

Planning documents

Waterproofing system under other coverings

Triflex BWS





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Applications



Solutions for details and different coverings

Thanks to its low build-up height of just a few millimetres and its ability to waterproof a wide range of different surfaces homogeneously and seamlessly, the waterproofing system Triflex BWS is ideal for complicated structures.

It can accommodate subsequent surfaces of fixed bonded or loosely applied coverings, such as light wooden decking or the heavy ashlar used in monument preservation.

It is crucial that the structures of both new and refurbished buildings are reliably waterproofed. Individual requirements in this regard can vary enormously. But one thing they do have in common is the permanent mechanical load of the surface weight of subsequent overlays. Only high-quality systems meet the requirements placed on the material.

Triflex has almost 40 years experience of using durable waterproofing and coating systems in the world of building refurbishment. **Triflex BWS** is a waterproofing system specially developed for other coverings. The waterproofing reliably protects the structure against permanent load from heavy coverings and penetrating moisture.



Advantages at a glance

Highly resilient with dynamic crack-bridging

The Triflex BWS system is full-surface fleece-reinforced. This gives the material a level of flexibility that leaves it unaffected by any movement of the foundation.

Waterproof down to the smallest detail

The cured waterproofing resin forms a seamless and joint-free surface. Even complex details, such as upturns, can be easily and homogeneously waterproofed using liquid processing technology.

Alkali- and hydrolysis-resistant

Triflex BWS is permanently resistant to alkalis and hydrolysis. Even mineral-based coverings or tile adhesives can be used in direct contact with the waterproofing.

Short closure periods

Triflex BWS offers faster curing times than systems made of EP or PUR resins. Work on waterproofed surfaces can continue after just a short period of time.

Can also be applied in low temperatures

The waterproofing system can be applied in substrate temperatures of down to 0 °C. This means that balconies can be refurbished even in the cold winter months.

Surface finishes

The Triflex BWS system can be dressed with a variety of other loose or fixed coverings. Liquid applied waterproofing solutions support a wide range of alternatives.

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And this is how it's done ...



1. Prime wall junction and surface.



2. Prepare Triflex Special Fleece cut-outs.



3. First, the details are waterproofed using Triflex ProDetail.



4. Triflex Special Fleece is applied across the entire surface ensuring there are no air bubbles.



5. A second layer of Triflex ProDetail is applied.



6. The details are reliably waterproofed.



7. Triflex ProTerra is applied generously to the surface.



8. Triflex Special Fleece is applied across the entire surface ensuring there are no air bubbles.



9. A second layer of Triflex ProTerra is applied.



10. The wearing layer of Triflex ProTerra is applied to the surface.



11. For fixed coverings, the wearing layer is dressed with quartz sand.



12. Done! Following this, the other covering is applied.



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.



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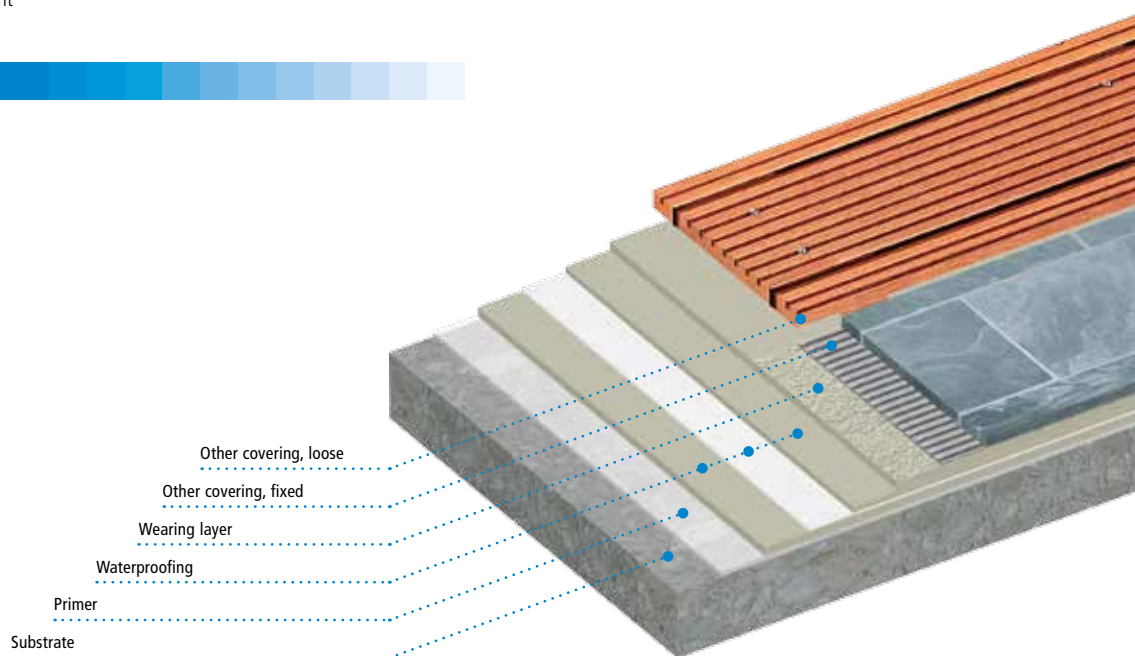
Triflex BWS

System description

Properties

- Fully reinforced waterproofing system with a polymethyl methacrylate (PMMA) base
- Withstands mechanical loads
- Seamless
- Joint-bridging
- Full-surface adhesion
- Elastic
- Dynamic crack-bridging
- Cold-applied
- Alkali-resistant
- Hydrolysis-resistant
- Fast-curing
- Vapour-permeable
- Chemical-resistant
- Weather-resistant (UV, IR, etc.)
- Surface design to specification
- European Technical Approval with CE mark in the highest usage categories (W3, M and S, P1 to P4, S1 to S4, TL4, TH4)

System design



System components

Primer

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

Waterproofing

Triflex ProTerra waterproof membrane, fully reinforced with a sturdy Triflex Special Fleece made of polyester.

Wearing layer

Triflex ProTerra protects the waterproofing.

Surface

Depending on the subsequent covering, the system will need to be dressed with quartz sand.

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 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 pre-treated test surfaces:
Concrete: in the centre, at least 1.5 N/mm², individual value not less than 1.0 N/mm².
Screed: in the centre, at least 1.0 N/mm², individual value not less than 0.7 N/mm².
Asphalt: in the centre, at least 0.8 N/mm², individual value not less than 0.5 N/mm².

