Triflex

Delivering solutions together.

Planning documents

Intermediate deck coating system

Triflex DeckCoat

PARKING DECKS | UNDERGROUND CAR PARKS

Intermediate deck coating system

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Applications

Triflex DeckCoat is a waterproof thin-layer system for less frequented parking deck surfaces and parking spaces. This system, which is made of polymethyl methacrylate resin (PMMA), is specially developed for intermediate decks and offers a simple protection in a variety of colours and increased non-slip finish. Flashing, joints and details are carried out as fleece-reinforced waterproofing.

Tailored solution

Triflex DeckCoat is a rapid and efficient solution for car park operators. The thin-layer system provides increased slip resistance and, at the same time, makes surfaces easier to clean.

The resin used for Triflex DeckCoat cures in just a few hours. Complete coating applications can be carried out in stages in a single day. Disruptions caused by closures can therefore be kept to a minimum. Downtimes caused by out of service parking bays and access areas are kept to a minimum.

Advantages at a glance

Ideal for refurbishments
The simple system build-up is used for naturally ventilated intermediate decks and private garages.

Improved safety with non-slip finish
Quartz sand dressing provides a non-slip finish to enhance safety for car park users and vehicles.

Colours
Triflex DeckCoat is available in a range of colours. This facilitates recognition and orientation among car park users and improves traffic safety.

Short closure periods
Triflex DeckCoat offers faster curing times than systems made of EP or PUR resins. Parking areas can also be coated in stages.
This reduces closure times and disruptions to traffic. The car park is soon ready for use again.

High quality
The system build-up meets the requirements of an OS 8 classification RL SIB with a minimum layer thickness of ≥ 1.5 mm with mere protective measures as defined by DIN EN 13813. The system's fire behaviour is graded B_{fl}-s1 according to DIN EN 13501-1.

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And this is how it's done…

1. Prime junctions and surface.

2. The flashings, details and …

3. … joints are waterproofed using Triflex ProDetail.

4. Apply the coating Triflex Cryl Finish 209 evenly.

5. The coating is sanded down with quartz sand in excess.

6. The surface is then finished with Triflex Cryl Finish 209.

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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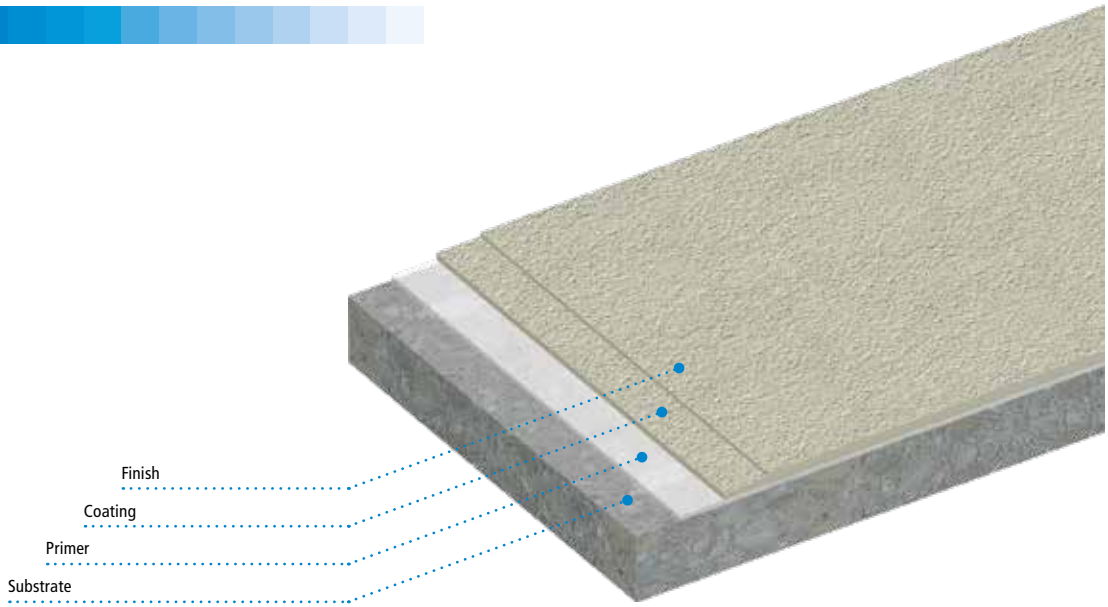
Properties

