

Planning documents
Intermediate Deck Coating System (OS 8)

Triflex DeckCoat





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Triflex DeckCoat

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. Triflex DeckCoat is approved to OS 8 in accordance with Guideline SIB 2001 from the German Committee on Reinforced Concrete (DAfStb Rili SIB 2001, supplementary sheet 2005 and DIN V 18026).

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 design is used for naturally ventilated intermediate decks.

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 decks can also be coated in stages. This reduces closure times and disruptions to traffic. The car park is soon ready for use again.

Certified safety

The system set-up meets the requirements of Class OS 8 in compliance with DIN V 18026 and the German Committee on Reinforced Concrete's guidelines for the protection and repair of concrete components (DAfStb Rili SIB 2001 – Maintenance Guideline 2005), fire classification C_{fl}-s1 in compliance with DIN EN 13501-1.

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And this is how it's done...



1. Prime junctions and surface.



2. Junctions, details and ...



3. ... joints are waterproofed using Triflex ProDetail.



4. Apply the coating Triflex Cryl Finish 209 evenly.



5. The wet 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 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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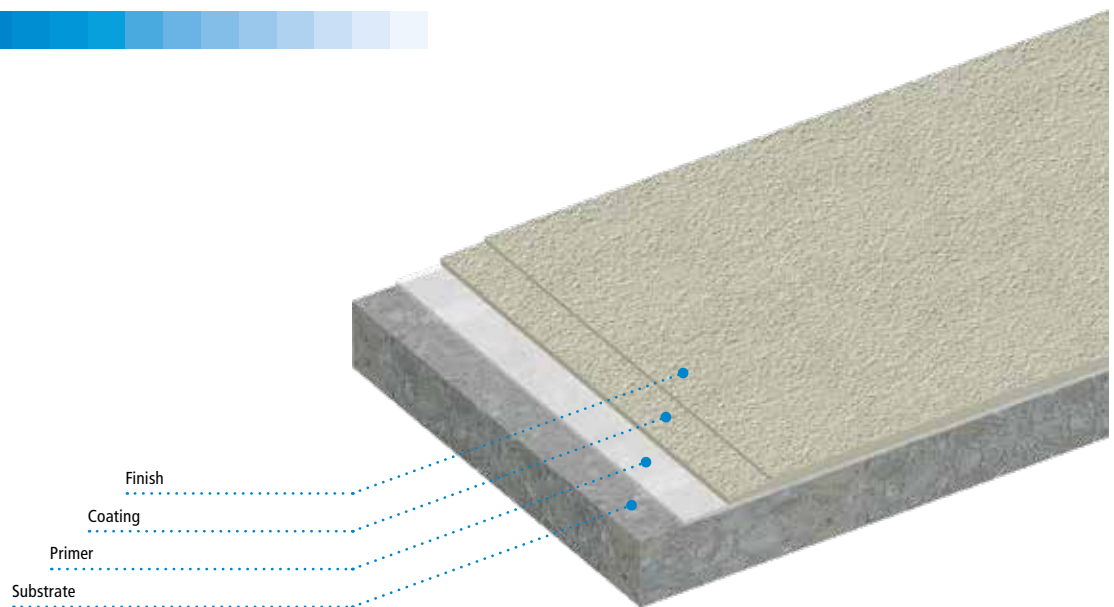


System description

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
- Meets the requirements of Class OS 8 in compliance with DIN V 18026 and the German Committee on Reinforced Concrete's guidelines for the protection and repair of concrete components (DAfStb Rili SIB 2001 – Repair Guideline 2005), Fire classification C_{fl}-s1 in compliance with DIN EN 13501-1

System set-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

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. The substrate must be pre-treated in accordance with the specifications in the Repair Guideline (Rili SIB). The following volume specifications relate to a roughness depth of $R_f = 0.5$ 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 pre-treated test areas:

Concrete: in the centre, at least 2.0 N/mm², individual value not less than 1.5 N/mm².

