Topdeck Waterproofing System (OS 10)

#### Triflex ProPark®



#### Specifications

Construction project:	
Architect/client:	

#### Preliminary remarks:

Work is carried out using products from the Minden-based company Triflex GmbH & Co. KG.

This offer is for the procurement and installation of the fleece-reinforced parking deck waterproofing system Triflex ProPark. The system build-up has been awarded a General Building Supervisory Authority Test Certificate (abP) in accordance with Building Regulations List A, Part 2, No. 2.24, Class OS 10 as per the DAfStb Directive – Protection and Repair of Concrete Components (Repair Guideline).

Compliance with all applicable guidelines is taken into account and required for the different recommended system build-ups using Triflex products.

Before the contract is awarded, contractors must prove that they have been trained in the application of Triflex products. Otherwise, instruction by a trainer shall be provided on-site.

The quantities contained herein shall be checked on the building site.

Billing shall be based on measurements conducted jointly by the contractor and client.

The waterproofing system must be applied so as to prevent rainwater from penetrating the system structure in the event that work is interrupted.

For disposal of rubble, the cartage and landfill costs shall be included in the individual prices or itemised separately.

Concerns about prior work performed by other contractors shall be communicated to the client in writing immediately, ideally before work begins.

It is recommended that the bidder view the work site prior to submitting a tender.

If alterations or special work not included herein become necessary after work has commenced, detailed notification shall be given before going ahead with such alterations or special work, and the work shall subsequently be billed separately.

Unless explicitly stated otherwise, all work shall be regarded as a comprehensive turnkey service, including the supply of all required materials and ancillary services.

Multi-storey car park coatings and traffic markings are subject to constant loads and wear in accordance with the level of use.

The system build-up must be adapted by the expert planner to meet the project-specific requirements. Detailed tender texts must be created by the planner on his or her own authority. There is no specific project consultation associated with the issue of these draft specifications. The preparation of drafts is a non-obligatory service provided by Triflex. Any legal claims from this service are excluded.

The basis for the execution of concrete repairs is the "Protection and Repair of Concrete Components (Repair Guideline)" Part 1 to Part 3, October 2001 version, published by the German Committee on Reinforced Concrete (DAfStB) and introduced in all German Federal States as Technical Building Rules.



#### Specifications

The contract comprises the following components:

- Specifications
- System description, system drawings and manufacturer's product information
- DIN 18202 Tolerances for building construction
- DAfStb Directive Protection and Repair of Concrete Components (Repair Guideline)
- Building code regulations
- Accident prevention regulations
- German Construction Contract Procedures (VOB), Part B

in the versions valid at the time of conclusion of the contract.

#### System and product characteristics:

- Full-surface fleece-reinforced waterproofing system based entirely on polymethyl methacrylate resin (PMMA)
- Withstands high mechanical loads
- Shear-resistant construction
- Seamless
- System-integrated detail solutions
- Fully bonded
- Enhanced dynamic crack-bridging Class 4.2 (-20 °C)
- Cold-applied
- Fast-curing
- Ready for vehicle traffic after max. 3 hours (+23 °C)
- Chemical-resistant
- Weather and UV-resistant,(UV, IR)
- Conditions for use as per manufacturer's system and product descriptions (e.g. minimum application temperature 0 °C, max. substrate moisture 6 % by weight, surface temperature min. +3 °C above dew point)
- Class OS 10 General Building Supervisory Authority Test Certificate as per Building Regulations List A, Part 2, No. 2.24
- The OS 10 test certificate is based on the German test standards Rili SIB for reinforced concrete substrates.
- The surface protection of the waterproofing, version 2, with Triflex Cryl M 264 is certified with a test certificate as having wear resistance of 8 million wheel passages.
- The waterproofing systems within the system build-up with Triflex ProDetail (junctions, details, joints) are
  covered by European Technical Approvals (ETAs) issued by the German approval body for non-regulated
  construction products and types of construction, the Deutsches Institut für Bautechnik (DIBt), and meet the
  requirements of the EU's Construction Products Directive (CE mark) in accordance with ETAG No. 005 in the
  highest usage category.
- Key characteristics of the waterproofing with regard to resistance to hydrolysis, root and rhizome-resistance (FLL standards) and a leak test up to min. 5 bar can also be certified by test reports.



