

Planning documents Roof surface coating system

Triflex Metal Coat



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Applications



The metal roof has stood the test of time in the field of industry. Not only does it provide cost-effective protection from the effects of weather, but it is also the preferred solution for complying with the new German building energy law when combined with insulation.

Metals are also used for façade cladding, containers and tanks, pipework and process apparatus as well as many other constructions. Metals that are exposed to the effects of weather as well as mechanical loads corrode at a faster rate, leading to surface rust, blistering rust and eventually scaling. This compromises the functionality of the metal roof.

Triflex has more than 45 years experience of using durable waterproofing and coating systems in the world of building refurbishment. **Triflex Metal Coat** is a functional coating that was specially developed for metal roofs. It protects against corrosion and prolongs the life of metal roofs and constructions.

Corrosion protection for metal

The single-component, aqueous functional coating acts like a protective coat over the roof covering. Scratches and dents are encased by the elastic coating with a high polymer base, so that cracks and scaling cannot occur. Even sensitive areas are protected thanks to the good edge coverage. Additional anticorrosive pigments ensure complete protection against rust.

When used together with the fleece-reinforced liquid applied waterproofing Triflex ProDetail for all metal overlaps and details, the result is reliable long-lasting protection, which is also available in different colours.







Advantages at a glance

Long-lasting

Triflex Metal Coat is a waterproofing coating system for joints and details that was developed specially for metal roofs. The components and products used are of high quality and durability-tested.

Waterproof down to the smallest detail

The cured resin forms a seamless and joint-free surface. Complex details and joints are waterproofed and fleece-reinforced.

Ideal for refurbishments

The system has a mass per unit area of less than 1 kg/m^2 and so hardly affects stability at all. This saves removal costs and time.

Colours

The coating is available in a range of colours. Old, weathered roofs are visually enhanced and look like new again.

Certified reliability

The system uses Triflex ProDetail as the waterproofing resin for joints and details, which meets the highest ETAG 005 levels of performance and has an expected service life of 25 years.

Fast execution down to the smallest detail

the resin used in the Triflex Metal Coat system cures in just a few hours. Complete coating applications can be carried out in stages in a single day. With Triflex Metal Coat details and joints are reinforced using Triflex ProDetail with Triflex Special Fleece, so that the waterproofing is full-surface joint-bridging and uniform.

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And this is how it's done...



1. Heavily corroded metal substrates and unsound old coatings must be removed.



2. Degrease greasy and oily joint surfaces with Triflex Cleaner.



3. Prime rusty surfaces with Triflex Metal Primer.



4. To increase the expansion capacity, metal element overlaps are taped with Triflex Duct Tape.



5. All details and joints are waterproofed with fleece-reinforced Triflex ProDetail.



6. Triflex Metal Coat is roller- or airless-sprayapplied to the entire surface in two coats.



7. The final result is an elastic functional coating that protects against rust and scaling.



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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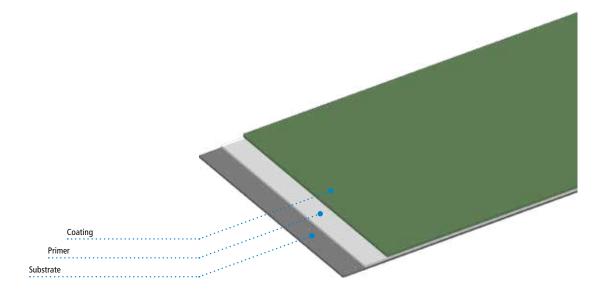
System description

Properties

- Watertight surface coating and detail waterproofing based on matched components
- · Seamless design
- System-integrated detail solution
- Full-surface adhesion and impermeable
- Flexible
- Dynamic crack-bridging properties
- Cold-applied
- Reinforced in areas exposed to high loads
- Fast-curing

- Rainproof after approx. 2 hrs.
- · Chemical-resistant
- Weather-resistant (UV, IR, etc.)
- · Variety of colours available
- The detail waterproofing has a European Technical Assessment with CE mark in the highest usage categories (W3, M and S, P1 bis P4, S1 to S4, TL4, TH4)
- Excellent adhesion properties on metal substrates
- Suitable for normal pedestrian traffic

System build-up



System components

Prime

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

Coating

Triflex Metal Coat protects against corrosion, prolonging the life of the metal structure.

Substrate

The suitability of the specific substrate should always be tested on a case-by-case 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 moisture cannot penetrate 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.