* Please note: Term in compliance with "German Committee on Reinforced Concrete (DAfStb) – Guidelines for the protection and repair of concrete components" = primarily effective surface protection layer

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System description

Substrate pre-treatment

Substrate	Pre-treatment	Primer
Aluminium ⁽¹⁾	Abrade with Triflex Cleaner, roughen surface	No primer ⁽²⁾
Composite thermal insulation systems ⁽¹⁾		Triflex Pox Primer 116+
Concrete	Grinding, milling or dust-free shot-blasting	Triflex Cryl Primer 287
Copper ⁽¹⁾	Abrade with Triflex Cleaner, roughen surface	No primer ⁽²⁾
Epoxy resin coating	Roughen surface, adhesive strength and compatibility test	No primer
Glass ⁽¹⁾	Abrade with Triflex Cleaner, roughen surface, adhesive strength test	Triflex Glass Primer
Lightweight concrete ⁽¹⁾		Triflex Cryl Primer 287
Mortar, resin-modified	Grinding, milling or dust-free shot-blasting; adhesive strength and compatibility test	Triflex Pox Primer 116+
Paints	Grinding or milling, completely remove	See substrate
Plaster/masonry ⁽¹⁾		Triflex Cryl Primer 287
PVC moulded components, hard ⁽¹⁾	Abrade with Triflex Cleaner, roughen surface	No primer
Screeds	Grinding, milling or dust-free shot-blasting	Triflex Cryl Primer 287
Stainless steel ⁽¹⁾	Abrade with Triflex Cleaner, roughen surface	No primer ⁽²⁾
Steel, galvanised ⁽¹⁾	Abrade with Triflex Cleaner, roughen surface	No primer ⁽²⁾
Wood ⁽¹⁾	Remove paints	Triflex Cryl Primer 287
Zinc ⁽¹⁾	Abrade with Triflex Cleaner, roughen surface	No primer ⁽²⁾

⁽¹⁾ Only in areas not subject to high mechanical stress, e.g. details and flashing.

⁽²⁾ 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 287

Pour on thickly and spread evenly using a cellular rubber spreader. Then cross-coat using a Triflex Universal Roller.

Volume: at least 0.35 kg/m².

Can be recoated after approx. 45 min.

Triflex Glass Primer

Wipe on GP evenly with a cleaning cloth.

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 a thin coat with a spray can.

Volume: approx. 80 ml/m².

Can be recoated after approx. 30 to 60 min.

Triflex Pox Primer 116+

Pour on thickly and spread evenly using a cellular rubber spreader. Then recoat using a Triflex Universal Roller.

Do not allow puddles to form.

Dress with not too much of the fresh primer.

Volume of Triflex Pox Primer 116+: at least 0.30 kg/m².

Volume of quartz sand 0.3–0.8 mm: at least 0.70 kg/m².

Can be recoated after approx. 12 hrs. to max. 24 hrs.

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System description

Important note:

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. Waterproof details, fill the stop
4. Waterproof surface

Repairing

Triflex Cryl RS 240

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

Triflex DeckFloor

Levelling paste for repairing mineral substrates with roughness depths of R_T 1 to 10 mm with the addition of up to 20.00 kg quartz sand 0.7–1.2 mm* per 33.00 kg of Triflex DeckFloor. Volume: at least 2.00 kg/m² per mm layer thickness. Can be recoated after approx. 1 hr.

Scratch coat for repairing mineral substrates with roughness depths of R_T 0.5 to 1 mm with the addition of up to 10.00 kg quartz sand 0.2–0.6 mm* per 33.00 kg of Triflex DeckFloor. Volume: at least 2.00 kg/m² per mm layer thickness. Can be recoated after approx. 1 hr.

Detail waterproofing

All junctions, transitions and other detail solutions must be completed before the surface coating is applied.

Points 1 to 3 are completed wet-on-wet.