Triflex BWS

System description

Substrate pre-treatment

Substrate	Pre-treatment	Primer
Aluminium	Abrade with Triflex Cleaner, roughen surface	No primer ⁽¹⁾
Asphalt	Grind	Triflex Cryl Primer 222
Composite thermal insulation systems	Remove any loose objects	Triflex Pox R 100
Concrete	Grind	Triflex Cryl Primer 276
Copper	Abrade with Triflex Cleaner, roughen surface	No primer ⁽¹⁾
Epoxy resin coating	Roughen surface, adhesion and compatibility test	No primer
Glass	Abrade with Triflex Glass Cleaner, adhesion test	Triflex Glass Primer
Lightweight concrete	Remove any loose objects	Triflex Cryl Primer 276
Mortar, resin-modified	Grind, adhesion and compatibility test	Triflex Pox R 100
Paints	Completely grind off	See substrate
Plaster/masonry	Remove any loose objects	Triflex Cryl Primer 276
PU coating	Roughen surface, adhesion and compatibility test	No primer
PVC mouldings, rigid	Abrade with Triflex Cleaner, roughen surface	No primer
Screeds	Grind	Triflex Cryl Primer 276
Stainless steel	Abrade with Triflex Cleaner, roughen surface	No primer ⁽¹⁾
Steel, galvanised	Abrade with Triflex Cleaner, roughen surface	No primer ⁽¹⁾
Tiles	Mechanically remove glaze	Triflex Cryl Primer 276
Wood	Remove paints	Triflex Cryl Primer 276
Zinc	Abrade with Triflex Cleaner, roughen surface	No primer ⁽¹⁾

⁽¹⁾ 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 Cryl Primer 222

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

Triflex Cryl Primer 276

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

Triflex Glass Primer

Wipe up evenly with a cleaning cloth GP.
Volume: approx. 50 ml/m².
Can be recoated after approx. 15 min up to max. 3 hrs.

Triflex Metal Primer

Apply a thin coat with a short-pile roller or, alternatively, spray on a thin coat with a spray can.
Volume: approx. 80 ml/m².
Can be recoated after approx. 30 to 60 min.

Triflex Pox R 100

Apply evenly with a Triflex universal roller.
Dress the fresh primer with a surplus of quartz sand.
Volume of Triflex Pox R 100: at least 0.30 kg/m²,
Volume of quartz sand 0.2–0.6 mm: at least 2.00 kg/m².
Can be recoated after approx. 12 hrs.

Repairing

Triflex Cryl Level 215

Mortar for making sloping screeds with layer thicknesses of 10 mm to 50 mm.
Volume with a minimum layer thickness of 10 mm: approx. 22 kg/m².
Can be recoated after approx. 45 min.

Triflex Cryl RS 240

Mortar for repairing mineral substrates with roughness depths of RT > 10 mm.
Volume: at least 2.20 kg/m² per mm layer thickness.
Can be recoated after approx. 45 min.

Triflex Cryl Paste

Paste for filling in shrinkage cracks, smaller areas of damage and for levelling out uneven areas and fleece overlaps.
Volume: approx. 1.40 kg/m² per mm layer thickness.
Can be recoated after approx. 1 hr.

Triflex ProFloor

Scratch coat for repairing mineral substrates with the addition of up to
10.00 kg of quartz sand, 0.2–0.6 mm* per 33.00 kg of Triflex ProFloor (3K) or
4.50 kg of quartz sand, 0.2–0.6 mm* per 15.00 kg of Triflex ProFloor RS 2K
Volume: at least 2.00 kg/m² per mm layer thickness.
Can be recoated after approx. 1 hr.

* The quartz sand grading curve must be adjusted on-site, if necessary.



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System description

Detail waterproofing

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

Application is wet-on-wet.

1. Triflex ProDetail

Apply evenly with a radiator roller.

Volume: at least 2.00 kg/m².

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/m².

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

Can be recoated after approx. 45 min.

For dimensions, see Triflex BWS system drawings.

Important note:

Special Fleece mouldings can be used instead of Special Fleece cut-outs for inner and outer corners and for pipe penetrations.

Joint waterproofing

All joints must be treated with Triflex ProDetail before surface waterproofing.

To prevent abutting edges, joints should always be embedded in the substrate (see system drawings).

Construction joint:

Application is wet-on-wet.

1. Triflex ProDetail

Apply a width of 16 cm with a radiator roller.

Volume: at least 0.30 kg/m.

2. Triflex Special Fleece

Lay a 15 cm wide fleece strip, removing any air bubbles.

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

3. Triflex ProDetail

Apply until the Triflex Special Fleece is fully saturated.

Volume: at least 0.30 kg/m.

Total volume of Triflex ProDetail: at least 0.60 kg/m.

Can be recoated after approx. 45 min.

For dimensions, see Triflex BWS system drawings.

Settlement joint:

1. Triflex Cryl Paste

Apply to both sides of the joint for adhesion in the lamination of the Triflex Support Strip.

2. Triflex Support Strip

Insert in the joint as a loop.

3. Triflex Special Fleece

Insert two fleece strips, each 20 cm wide, saturated with Triflex ProDetail as a double loop, making sure there are no air bubbles.

Can be recoated after approx. 45 min.

4. PE round sealing band

Place in the joint.

5. Triflex ProDetail

Seal the joint so it is flush with the surface.

Total volume of Triflex ProDetail: at least 1.20 kg/m.

Can be recoated after approx. 45 min.

For dimensions, see Triflex BWS system drawings.

Important note:

In the area of the settlement joint, tape over the surface waterproofing, the wearing layer and the "Other covering, fixed" surface with at least 5 cm wide adhesive tape. The joint is levelled flush with Triflex ProDetail.

Bonded other coverings must be taped off in the area of the settlement joint.



Waterproofing system under other coverings

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System description

Surface waterproofing

Application is wet-on-wet.

1. Triflex ProTerra

Apply evenly with a Triflex universal roller.

Volume: at least 2.00 kg/m².

2. Triflex Special Fleece

Lay fleece without any air bubbles.

Overlap the fleece by at least 5 cm.

3. Triflex ProTerra

Apply until the Triflex Special Fleece is fully saturated.

Volume: at least 1.00 kg/m².

Total volume of Triflex ProTerra: at least 3.00 kg/m².

Can be recoated after approx. 1 hr.

Important note:

In the area of the settlement joint, tape over the surface waterproofing with at least 5 cm wide adhesive tape.

