

Planning documents  
Roof Surface Coating System

## Triflex Metal Coat





## Applications



The metal roof has stood the test of time in the field of industry. Not only does it provide cost-effective protection against the effects of weather, but an insulated metal roof is also the preferred solution for complying with the new German energy saving regulations. Metals are also used for facade 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 almost 40 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 no cracks and scaling can occur. Even sensitive areas are protected thanks to the good edge coverage. Additional anti-corrosive 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<sup>2</sup> 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 safety

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.

# Triflex Metal Coat

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-spray-applied 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 lab-scale and application coordinated as a result of years of experience. This standard of quality ensures optimum results during both application and use.



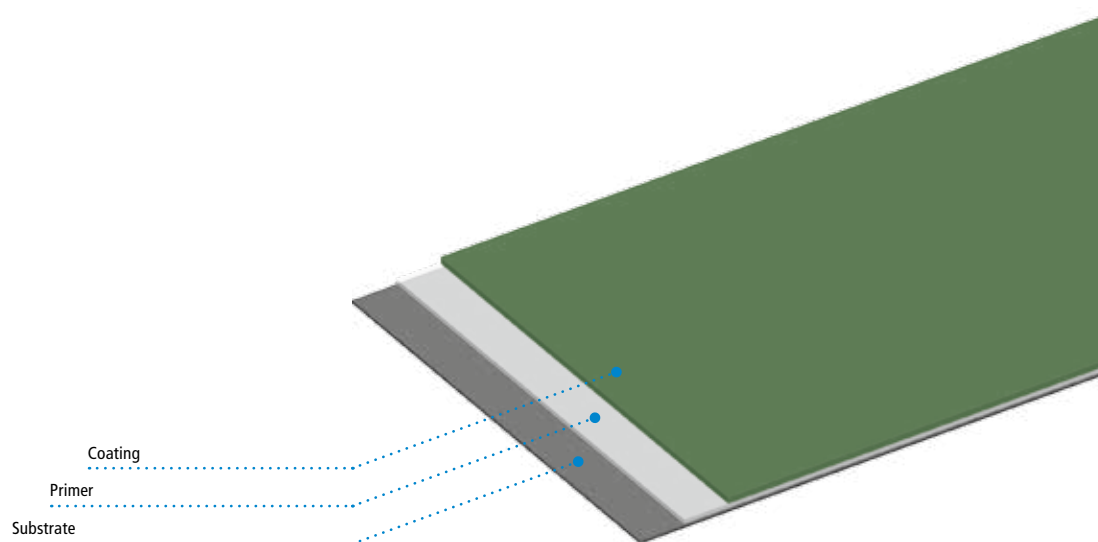
# Triflex Metal Coat

## 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
- 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
- Detail waterproofing has European Technical Approval with CE mark in the highest usage categories (W3, M and S, P1 to P4, S1 to S4, TL4, TH4)
- Excellent adhesion properties on metal substrates
- Suitable for normal pedestrian traffic

### System design



### System components

#### Primer

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

#### Coating

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

### Substrate

Substrate suitability should always be checked on a case by case basis. The substrate must be clean, dry and free of cement bloom, dust, oil, grease and other adhesion-reducing dirt.

**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 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.

# Roof Surface Coating System

## Triflex Metal Coat

### System description

#### Substrate pre-treatment

##### Substrate for the surface: Triflex Metal Coat

| Substrate         | Pre-treatment                              | Primer                   |
|-------------------|--|--------------------------|
| Aluminium         | Clean surface with high pressure water jet | No primer <sup>(1)</sup> |
| Copper            | Clean surface with high pressure water jet | No primer <sup>(1)</sup> |
| Stainless steel   | Clean surface with high pressure water jet | No primer <sup>(1)</sup> |
| Steel, galvanised | Clean surface with high pressure water jet | No primer <sup>(1)</sup> |
| Zinc              | Clean surface with high pressure water jet | No primer <sup>(1)</sup> |

<sup>(1)</sup> Metal substrates with surface rust must be primed with Triflex Metal Primer. Loose rust and blistering rust must first be removed.

