

Planning documents
Detail waterproofing system

Triflex ProDetail®



Applications



It is not just surface waterproofing that ensures the water-tightness of a flat roof, the solution for joints and details is also crucial. Just one single weak point compromises the functionality of the overall layer structure.

In the case of single repairs, or a complete refurbishment, the number and complexity of the details may well be the key factor in the decision to use liquid applied waterproofing. Only liquid applied waterproofing is able to mould itself exactly to the details of the roof and provide a seamless and joint-free solution.

Triflex has more than 45 years experience of using durable waterproofing and coating systems in the world of building refurbishment. **Triflex ProDetail** is a waterproofing system developed specially for junctions that ensures durable and reliable protection of details.

Fast and reliable

Generally speaking, leaks in a flat roof only become apparent when the rooms underneath show signs of damp. For this reason, damage tends to occur in the cold seasons. Triflex ProDetail is formulated for use at substrate temperatures of -5 °C. The liquid Triflex ProDetail is rainproof after approx. 30 minutes and fully cured in approx. 45 minutes. So repairs can be safely carried out in all weathers.

Universal detail solutions

Triflex ProDetail is ideal for a whole host of applications. Alongside its use as a detail solution in a flat roof system, Triflex ProTect is also used as a detail solution with other waterproofing substances and as a repair material. The waterproofing resin has technical properties which also make it suitable for use in Triflex systems on balconies and in car parks. Triflex ProDetail is also a proven performer in special applications, such as the preservation of monuments.







Advantages at a glance

Waterproof down to the smallest detail

The cured resin forms a seamless and joint-free surface. Even complicated details, such as ventilation pipes in close proximity to each other, or H-beams, can easily be homogeneously waterproofed using liquid-applied waterproofing.

Highly resilient with dynamic crack-bridging

The fully reinforced system offers a level of flexibility that leaves it unaffected by any movement of the other functional layers.

Ideal for refurbishments

The vapour-permeable system can be applied to virtually all substrates, without primer in the majority of cases.

Short curing times

The liquid-applied system has particularly rapid curing times. The waterproofing resin is fully functional after just 45 minutes. This ensures reliable processing — even in changeable weather and at substrate temperatures of down to -5 $^{\circ}$ C.

Reliable application

The liquid-applied waterproofing has a thixotropic formulation which allows the resin to be applied to vertical surfaces without slumping. It also fully bonds to the substrate preventing the underflow of rainwater. Mechanical fastening at the upper edge is not required.

Certified reliability

Triflex ProDetail has obtained a European Technical Assessment (ETA) and meets the requirements of the EU Construction Products Directive (CE marking). Its root resistance is also certified acc. to FLL standards (EN 13948). Also, Triflex ProTect has a general building supervisory authority test certificate (abP) in accordance with PG-FLK for waterproofing of building structures as per VV TB No. C 3.28. Triflex ProDetail meets the requirements as per DIN 18531 and the German Flat Roof Guidelines.

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And this is how it's done...



1. Seal off intersections between skylight dome and refurbishing rim with adhesive tape.



2. Mix partial quantity thoroughly with the respective amount of catalyst additive.



3. Apply generous coating of Triflex ProDetail.



4. Work the Triflex Special Fleece into the laid material, making sure that there are no air



5. Cut into the fleece at the corners and apply another generous coat of Triflex ProDetail.



6. Follow the same procedure to bond to the surface.



7. The waterproofing is rainproof after just 30 minutes.



8. Triflex ... waterproof down to the smallest detail!



Compatible system components

All the Triflex products mentioned in this system are carefully coordinated on the basis of laboratory testing and years of experience. This standard of quality ensures optimum results during both application and use.

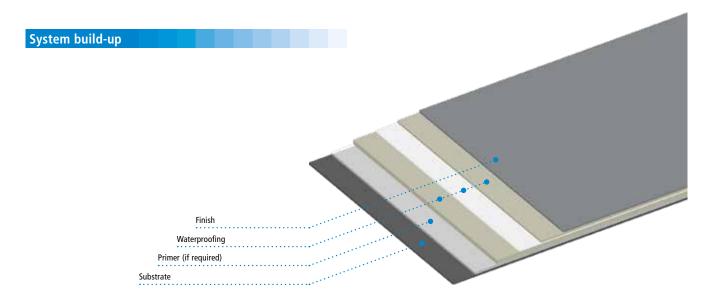
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System description