1. Triflex ProDetail

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

2. Triflex Special Fleece

Lay 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.

4. Triflex Cryl Finish 209

Cross-coat evenly using a Triflex Universal Roller.
Volume: at least 0.50 kg/m².

Can be recoated after approx. 1 hr.

For dimensions, see Triflex DeckCoat system drawings.

Joint waterproofing

Important note:

All joints must be waterproofed before the surfaces are coated. 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 are completed wet-on-wet.

2. Triflex ProDetail

Apply a width of 16 cm with a radiator roller.
Volume: at least 0.30 kg/m.

3. Triflex Special Fleece

Insert a 15 cm wide strip, removing any 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.
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.

5. Triflex Cryl Finish 209

Apply a width of approx. 10 cm with a Triflex Universal Roller above the construction joint.

Volume: at least 0.50 kg/m².

Can be recoated after approx. 1 hr.

For dimensions, see Triflex DeckCoat system drawings.

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

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System description

Settlement 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 are completed wet-on-wet.

3. Triflex ProDetail

Apply to both sides of the joint and on the support strip using a radiator roller.

Volume: at least 0.70 kg/m.

4. Triflex Special Fleece

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 completely saturate the Triflex Special Fleece and as a preliminary layer for the next fleece loop.

Volume: at least 0.70 kg/m.

6. Triflex Special Fleece

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.

Volume: at least 0.70 kg/m.

Total volume 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

Seal the joint so it is flush with the surface.

Volume: 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 note:

1. The construction joint or settlement 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 settlement joints are all maintenance joints. For visual reasons, it may be necessary to renew the joint ingress protection after structural movement.

For joints subject to high mechanical stress, see

Triflex ProJoint – settlement joint waterproofing system.

Surface coating

1. Triflex Cryl Finish 209

Apply transversely to the direction of travel using a hard rubber spreader and cross-coat using a Triflex Universal Roller.

Volume: at least 0.70 kg/m².

2. Quartz sand grain size 0.7–1.2 mm

Dress the wet coating in excess.

Once the coating is cured, remove any surplus.

Volume: at least 7.00 kg/m².

Can be recoated after approx. 2 hrs.

Finish

Triflex Cryl Finish 209

Apply transversely to the direction of travel using a hard rubber spreader and cross-coat using a Triflex Universal Roller.

Volume: at least 0.50 kg/m².

Ready for vehicle traffic after approx. 2 hrs.

Important note:

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

Volume of Triflex Cryl Paste: at least 0.50 kg/m².

Can be subject to loads after approx. 45 min.

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



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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 (including Triflex Special Fleece) by a minimum of 10 cm. This also applies to junctions, transitions 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.

System components

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 Primer
- Triflex Liquid Thixo
- Triflex Metal Primer
- Triflex Pox Primer 116+
- 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.

Gradient/Evenness

Before commencing any 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 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 volumes/Waiting times

The specified volumes apply only to smooth, even substrates with a maximum roughness depth of $R_T = 0.5$ mm. 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.

Application notes

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.

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-Triflex products must not be used with Triflex systems. 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, which are available in a range of different file formats. Alternatively, visit the website www.ausschreiben.de or www.heinze.de.

