



Specifications

Construction project:

Architect/client:

Preliminary remarks:

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

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

The waterproofing systems within the system design with Triflex ProDetail (junctions, details) are covered by an European Technical Approval (ETA) 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) as per ETAG No. 005 in the highest usage category. A general building supervisory authority test certificate (PG-FLK) certifies the suitability for use of the waterproofing within the system design as structure waterproofing on surfaces with an inclination of up to 90° as per MVV TB C 3.28.

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 coating 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.

The contract comprises the following components:

- Specifications
- System description and manufacturer's product information
- DIN 18202 – Tolerances in building construction
- DIN 18531 – Waterproofing of roofs, balconies, loggias and walkways
- 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.

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.



Specifications

System and product characteristics:

- Thick-layer system based entirely on polymethyl methacrylate (PMMA) base
- Withstands high mechanical loads
- Highly abrasion-resistant
- Seamless
- Cold-applied
- Fast-curing
- Solvent-free
- Full-surface adhesion on a multitude of substrates
- Self-levelling
- Weather-resistant (UV, IR etc.)
- Chemical-resistant
- Structurally crack-bridging
- 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)
- Approved coating as per DIN EN 1504 / DIN VN 18026
- Complies with DIN 18531-5, Annex A (OS 8)
- Triflex TSS version S1 is flame-retardant (B1 as per DIN 4102 and Class B_{fl}-s1 as per DIN EN 13501- 1)

For detail waterproofing the following also applies:

- Root- and rhizome-resistant according to FLL standards
- Dynamic crack-bridging properties
- Crack-bridging up to 3.0 mm based on PG-FLK
- Fire classification according to EN 13501-5: Class B_{ROOF}(t1), B_{ROOF}(t2), B_{ROOF}(t3), B_{ROOF}(t4)
- Fire classification according to EN 13501-1: Class E
- Hard roofing in accordance with the German regional building regulations
- European Technical Approval with CE mark in the highest usage categories (W3, M and S, P1 to P4, S1 to S4, TL4, TH4)



Specifications

Item no.	Quantity	Subject of service	Unit price EUR	Total price EUR
1		General information		
1.1	Lump sum	Building site preparation	Lump sum	_____
2		Structure and substrate inspection		
2.1	Lump sum	Cavities Checking for cavities by tapping the existing surfaces with a hammer, and marking any areas that sound hollow.	Lump sum	_____
2.2	Lump sum	Moisture content Determining and recording the moisture content of the existing concrete substrate using a suitable gauge (e.g. a CM device).	Lump sum	_____
2.3	Lump sum	Evenness and gradient Testing the evenness and gradient of the existing substrate.	Lump sum	_____
2.4	Lump sum	Adhesive tensile strength Determining and recording the specified adhesive tensile strength of the existing substrate using a suitable gauge (e.g. a Herion unit).	Lump sum	_____
3		Substrate pretreatment See Triflex TSS system description, Substrate pre-treatment table. Triflex TSS version S1 (flame-retardant) can only be used on the surface of solid mineral substrates with a raw density >1,350 kg/m ³ (e.g. concrete, screed and lightweight concrete).		
3.1	_____ m ²	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.	_____ /m ²	_____
3.2	_____ m ²	Milling Removal of any contaminated surfaces on the concrete/screed using a suitable milling machine of approx. 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.	_____ /m ²	_____