## **Specifications**

Performance properties of Triflex ProPark according to DAfStb repair guideline and the DBV data sheet for multi-storey car parks and underground car parks, January 2018 issue:

Line	Characteristics	Test method	Requirement	Triflex ProPark
1	Abrasion resistance	DIN EN ISO 5470-1	Mass loss < 3000 mg Friction wheel: H22/1000 Cycles/load 1000 g The requirements of DIN EN 13813 must also be met.	Met
2	CO <sub>2</sub> permeability	DIN EN 1062-6	s <sub>d</sub> > 50 m	Met
3	Water vapour permeability	DIN EN ISO 7783	Class II 5 m ≤ s <sub>d</sub> ≤ 50 m	Met
4	Capillary water absorption and water permeability	DIN EN 1062-3	$w < 0.1 \text{ kg/(m}^2 \text{ x h}^{0.5})$	Met
5	Bond strength according to testing for temperature change tolerance For outdoor usages under the influence of de-icing salts: Thunder shower exposure (temperature shock) (10x) and thermal cycling with alternating freezing/thawing with exposure to de-icing salt (50x)	DIN EN 13687-2 DIN EN 13687-1	After thermal cycling a) No cracks, bubbles, detachment b) Pull-off trial ≥ 1.5 (1.0) N/mm²	Met Met
6	Resistance to strong chemical attack Class I: 3d without pressure Test liquids: Groups 1, 3 and 10 according to DIN EN 13529	DIN EN 13529	24 hrs after removing the coating from the test liquid, reduction of the hardness by less than 50 % when measuring after the indentation hardness test according to Buchholz, EN ISO 2815, or Shore hardness, EN ISO 868	Met
7	Dynamic crack-bridging capabilities After conditioning according to DIN EN 1062-11, 4.1 – 7 days at 70 °C for reactive resin systems	DIN EN 1062-7	B 4.2 (-20 °C) and A 3 (20 °C) (according to DIN EN 1062-7)	Met
8	Impermeability	DIN EN 14224:2 010 and ETAG	No water penetration	Met
9	Impact strength	DIN EN ISO 6272-2	Class I, ≥ 4 Nm	Met
10	Pull-off trial	DIN EN 1542	≥ 1.5 (1.0) N/mm²	Met
11	Fire behaviour	DIN EN 13501-1	N/A	Met
12	Grip / slip resistance	DIN EN 13036-4	Class III: > 55 units tested in wet condition (outside)	Met
13	Fire behaviour	DIN EN 13501-1		V1: C <sub>fl</sub> -s1 V2: B <sub>fl</sub> -s1 V3: B <sub>fl</sub> -s1
14	Wheel passages over the surface protection of the waterproofing, version 2, with Triflex Cryl M 264		8 million wheel passages	Met

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15	Non-slip class	DIN 51130		V1: R12 V6 V2: R13 V10 V3: R13 V10
16	Dynamic crack-bridging capabilities on concrete for Triflex ProDetail in the junction area and for Triflex ProPark in the surface area	DIN EN 1062-7	Maximum crack expansion of 3 mm	3 mm
17	Crack bridging R	TP-BEL-B, Part 3 (issue 1995)	Dynamic: 0.55 mm at -20 °C	Met



## **Specifications**

Item no.	Quantity	Subject of service	Unit price EUR	Total price EUR
1		General		
1.1	Lump sum	Building site preparation	Lump sum	
1.2	Lump sum	Container Delivery, set-up, provision and off-site transportation of a material and device container.	Lump sum	
1.3	Lump sum	Power supply Provision of power supply for alternating and three- phase current, to be removed on completion of the  building project.	Lump sum	
1.4	Lump sum	Water supply Provision of water supply for the necessary cleaning tasks, to be removed on completion of the building project.	Lump sum	
1.5	Lump sum	Fence around building site Provision of fence for the entire period of the building project, to be adapted as required by the individual work stages.	Lump sum	
1.6	Lump sum	Re-routing of traffic Implementing measures to re-route traffic, such as road signs, traffic light system etc., setting up any necessary devices, adapting in accordance with progress of the building project and removing on completion of the building project.	Lump sum	
2		Structure and substrate inspections		
2.1	Lump sum	Cavities Checking for cavities by tapping the existing concrete surfaces with a hammer or chain, and marking any areas accordingly.	Lump sum	
2.2	Lump sum	Adhesive tensile strength  Determining and recording the specified adhesive tensile strength of the existing substrate using a suitable gauge (e.g. a Freundl unit).  Number of measurements:	Lump sum	
2.3	Lump sum	Compressive strength Determining and recording the compressive strength of the existing concrete substrate using a Schmidt Hammer. Number of measurements:	Lump sum	