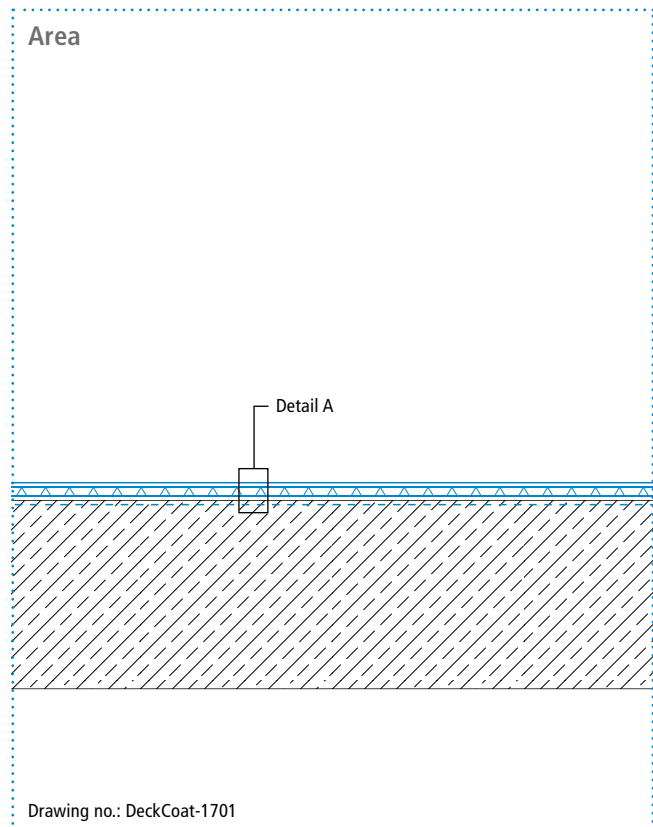
CAD drawings

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

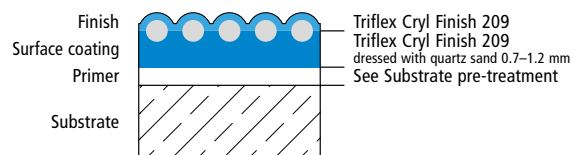
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System drawings