#### Important note:

Adhesion to the substrate must be checked on a case-by-case basis!

##### Substrate for details/joints: Triflex ProDetail

| Substrate            | Pre-treatment                                    | Primer                   |
|----------------------|--|--------------------------|
| Aluminium            | Abrade with Triflex Cleaner, roughen surface     | No primer <sup>(2)</sup> |
| Copper               | Abrade with Triflex Cleaner, roughen surface     | No primer <sup>(2)</sup> |
| FRP / Skylight frame | Abrade with Triflex Cleaner, roughen surface     | No primer                |
| Glass                | Abrade with Triflex Glass Cleaner, adhesion test | Triflex Glass Primer     |
| PVC mouldings, rigid | Abrade with Triflex Cleaner, roughen surface     | No primer                |
| Stainless steel      | Abrade with Triflex Cleaner, roughen surface     | No primer <sup>(2)</sup> |
| Steel, galvanised    | Abrade with Triflex Cleaner, roughen surface     | No primer <sup>(2)</sup> |
| Zinc                 | Abrade with Triflex Cleaner, roughen surface     | No primer <sup>(2)</sup> |

<sup>(2)</sup> Alternative to roughening: Abrade with Triflex Cleaner, prime with Triflex Metal Primer. Loose rust and blistering rust must first be removed. Information on other substrates is available on request (technik@triflex.de).

#### Important note:

Adhesion to the substrate must be checked on a case-by-case basis!

#### Primer

##### Triflex Glass Primer

Wipe up evenly with a cleaning cloth GP.

Volume: approx. 50 ml/m<sup>2</sup>.

Can be recoated after approx. 15 min up to max. 3 hrs.

##### Triflex Metal Primer

Apply thinly with a short-pile roller or, alternatively, spray on thinly with a spray can.

Volume: approx. 80 ml/m<sup>2</sup>.

Can be recoated after approx. 30 to 60 min.

#### Detail waterproofing

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

Application is wet-in-wet.

##### 1 Triflex ProDetail

Apply evenly with a radiator roller.

Volume: at least 2.00 kg/m<sup>2</sup>.

##### 2 Triflex Special Fleece

Lay fleece strips, removing any air bubbles.

Overlap the fleece strips by at least 5 cm.

##### 3 Triflex ProDetail

Apply until the Triflex Special Fleece is fully saturated.

Volume: at least 1.00 kg/m<sup>2</sup>.

Total volume of Triflex ProDetail: at least 3.00 kg/m<sup>2</sup>.

Can be recoated after approx. 45 min.

For dimensions, see Triflex ProProtect system drawings.

#### Detail waterproofing for hard-to-reach areas:

##### Triflex ProFibre

Apply with a brush.

Volume: approx. 3.00 kg/m<sup>2</sup>.

Rainproof after approx. 30 min.

Can be recoated after approx. 45 min.



## 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 are completed wet-in-wet.

##### 2 Triflex ProDetail

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

Volume: at least 2,00 kg/m<sup>2</sup>.

##### 3 Triflex Special Fleece

Lay fleece strips, removing any air bubbles.

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

##### 4 Triflex ProDetail

Apply until the Triflex Special Fleece is fully saturated.

Volume: at least 1,00 kg/m<sup>2</sup>.

Total volume of Triflex ProDetail: at least 3,00 kg/m<sup>2</sup>.

Can be recoated after approx. 45 min.

For dimensions, see Triflex Metal Coat system drawings.

#### Settlement joint:

##### 1 PE round sealing band

Lay band to seal the joint.

Points 2 to 4 are completed wet-in-wet.

##### 2 Triflex ProDetail

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

Volume: at least 2,00 kg/m<sup>2</sup>.

##### 3 Triflex Special Fleece

Lay fleece strips, removing any air bubbles.

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

##### 4 Triflex ProDetail

Apply until the Triflex Special Fleece is fully saturated.

Volume: at least 1,00 kg/m<sup>2</sup>.

Total volume of Triflex ProDetail: at least 3,00 kg/m<sup>2</sup>.

Can be recoated after approx. 45 min.

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.