Amount carried forward: \_\_\_\_\_



Item no.	Quantity	Subject of service	Unit price EUR	Total price EUR
			Amount carried forward:	
2.4	Lump sum	Moisture content  Determining and recording the moisture content of the existing concrete substrate using a suitable gauge (e.g. electronic moisture meter).  Number of measurements:	Lump sum	
2.5	Lump sum	Core sample Determining the layer configuration and each of the layer thicknesses by taking a core sample. Number of measurements:	Lump sum	
2.6	Lump sum	Analysis of core sample Determining the chloride content in the substrate by testing the core sample (see Item 2.5). Number of measurements:	Lump sum	
2.7	Lump sum	Checking gradient and unevenness Checking the existing substrate for sufficient gradient, formation of puddles and unevenness.	Lump sum	
2.8	Lump sum	Site journal with continuous measuring Provision of suitable measuring devices for the continuous measuring of air humidity, ground temperature, air temperature and to determine the dew point throughout the building project, incl. a site journal with logging of measured values.	Lump sum	
3		Substrate pre-treatment		
3.1	m²	Milling Removal of any contaminated surfaces on the concrete with a suitable milling machine approx. 3–5 mm in depth in order to ensure the adhesive property and soundness of the substrate, incl. acknowledgement of delivery, off-site transportation and proper disposal of the milled material.	/m²	
3.2	m	Milling in proximity to construction and settlement joints  Machine milling, cm wide, approx. 3–5 mm in depth incl. acknowledgement of delivery, off-site transportation and proper disposal of the milled material.  (See Triflex system drawing ProPark-1309 or ProPark-1310 and ProPark-1311)	/m	
		Amo	unt carried forward	:



Item no.	Quantity	Subject of service	Unit price EUR	Total price EUR
			Amount carried forward:	
3.3	m²	Shot-blasting Cleaning of entire surface, incl. construction and settlement joint areas by Blastrac shot-blasting crosswise, incl. machine-sanding junctions, cleaning of surfaces, off-site transportation and proper disposal of any blasting residue.	/m²	
3.4	m²	Grinding Preparation of the substrate by grinding with suitable abrasive tools, incl. cleaning, acknowledgement of delivery, off-site transportation and proper disposal of any rubble.	/m²	
3.5	m	Grinding the junctions Preparation of the substrate of the wall junctions and details by grinding with suitable abrasive tools incl. cleaning, acknowledgement of delivery, off-site transportation and proper disposal of any rubble.  Junction height: cm	/m	
3.6	m	Joint milling machine/joint hook Removal of any joint sealant as required using joint milling machine or joint hook.	/m	
3.7	m	Levelling Levelling of joint sealant in still functional construction joints by filling with comparable material or Triflex Cryl RS 240, or removal of any oozing or excess material in order to achieve a flush finish.	/m	
3.8	m²	Preparing metal substrates Thoroughly abrade the metal substrates with Triflex Cleaner and additionally roughen the surface. Consumption: min. 0.20 l/m²	/m²	Unit price
4		Triflex Primer		
4.1	m	Priming of wall junctions On concrete and masonry substrates. Priming with Triflex Cryl Primer 287. Consumption: at least 0.35 kg/m² Application according to the material manufacturer's technical guidelines. Adhesion to the substrate must be checked on a case-by-case basis. Junction height: cm	/m	
		Amo	unt carried forward	:



Item no.	Quantity	Subject of service	Unit price EUR	Total price EUR
			Amount carried forward:	
4.2	m²	Priming of kerb On concrete and masonry substrates. Priming with Triflex Cryl Primer 287. Consumption: at least 0.35 kg/m² Application according to the material manufacturer's technical guidelines. Adhesion to the substrate must be checked on a case-by-case basis. Kerb height: cm, width: cm	/m²	
4.3	m	Priming of construction joint On concrete and masonry substrates. Priming with Triflex Cryl Primer 287. Consumption: at least 0.35 kg/m² Application according to the material manufacturer's technical guidelines. Adhesion to the substrate must be checked on a case-by-case basis. Construction joint width: cm	/m	
4.4	m	Priming of settlement joint On concrete and masonry substrates. Priming with Triflex Cryl Primer 287. Consumption: at least 0.35 kg/m² Application according to the material manufacturer's technical guidelines. Adhesion to the substrate must be checked on a case-by-case basis. Settlement joint width: cm	/m	
4.5	m	Priming of composite thermal insulation systems For composite thermal insulation systems in the area of the facade. Priming with Triflex Pox Primer 116+ incl. dressing with quartz sand, size 0.3–0.8 mm. Removal of any surplus after curing. Consumption of Triflex Pox Primer 116+: at least 0.30 kg/m² Consumption of quartz sand 0.3–0.8 mm: at least 0.70 kg/m² Application according to the material manufacturer's technical guidelines. Adhesion to the substrate must be checked on a case-by-case basis. Junction height cm	/m	
l		] Amo	unt carried forward:	



Item no.	Quantity	Subject of service	Unit price EUR	Total price EUR
			Amount carried forward:	
4.6	m <sup>2</sup>	Priming of resin-modified substrate For resin-modified substrates. Priming with Triflex Pox Primer 116+ incl. dressing with quartz sand, size 0.3–0.8 mm. Removal of any surplus after curing. Consumption of Triflex Pox Primer 116+: at least 0.30 kg/m² Consumption of quartz sand 0.3–0.8 mm: at least 0.70 kg/m² Application according to the material manufacturer's technical guidelines. Adhesion to the substrate must be checked on a case-by-case basis.	/m²	
4.7	m²	Priming of mineral substrate For mineral substrates in the surface. Priming with Triflex Cryl Primer 287. Consumption: at least 0.35 kg/m² Application according to the material manufacturer's technical guidelines. Adhesion to the substrate must be checked on a case-by-case basis.	/m²	
4.8	m²	Pore sealing primer For substrates with pinholes. Priming with Triflex Cryl Primer 280. Consumption without pinholes: min. 0.40 kg/m², 1 working step Consumption with pinholes: min. 0.80 kg/m², 2 working steps, 0.40 kg/m² each. Second working step after non-stick surface Application according to the material manufacturer's technical guidelines. Adhesion to the substrate must be checked on a case-by-case basis.	/m²	Unit price
4.9	m <sup>2</sup>	Priming of asphalt For surfacing asphalt substrates Priming with Triflex Cryl Primer 222. Consumption: at least 0.40 kg/m² Application according to the material manufacturer's technical guidelines. Adhesion to the substrate must be checked on a case-by-case basis.	/m²	
4.10	m²	Priming of glass Priming with Triflex Glass Primer, incl. pre-cleaning of the surface with Triflex Glass Cleaner. Consumption of Triflex Glass Cleaner: approx. 0.05 l/m² Consumption of Triflex Glass Primer: approx. 0.05 l/m² Application according to the material manufacturer's technical guidelines. Adhesion to the substrate must be checked on a case-by-case basis.	/m²	
		Amo	unt carried forward:	·



## Specifications

			Unit price	Total price
Item no.	Quantity	Subject of service	EUR	EUR
			Amount carried forward:	
4.11	m²	Priming of metal e.g. stainless steel, steel and zinc. Priming with Triflex Metal Primer, incl. pre-cleaning of the surface with Triflex Cleaner. Consumption of Triflex Cleaner: at least 0.20 l/m² Consumption of Triflex Metal Primer: approx. 0.08– 0.10 l/m² Application according to the material manufacturer's technical guidelines. Adhesion to the substrate must be checked on a case-by-case basis.	/m²	
5		Triflex repairs		
5.1	m²	Repair mortar, mineral substrate (Rt >10 mm) Repairing defective spots on the existing mineral substrate with Triflex Cryl RS 240 repair mortar in the area of roughness depths Rt >10 mm. Triflex Cryl RS 240, colour 7023, consumption: at least 2.20 kg/m² per mm layer thickness Application according to the material manufacturer's technical guidelines. Average layer thickness:	/m²	
5.2	m²	Repair mortar, bituminous substrate (Rt >10 mm) Repairing defective spots on the existing bituminous substrate with Triflex Cryl RS 242 repair mortar in the area of roughness depths Rt >10 mm. Triflex Cryl RS 242, colour 7022, consumption: at least 2.20 kg/m² per mm layer thickness. Application according to the material manufacturer's technical guidelines. Average layer thickness:	/m²	
5.3	m²	Levelling coat, mineral substrate or asphalt (Rt >1 to 10 mm) Repairing defective spots on the existing mineral substrate or asphalt with levelling coat with Triflex DeckFloor basis in the area of roughness depths Rt >1 to 10 mm. Triflex DeckFloor levelling coat made from 33 kg Triflex DeckFloor with the addition of up to 20 kg quartz sand (0.7–1.2 mm), grey finish, consumption of at least 2.00 kg/m² per mm layer thickness. Triflex Powder Thixo, addition depending on temperature and the desired degree of thixotropy, approx. 2 %. Application according to the material manufacturer's technical guidelines. Average layer thickness:	/m²	