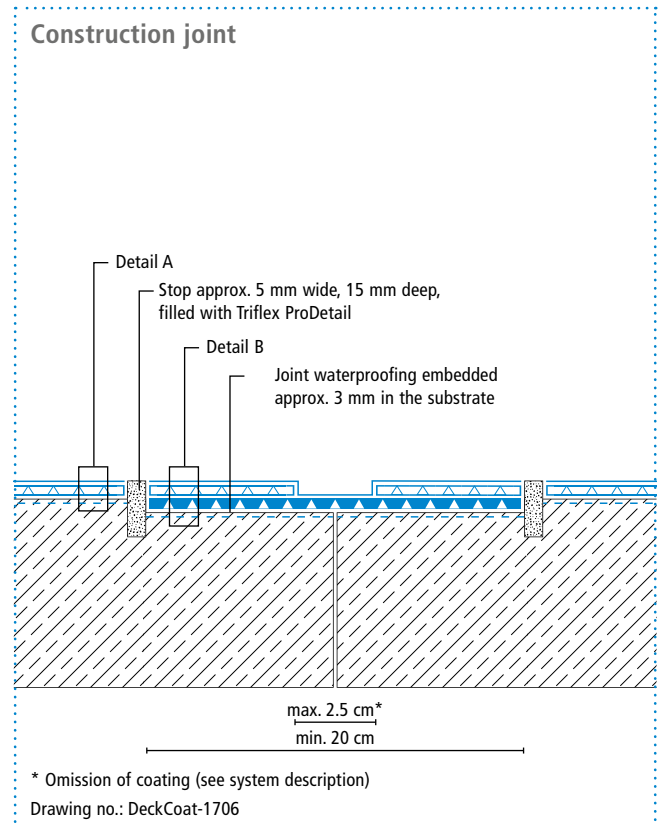
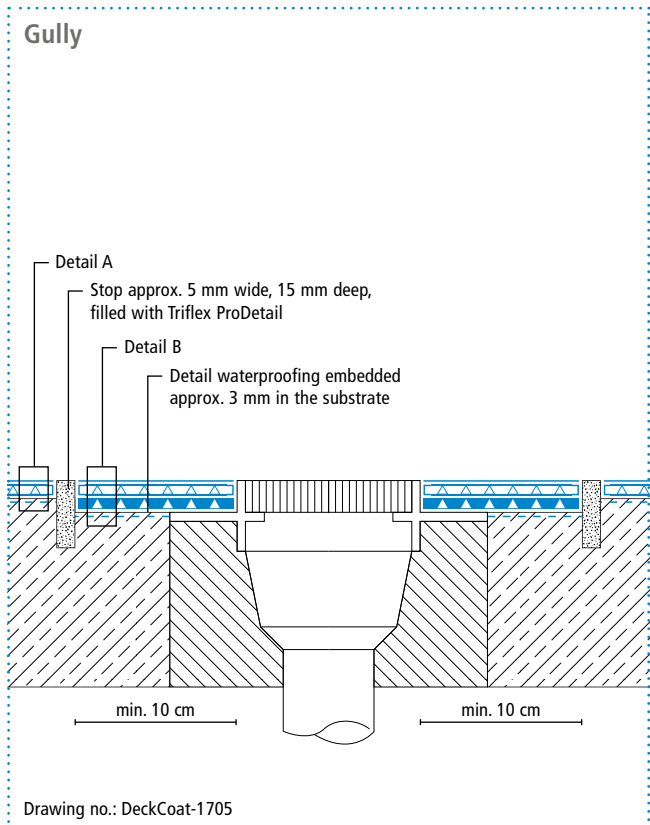
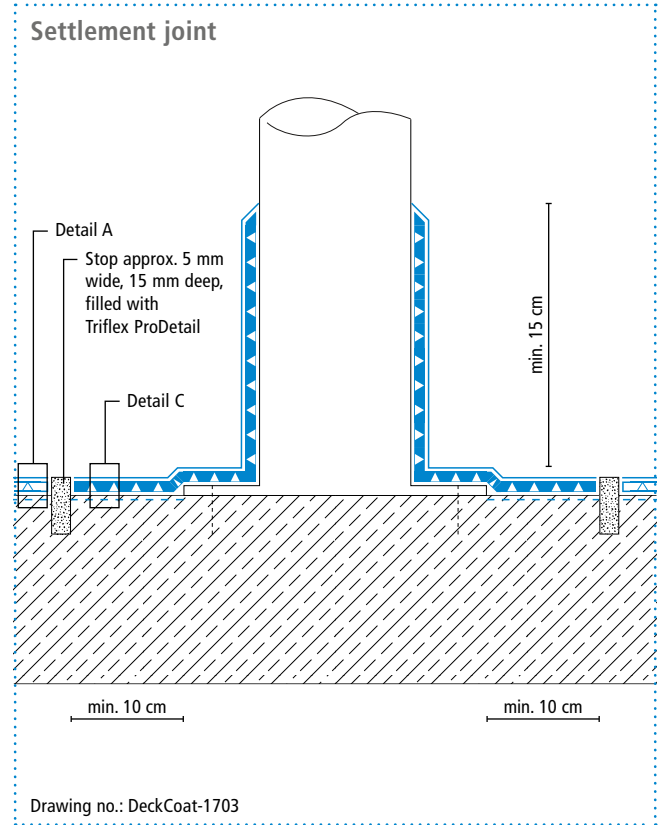
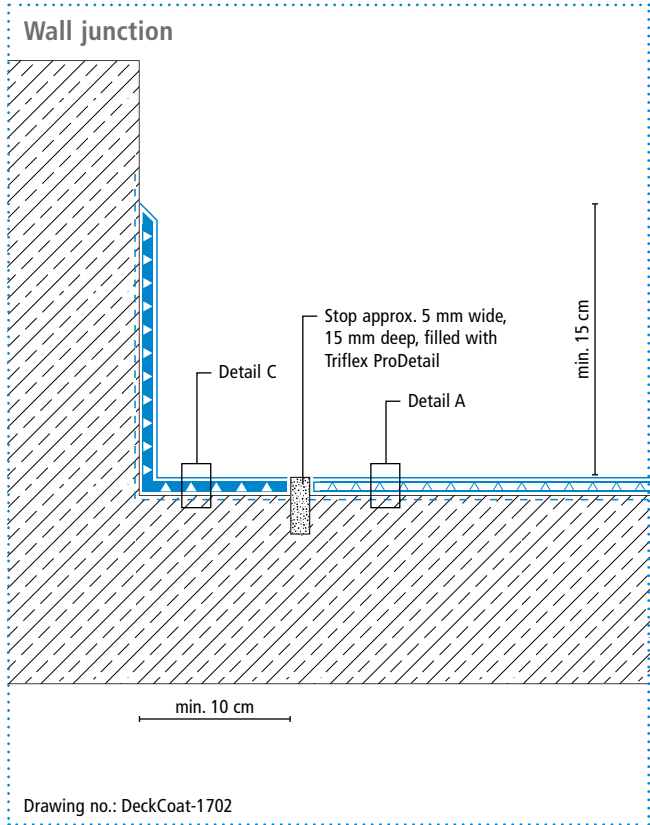
System set-up – Detail A