- Waterproof thin-layer system based entirely on polymethyl methacrylate (PMMA)
- For little used intermediate decks
- Seamless
- System-integrated detail solutions
- Full-surface adhesion and impermeable
- Rigid
- Cold-applied
- Fast-curing
- Ready for vehicle traffic after approx. 2 hrs
- Chemical-resistant, resistant to de-icing salt.
- Weather-resistant (UV, IR etc.)
- Non-slip
- Variety of colours available
- Fire classification B_{fl}-s1 in compliance with with DIN EN 13501-1
- Meets the requirements of an OS 8 classification RL SIB with a minimum layer thickness of ≥ 1.5 mm with mere protective measures as defined by DIN EN 13813.

System build-up



System components

Primer
Triflex Cryl Primer 287 for sealing the substrate and ensuring substrate adhesion (if necessary, see Substrate pre-treatment table)

Coating
Triflex Cryl Finish 209 with quartz sand dressing 0.7–1.2 mm

Finish
Triflex Cryl Finish 209 as a surface finish.

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. The substrate must be pretreated in accordance with the specifications in the Repair Guideline (RL SIB). The consumptions specified below assume a surface roughness of R_t = 0.5 mm.

Moisture: When carrying out application 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 minimum tensile adhesion strengths must be met on pretreated test surfaces:
Concrete: on average, at least 2.0 N/mm², individual value not less than 1.5 N/mm².

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Substrate pre-treatment

Substrate	Pre-treatment	Primer
Aluminium [A]	Abrade with Triflex Cleaner	Triflex Metal Primer [B]
Composite thermal insulation systems [A]	Remove any loose material	Triflex Pox Primer 116+
Concrete	Grinding, milling or dust-free shot-blasting in criss-cross pattern	Triflex Cryl Primer 287
Copper [A]	Abrade with Triflex Cleaner	Triflex Metal Primer [B]
Epoxy resin coating	Roughen surface and test adhesive strength and compatibility	No primer
Glass [A]	Abrade with Triflex Glass Cleaner, adhesive strength test	Triflex Glass Primer
Lightweight concrete [A]	Remove any loose material	Triflex Cryl Primer 287
Mortar, resin-modified	Grinding, milling or dust-free shot-blasting executed transversely; adhesive strength and compatibility test	Triflex Pox Primer 116+
Paint	Grinding or milling to remove completely	See substrate
Plaster/render/masonry [A]	Remove any loose material	Triflex Cryl Primer 287
PVC mouldings, rigid [A]	Abrade with Triflex Cleaner, roughen surface	No primer
Screeds	Grinding, milling or dust-free shot-blasting in criss-cross pattern	Triflex Cryl Primer 287
Stainless steel [A]	Abrade with Triflex Cleaner	Triflex Metal Primer [B]
Steel, galvanised [A]	Abrade with Triflex Cleaner	Triflex Metal Primer [B]
Wood [A]	Remove any paint	Triflex Cryl Primer 287
Zinc [A]	Abrade with Triflex Cleaner	Triflex Metal Primer [B]

[A] Only in areas not subject to mechanical stress, e.g. details and flashing.
[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 Cryl Primer 287
Pour on thickly and spread evenly using a Triflex cellular rubber spreader.
Then spread crosswise using a Triflex universal roller.
Consumption: at least 0.35 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/m²
Can be recoated after approx. 15 mins. up 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 Primer 116+
Pour on thickly and spread evenly using a Triflex cellular rubber spreader.
Then spread crosswise using a Triflex universal roller.
Do not allow puddles to form.
Dress the fresh primer – not to excess.
Consumption of Triflex Pox Primer 116+: at least 0.30 kg/m².
Consumption of quartz sand 0.3–0.8 mm: at least 0.70 kg/m².
Can be recoated after approx. 12 hrs. to 24 hrs max.

