

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 build-up with Triflex ProDetail (junctions, details) as well as Triflex ProTect (surfaces) are covered by European Technical Approval (ETA) issued by the German approval body for non-regulated construction products and types of construction, Deutsche Institut für Bautechnik (DIBt), and meet the requirements of the Construction Products Directive of the EU (CE marking) in accordance with ETAG No. 005 in the highest usage categories.

General Building Supervisory Authority Test Certificates (PG-FLK) certify the suitability for use of the waterproofings within the system build-up as structure waterproofing on surfaces with an inclination of up to 90° as per Building Regulations List A Part 2 No. 2.51. This waterproofing system is classified as a rigid roofing structure, among other things, in accordance with German regional building regulations.

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.

The contract comprises the following components:

- Specifications
- System description and manufacturer's product information
- Rules for waterproofing systems (German Flat Roof Guidelines) Zentralverband des Deutschen Dachdeckerhandwerks (German Central Association of the Roofing Trade)
- 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:

- Full-surface fleece-reinforced waterproofing system based entirely on polymethyl methacrylate resin (PMMA)
- Hydrolysis-resistant
- Seamless
- Cold-applied
- Fast-curing (rainproof after 30 min)
- Solvent-free
- Flexible in low temperatures
- Vapour-permeable
- Full-surface adhesion on a multitude of substrates
- Root- and rhizome-resistant according to FLL standards
- Conditions for use as per manufacturer's system and product descriptions (e.g. minimum application temperature 0 °C substrate moisture max. substrate moisture 6 % by weight, surface temperature min. 3 °C above dew point)
- Suitable for normal pedestrian traffic
- Elastic and crack-bridging up to 3.0 mm based on PG-FLK
- Extremely weather-resistant (UV, IR, etc.)
- Resistant to chemicals present in air and rainwater
- Fire classification according to EN 13501-5: Class BROOF(t1), BROOF(t2), BROOF(t3), BROOF(t4)
- Fire classification according to EN 13501-1: Class E
- Resistant to external fire exposure to DIN 4102 / DIN EN 13501
- 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)
- Complies with DIN 18531 and German Flat Roof Guidelines





Specifications

Item no.	Quantity	Subject of service	Unit price EUR	Total price EUR
1 1.1	Lump sum	General Building site preparation	lump sum	
2		Substrate pre-treatment		
2.1	m²	Roofing membranes Eliminate any bulges, bubbles, folds and loose roofing membrane. Level out any unevenness. Ensure the roof surface is free of any contaminants. Remove any debris.	/m²	
2.2	m ²	Gravel filling Remove and dispose of any gravel filling.	/m²	
2.3	m	Lightning protection system Dismantle and, where relevant, dispose of any lightning protection systems. Replacement/reassembly and testing will be carried out by a specialist company in accordance with the statutory provisions.	/m	
3		Substrate pre-treatment See Triflex ProTect system description, Substrate pre-treatment table.		
3.1	m²	Basic cleaning Preparation of the substrate using a suitable basic cleaning process. Procedure:	/m²	
3.2	m²	Grinding Prepare the substrate in accordance with the system description and the substrate pre-treatment table, by grinding with suitable abrasive tools, incl. cleaning, acknowledgement of delivery, off-site transportation and proper disposal of any rubble.	/m²	
3.3	m²	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.	/m²	
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Amount carried forward:



Specifications

			Unit price	Total price
Item no.	Quantity	Subject of service	EUR	EUR
			Amount carried forward:	
4		Triflex Primer See Triflex ProTect system description, Substrate pre-treatment table.		
4.1	m²	Priming of asphalt e.g. asphalt, hot bitumen coating, cold bitumen coating, polymer bitumen sheeting (PY-P) mod. (APP). 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.	/m²	
4.2	m²	Priming of concrete e.g. concrete, screed, 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.	/m²	
4.3	m²	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, grain 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.	/m²	
4.4	m²	Priming of plastic sheeting e.g. plastic sheeting TPO, FPO, EPDM. Priming for specific sheeting with Triflex Primer 610. Consumption: approx. 40-80 g/m ² For advice on a case-by-case basis, please contact the Triflex Technical Advice Department. Application according to the material manufacturer's technical guidelines. Adhesion to the substrate must be checked on a case-by-case basis.	/m²	