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System drawings

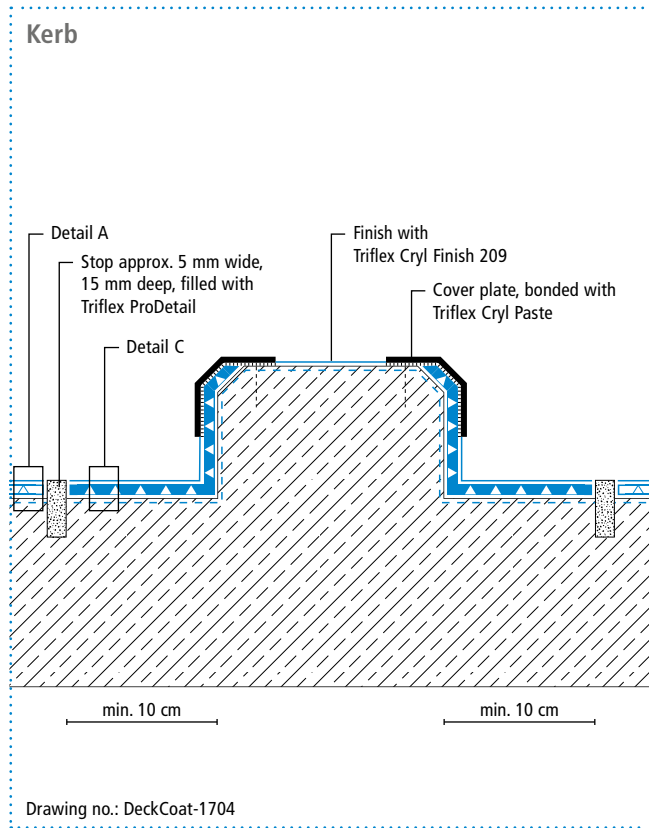


Height differences between fleece overlaps are exaggerated.

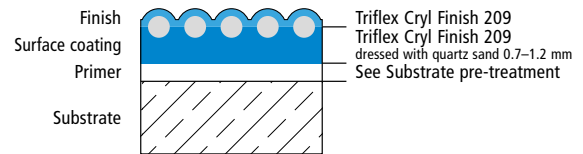
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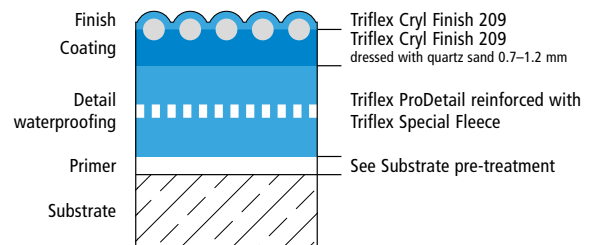
System drawings