Wearing layer

"Other covering, fixed" wearing layer:

1. Triflex ProTerra

Apply evenly with a Triflex universal roller.

Volume: at least 1.00 kg/m².

2. Quartz sand, size 0.7–1.2 mm

Dress the fresh wearing layer with a surplus of quartz sand.

Once the wearing layer is cured, remove any surplus.

Volume: at least 7.00 kg/m².

Can be walked on after approx. 2 hrs.

Important note:

In the area of the settlement joint, tape over the wearing layer and quartz sand dressing with at least 5 cm wide adhesive tape. Following curing, the joint is levelled flush with Triflex ProDetail.

"Other covering, loose" wearing layer:

Triflex ProTerra

Apply evenly with a Triflex universal roller.

Volume: at least 1.00 kg/m².

Can be walked on after approx. 2 hrs.

Important note:

In the area of the settlement joint, tape over the wearing layer with at least 5 cm wide adhesive tape. Following curing, the joint is levelled flush with Triflex ProDetail.

Other covering

Other covering, fixed:

Adhesion of a subsequent other covering (e.g., paving or tiles) can be performed using a standard tile adhesive after approx. 12 hrs.

Other covering, loose:

If the subsequent covering is loosely applied (e.g., wooden decking, paving on paving supports, etc.), then no further waiting times are required.

Important note:

The constructive design details depend on the other covering being applied. The Triflex BWS system drawings are only intended to serve as examples.



Waterproofing system under other coverings

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System description

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 min.

Transitions to subsequent waterproofing must overlap (incl. Triflex Special Fleece) by a minimum of 10 cm. This also applies to junctions, transitions and detail solutions with Triflex ProDetail.

System components

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

Triflex Cleaner
Triflex Cryl Level 215
Triflex Cryl Paste
Triflex Cryl Primer 222
Triflex Cryl Primer 276
Triflex Cryl RS 240
Triflex Glass Primer
Triflex Metal Primer
Triflex Pox R 100
Triflex ProDetail
Triflex ProTerra
Triflex Special Fleece
Triflex Support Strip
Balcony edge finishing profile

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.

Gradient / Evenness

Before commencing any surfacing work and during the work itself, it is essential to ensure the correct gradient and evenness of the substrate. Any corrections required must be taken into account during this work.

Dimensional tolerances

When carrying out coating work, always ensure compliance with the permissible tolerances for building construction (DIN 18202, Table 3, line 4).

Safety tips / Accident prevention

Read the safety data sheets before using the products.

Required volumes / 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.

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 to obtain the current standard specifications for tender, which are available in a range of different file formats.

CAD drawings

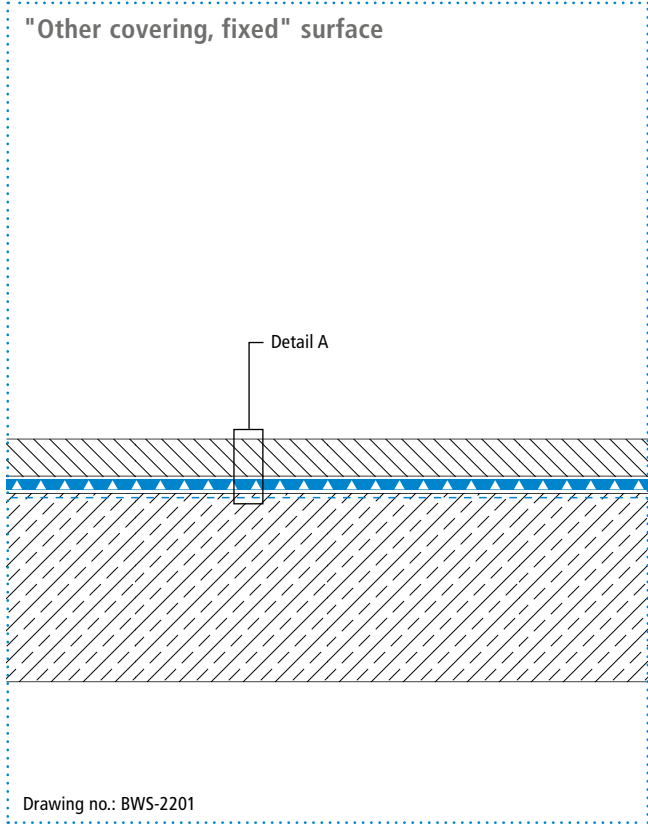
All CAD system drawings can be downloaded free of charge from the download section of the Triflex website www.triflex.com.