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System description

Substrate pre-treatment

Substrate pre-treatment for the surface: Triflex Metal Coat

Substrate	Pre-treatment	Primer
Aluminium	Clean surface with high pressure water jet	No primer ^(A)
Copper	Clean surface with high pressure water jet	No primer ^(A)
Stainless steel	Clean surface with high pressure water jet	No primer ^(A)
Steel, galvanised	Clean surface with high pressure water jet	No primer (A)
Zinc	Clean surface with high pressure water jet	No primer ^(A)

⁽A) Metal substrates with rust film must be primed with Triflex Metal Primer. Loose rust and blistering rust must first be removed.

Important

Adhesion must always be tested on the specific substrate!

Substrate pre-treatment for details/junctions: Triflex ProDetail

Substrate	Pre-treatment Pre-treatment	Primer
Aluminium	Remove loose rust and rust scale, abrade with Triflex Cleaner	Triflex Metal Primer (B)
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 Cleaner, adhesive strength test	Triflex Glass Primer
PVC mouldings, rigid	Abrade with Triflex Cleaner, roughen surface	No primer
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)
Zinc	Remove loose rust and rust scale, abrade with Triflex Cleaner	Triflex Metal Primer (B)

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

Important:

Adhesion must always be tested on the specific substrate!

Priming

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.

Detail waterproofing

Triflex ProDetail must be applied to all joints, junctions, transitions and other detail solutions before surface coating.

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/Special Fleece PF

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 Metal Coat system drawings.

Important:

Triflex duct tape is secured before the waterproofing in the area of the overlaps and joints of metal elements.

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.

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System description

Joint waterproofing

All joints must be waterproofed with Triflex ProDetail before surface coating.

Construction joint:

1. Triflex duct tape

Tape joint with Triflex duct tape.

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 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/m^2 .

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

Can be recoated after approx. 45 mins.

For dimensions, see Triflex Metal Coat system drawings.

Expansion joint:

1. PE round sealing band

Lay band to seal the joint.

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

3. Triflex Special Fleece/Triflex Special Fleece PF

Embed strips over the joint 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.

Can be recoated after approx. 45 mins.

For dimensions, see Triflex Metal Coat system drawings.

Surface coating

The coating is applied in two layers.

Roller/brush application:

1. Triflex Metal Coat

Evenly apply the first coat with a Triflex universal roller or brush. Consumption: approx. 0.20 to 0.30 kg/m².

Can be recoated after approx. 2 hr.

2. Triflex Metal Coat

Evenly apply the second coat with a Triflex universal roller or brush. Consumption: approx. 0.20 to 0.30 kg/m².

Total consumption of Triflex Metal Coat: approx. 0.40 to 0.60 kg/m². Can be recoated after approx. 2 hr.

Spray application:

1. Triflex Metal Coat

Evenly apply the first coat using the airless method. Consumption: approx. 0.30 to 0.40 kg/m². Can be recoated after approx. 2 hr.

2. Triflex Metal Coat

Evenly apply the second coat using the airless method.

Consumption: approx. 0.30 to 0.40 kg/m².

Total consumption of Triflex Metal Coat: approx. 0.60 to 0.80 kg/m².

Can be recoated after approx. 2 hr.

For dimensions, see Triflex Metal Coat system drawings.

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System description

Work interruptions

If joint work (details and joints using Triflex ProDetail) is interrupted for more than 12 hrs., or if soiled by rain etc., the transition must be activated with Triflex Cleaner. Airing time at least 20 mins. The coating (Triflex Metal Coat) must be applied within 24 hrs. If this application is delayed for any reason, the surface to be coated must be cleaned with water.

Product information

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

Triflex Cleaner
Triflex Glass Primer
Triflex Glass Cleaner
Triflex Metal Coat
Triflex Metal Primer
Triflex ProDetail
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 $+20\,^{\circ}\text{C}$.



System description

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

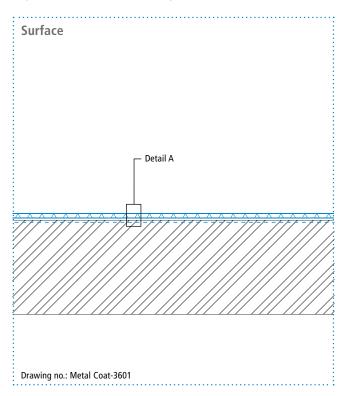
Please visit the Download section of the Triflex website at www.triflex.com to obtain the current standard specifications, which are available in a range of different file formats. Alternatively, visit the website www.ausschreiben.de or www.heinze.de.