Volume: approx. 200 to 300 g/m<sup>2</sup>.

Can be recoated after approx. 2 hrs.

##### 2 Triflex Metal Coat

Evenly apply the second coat with a Triflex universal roller or brush.

Volume: approx. 200 to 300 g/m<sup>2</sup>.

Total volume of Triflex Metal Coat: approx. 400 to 600 g/m<sup>2</sup>.

Can be recoated after approx. 2 hrs.

#### Spray application:

##### 1 Triflex Metal Coat

Evenly apply the first coat using the airless method.

Volume: approx. 300 to 400 g/m<sup>2</sup>.

Can be recoated after approx. 2 hrs.

##### 2 Triflex Metal Coat

Evenly apply the second coat using the airless method.

Volume: approx. 300 to 400 g/m<sup>2</sup>.

Total volume of Triflex Metal Coat: approx. 600 to 800 g/m<sup>2</sup>.

Can be recoated after approx. 2 hrs.

For dimensions, see Triflex Metal Coat system drawings.

# Triflex Metal Coat



## System description

### What to do if work is interrupted

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 min. 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.

### System components

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

[Triflex Cleaner](#)  
[Triflex Glass Primer](#)  
[Triflex Metal Coat](#)  
[Triflex Metal Primer](#)  
[Triflex ProDetail](#)  
[Triflex Special Fleece](#)

### Quality standard

All Triflex products are manufactured in accordance with the standards defined in ISO 9001. To ensure quality is not compromised, Triflex products are only installed by specialist, fully trained and qualified contractors.

### Safety tips / Accident prevention

Read the safety data sheets before using the products.

### Volumes required / Waiting times

The specified volumes apply only to smooth, even surfaces. Special allowances must be made for unevenness, roughness and porosity. Information regarding airing and waiting times applies to a substrate at an ambient temperature of +20 °C.





## System description

### General notes

The basis for the use of Triflex products can be found in the system descriptions, system drawings and product information sheets. It is essential to heed these when planning and carrying out the building project. Departures from the technical information of Triflex GmbH & Co. KG applicable at the time of work can compromise the guarantee. Any project-related departures are subject to the written authorisation of Triflex.

All data 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 user is required to test the suitability, e.g., of the substrate.

Non-system substances must not be added to Triflex products. Subject to change in the interests of technical advancement or enhancement of Triflex products.

### Tender texts

Please visit the download section of the Triflex website at [www.triflex.com](http://www.triflex.com) to obtain the current standard specifications for tender, which are available in a range of different file formats.

### CAD drawings

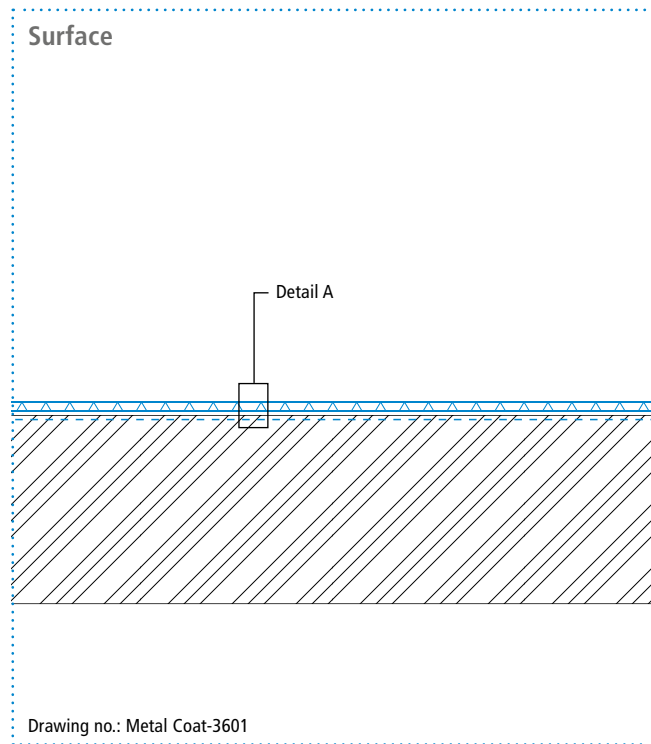
All CAD system drawings can be downloaded free of charge from the download section of the Triflex website [www.triflex.com](http://www.triflex.com).