For highly absorbent substrates and substrate moisture levels of 4 to 6 wt%, an additional layer of primer has to be applied to the surface. Only the second layer is dressed with quartz sand.
Consumption of Triflex Pox Primer 116+: at least 0.30 kg/m².

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Important:
To prevent the possibility of water infiltration or detachment around the details, a stop must be cut at the transition of the surface coating to the detail waterproofing (see system drawings). The stop must be at least 15 mm deep and 5 mm wide. The cut must be made before beginning waterproofing/coating work.

Sequence of steps:
1. Cut stop
2. Prime surfaces
3. Detail waterproofing, fill the stop
4. Waterproof surface

Repairing

In the case of roughness depths R_t 0.5 to 1 mm:

Scratch coat for repairing mineral or bituminous substrates with the addition of up to 10.00 kg quartz sand 0.2–0.6 mm[(1)] per 33.00 kg of Triflex DeckFloor.
Consumption at least 2.00 kg/m² per mm layer thickness.
Can be recoated after approx. 1 hr.

In the case of roughness depths R_t 1 to 10 mm:

Levelling coat for repairing mineral or bituminous substrates with the addition of up to 20.00 kg of quartz sand 0.7–1.2 mm[(1)] per 33.00 kg of Triflex DeckFloor.
Consumption at least 2.00 kg/m² per mm layer thickness.
Can be recoated after approx. 1 hr.

In the case of roughness R_t >10 mm:

Triflex Cryl RS 240
Mortar for repairing mineral substrates.
Consumption at least 2.20 kg/m² per mm layer thickness.
Can be recoated after approx. 45 mins.

Detail waterproofing

All junctions, transitions and other detail solutions must be completed before the surface coating is applied.
Points 1 to 3 below are implemented 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**[(2)]
   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.

4. **Triflex Cryl Finish 209**
   Cross-coat evenly using a Triflex finish roller.
   Consumption: at least 0.50 kg/m².

Can be recoated after approx. 1 hr.
For dimensions, see Triflex DeckCoat system drawings.

Joint waterproofing

All joints must be waterproofed before the the surface coating is applied. To prevent abutting edges, joints must always be embedded in the substrate (see system drawings).

Construction joint:

1. **Triflex Cryl RS 240**
   Level joint flush with surface (if necessary).

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

2. **Triflex ProDetail**
   Apply a width of 16 cm with a radiator roller.
   Consumption: at least 0.30 kg/m.
3. **Triflex Special Fleece/Special Fleece PF**
   Insert a 15 cm wide strip, making sure there are 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 0.30 kg/m.

Total consumption of Triflex ProDetail: at least 0.60 kg/m.
Can be recoated after approx. 45 mins.

5. **Triflex Cryl Finish 209**
   Apply a width of approx. 10 cm with a Triflex finish roller above the construction joint.
   Consumption: at least 0.50 kg/m².

Can be recoated after approx. 1 hr.
For dimensions, see Triflex DeckCoat system drawings.

(1) The quartz sand grading curve must be adjusted on site, if necessary.
(2) if necessary, Triflex Special Fleece mouldings

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Expansion joint:

Joints subject to normal mechanical stress.

1. **Triflex Cryl Paste**
   Apply a width of approx. 4 cm to both sides of the joint to bond the Triflex Support Strip.
2. **Triflex Support Strip**
   Lay in the joint as a loop.
   Can be recoated after approx. 1 hr.

Points 3 to 7 below are implemented wet-on-wet.

3. **Triflex ProDetail**
   Apply to both sides of the joint and on the support strip using a radiator roller. Consumption: at least 0.70 kg/m.
4. **Triflex Special Fleece/Triflex Special Fleece PF**
   Lay a 35 cm wide strip as the first loop, making sure there are no air bubbles.
   Overlap the ends of the fleece by at least 5 cm.
5. **Triflex ProDetail**
   Apply to fully saturate the Triflex Special Fleece and as a preliminary layer for the next fleece loop.
   Consumption: at least 0.70 kg/m.
6. **Triflex Special Fleece/Triflex Special Fleece PF**
   Lay a 35 cm wide strip as the second loop, making sure there are no air bubbles.
   Overlap the ends of the fleece by at least 5 cm.
7. **Triflex ProDetail**
   Apply until the Triflex Special Fleece is fully saturated.
   Consumption: at least 0.70 kg/m.

