent) (Quoted Rates are for all heights, depths, levels, leads and lifts)	Sqm	90		
2.2.4	Polymer Modified Cement Mortar / Plaster -12mm-15mm				
	Providing ,mixing & applying polymer modified cement mortar's (immediately after the application of bond coat over 1st layer) 2nd layer of upto 15mm Thick vertical/horizontal/inclined /circular faces in proportion 1 : 4 (1 Cement : 4Coarse Sand) admix with any of undermentioned admixture @3% weight of cement. Note-BA30 of Xchem Polymer/ Nitobond AR of Forsroc / masterEmaco 141 of BASF / SUPER LATEX of Dr. Fixit or equivalent)	Sqm	90		
2.2.4a	Alternate option for plaster work				
	Item same as above but for ready made plaster instead of cast in situ site mix mortar based.	Sqm	90		
3	Water Tank Waterproofing				
3.1	Removing of Existing Tiles				
	Carefully dismantling and removing existing floor / wall tiles of any type including ceramic, vitrified, mosaic or stone, from floors, walls or water tank surfaces, including hacking of tile bedding mortar/adhesive, cleaning the base surface to receive new treatment, stacking serviceable material separately if required, and disposal of unserviceable debris outside the premises to approved dumping area, including cost of all labour, tools, scaffolding and incidental works complete as per direction of Engineer-in-Charge.	Sq m	111		
3.2	Waterproofing Work				
	Providing and applying two-component elastomeric waterproofing coating using Dr. Fixit Tank Pro on the primed concrete surface, after surface preparation complete in all respects. The coating shall be applied in two coats by roller only at a total consumption of 1.40 kg/sq.m, comprising 0.50 kg/sq.m for the first coat and the balance in the second coat. The interval between the two coats shall not exceed 12 hours. The applied coating shall be allowed to cure for 3–5 days to achieve full curing, after which a 24-hour water ponding test shall be conducted. The material shall conform to the following minimum properties: Specific Gravity: 1.20 Solids Content: 100% Elongation: ≥100% Tensile Strength: >10 MPa (as per ASTM D412) Hardness: >40 (as per ASTM D2240) Hydrostatic Pressure Resistance: 5 bar (as per EN 12390) Adhesion to Concrete: >1.5 MPa (as per ASTM D7234) Water Absorption: <0.5% (as per ASTM D570)	Sq m	111		
3.3	Injecting PU (Polyurethane) Grouting				
	Providing and injecting Polyurethane (PU) expanding resin grouting for arresting leakage/seepage in RCC structures, including drilling injection holes with 10–12 mm drill bit, fixing mechanical packers (10–14 mm), injecting approved PU grout resin (Fosroc Nitofill PU130 / Sika Injection-201/202 / Technokem PU Grout / STP PU Grout) using hand/electric injection pump of 50–150 bar pressure, removal of packers after curing, sealing of injection points with suitable epoxy/mortar, and complete cleaning of the area as per manufacturer specification.	No	R/O		
3.4	Plumbing Line Cutout Packing				
	Providing and applying for Micro Concrete and GP2 for Plumbing Pipe Core Cutting	Nos	3		
3.5	Khurra				

	Providing and fixing Stainless steel khurra (terrace rainwater outlet / floor drain) of approved make, heavy-duty type, made of SS-304 grade, suitable for terrace application, complete with removable grating and outlet connection suitable for 100 mm dia rainwater down-take pipe, including cutting and chasing of terrace slab / screed, embedding in cement mortar, proper alignment and level, ensuring required slope for effective drainage, making joints fully watertight, testing, and making good the surrounding surface, including cost of all materials, labour, tools and incidental works complete as per direction of Engineer-in-Charge.	No	4		
3.6	Removing & fixing of stone top parapet				
	Dismantling existing top parapet coping / stone carefully without damaging adjacent masonry or plaster, cleaning and removing old mortar from stone and parapet surface, preparing the base, and re-fixing the same stone coping in position with cement mortar (1:3) including necessary hacking, levelling, proper slope for drainage, alignment, curing, and making good all disturbed portions complete as per directions of Engineer-in-Charge	Sq m	49		
3.7	Stone Grouting Work				
	Removing existing damaged / loose stone grout from joints to the required depth, cleaning the joints thoroughly, and refilling with epoxy-based tile grout – MYK Laticrete SPECTRALOCK® PRO Premium Grout (or Fosroc Conbextra EP10 TG / Roff Epoxy Grout / Ardex WA or approved equivalent) of approved colour.	Sqm	50		
4	Disposal of Malba / Construction Debris from Site				
	Disposal of unserviceable materials, construction debris, malba, broken bricks, plaster waste, concrete pieces, etc., from site premises to the approved dumping ground as directed by the Engineer-in-Charge, including loading, unloading, transportation, and all leads and lifts, labour, tools, and equipment complete in all respects.	Per Trolley	20		
Total Amount					-
<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  Gaurav Dagar Sr. Civil Executive </div> <div style="text-align: center;">  Udairaj Singh Technical Manager </div> <div style="text-align: center;">  Harpreet Singh Estate Head </div> </div> <hr/> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  JB Ruhil Civil Head AIMSPL </div> <div style="text-align: center;">  Santosh Aggarwal Infra Committee </div> <div style="text-align: center;">  Myrelle Machado VP TWSAOA - Infra BOM </div> </div>					