Amount carried forward: _____



Specifications

Item no.	Quantity	Subject of service	Unit price EUR	Total price EUR
			Amount carried forward:	_____
4		Triflex Primer See Triflex TSS system description, Substrate pre-treatment table.		
4.1	_____ m ²	Priming of asphalt Priming with Triflex Cryl Primer 222. Consumption: at least 0.40 kg/m ² Application according to the material manufacturer's technical guidelines. Adhesion to the substrate must be checked on a case-by-case basis.	_____ /m ²	_____
4.2	_____ m ²	Priming of concrete e.g. concrete, screed, tiles, wood, lightweight concrete, plaster/masonry. Priming with Triflex Cryl Primer 276. Consumption: at least 0.40 kg/m ² Application according to the material manufacturer's technical guidelines. Adhesion to the substrate must be checked on a case-by-case basis.	_____ /m ²	_____
4.3	_____ m ²	Priming of composite thermal insulation systems e.g. on composite thermal insulation systems, resin-modified mortar. Priming with Triflex Pox R 100 incl. dressing with a surplus of quartz sand, size 0.2–0.6 mm. Removing any surplus after curing. Junction height: cm Consumption of Triflex Pox R 100: at least 0.30 kg/m ² Consumption of quartz sand 0.2–0.6 mm: at least 2.00 kg/m ² Application according to the material manufacturer's technical guidelines. Adhesion to the substrate must be checked on a case-by-case basis.	_____ /m ²	_____
4.4	_____ m ²	Priming of glass Priming with Triflex Glass Primer, incl. pre-cleaning of the surface with Triflex Glass Cleaner. Consumption of Triflex Glass Cleaner: at least 0.05 l/m ² Consumption of Triflex Glass Primer: approx. 0.05 l/m ² Application according to the material manufacturer's technical guidelines. Adhesion to the substrate must be checked on a case-by-case basis.	_____ /m ²	_____

Amount carried forward: _____



Specifications

Item no.	Quantity	Subject of service	Unit price EUR	Total price EUR
			Amount carried forward:	_____
4.5	_____ m ²	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/m ² Consumption of Triflex Metal Primer: approx. 0.08 l/m ² Application according to the material manufacturer's technical guidelines. Adhesion to the substrate must be checked on a case-by-case basis.	_____ /m ²	_____
5		Triflex repairs		
5.1	_____ m ²	Grouting e.g. in the event of shrinkage cracks, small areas of damage and uneven areas. Grouting and filling in with Triflex Cryl Paste. Consumption: approx. 1.40 kg/m ² per mm layer thickness Application according to the material manufacturer's technical guidelines.	_____ /m ²	_____
5.2	_____ m ²	Levelling out e.g. in the event of larger areas of damage. Levelling out and filling in with Triflex Cryl RS 240. Consumption: approx. 2.20 kg/m ² per mm layer thickness Application according to the material manufacturer's technical guidelines.	_____ /m ²	_____
5.3	_____ m ²	Scratch coat, mineral substrate or asphalt Repairing defective spots on the existing mineral substrate or on asphalt using a scratch coat with a Triflex ProFloor base. Triflex ProFloor scratch coat made from 33 kg Triflex ProFloor with the addition of up to 10 kg quartz sand (0.2–0.6 mm), grey finish. Average layer thickness: Consumption: at least 2.00 kg/m ² per mm layer thickness Application according to the material manufacturer's technical guidelines.	_____ /m ²	_____

Amount carried forward: _____



Specifications

Item no.	Quantity	Subject of service	Unit price EUR	Total price EUR
			Amount carried forward:	_____
5.4	_____ m ²	Gradient creation Creation of a sufficient gradient using Triflex Cryl Level 215. Average thickness: mm Consumption: approx. 2.20 kg/m ² per mm layer thickness Application according to the material manufacturer's technical guidelines.	_____ /m ²	_____
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 (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.		
6.1	_____ m	Wall junction Waterproofing of the wall junction with Triflex ProDetail incl. Triflex Special Fleece. Triflex Special Fleece strip width: cm Consumption of Triflex ProDetail: at least 3.00 kg/m ² Application according to the material manufacturer's technical guidelines. (Corresponds to Triflex system drawing BFS-2303)	_____ /m	_____
6.2	_____ m	Riser and step Waterproofing of the riser and step with Triflex ProDetail, including Triflex Special Fleece. Triflex Special Fleece strip width: cm Consumption of Triflex ProDetail: at least 3.00 kg/m ² Application according to the material manufacturer's technical guidelines. (See Triflex system drawing TSS-2603)	_____ /m	_____
6.3	_____ m	Door sill Waterproofing of the door sill with Triflex ProDetail incl. Triflex Special Fleece. Triflex Special Fleece strip width: cm Consumption of Triflex ProDetail: at least 3.00 kg/m ² Application according to the material manufacturer's technical guidelines. (Corresponds to Triflex system drawing BFS-2303)	_____ /m	_____