Total consumption of Triflex ProDetail: at least 2.10 kg/m.
Can be recoated after approx. 1 hr.
After application of the surface coating and driving surface.

8. **PE round sealing band**
   Place in the joint.
9. **Triflex FlexFiller**
   Fill the joint so it is flush with the surface.
   Consumption: approx. 1.40 kg/m² per mm layer thickness.

Ready for pedestrian and vehicle traffic after approx. 3 hrs.
For dimensions, see Triflex DeckCoat system drawings.

Important:

1. The construction joint or expansion joint is taped off with adhesive tape for the subsequent layers so that the joint remains permanently taped off.
   All further layers are only taken to the edge of the joint.
   Prior to curing the layer, the adhesive tape must be removed and new tape applied for each further layer.
2. **The expansion joints are all maintenance joints. For visual reasons, it may be necessary to replace joint ingress protection (Triflex FlexFiller) after structural movement.**

For joints subject to high mechanical stress, see
Triflex ProJoint+ – Waterproofing system for expansion joints.

Surface coating

1. **Triflex Cryl Finish 209**
   Apply evenly and cross-coat using a Triflex finish roller.
   Consumption: at least 0.70 kg/m².
2. **Quartz sand size 0.7–1.2 mm**
   Dress the wet coating in excess.
   Once the coating is cured, remove any surplus.
   Consumption: at least 7.00 kg/m².

Can be recoated after approx. 2 hr.

Finishing

Triflex Cryl Finish 209
Apply evenly and cross-coat using a Triflex finish roller.
Consumption: at least 0.50 kg/m².
Ready for vehicle traffic after approx. 2 hrs.

Important:
The sealing of all vertical junctions, transitions and details must be carried out prior to the surface finishing with thixotropic Triflex Cryl Finish 209.
The product is thickened by the in-situ addition of 1 % by weight Triflex Liquid Thixo.

Collision protection

To protect against mechanical damage, the coating should be protected in risk areas (e.g. kerbs, thresholds and joints) by stainless steel cover plates.

1. **Triflex Cleaner**
   Degrease plates and roughen the underside.*
2. **Triflex Cryl Paste**
   Cover the entire underside of the plate with Triflex Cryl Paste.
3. **Cover plate**
   Stick into place and remove surplus paste with a trowel, secure mechanically if necessary.

Consumption of Triflex Cryl Paste: at least 0.50 kg/m².
Can be subject to loads after approx. 45 mins.

Marking

For traffic markings with cold plastic, coloured finish or high-solid paint, see **Triflex DMS** – parking deck marking system.

* Alternative to roughening: remove loose rust and rust scale, prime with Triflex Metal Primer.

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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 (including Triflex Special Fleece) by a minimum of 10 cm. This also applies to connections and detail solutions with Triflex ProDetail. 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.

Product information

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

Triflex Cleaner
Triflex Cryl Finish 209
Triflex Cryl Primer 287
Triflex Cryl RS 240
Triflex Cryl Paste
Triflex DeckFloor
Triflex FlexFiller
Triflex Glass Cleaner
Triflex Glass Primer
Triflex Liquid Thixo
Triflex Metal Primer
Triflex Pox Primer 116+
Triflex ProDetail
Triflex Special Fleece
Triflex Special Fleece PF
Triflex Support Strip

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.

Gradient / Evenness

Before applying the pattern or decoration, and during application, always ensure the correct gradient and evenness of the substrate. Any corrections required must be taken into account during this work.

Pinholes

Air pockets in concrete or screed go on to cause "pinholes". The mechanical substrate pre-treatment causes the air pockets to open on the surface. The subsequent coating closes the access to the air spaces. The warming of the air inside the pockets as a result of the reaction and ambient temperature causes the volume to expand and the pressure to increase. The air then rises up through the coating to the surface. This is a purely physical process and is not triggered by the coating material itself. In order to prevent the formation of pinholes in the coating, it is recommended that processing be performed when temperatures are falling.