Triflex BWS



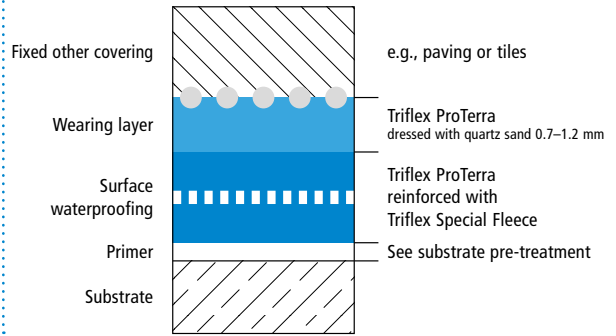
System drawings

"Other covering, fixed" surface



Drawing no.: BWS-2201

System design – Detail A



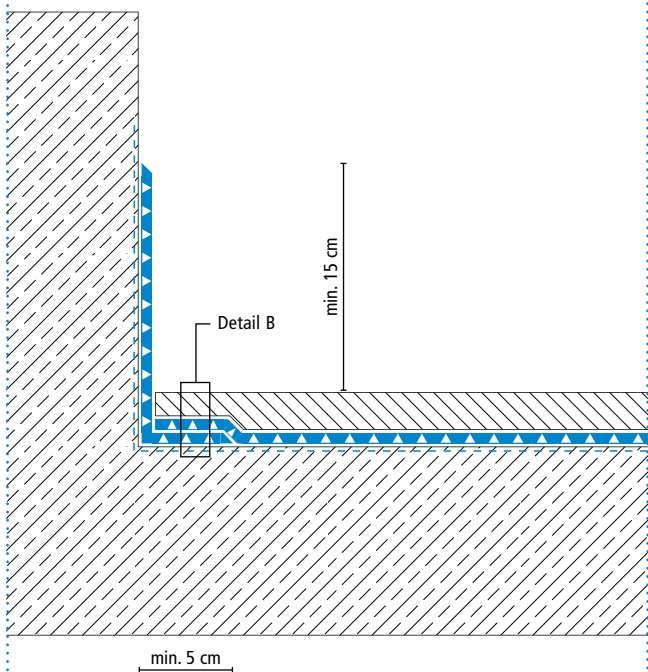


Waterproofing system under other coverings

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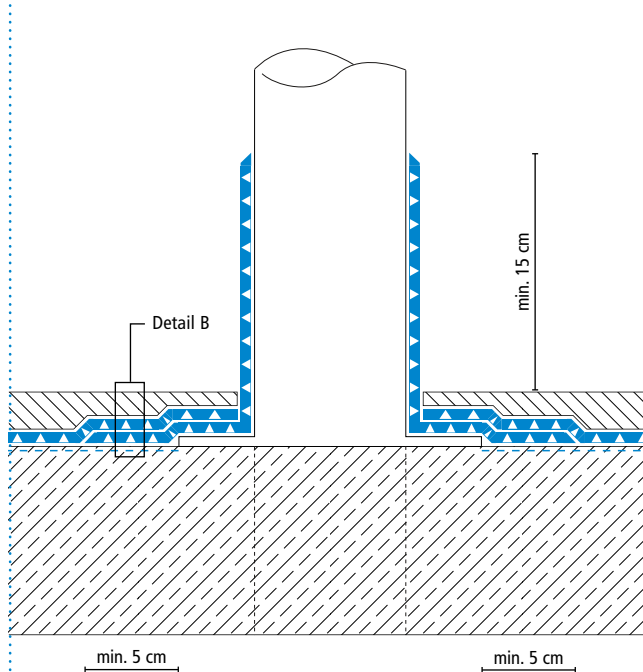
System drawings

"Other covering, fixed" wall junction



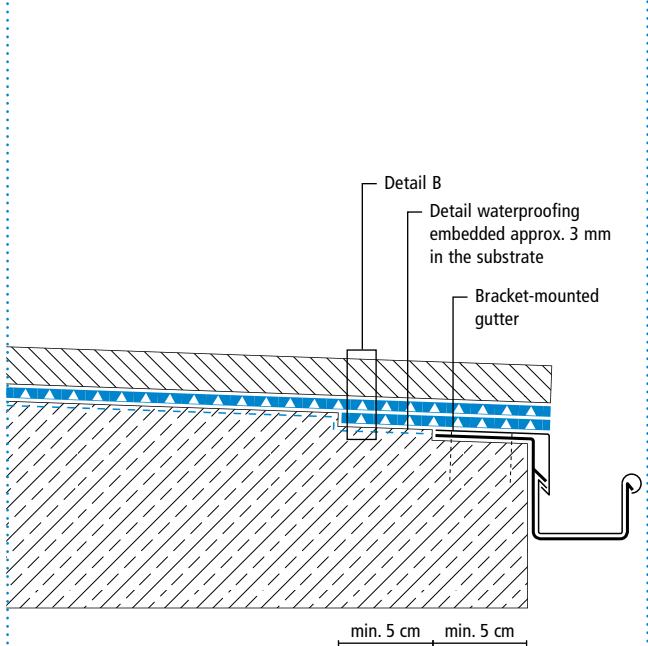
Drawing no.: BWS-2202

"Other covering, fixed" prop connector / penetration



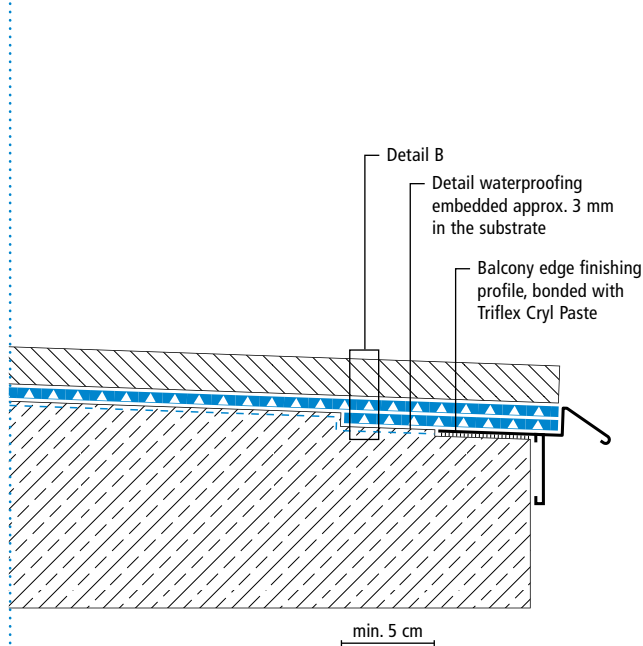
Drawing no.: BWS-2203

"Other covering, fixed" leading edge with bracket-mounted gutter



Drawing no.: BWS-2205

"Other covering, fixed" leading edge with edge finishing profile



Drawing no.: BWS-2206

Height differences between fleece overlaps are exaggerated.

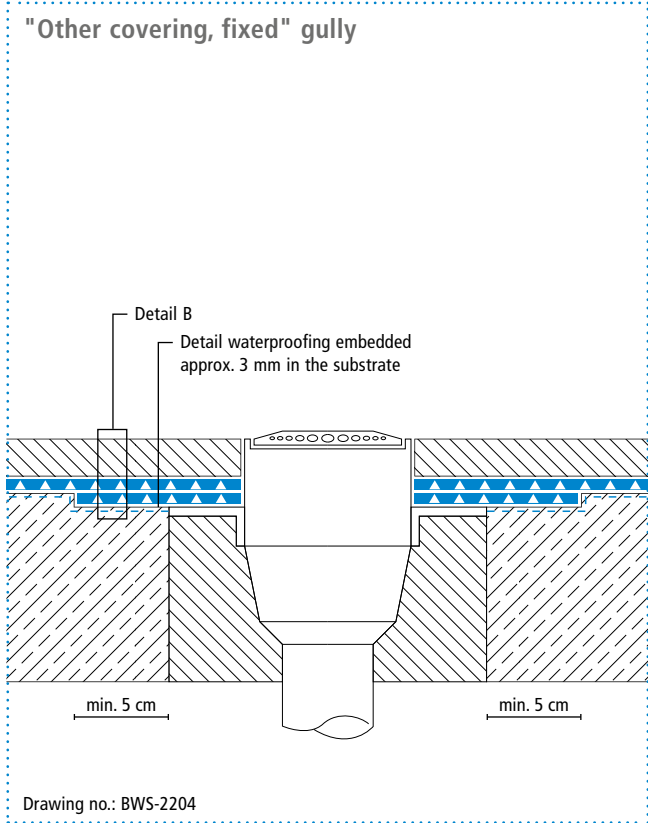
The constructive design details depend on the other covering being applied.