Amount carried forward: _____



Specifications

Item no.	Quantity	Subject of service	Unit price EUR	Total price EUR
			Amount carried forward:	_____
6.4	_____ pc.	Gully Waterproofing of the gully with Triflex ProDetail incl. Triflex Special Fleece. Triflex Special Fleece strip width: cm, d = cm Consumption of Triflex ProDetail: at least 3.00 kg/m ² Application according to the material manufacturer's technical guidelines. (Corresponds to Triflex system drawing BFS-2305)	_____ /pc.	_____
6.5	_____ pc.	Column joint Waterproofing of the settlement joint with Triflex ProDetail, including Triflex Special Fleece. Triflex Special Fleece strip width: cm, d = cm Consumption of Triflex ProDetail: at least 3.00 kg/m ² Application according to the material manufacturer's technical guidelines. (Corresponds to Triflex system drawing BFS-2304)	_____ /pc.	_____
6.6	_____ pc.	Penetration Waterproofing of the penetration with Triflex ProDetail incl. Triflex Special Fleece. Triflex Special Fleece strip width: cm, d = cm Consumption of Triflex ProDetail: at least 3.00 kg/m ² Application according to the material manufacturer's technical guidelines. (Corresponds to Triflex system drawing BFS-2304)	_____ /pc.	_____
7		Edge protector		
7.1	_____ m	Edge protector Installation and bonding of an edge finishing profile with Triflex Cryl paste. Consumption: approx. 1.40 kg/m ² per mm layer thickness Application according to the material manufacturer's technical guidelines. (See Triflex system drawing TSS-2601)	_____ /m	_____
8		Triflex stair coating		
8.1	_____ m ²	Stair coating – standard Coating of the stairs and platforms with Triflex ProFloor. Consumption: at least 4.00 kg/m ² Application according to the material manufacturer's technical guidelines. (See Triflex system drawing TSS-2601)	_____ /m ²	_____
			Amount carried forward:	_____



Specifications

Item no.	Quantity	Subject of service	Unit price EUR	Total price EUR
			Amount carried forward:	_____
8.2	_____ m ²	Stair coating – version S1 (flame-retardant) Coating of the stairs and platforms with Triflex ProFloor S1. Consumption: at least 4.00 kg/m ² Application according to the material manufacturer's technical guidelines. (See Triflex system drawing TSS-2602)	_____ /m ²	_____
9		Triflex finish		
9.1	_____ m ²	"Micro Chips" (R 9) surface – standard Finishing of the surface and details with Triflex Cryl Finish 205, dressing of the surface with Triflex Micro Chips. Colour: at the discretion of the client. Consumption of Triflex Cryl Finish 205: at least 0.50 kg/m ² Consumption of Triflex Micro Chips: at least 0.05 kg/m ² Application according to the material manufacturer's technical guidelines. (Not suitable for the Triflex TSS S1 (flame-retardant) version).	_____ /m ²	_____
9.2	_____ m ²	"Micro Chips" (R 9) surface – version S1 (flame-retardant) Finishing of the surface and details with Triflex Cryl Finish S1, dressing of the surface with Triflex Micro Chips. Colour: at the discretion of the client. Consumption of Triflex Cryl Finish S1: at least 0.50 kg/m ² Consumption of Triflex Micro Chips: at least 0.05 kg/m ² Application according to the material manufacturer's technical guidelines.	_____ /m ²	_____