# Triflex Metal Coat



## System drawings



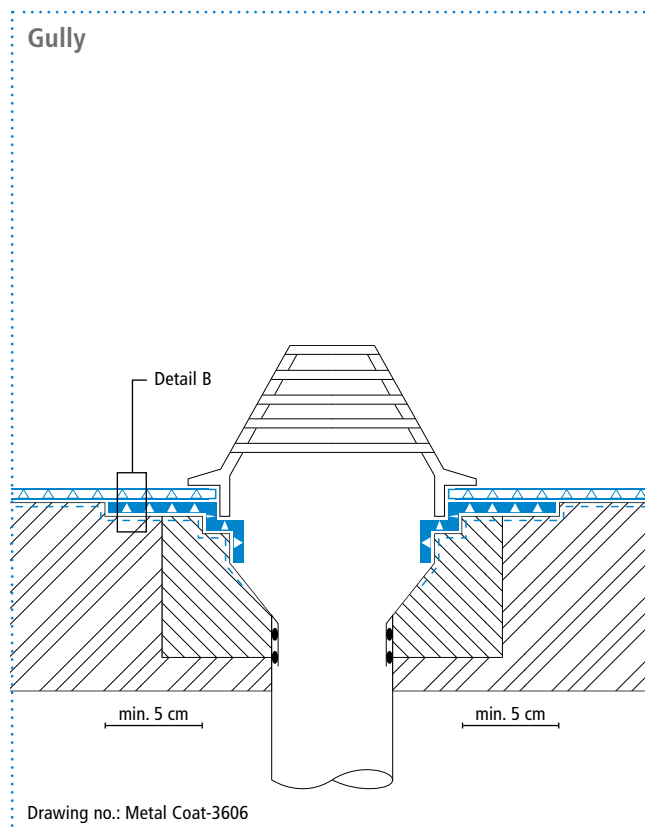
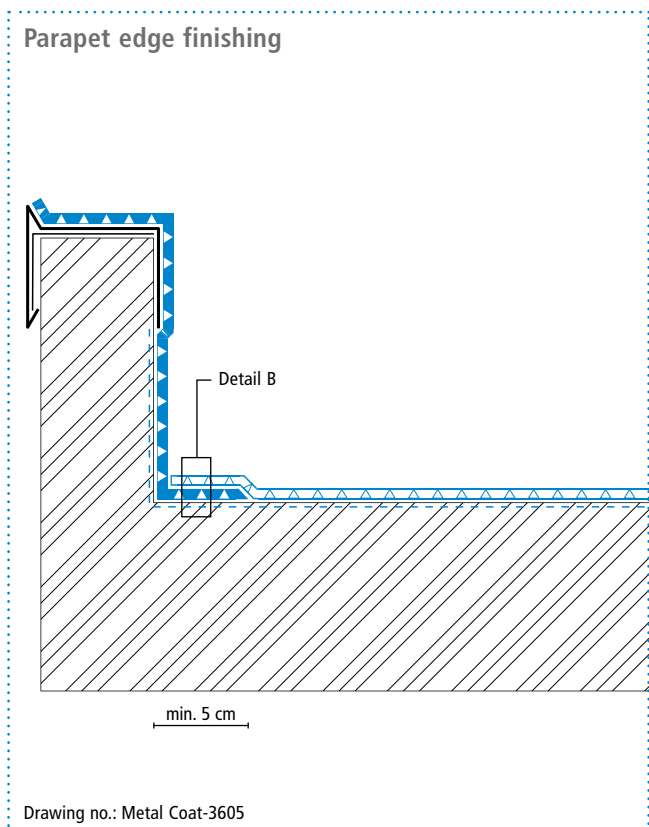