Triflex BWS

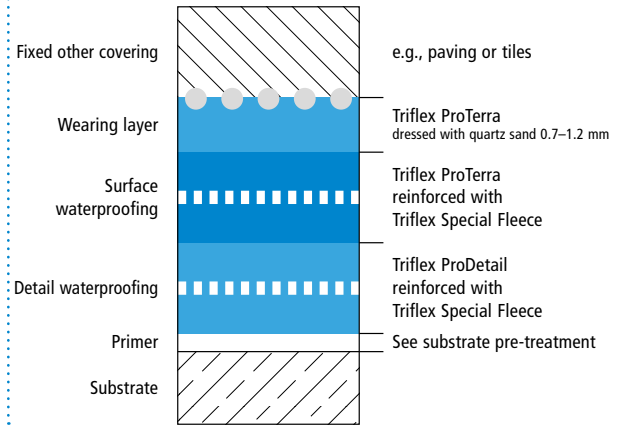


System drawings

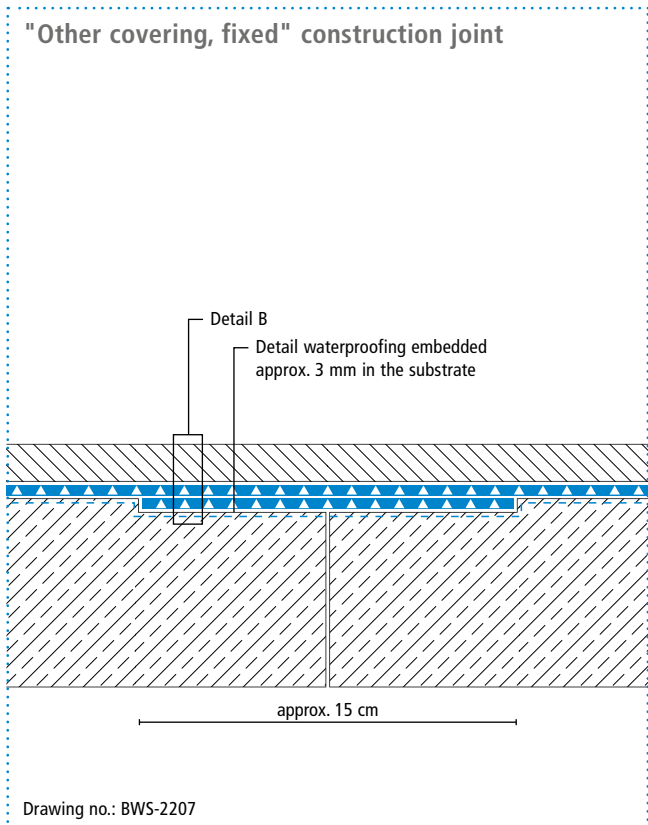
"Other covering, fixed" gully



System design – Detail B



"Other covering, fixed" construction joint



Height differences between fleece overlaps are exaggerated.

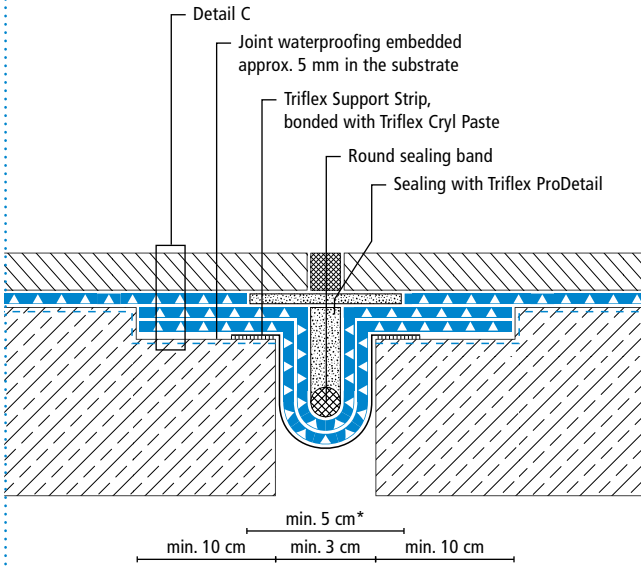
The constructive design details depend on the other covering being applied.

Triflex BWS

System drawings

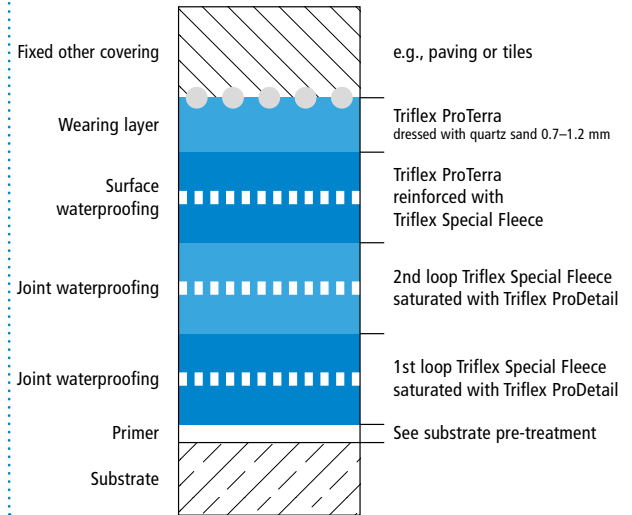


"Other covering, fixed" settlement joint surface

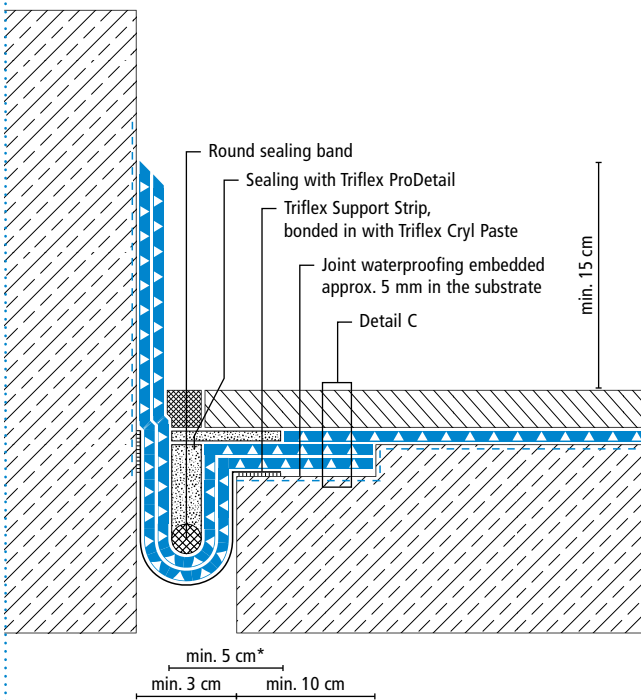


* Omission of surface waterproofing and wearing layer (see system description)
Drawing no.: BWS-2208

System design – Detail C



"Other covering, fixed" settlement joint – wall junction



* Omission of surface waterproofing and wearing layer (see system description)
Drawing no.: BWS-2209

Height differences between fleece overlaps are exaggerated.