Properties

- Fully reinforced detail waterproofing system with a polymethyl methacrylate (PMMA) base
- Seamless
- Cold-applied
- Fast-curing
- Flexible in low temperatures
- Excellent adhesion properties on a multitude of substrates
- · Root-resistant in line with FLL
- Can be used at substrate temperatures of down to -5 °C
- Extremely weather-resistant (UV, IR, etc.)
- Radon-resistant
- Elastic and crack-bridging
- Vapour-permeable

- Resistant to chemicals present in air and rainwater
- Resistant to external fire exposure to DIN 4102/DIN EN 13501
- European Technical Assessment with CE mark in the highest usage categories (W3, M and S, P1 bis P4, S1 to S4, TL4, TH4)
- Meets the requirements of DIN 18531 and the German Flat Roof Guidelines
- General building supervisory authority test certificate (abP) for liquidapplied waterproofing of building structures set out in PG-FLK as per VV TB No. C 3.28
- Can also be used for other applications, such as balconies and parking
 decks.



System components

Prime

Triflex Primer for sealing the substrate and ensuring substrate adhesion (if necessary, see Substrate pre-treatment table).

Waterproofing

Triflex ProDetail waterproofing membrane, fully reinforced with a sturdy Triflex Special Fleece made of polyester.

Finish

Triflex Cryl Finish 205, wear-resistant system finish (for visually appealing design if required).

Substrate

The suitability of the specific substrate should always be tested on a case-bycase basis. The substrate must be clean, dry and free of cement bloom, dust, oil, grease and other adhesion-inhibiting substances.

Moisture: When carrying out coating work, the substrate moisture must not exceed 6% by weight. Ensure that structural measures are taken to prevent moisture penetration of the coating from underneath.

Dew point: During application, the surface temperature must be at least 3 °C above the dew point temperature. Below this temperature, a separating film of moisture can form on the surface.

Hardness: Mineral substrates must be permitted to fully harden for at least 28 days.

Adhesion: The following tensile strengths must be verified on pretreated test surfaces:

Concrete: on average, at least 1.5 N/mm², individual value not less than 1.0 N/mm².

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System description

Substrate pre-treatment

Substrate	Pre-treatment Pre-treatment	Primer
Acrylic glass	Abrade with Triflex Cleaner, roughen surface	No primer
Aluminium	Remove loose rust and rust scale, abrade with Triflex Cleaner	Triflex Metal Primer (B)
Asphalt	Grinding	Triflex Cryl Primer 222
Cold bitumen coating	Adhesive strength test	Triflex Cryl Primer 222
Composite thermal insulation systems	Remove any loose material	Triflex Pox R 100
Concrete	Grinding	Triflex Cryl Primer 276
Copper	Remove loose rust and rust scale, abrade with Triflex Cleaner	Triflex Metal Primer (B)
FRP/skylight frame	Abrade with Triflex Cleaner, roughen surface	No primer
Glass	Abrade with Triflex Glass Cleaner, adhesive strength test	Triflex Glass Primer
Hot bitumen coating	Adhesive strength test	Triflex Cryl Primer 222
Lightweight concrete	Remove any loose material	Triflex Cryl Primer 276
Mortar, resin-modified	Grinding	Triflex Pox R 100
Paint	Completely grind off	See substrate
Plaster/masonry	Remove any loose material	Triflex Cryl Primer 276
Plastic sheeting (PIB)	Roughen surface, adhesive strength test	On request ^(A)
Plastic sheeting (PVC-P, nB), EVA	Abrade with Triflex Cleaner	No primer
Plastic sheeting (TPO, FPO, EPDM)	Abrade with Triflex Cleaner, roughen surface, adhesive strength test mandatory	On request ^(A)
Polymer bitumen sheeting (PYE) mod. (SBS)	Remove any loose material	No primer
Polymer bitumen sheeting (PYP) mod. (APP)	Remove any loose material, adhesive strength test	Triflex Cryl Primer 222
PVC mouldings, rigid	Abrade with Triflex Cleaner, roughen surface	No primer
Screeds	Grinding	Triflex Cryl Primer 276
Stainless steel	Remove loose rust and rust scale, abrade with Triflex Cleaner	Triflex Metal Primer (B)
Steel, galvanised	Remove loose rust and rust scale, abrade with Triflex Cleaner	Triflex Metal Primer (B)
Wood	Remove any paint	Triflex Cryl Primer 276
Zinc	Remove loose rust and rust scale, abrade with Triflex Cleaner	Triflex Metal Primer (B)

 $^{^{(}A)}$ Depending on the type of sheeting, e.g. using Triflex Primer 610.