Amount carried forward: \_



Item no.	Quantity	Subject of service	Unit price EUR	Total price EUR
			Amount carried forward:	
5.4	m²	Scratch coat, mineral substrate or asphalt ( $R_t > 0.5$ to 1.0 mm) Repairing defective spots on the existing mineral substrate or asphalt with scratch coat with Triflex DeckFloor basis in the area of roughness depths $R_t > 0.5$ to 1.0 mm. Triflex DeckFloor scratch coat made from 33 kg Triflex DeckFloor with the addition of up to 10 kg quartz sand (0.2–0.6 mm), grey finish, consumption of at least 2.00 kg/m² per mm layer thickness. Application according to the material manufacturer's technical guidelines. Average layer thickness:	/m²	
6		Triflex detail waterproofing Creation of detail waterproofing with Triflex ProDetail incl. Triflex Special Fleece. The Triflex ProDetail waterproofing system has been awarded ETA approval (ETAG No. 06/0269) with CE mark in the highest usage categories W3, M and S, P1 to P4, S1 to S4, TL4, TH4, B <sub>ROOF</sub> (t1), B <sub>ROOF</sub> (t2), B <sub>ROOF</sub> (t3), B <sub>ROOF</sub> (t4). Test reports certify the root resistance according to FLL standards and resistance to hailstorm according to DIN EN 13583 for hard and flexible substrates. A General Building Supervisory Authority Test Certificate (abP) in accordance with the Building Regulations List A, Part 2, No. 2.51 is also available.		
6.1	m	Wall junction Waterproofing of the wall junction with Triflex ProDetail incl. Triflex Special Fleece. Triflex ProDetail, colour 7030, consumption at least 3.00 kg/m². Application according to the material manufacturer's technical guidelines. (See Triflex system drawing ProPark-1305) Junction height: cm Triflex Special Fleece strip width: cm.	/m	
6.2	m²	Kerb, threshold Waterproofing of the junction at the kerb and threshold with Triflex ProDetail incl. Triflex Special Fleece. Triflex ProDetail, colour 7030, consumption at least 3.00 kg/m² Application according to the material manufacturer's technical guidelines. (See Triflex system drawing ProPark-1307) Triflex Special Fleece strip width:	/m² unt carried forward	



Item no.	Quantity	Subject of service	Unit price EUR	Total price EUR
			Amount carried forward:	
6.3	m	Kerb, collision protection Bond a cover plate to the kerb using Triflex Cryl Paste and additional mechanical anchors if necessary. Triflex Cryl Paste, consumption: at least 0.50 kg/m² Application according to the material manufacturer's technical guidelines. (See Triflex system drawing ProPark-1307)	/m	
6.4	pc.	Gully Waterproofing of gully with Triflex ProDetail incl. Triflex Special Fleece. Triflex ProDetail, colour 7030, consumption at least 3.00 kg/m². Application according to the material manufacturer's technical guidelines. (See Triflex system drawing ProPark-1308) Triflex Special Fleece strip width:	/pc.	
6.5	m	Drainage channel Waterproofing of the drainage channel with Triflex ProDetail incl. Triflex Special Fleece. Triflex ProDetail, colour 7030, consumption at least 3.00 kg/m² Application according to the material manufacturer's technical guidelines. (See Triflex system drawing ProPark-1308) Triflex Special Fleece strip width:	/m	
6.6	pc.	Settlement joint Waterproofing of the settlement joint with Triflex ProDetail incl. Triflex Special Fleece. Triflex ProDetail, colour 7030, consumption at least 3.00 kg/m² Application according to the material manufacturer's technical guidelines. (See Triflex system drawing ProPark-1306) Junction height: cm Triflex Special Fleece strip width: cm, d = cm.	/pc.	
		Amo	unt carried forward	:



## **Specifications**

			Unit price	Total price
Item no.	Quantity	Subject of service	EUR	EUR
6.7	pc.	Penetration Waterproofing of penetrations with Triflex ProDetail incl. Triflex Special Fleece. Triflex ProDetail, colour 7030, consumption at least 3.00 kg/m². Application according to the material manufacturer's	Amount carried forward:	
		technical guidelines. (Corresponds to Triflex system drawing ProPark-1306) Junction height: cm Triflex Special Fleece strip width: cm, d = cm.	/pc.	
6.8	m	Door sill Waterproofing of the junction at the door sill with Triflex ProDetail incl. Triflex Special Fleece. Triflex ProDetail, colour 7030, consumption at least 3.00 kg/m². Application according to the material manufacturer's technical guidelines. Triflex Special Fleece strip width: cm.	/m	
7		Triflex joint waterproofing Creation of joint waterproofing with Triflex ProDetail incl. Triflex Special Fleece. The Triflex ProDetail waterproofing system has been awarded ETA approval (ETA No. 06/0269) with CE mark in the highest usage categories W3, M and S, P1 to P4, S1 to S4, TL4, TH4, BROOF(t1), BROOF(t2), BROOF(t3), BROOF(t4). Test reports certify the root resistance according to FLL standards and resistance to hailstorm according to DIN EN 13583 for hard and flexible substrates. A General Building Supervisory Authority Test Certificate (abP) in accordance with the Building Regulations List A, Part 2, No. 2.51 is also available.		

Amount carried forward: \_



			Unit price	Total price
Item no.	Quantity	Subject of service	EUR	EUR
7.1	m	Construction joint Waterproofing of the construction joint with Triflex ProDetail incl. Triflex Special Fleece. If required, level out the joint using Triflex Cryl RS 240 (mineral substrates) or Triflex Cryl RS 242 (bituminous substrates). Width cm, consumption of Triflex Cryl RS 240 / Triflex Cryl RS 242: approx. 2.20 kg/m² per mm layer thickness. Triflex ProDetail, colour 7030, consumption at least 3.00 kg/m². Application according to the material manufacturer's technical guidelines. (See Triflex system drawing ProPark-1309) Triflex Special Fleece strip width:	Amount carried forward:	
7.2	m	Settlement joint surface Waterproofing of the settlement joint with Triflex ProDetail incl. Triflex Special Fleece. Apply a width of approx. 4 cm of Triflex Cryl Paste to both sides of the joint to bond the Triflex Support Strip, consumption: 1.40 kg/m² per mm coat thickness. Triflex ProDetail, colour 7030, consumption at least 2.10 kg/m incl. fitting of 2 layers of Triflex Special Fleece, fleece width 35 cm and a PE round sealing band (closed-cell). Triflex FlexFiller, colour 7043, consumption at least 1.40 kg/m² per mm layer thickness Application according to the material manufacturer's technical guidelines. (See Triflex system drawing ProPark-1310)  Note: The settlement joints are all maintenance joints. It may be necessary to renew the joint sealant after structural movement.	/m	
		Amo	unt carried forward:	



## **Specifications**

			Unit price	Total price
Item no.	Quantity	Subject of service	EUR	EUR
7.3	m	Settlement joint – wall junction Waterproofing of the settlement joint with	Amount carried forward:	
		Triflex ProDetail incl. Triflex Special Fleece. Apply a width of approx. 4 cm of Triflex Cryl Paste to both sides of the joint to bond the Triflex Support Strip, consumption: 1.40 kg/m² per mm coat thickness. Triflex ProDetail, colour 7030, consumption at least 2.10 kg/m incl. fitting of 2 layers of Triflex Special Fleece, fleece width 35 cm and a PE round sealing band (closed-cell). Triflex FlexFiller, colour 7043, consumption at least 1.40 kg/m² per mm layer thickness Application according to the material manufacturer's technical guidelines. (See Triflex system drawing ProPark-1311) Junction height: cm		
		The settlement joints are all maintenance joints. It may be necessary to renew the joint sealant after structural movement.	/m	
8		Triflex surface waterproofing Creation of surface waterproofings with Triflex ProPark incl. Triflex Special Fleece. Triflex ProPark is covered by a General Building Supervisory Authority Test Certificate (abP) in accordance with the Building Regulations List A, Part 2, No. 2.51.		
8.1	<b>m</b> <sup>2</sup>	Surface waterproofing Waterproofing the surface with Triflex ProPark incl. Triflex Special Fleece. Triflex ProPark, colour 7030, consumption at least 3.00 kg/m². Application according to the material manufacturer's technical guidelines. Triflex Special Fleece strip width:	/m²	