Dimensional tolerances

When carrying out the 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 consumptions / Waiting times

The specified consumptions apply only to smooth, flat substrates with a maximum roughness of R_t = 0.5 mm. 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 °C.

Information about tools

The Triflex tools mentioned in the system description are a guideline for correct application of the individual functional layers with the respective volumes of product. The use of Triflex tools is not mandatory as long as correct application of the Triflex products is assured.

Remarks on use

Driving lane coatings are subject to constant loads and stresses in accordance with the level of use. The effects of UV light and weather as well as organic dyes (e.g. foliage) and various chemicals (e.g. disinfectants, acids, etc.) may cause discolouration, yellowing and chalking effects in finishes. Abrasion can scratch the surface. This does not affect the mechanical properties of the cured coating.

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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.g. 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

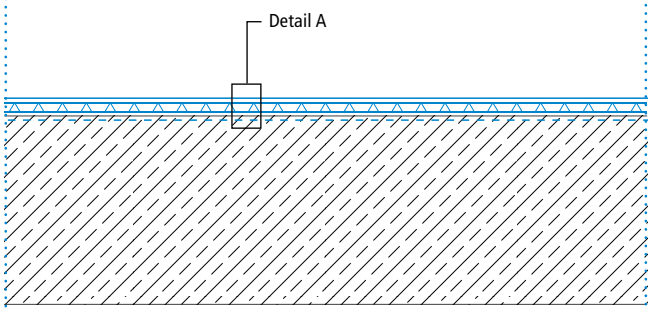
Please visit the Download section of the Triflex website at www.triflex.com to obtain the current standard specifications, which are available in a range of different file formats. Alternatively, visit the website www.ausschreiben.de or www.heinze.de.

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.