Important:

Adhesion must always be tested on the specific substrate!

Priming

Triflex Cryl Primer 222

Apply evenly with a Triflex universal roller. Consumption: at least 0.40 kg/m². Can be recoated after approx. 45 mins.

Triflex Cryl Primer 276

Apply evenly with a Triflex universal roller. Consumption: at least 0.40 kg/m². Can be recoated after approx. 45 mins.

Triflex Glass Primer

Wipe on GP evenly with a cleaning cloth. Consumption: approx. $0.05 \ l/m^2$ Can be recoated after approx. 15 mins. to max. 3 hrs.

Triflex Metal Primer

Apply a film with a short-pile roller (e.g. MP roller) or alternatively, apply a film with a spray can.

Consumption: approx. 0.15 l/m².

Can be recoated after approx. 60 mins.

Triflex Pox R 100

Apply evenly using a Triflex universal roller and immediately dress with plenty of quartz sand.

Consumption of Triflex Pox R 100: at least 0.30 kg/m², Consumption of quartz sand 0.2–0.6 mm: at least 2.00 kg/m². Can be recoated after approx. 12 hrs.

Triflex Primer 610

Apply evenly with a brush or roller. Consumption: approx. 40 to 80 g/m² Can be recoated after approx. 20 mins.

⁽B) Alternative to priming: Abrade with Triflex Cleaner and roughen surface. Information on other substrates is available on request (technik@triflex.de).

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System description

Detail waterproofing

Application is wet-on-wet.

1. Triflex ProDetail

Apply evenly with a radiator roller. Consumption: at least 2.00 kg/m².

2. Triflex Special Fleece/Triflex Special Fleece PF(1)

Embed cut-outs with no air bubbles.

Overlap the fleece strips by at least 5 cm.

3. Triflex ProDetail

Apply until the Triflex Special Fleece is fully saturated. Consumption: at least 1.00 kg/m².

Total consumption of Triflex ProDetail: at least 3.00 kg/m².

Can be recoated after approx. 45 mins.

For dimensions, see Triflex ProDetail system drawings.

Detail waterproofing for hard-to-reach areas:

Triflex ProFibre

Apply with a brush. Consumption: approx. 3.00 kg/m². Rainproof after approx. 30 mins. Can be recoated after approx. 45 mins.

Joint waterproofing

1. PE round sealing band

Seal the joint with the round sealing band.

Points 2 to 4 below are implemented wet-on-wet.

2. Triflex ProDetail

Apply with a width of at least 10 cm on both sides of the joint with a radiator roller.

Consumption: at least 2.00 kg/m².

3. Triflex Special Fleece/Triflex Special Fleece PF

Embed strips with no air bubbles.

Overlap the ends of the fleece by at least 5 cm.

4. Triflex ProDetail

Apply until the Triflex Special Fleece is fully saturated. Consumption: at least 1.00 kg/m².

Total consumption of Triflex ProDetail: at least 3.00 kg/m².

Rainproof after 30 mins.

Can be recoated after approx. 45 mins.

For dimensions, see Triflex ProDetail system drawings.

Finishing

The sealing of all vertical junctions, transitions and details must be carried out prior to the surface finishing with thixotropic Triflex Cryl Finish 205. The product is thickened by the in-situ addition of 1 wt. % Triflex Liquid Thixo.

Triflex Cryl Finish 205

Cross-coat evenly using a Triflex finish roller. Consumption: at least 0.50 kg/m². Can be walked on after approx. 2 hrs.

Work interruptions

If work is interrupted for more than 12 hrs., or if soiled by rain etc., the intersection must be activated with Triflex Cleaner.

Airing time: at least 20 mins.

Transitions to subsequent waterproofing must overlap (incl. Triflex Special Fleece) by a minimum of 10 cm. The finish must be applied within 24 hrs. If this application is delayed for any reason, the surface to be finished must be pre-treated with Triflex Cleaner.