Amount carried forward: \_



			Unit price	Total price
Item no.	Quantity	Subject of service	-	· · · · · · · · · · · · · · · · · · ·
9 9.1	Quantity m²	Triflex wearing layer Protection and wear layer  Wearing layer, version 1: Triflex DeckFloor incl. quartz sand and Triflex Cryl Finish 209 Creation of a surfacing solution (protection and wear	EUR  Amount carried forward:	EUR
			/m²	
		Amo	unt carried forward:	



			Unit price	Total price
Item no.	Quantity	Subject of service	EUR	EUR
item no.	Quantity	Subject of service	Amount carried forward:	
9.2	m²	Wearing layer, version 2: Triflex Cryl M 264 Creation of a surfacing solution (protection and wear layer) for high loads and stresses. Coating of surface with Triflex Cryl M 264. To enable reliable drainage of the surface water, or if the colour is changed, the surfacing solution is divided into panels. Vehicle traffic areas are divided into identically sized rectangular panels. The length of the rectangle should be max. twice the width of the traffic path. Suitable components such as ramps are divided into diagonal strips with a max. width of 50 cm. An approx. 10 cm wide strip of Triflex Cryl Finish 209 must be applied to the subsequent surface gap. The chosen colour of Triflex Cryl Finish 209 should be as dark as possible in order to make dirt and grime less visible. The dividing lines are created by taping over with Triflex adhesive tape (max. width: 25 mm).		
		The surface protection of the waterproofing, version 2, with Triflex Cryl M 264 is certified with a test certificate as having wear resistance of 8 million wheel passages.  Triflex Cryl Finish 209, colour 7043, application width approx. 10 cm, consumption at least 0.50 kg/m².  Triflex Cryl M 264, colour 7043, consumption at least 4.00 kg/m²  Application according to the material manufacturer's technical guidelines. (See Triflex system drawings ProPark-1301, ProPark-1302, ProPark-1303 and ProPark-1304)	/m²	
9.3	m <sup>2</sup>	Wearing layer, version 3: Triflex DeckFloor incl. coarse hard grain and Triflex Cryl Finish 202 Creation of a surfacing solution (protection and wear layer) for high loads and stresses and increased demands in terms of grip. Coating the surface with Triflex DeckFloor, incl. dressing with a surplus of coarse hard grain. Removal of any surplus after curing. Finishing of surface with Triflex Cryl Finish 202. Triflex DeckFloor, colour dark grey, consumption at least 4.00 kg/m². Coarse hard grain, consumption at least 7.00 kg/m² with a surplus. Triflex Cryl Finish 202, colour transparent, consumption at least 0.80 kg/m². Application according to the material manufacturer's	lm2	
		technical guidelines.	/m <sup>2</sup> unt carried forward:	



## Specifications

			Unit price	Total price
Item no.	Quantity	Subject of service	EUR	EUR
			Amount carried forward:	
9.4	<b>m</b> ²	Creation of junctions from protection and wear layer to protection and wear layer  If changing the surfacing solution (versions 1 to 3) and/or changing colour within the same version, a gap is made in the surfacing solution.  Finishing of surface with Triflex Cryl Finish 209.  Triflex Cryl Finish 209, colour 7043, application width approx. 10 cm, consumption at least 0.50 kg/m².  Triflex adhesive tape to create gap in surfacing solution, width max. 25 mm.  Application according to the material manufacturer's technical guidelines.  (See Triflex system drawing ProPark-1301 and ProPark-1302)	/m²	
10		Triflex Finish		
10.1	m	Finishing of wall junction Finishing of wall junctions with Triflex Cryl Finish 209. Consumption: at least 0.50 kg/m². Application according to the material manufacturer's technical guidelines. Junction height: cm Colour:	/m	
10.2	m²	Finishing of kerb, threshold Finishing in the area of rising kerbs/thresholds with Triflex Cryl Finish 209. Consumption: at least 0.50 kg/m². Application according to the material manufacturer's technical guidelines. Colour:	/m²	
10.3	pc.	Finishing of railing posts Finishing in the area of rising railing posts with Triflex Cryl Finish 209. Consumption: at least 0.50 kg/m². Application according to the material manufacturer's technical guidelines. Junction height: cm Colour:	/pc.	