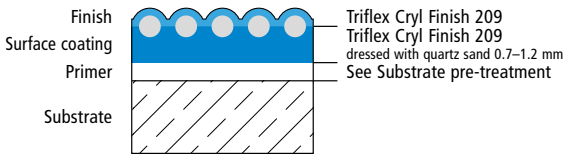
System drawings

Surface



Drawing no.: DeckCoat-1701

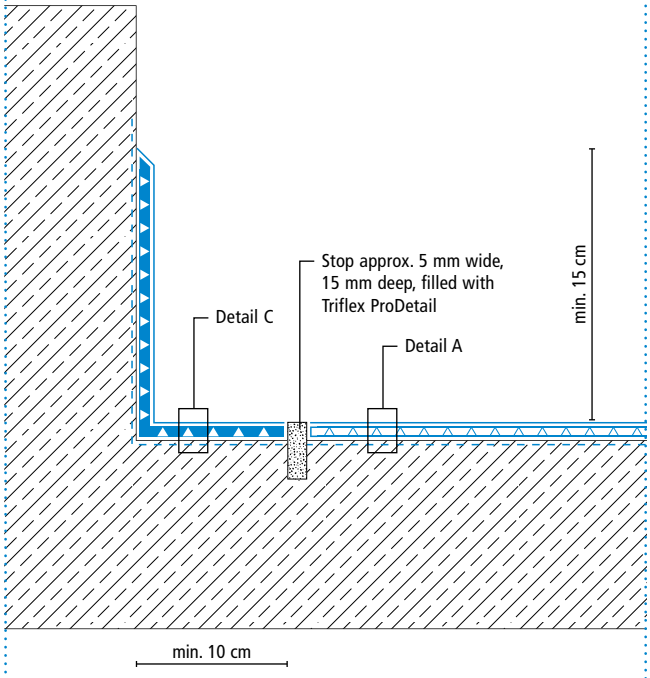
System build-up – Detail A



Triflex DeckCoat

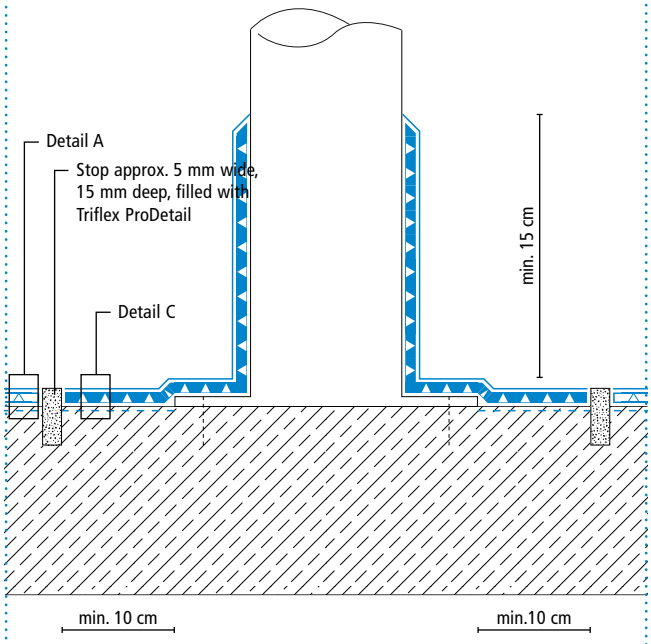
System drawings

Wall junction



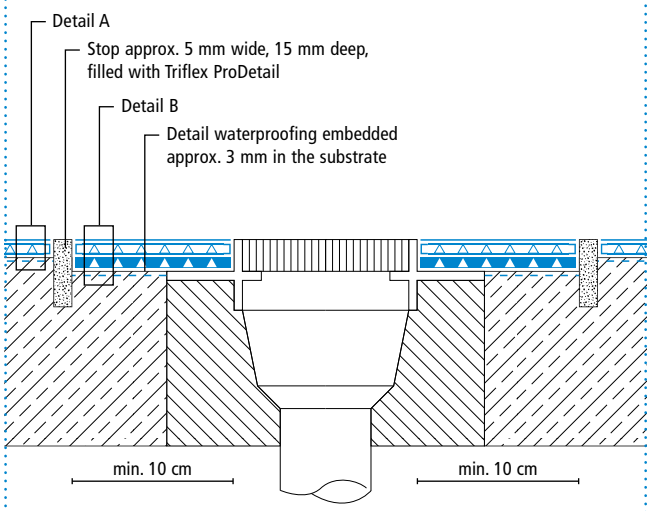
Drawing no.: DeckCoat-1702

Prop connector



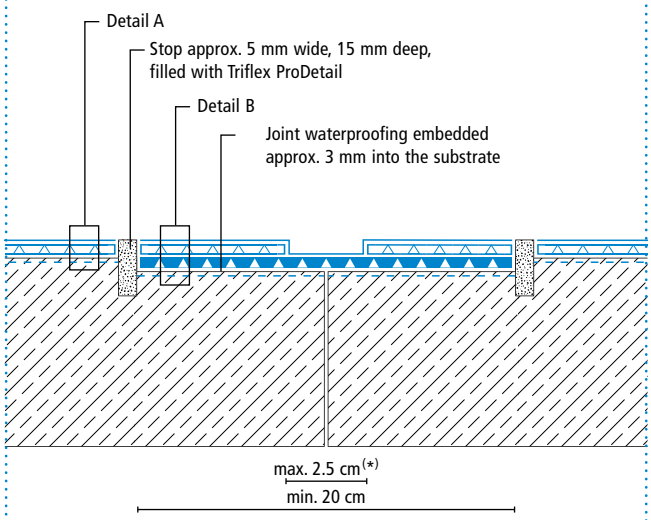
Drawing no.: DeckCoat-1703

Gully



Drawing no.: DeckCoat-1705

Construction joint



(*) Omission of coating (see system description)

