

INDUSTRY: MULTI LEVEL CAR PARKING
CONDITION: Vehicles Movements, some Impact.
TRAFFIC: HEAVY DUTY
BOQ

ITEM NO	DESCRIPTION OF THE ITEMS	UNIT
9.1	CAR PARKING AREA	
	Optional subject to Floor profile	
9.11	Cementitious Underlay for Undulation - Polymer modified, cement based, floor levelling compound - 6mm	sqm
a.	<p>New concrete floors: These should normally have been placed for at least 21 days and have a moisture content of less than 5%. Floors should be sound and free from contamination such as oil and grease, mortar and paint splashes or curing compound residues. Excessive laitance can be removed by light mechanical scabbling, grinding or grit blasting. Light laitance can be removed by grinding or blasting and then by vacuum cleaning.</p> <p>Old concrete floors Where deep seated contamination has occurred, mechanical Methods such as blasting, grinding or scabbling should be used to provide a suitable clean surface. Any necessary repairs should be carried out using Renderoc SXtra</p>	
b.	<p>Priming: The substrate should be primed in order to prevent air release and to provide a bond for the Cemtop HD. Priming is achieved by coating the floor with a solution of Nitobond PVA diluted 1:1 with potable water (or suitable Fosroc primer). If, after treatment an even sheen is not evident on the floor an additional application of primer should be made.</p>	
c.	<p>Cementitious floor levelling compound : Providing mixing and laying to the areas indicated shall be applied with the cementitious floor levelling compound of Cemtop HD is a blend of selected cements, graded aggregates, polymers and flow agents. It is supplied as a dry, grey powder which requires only the addition of water to produce a self-smoothing, free flowing material. Cemtop HD may be applied either by hand, or via the use of a continuous mixer pump. At 28 days the material should achieve a compressive strength of not less than 35 N/mm² and an 'A' rating for the BRE (BS 8204) test for Impact Resistance. The floor shall be prepared and the product mixed and applied in accordance with the manufacturer's current data sheet. Cost Inclusive of Supply, apply, Equipment's. Exclusive of GST as applicable. Client shall provide Storage, Power, water, etc. Flooring work shall be executed by Fosroc Authorised Applicator.</p>	
9.12	Traffic guard UR 150 system for Intermediate Slab: Hard wearing, skid resistant, flexible protection system for car park decks	sqm
a.	<p>PU Parking deck system: Providing and applying an hard wearing, skid resistant, flexible protection system for car parks with Traffic guard UR150 systems consist of multiple layers Shall be Traffic guard UR150 Primer to the prepared surface at an application rate in the range of 0.2 to 0.3 ltr/m². Quantity will depend on surface texture and porosity. Whilst Traffic guard UR150 Primer is still wet, blind with Antislip Grain No. 2 at an estimated rate of between 0.4 - 0.8 kg/m², leave to dry for 16 hours @ 35°C. Prior to the removal of excess Antislip grain ensure that the grains are firmly embedded in</p>	

	the primer. Apply Traffic guard UR150 Top Coat to the primed surface at an application rate in the range of 0.4 to 0.5 ltr/m ² per coat. followed by Application of Traffic guard UR150 Wear Course to the Traffic guard UR150 Topcoat at an application rate of 0.1 - 0.2 ltr/m ² (100- 200 microns wft) per coat. Cured Traffic system shall have Elongation (ASTM D412) : ca. 175% ,Tensile Strength (ASTM D412) : 8 N/mm ² ,Shore A Hardness (ASTM D2240) : ca. 80.,cost including cost of material, labour, equipment necessary for surface preparation and application as per Fosroc specifications etc complete. Water power storage facility for storing material and equipment shall be provided free of cost at site	
b.	Line Marking Paint: Traffic marking lines may be applied Up to 3 coats using Traffic guard Line Marking Paint (TLMP) after five days from time of application.	
9.13	Traffic guard UR 100 system for Terrace parking / Exposed parking Slab Skid resistant, waterproof flexible protection system for car park decks :	sqm
a.	Surface Preparation: New concrete surfaces should have reached 80% of their intended physical properties - generally only achieved after a minimum curing period of 28 days. Existing concrete surfaces must be prepared to provide a clean, sound substrate. Surfaces should be clean and dry with open capillary, free from laitance, oil and grease, curing compounds or other surface contaminants which may prevent full and proper adhesion of the primer. All blowholes and other surface undulations should be repaired using an appropriate Fosroc product.	
b.	PU Parking deck system : Providing and applying Skid resistant, waterproof flexible protection system for car park decks consist of multiple layers Shall be Traffic guard UR 100 system for Terrace parking / Open parking Slab, Apply Traffic guard UR100 Primer to the prepared surface at a wet film thickness of 200 microns. Whilst Traffic guard UR100 Primer is still wet, seed with Fosroc Anti Slip Grain No. 3 at a rate of 0.4 kg/m ² and allow curing for 24 hours. Apply Traffic guard UR100 Membrane to the primer surface at a wet film thickness of 900 microns. Should be applied with a notched trowel or squeegee. Allow to cure for 16 hours at 25°C. Followed by a Base Coat Application Traffic guard UR100 Base Coat to the primed surface at a wet film thickness of 750 microns. Should be applied with a notched trowel or squeegee. Broadcast with Antislip Grain No. 2 or 3 at a minimum rate of 5 kg/m ² and roll with Spike Roller to required finish. Allow to cure for 16 hours at 25°C. Finally apply Wear Course i.e.Trafficguard UR100 Wear Course at a wet film thickness of 225 microns. When application is complete the system should be permitted to cure for 72 hours @ 35°C or 7 days @ 25°C prior to being trafficked. Cured Traffic system shall have Elongation (ASTM D412) : ca. > 100% ,Tensile Strength (ASTM D412) : 6 N/mm ² , Tear Resistance (ASTM D624) : 26.0 KN/m ² ,Shore A Hardness (ASTM D2240) : ca. 80.,cost including cost of material, labour, equipment necessary for surface preparation and application as per Fosroc specifications etc. complete. Water power storage facility for storing material and equipment shall be provided free of cost at site	
c.	Line Marking Paint: Traffic marking lines may be applied Up to 3 coats using Traffic guard Line Marking Paint (TLMP) after five days from time of application.	
9.14	PU floor Coving: Nitoflor Coving UT size - 75mm x 75mm	rmt
a.	Surface Preparation: Removing all laitance and any surface sealer or curing membrane by mechanical means such as shot-blasting, grinding or light scabbling to the level of sound concrete. After surface preparation, all loose debris and dirt should be removed	