Amount carried forward:



Item no.	Quantity	Subject of service	Unit price EUR	Total price EUR
			Amount carried forward:	
10.4	pc.	Finishing of penetration Finishing in the area of rising penetrations with Triflex Cryl Finish 209. Consumption: at least 0.50 kg/m². Application according to the material manufacturer's technical guidelines. Junction height: cm Colour:	/pc.	
11		Triflex Marking		
11.1	m	Thick-layer marking, parking bays Marking of parking bays with Triflex Cryl M 266. Width of outline: 10 cm incl. tape. Consumption: at least 4.00 kg/m². Application according to the material manufacturer's technical guidelines, see Triflex DMS, version 1. Colour:	/m	
11.2	pc.	Thick-layer marking, disabled parking bays Marking of disabled parking bays with Triflex Cryl M 266, incl. taping and, where required, provision of template. Consumption: at least 4.00 kg/m². Application according to the material manufacturer's technical guidelines, see Triflex DMS, version 1. Colour:	/pc.	
11.3	pc.	Thick-layer marking, direction arrows Marking of direction arrows with Triflex Cryl M 266, incl. taping and, where required, provision of template. To include the following arrows - Straight: pcs Left: pcs Right: pcs. Consumption: at least 4.00 kg/m². Application according to the material manufacturer's technical guidelines, see Triflex DMS, version 1. Colour:	/pc.	
11.4	m	Thin-layer marking, parking bays Marking of parking bays with Triflex Cryl Finish 209. Width of outline: 10 cm incl. tape. Consumption: at least 0.70 kg/m². Application according to the material manufacturer's technical guidelines, see Triflex DMS, version 2. Colour:	/m	
		Amo	unt carried forward:	



			Unit price	Total price
Item no.	Quantity	Subject of service	EUR	EUR
			Amount carried forward:	
11.5	pc.	Thin-layer marking, disabled parking bays Marking of disabled parking bays with Triflex Cryl Finish 209, incl. taping and, where required, provision of template. Consumption: at least 0.70 kg/m². Application according to the material manufacturer's technical guidelines, see Triflex DMS, version 2. Colour:	/pc.	
11.6	pc.	Thin-layer marking, direction arrows  Marking of direction arrows with  Triflex Cryl Finish 209, incl. taping and, where required, provision of template. To include the following arrows  - Straight: pcs.  - Left: pcs.  - Right: pcs.  Consumption: at least 0.70 kg/m².  Application according to the material manufacturer's technical guidelines, see Triflex DMS, version 2.		
11.7	m	Colour: at the discretion of the client.  Thin layer of marking paint, parking bays Marking of parking bays with Preco Line 300. Width of outline: 10 cm incl. tape. Consumption: at least 0.44 kg/m².	/pc.	
		Application according to the material manufacturer's technical guidelines, see Triflex DMS, version 3. Colour:	/m	
11.8	pc.	Thin layer of marking paint, disabled parking bays Marking of disabled parking bays with Preco Line 300, incl. taping and, where required, provision of template. Consumption: at least 0.44 kg/m². Application according to the material manufacturer's technical guidelines, see Triflex DMS, version 3. Colour:	/pc.	
11.9	pc.	Thin layer of marking paint, directional arrows Marking of direction arrows with Preco Line 300, incl. taping and, where required, provision of template. To include the following arrows - Straight: pcs Left: pcs Right: pcs. Consumption: at least 0.44 kg/m². Application according to the material manufacturer's technical guidelines, see Triflex DMS, version 3. Colour:	/pc. unt carried forward:	



			Unit price	Total price
Item no.	Quantity	Subject of service	EUR	EUR
			Amount carried forward:	
12		Hourly rates		
12.1	hrs.	Hourly rate of a foreman.	/hr.	
12.2	hrs.	Hourly rate of a skilled trade worker.	/hr.	
12.3	hrs.	Hourly rate of an assistant.	/hr.	
13		Materials		
13.1	kg	Material consumption upon proof.	/kg	Unit price
14		Disposal		
14.1	Lump sum	Disposal of all waste and hazardous waste materials in accordance with the current applicable laws and implementing regulations.	Lump sum	
		Net total:		
		Statutory VAT at%		
		Gross total:		