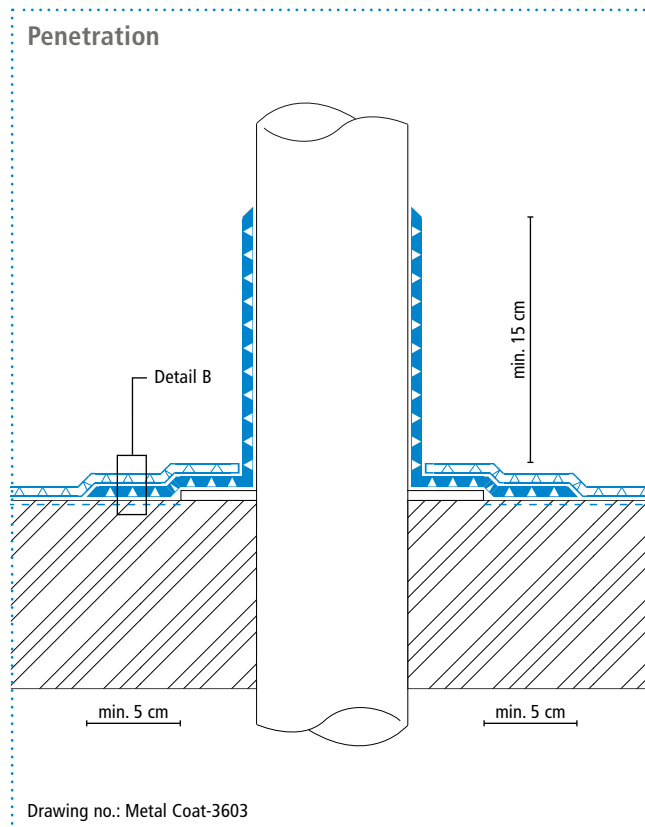
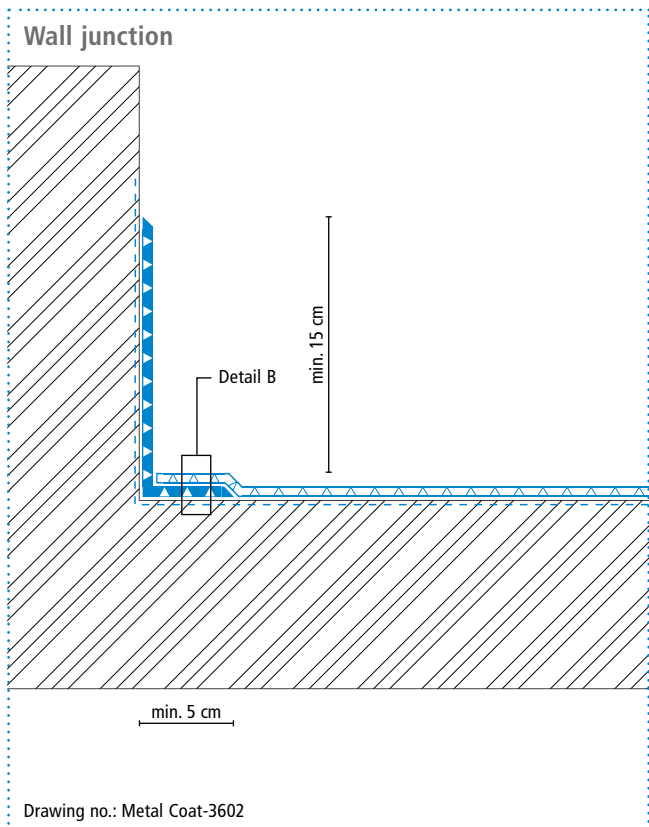
### System design – Detail A