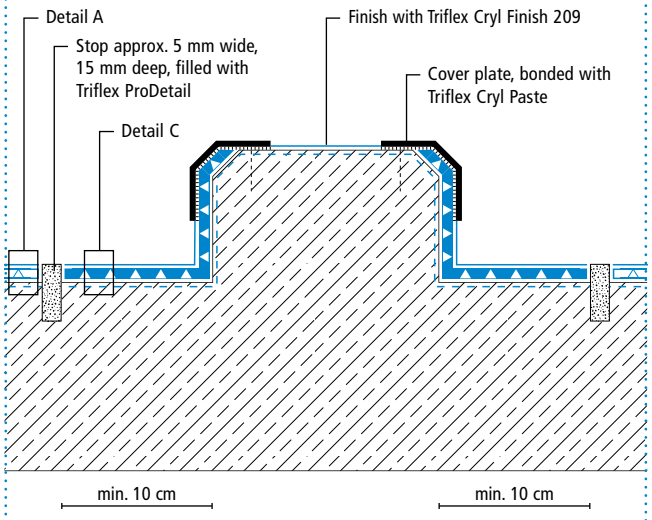
Drawing no.: DeckCoat-1706

Height differences where the fleece overlaps are exaggerated.

Triflex DeckCoat

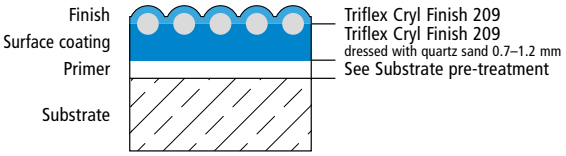
System drawings

Kerb

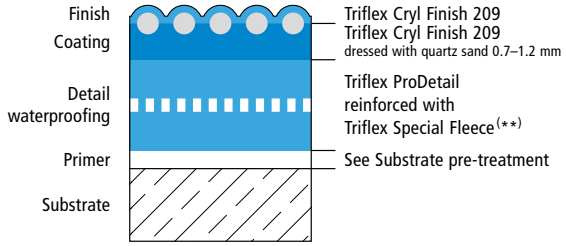


Drawing no.: DeckCoat-1704

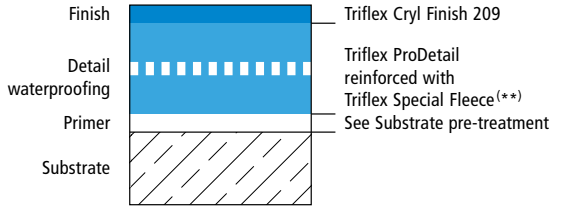
System build-up – Detail A



System build-up – Detail B



System build-up – Detail C



Height differences where the fleece overlaps are exaggerated.

(**) Triflex Special Fleece or Triflex Special Fleece PF

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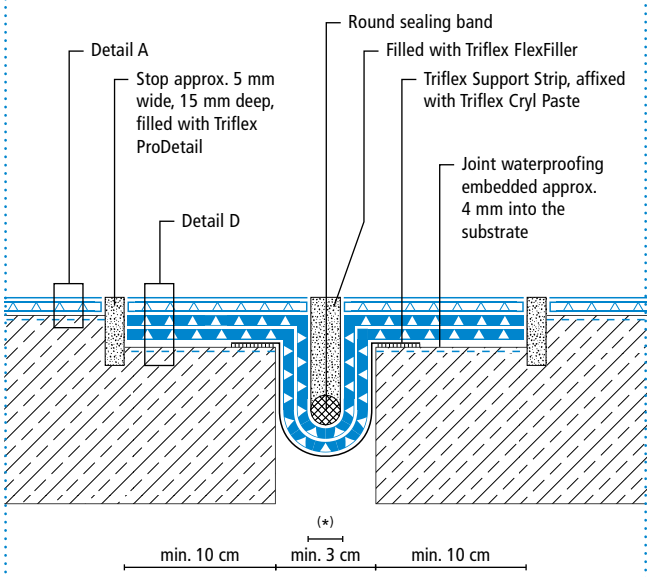
System drawings