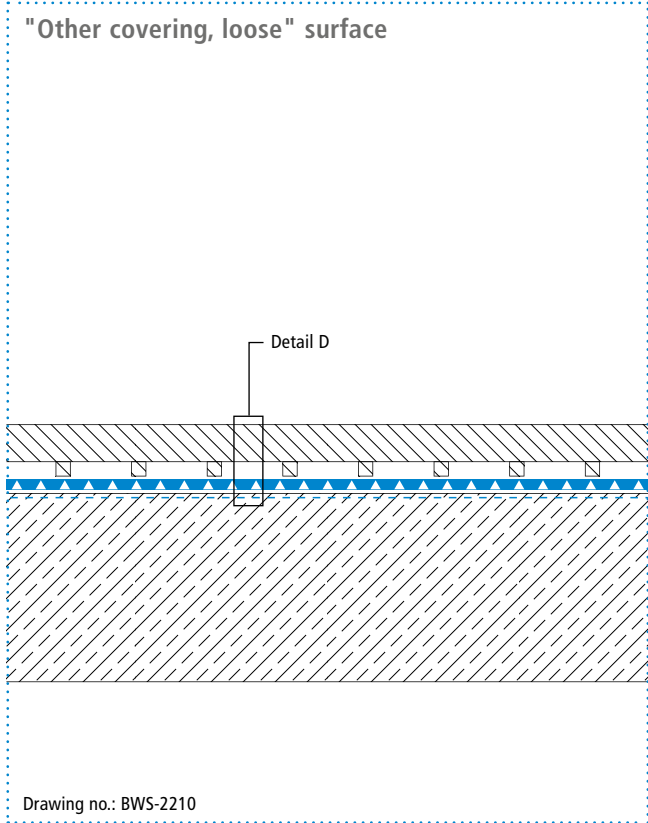
The constructive design details depend on the other covering being applied.