# Triflex Metal Coat

## System drawings



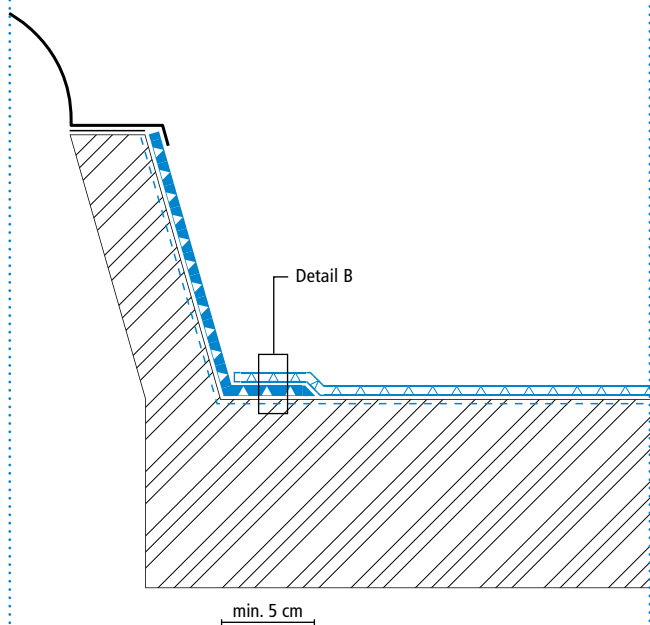
Height differences between fleece overlaps are exaggerated.

# Roof Surface Coating System

## Triflex Metal Coat

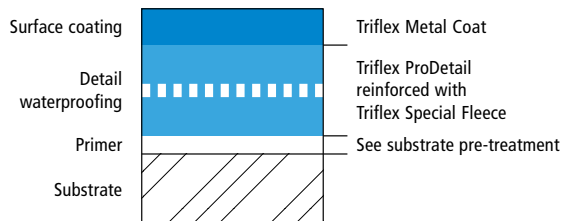
### System drawings

Rooflight

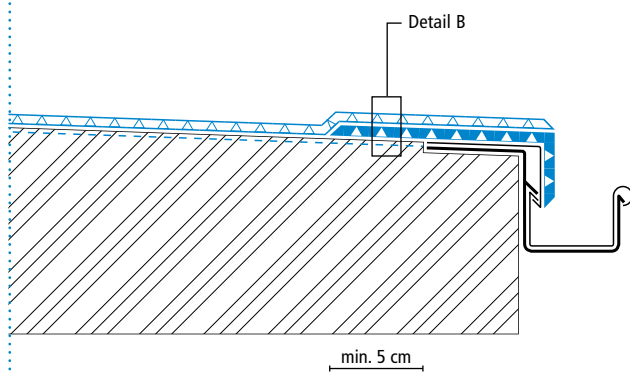


Drawing no.: Metal Coat-3604

System design – Detail B

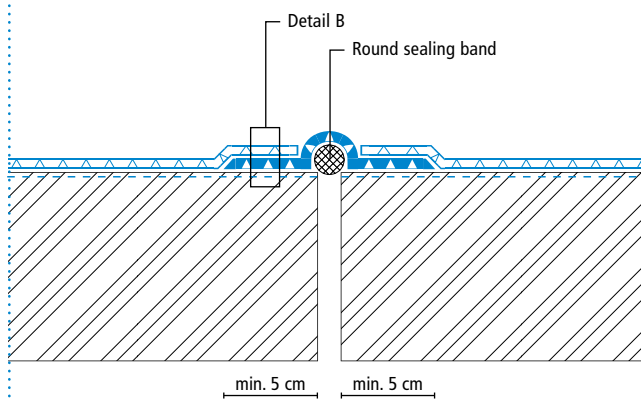


Edge finishing with bracket-mounted gutter



Drawing no.: Metal Coat-3607

Settlement joint



Drawing no.: Metal Coat-3608

Height differences between fleece overlaps are exaggerated.

Planning documents Triflex Metal Coat 01/2016



# Triflex Metal Coat

## Colours

### Triflex Metal Coat



3056 English red



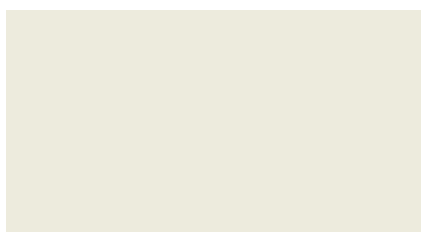
6011 Reseda green



7032 Pebble grey



7056 Grey green



9002 Grey white



9010 White

**Please note:**

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

Roof Surface Coating System

# Triflex Metal Coat





Delivering solutions together.



**International**

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