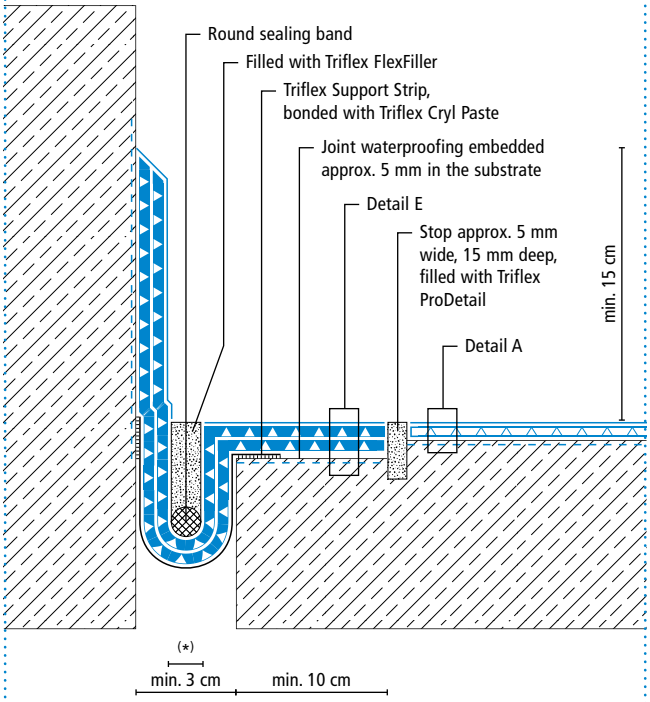
Expansion joint surface



(*) Omission of coating and finish (see system description)

Drawing no.: DeckCoat-1707

Expansion joint – wall junction



(*) Omission of finish (see system description)

Drawing no.: DeckCoat-1708

Height differences where the fleece overlaps are exaggerated.

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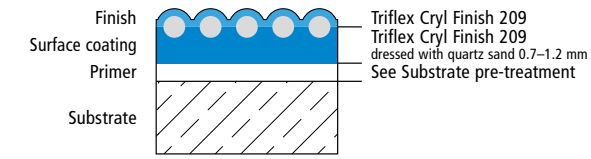
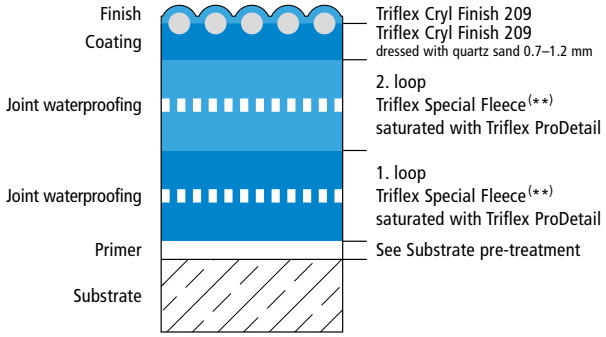
System drawings

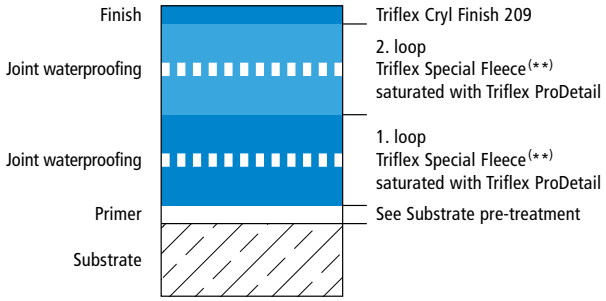
System build-up – Detail A



System build-up – Detail D



System build-up – Detail E



(**) Triflex Special Fleece or Triflex Special Fleece PF

Intermediate deck coating system

Triflex DeckCoat

Triflex DeckCoat surface

Dress with quartz sand and finish with Triflex Cryl Finish 209


7030 Stone grey


7031 Blue grey


7032 Pebble grey


7035 Light grey


7037 Dusty grey


7038 Agate grey


7040 Window grey


7042 Traffic grey A


7043 Traffic grey B


1023 Traffic yellow


2009 Traffic orange


3020 Traffic red


4006 Traffic purple


5017 Traffic blue


6024 Traffic green


9010 White

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

Intermediate deck coating system

Triflex DeckCoat

Triflex

Delivering solutions together.

International
Triflex GmbH & Co. KG
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