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System description

Product information

For information on applications, conditions for use and instructions for mixing, see product information (request if necessary):

Triflex Cleaner

Triflex Cryl Finish 205

Triflex Cryl Primer 222

Triflex Cryl Primer 276

Triflex Glass Primer

Triflex Glass Cleaner

Triflex Liquid Thixo

Triflex Metal Primer

Triflex Pox R 100

Triflex Primer 610

Triflex ProDetail

Triflex ProFibre

Triflex Special Fleece

Triflex Special Fleece PF

Quality standard

All Triflex products are manufactured in accordance with the standards defined in ISO 9001. To ensure quality of workmanship, Triflex products are only installed by fully trained and qualified specialist contractors.

Safety tips / Accident prevention

Read the safety data sheets before using the products.

Required consumptions / Waiting times

The specified consumptions (coverage) figures apply only to smooth, even surfaces. Special allowance must be made for unevenness, roughness and porosity. Specified flash times and waiting times apply to a substrate and ambient temperature of $+20\,^{\circ}\text{C}$.

General notes

The system descriptions, system drawings and product information sheets form the basis for using Triflex products, and it is essential to follow these when planning and carrying out your building project. Any deviation from the technical information provided by Triflex GmbH & Co. KG that is current at the time the work is carried out may invalidate the warranty. Any project-related deviations require written approval from Triflex.

All the information is based on general regulations, directives and other technical rules. The general regulations applicable in the particular country of use must be respected.

Since the parameters can vary from case to case, the contractor is required to test the suitability, e.q. of the substrate.

Non-Triflex products must not be used in combination with Triflex systems. Triflex reserves the right to make modifications in the interest of technical enhancement or optimisation of Triflex products.

Tender texts

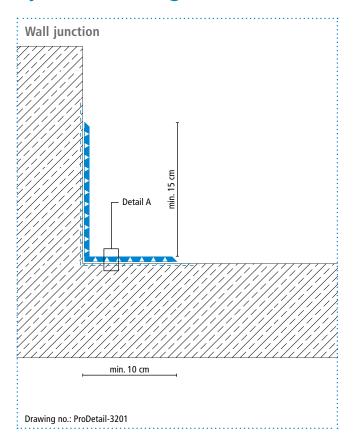
Please visit the Download section of the Triflex website at www.triflex.com to obtain the current standard specifications, which are available in a range of different file formats. Alternatively, visit the website www.ausschreiben.de or www.heinze.de.

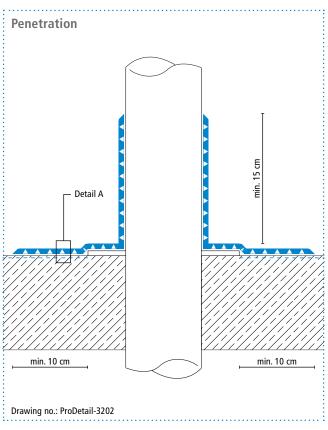
CAD drawings

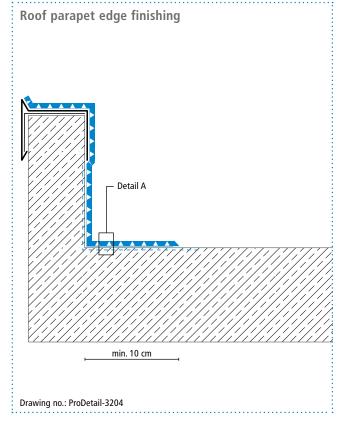
All CAD system drawings can be downloaded free of charge from the Download section of the Triflex website www.triflex.com. Contact us at technik@triflex.de to request further true-to-scale CAD drawings.