Amount carried forward: _____



Specifications

Item no.	Quantity	Subject of service	Unit price EUR	Total price EUR
9.3	_____ m ²	<p>"Colour Design" (R 10) surface – standard Finishing of the surface and details with Triflex Cryl Finish 205, dressing of the surface with Triflex Colour Mix, final finish with Triflex Cryl Finish Satin. Triflex Colour Design colour: at the discretion of the client. Consumption of Triflex Cryl Finish 205: at least 0.50 kg/m² Consumption of Triflex Colour Mix: at least 0.80–1.00 kg/m² Consumption of Triflex Cryl Finish Satin: at least 0.35 kg/m² Application according to the material manufacturer's technical guidelines. (Not suitable for the Triflex TSS S1 (flame-retardant) version).</p>	Amount carried forward: _____ /m ²	_____ _____
9.4	_____ m ²	<p>"Dressing, fine" (R 11) surface – standard Finishing of the surface and details with Triflex Cryl Finish 205 with quartz sand dressing, size 0.2–0.6 mm. Colour: at the discretion of the client. Consumption of Triflex Cryl Finish 205: at least 0.50 kg/m² Consumption of quartz sand 0.2–0.6 mm: at least 3.00 kg/m² Finishing with Triflex Cryl Finish 205 a second time, dressing of the surface with Triflex Micro Chips. Consumption of Triflex Cryl Finish 205: at least 0.70 kg/m² Consumption of Triflex Micro Chips: at least 0.05 kg/m² Application according to the material manufacturer's technical guidelines. (Not suitable for the Triflex TSS S1 (flame-retardant) version).</p>	_____ /m ²	_____

Amount carried forward: _____



Specifications

Item no.	Quantity	Subject of service	Unit price EUR	Total price EUR
9.5	_____ m ²	<p>"Dressing, fine" (R 11) surface – version (S1) (flame-retardant) Finishing of the surface and details with Triflex Cryl Finish S1 with quartz sand dressing, size 0.2–0.6 mm. Colour: at the discretion of the client. Consumption of Triflex Cryl Finish S1: at least 0.50 kg/m² Consumption of quartz sand 0.2–0.6 mm: at least 3.00 kg/m² Finishing with Triflex Cryl Finish S1 a second time, dressing of the surface with Triflex Micro Chips. Consumption of Triflex Cryl Finish S1: at least 0.70 kg/m² Consumption of Triflex Micro Chips: at least 0.05 kg/m² Application according to the material manufacturer's technical guidelines.</p>	<p>Amount carried forward: _____</p> <p>_____ /m²</p>	_____
9.6	_____ m ²	<p>"Dressing, coarse" (R 12) surface – standard Dressing of the Triflex ProFloor coating whilst still fresh with quartz sand, grain size 0.7-1.2 mm. Colour: at the discretion of the client. Consumption of quartz sand 0.7-1.2 mm: at least 7.00 kg/m² Finishing of the surface and details with Triflex Cryl Finish 205, dressing of the surface with Triflex Micro Chips. Consumption of Triflex Cryl Finish 205: at least 0.50 kg/m² Consumption of Triflex Micro Chips: at least 0.05 kg/m² Application according to the material manufacturer's technical guidelines. (Not suitable for the Triflex TSS S1 (flame-retardant) version).</p>	<p>_____ /m²</p>	_____

Amount carried forward: _____



Specifications

Item no.	Quantity	Subject of service	Unit price EUR	Total price EUR
9.7	_____ m ²	<p>"Dressing, coarse" (R 12) surface – version S1 (flame-retardant) Dressing of the Triflex ProFloor S1 coating whilst still fresh with quartz sand, grain size 0.7-1.2 mm. Consumption of quartz sand 0.7-1.2 mm: at least 7.00 kg/m² Finishing of the surface and details with Triflex Cryl Finish S1, dressing of the surface with Triflex Micro Chips. Colour: at the discretion of the client. Consumption of Triflex Cryl Finish S1: at least 0.70 kg/m² Consumption of Triflex Micro Chips: at least 0.05 kg/m² Application according to the material manufacturer's technical guidelines.</p>	Amount carried forward: _____ /m ²	_____ _____
10		Hourly rates		
10.1	_____ hrs.	Hourly rate of a foreman.	_____ /hr.	_____
10.2	_____ hrs.	Hourly rate of a skilled trade worker.	_____ /hr.	_____
10.3	_____ hrs.	Hourly rate of an assistant.	_____ /hr.	_____
11		Materials		
11.1	_____ kg	Material consumption upon proof.	_____ /kg	Unit price
12		Disposal		
12.1	Lump sum	Disposal of all waste and hazardous waste materials in accordance with the current applicable laws and implementing regulations. Net total: Statutory VAT at _____% Gross total:	Lump sum	_____ _____