Triflex BWS



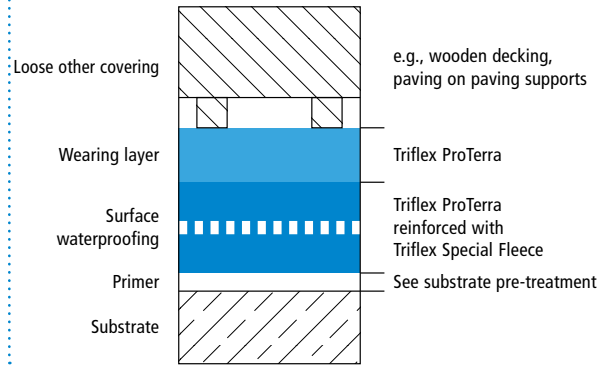
System drawings

"Other covering, loose" surface



Drawing no.: BWS-2210

System design – Detail D

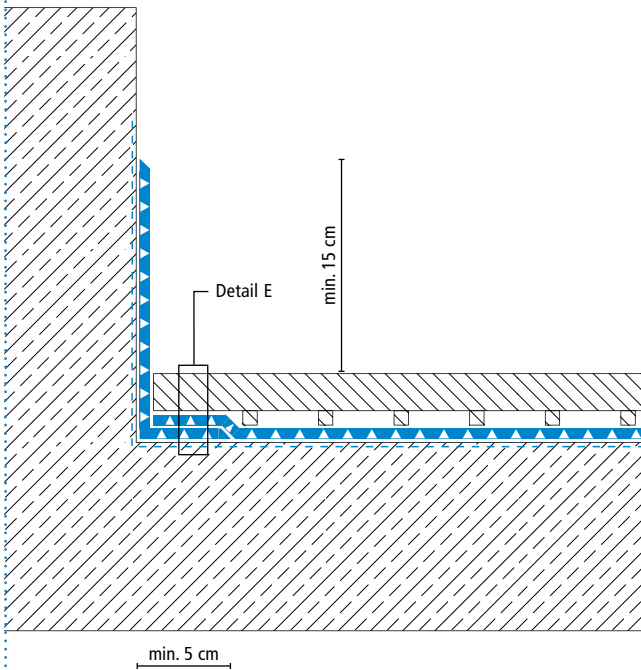


Triflex BWS



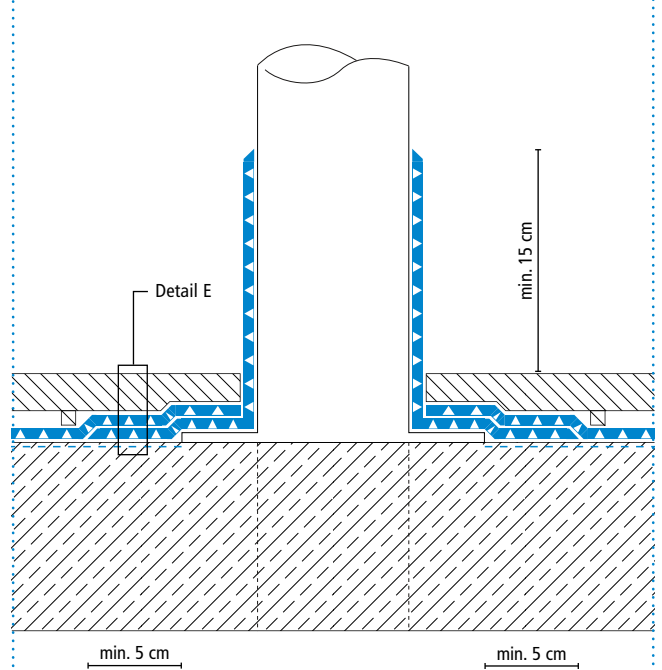
Systemzeichnungen

"Other covering, loose" wall junction



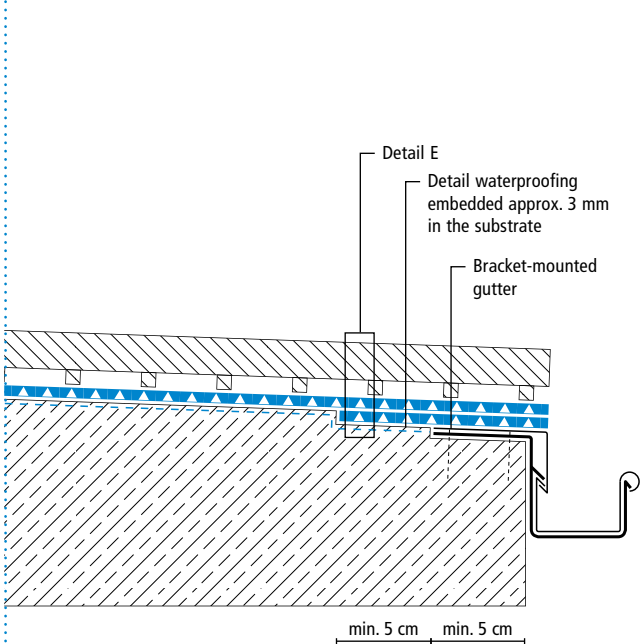
Drawing no.: BWS-2211

"Other covering, loose" prop connector / penetration



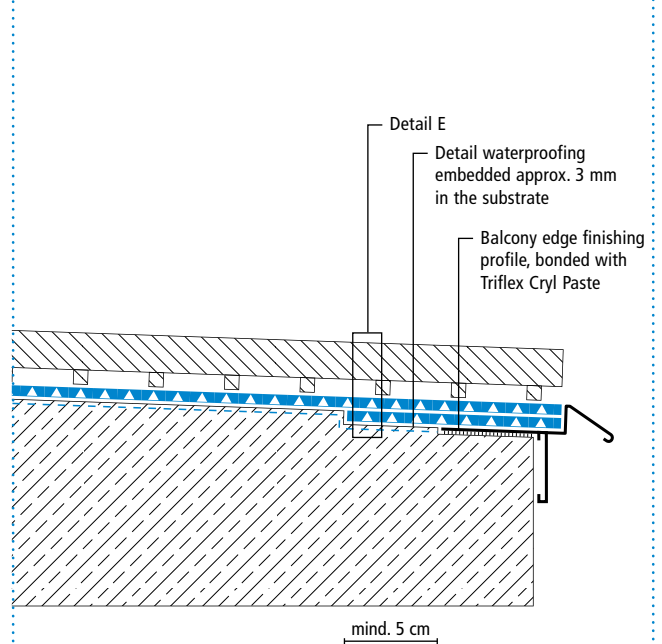
Drawing no.: BWS-2212

"Other covering, loose" leading edge with bracket-mounted gutter



Drawing no.: BWS-2214

"Other covering, loose" leading edge with edge finishing profile



Drawing no.: BWS-2215

Height differences between fleece overlaps are exaggerated.

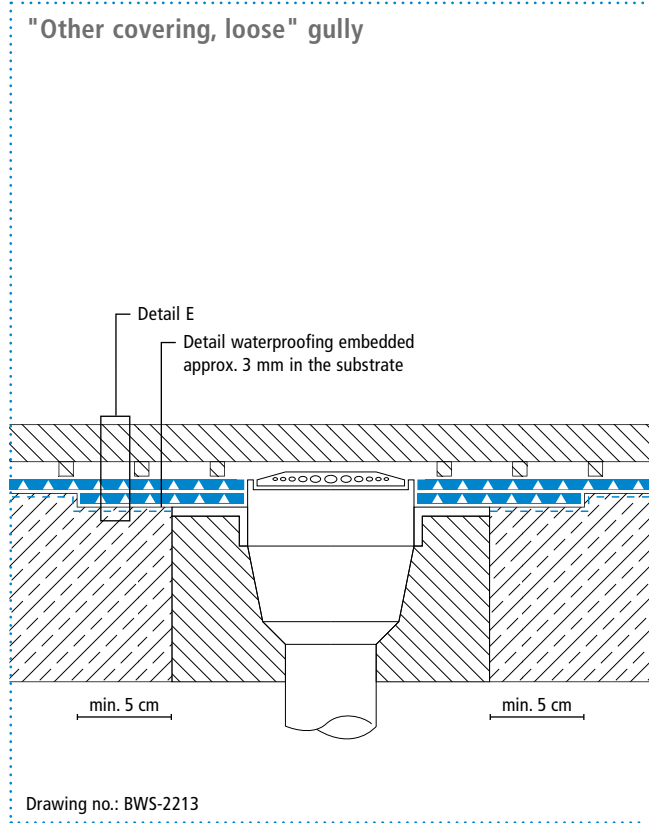
The constructive design details depend on the other covering being applied.