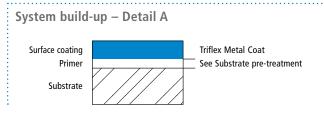
CAD drawings

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.



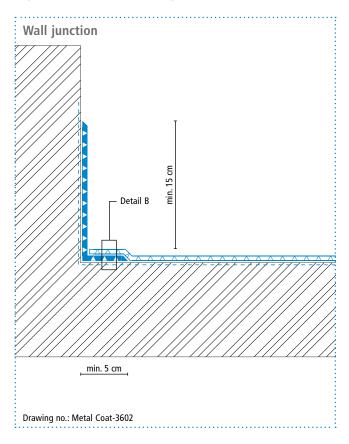
System drawings

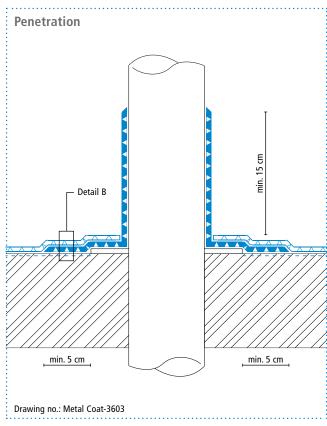


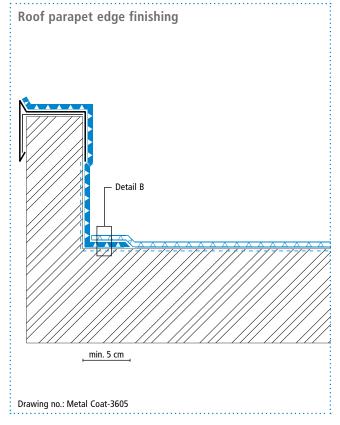


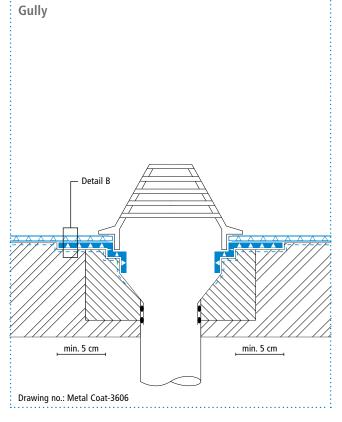


System drawings





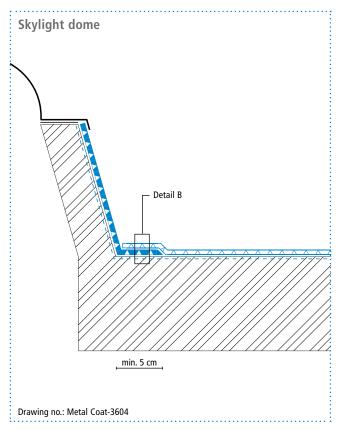


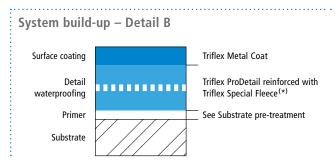


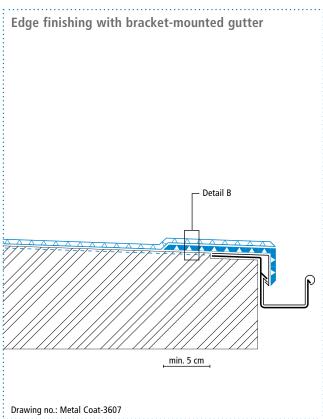
Height differences where the fleece overlaps are exaggerated.

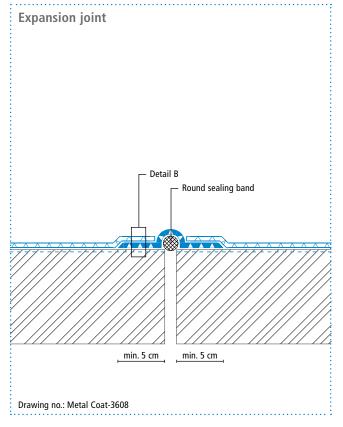
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System drawings









Height differences where the fleece overlaps are exaggerated.

(*) Triflex Special Fleece or Triflex Special Fleece PF

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Colours

Triflex Metal Coat



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

Roof surface coating system Triflex Metal Coat