	by vacuum equipment.	
b.	Priming: Priming is carried out using a mix of Part A and Part B only. Thoroughly drain the contents of the hardener component into the base component and mix for a minimum of 1 minute or to provide a homogeneous mix. Apply by roller or brush and spread uniformly at the rate of approximately 5m ² /1kg set depending on the substrate. Nitoflor Coving UT must be applied wet to wet onto the primed surface before the primer is cured	
c.	Polyurethane coving mortar: Providing and applying 3 components, Water based Polyurethane coving mortar Nitoflor Coving UT topped with a sealer coat Nitoflor HB 200UT of Fosroc make. The substrate shall be prepared properly prior laying UT coving, priming the surface with suitable primer as recommended in the manufacturer datasheet @ 12.5m ² /2.5kg set depending on the substrate. Laying Nitoflor Coving UT 1.8 - 2.0 kg/m ² /mm thickness wet to wet onto the primed surface before the primer is cured. Followed by applying 3 components Water-based high-build polyurethane coating sealer coat Nitoflor HB 200 UT in 2 coats 6 m ² per 4.75 kg pack per coat@ 200microns WFT per coat. Fosroc Nitoflor HB200 UT is available in a range of standard Fosroc colours. Complete as per the manufacturer Instruction.	
9.15	Expansion joints	rmt
a.	Surface preparation: Clean the surface and remove any dust, unsound or contaminated material, plaster, oil, paint, grease, corrosion deposits or algae, Oil and grease deposits should be removed by mechanical means.	
b.	Priming: Prime sealing slot surfaces with Primer No. 20 using a clean dry brush. Colpor 200 must be applied between 30 minutes and 2 hours after priming.	
c.	PU Sealant: Providing mixing and laying PU Sealant at the designated joints are to be sealed using Fosroc Colpor 200PF over the Backer rod of Expancel which shall position on the filler board of Hydrocel XL of the Expansion joint , pavement sealant manufactured by Fosroc to BS 5212: 1990 and U.S.Federal Specification SS-S 200E:1984.. Colpor 200PF has a movement accommodation factor of 30% in butt joints.. To ensure the sealant operates within its stated movement capacity of 30% , the width of sealing slots should be designed in accordance with the recommendations of IRC-57-2006. In trafficked areas the expansion joint width should not generally Exceed 30 mm. Joint depth: In trafficked areas the sealing slots should be constructed so that at no time during the anticipated operating cycle of the joint will the sealant protrude above the surface of the concrete pavement. It is necessary to recess the level of the sealant 5 to 8 mm below the pavement surface, dependent on the time of year and temperature prevailing at the time of sealing. Note: The width to depth ratio of the Colpor 200PF seal should be 1:1 to 1½:1 subject to a minimum 10 mm depth of sealant (example, contraction joint: 15 mm wide x 13 mm depth; expansion joint: 25 mm wide x 20 mm depth). Complete as per the manufacturer Instruction. Cost Inclusive of Supply, apply, Equipment's. Exclusive of GST as applicable. Client shall provide Storage, Power, water, etc. Flooring work shall be executed by Fosroc Authorised Applicator.	