Amount carried forward:



Specifications

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Item no.	Quantity	Subject of service	EUR	EUR
			Amount carried forward:	
4.5	m²	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 I/m ² Consumption of Triflex Glass Primer: approx. 0.05 I/m ² Application according to the material manufacturer's technical guidelines. Adhesion to the substrate must be checked on a case-by-case basis.	/m²	
4.6	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/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.	/m²	
5		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.		
5.1	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. (See Triflex system drawing ProTect-3302)	/m	
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Amount carried forward



Specifications

			Unit price	Total price
Item no.	Quantity	Subject of service	EUR	EUR
			Amount carried forward:	
5.2	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. (See Triflex system drawing ProTect-3306)	/pc.	
5.3	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. (See Triflex system drawing ProTect-3303)	/pc.	
5.4	m	Edge finishing with bracket-mounted gutter Waterproofing of the edge finishing 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. (See Triflex system drawing ProTect-3307)	/m	
5.5	m	Parapet edge finishing Waterproofing of the edge finishing 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. (See Triflex system drawing ProTect-3305)	/m	
5.6	pc.	Skylight Waterproofing of the skylight 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. (See Triflex system drawing ProTect-3304)	/pc.	
		Amo	unt carried forward:	



Specifications

	O		Unit price	Total price
Item no.	Quantity	Subject of service	EUR	EUR
			Amount carried forward:	
5.7	pc.	Waterproofing of hard-to-reach details Waterproofing with Triflex ProFibre. Consumption: at least 3.00 kg/m ² Note: In areas where DIN 18531/the Flat Roof Guidelines are valid, Triflex ProFibre is classified as a special structure to be agreed upon with the client. Application according to the material manufacturer's technical guidelines.	/pc.	
6		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.		
6.1	m	Settlement joint Waterproofing of the settlement joint with Triflex ProDetail incl. Triflex Special Fleece and PE round sealing band. Triflex Special Fleece strip width: cm, round sealing band d = 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 ProTect-3308)	/m	
7		Triflex surface waterproofing Creation of surface waterproofing with Triflex ProTect incl. Triflex Special Fleece. The Triflex ProTect waterproofing system has been awarded ETA approval (ETA No. 03/0020) with CE mark in the highest usage categories W3, M and S, P1 to P4, S1 to S4, TL4, TH4, B _{ROOF} (t1), B _{ROOF} (t2), B _{ROOF} (t3), B _{ROOF} (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.		
7.1	m²	Surface waterproofing Waterproofing of the wall junction with Triflex ProTect incl. Triflex Special Fleece. Consumption of Triflex ProTect: at least 3.00 kg/m ² Application according to the material manufacturer's technical guidelines. (See Triflex system drawing ProTect-3301) Amor	/m² unt carried forward:	



Specifications

			Unit price	Total price
Item no.	Quantity	Subject of service	EUR	EUR
			Amount carried forward:	
8		Triflex Finish		
8.1	m²	Standard surface "smooth" Finishing of surface with Triflex Cryl Finish 205. Colour: at the discretion of the client. Consumption: at least 0.50 kg/m ² Application according to the material manufacturer's technical guidelines.	/m²	
8.2	m²	Surface "maintenance paths/hazard areas". Coating of surface with Triflex Cryl SC 237. Colour: at the discretion of the client. Consumption: approx. 2.00 kg/m ² Application according to the material manufacturer's technical guidelines.	/m²	
9		Surface protection		
9.1	m²	Protective layer For protection against mechanical influences caused by a subsequent covering. Make of protective layer:	/m²	Unit price
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.	Lump sum	

Amount carried forward:





Specifications

			Unit price	Total price
Item no.	Quantity	Subject of service	EUR	EUR
			Amount carried forward:	
		Net total:		
		Statutory VAT at%		
		Gross total:		