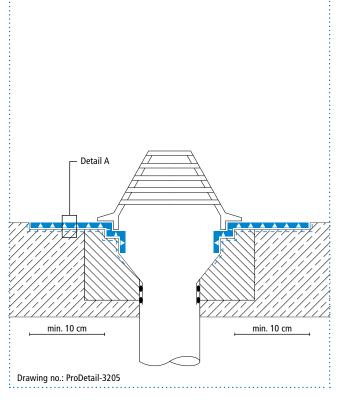


System drawings







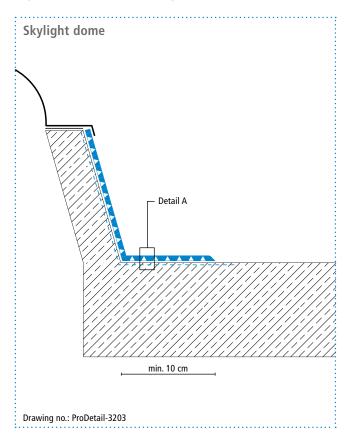


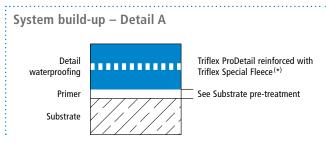
Gully

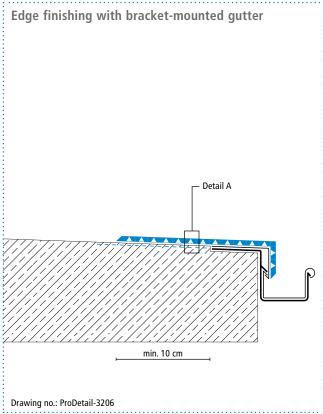
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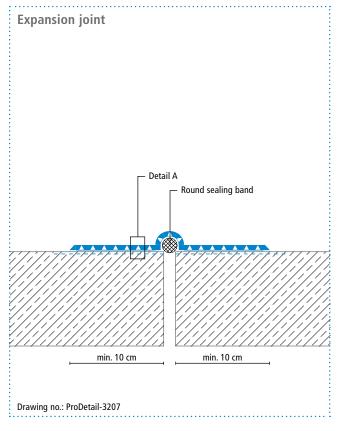
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System drawings









Height differences where the fleece overlaps are exaggerated.

 $^{^{(\}star)}$ Triflex Special Fleece or Triflex Special Fleece PF

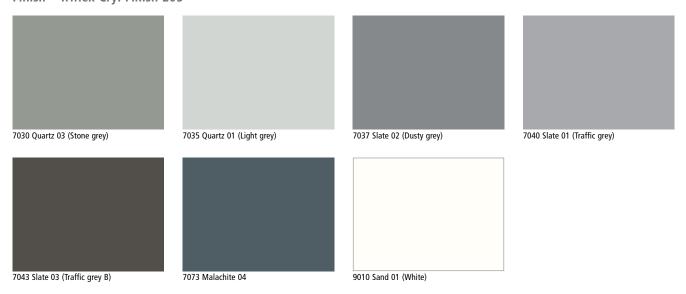


Colours

Waterproofing - Triflex ProDetail



Finish - Triflex Cryl Finish 205



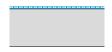
Please note:

Minor variations between the colour shown here and the actual colour are due to printing technology and the materials used.



Different roof constructions

Waterproofing for roofs without thermal insulation



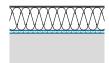
The full-surface fleece-reinforced Triflex waterproofing system provides seamless and jointless roof waterproofing, with no need for any additional surface protection.

Waterproofing for non-ventilated roofs



Over the thermal insulation (with support layer), the Triflex waterproofing system reliably waterproofs the building shell.

Waterproofing for inverted roofs



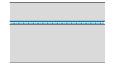
With inverted roofs, the Triflex waterproofing system forms the seamless waterproofing membrane underneath the thermal insulation.

Waterproofing under other coverings



The Triflex waterproofing system provides longlasting protection under loose coverings and their sub-structures.

Waterproofing under screed



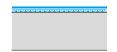
Triflex waterproofing systems with a PMMA resin base are resistant to alkalis and hydrolysis. They can be used under concrete, screed and tiles without any problems.

Waterproofing under ponding water



The waterproofing systems Triflex ProTect and Triflex ProDetail are suitable for waterproofing ornamental fountains, sprinkler systems and water tanks.

Waterproofing that can be walked on



For maintenance paths, there are non-slip Triflex waterproofing systems available. Waterproofing with a higher load resistance is also possible.

Waterproofing for green roofs



Triflex waterproofing systems are suitable for use under roof greening (root and rhizomeresistant).



Specific details with Triflex ProFibre

Triflex ProFibre is a 2-component fibre-reinforced waterproofing product with a PMMA resin base, which needs no additional fleece reinforcement. The waterproofing resin is particularly suitable for details that are difficult to get to for structural reasons, making it impossible to use a fleece-reinforced waterproofing system.



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