Triflex BWS

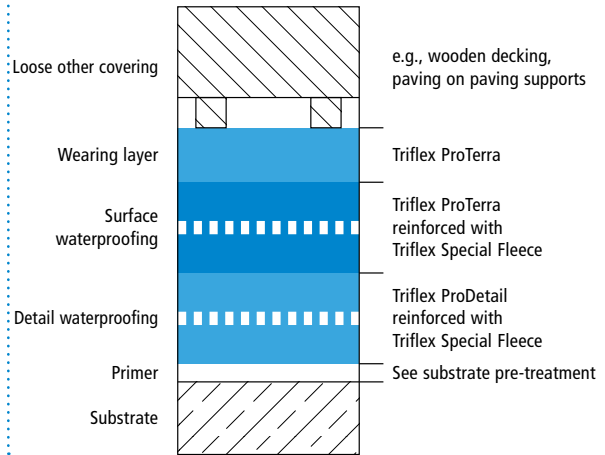


Systemzeichnungen

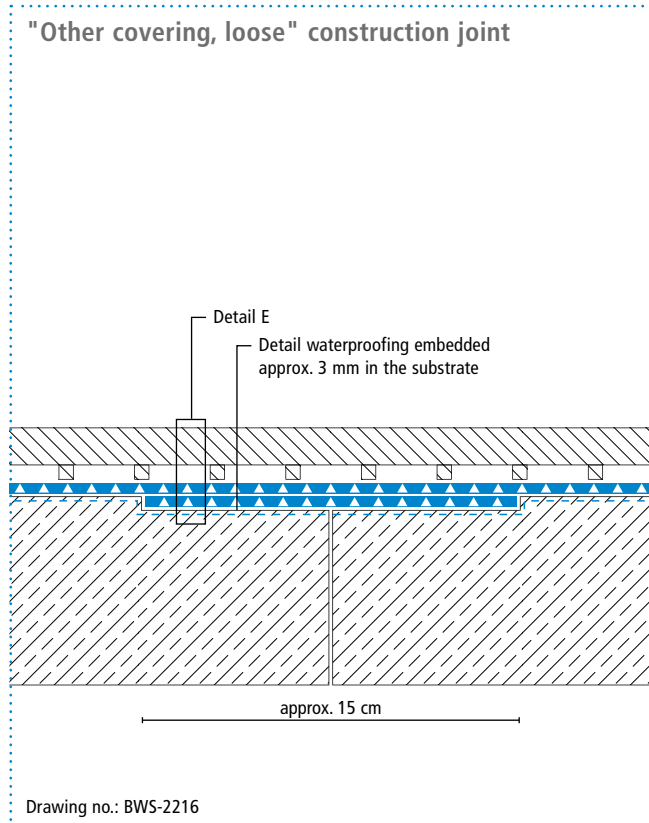
"Other covering, loose" gully



System design – Detail E



"Other covering, loose" construction joint



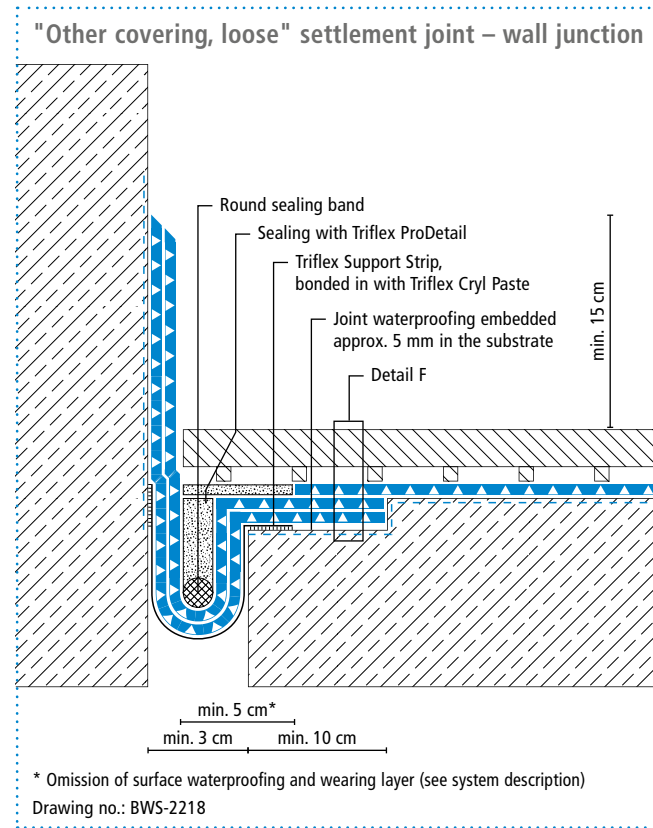
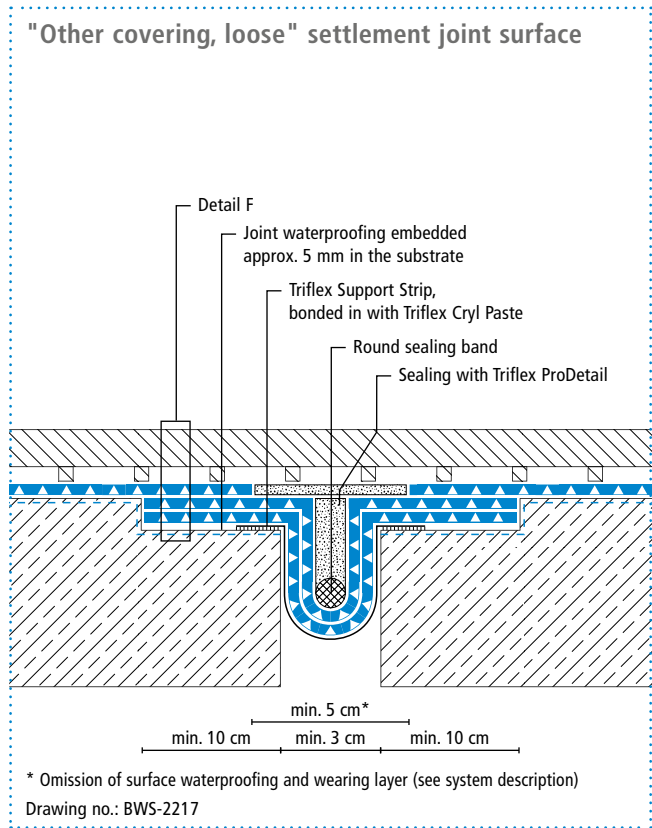
Height differences between fleece overlaps are exaggerated.

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Triflex BWS

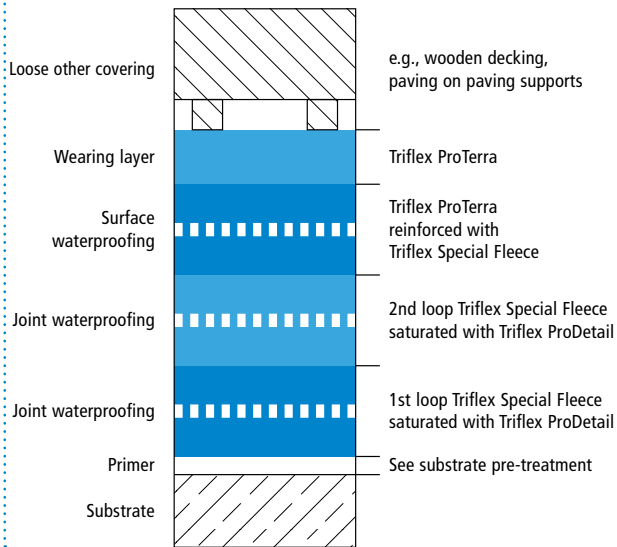
System drawings



Triflex BWS



System design – Detail F





Waterproofing system under other coverings

Triflex BWS

Triflex BWS surfaces

"Other covering, fixed" wearing layer



7032 Pebble grey with quartz sand dressing

"Other covering, loose" wearing layer



7032 Pebble grey

Please note:

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

Waterproofing system under other coverings

Triflex BWS



Triflex

Delivering solutions together.



International

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