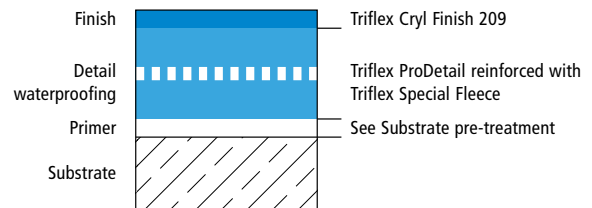
System set-up – Detail A



System set-up – Detail B



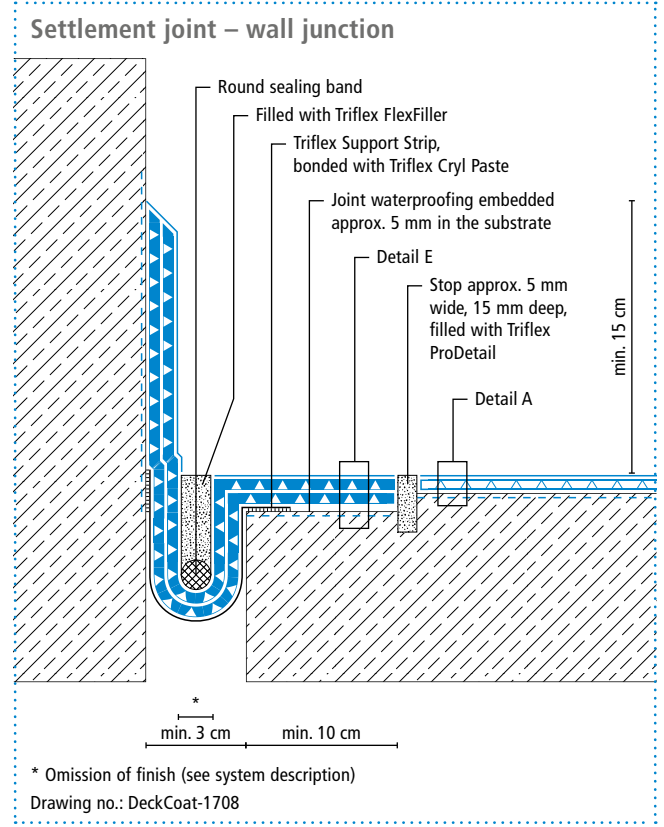
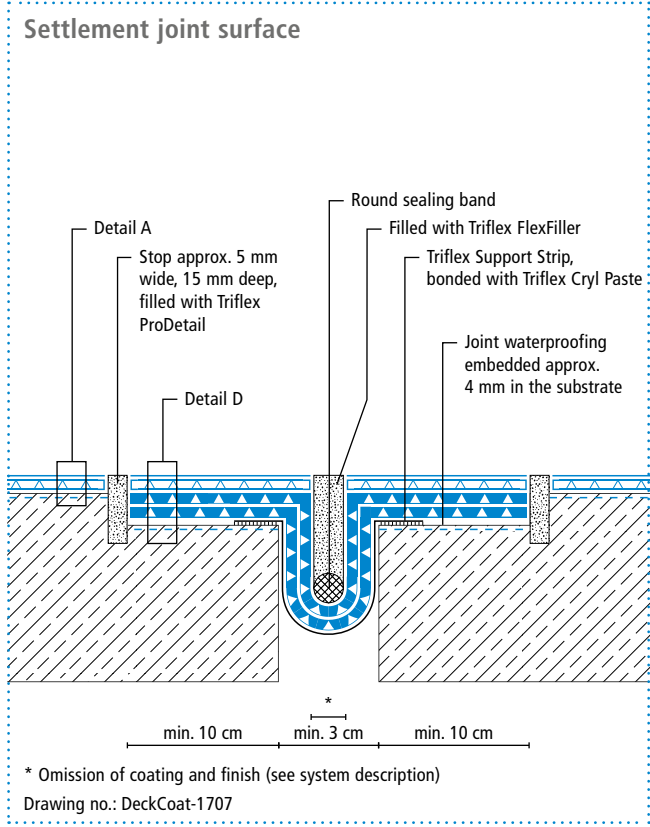
System set-up – Detail C



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System drawings

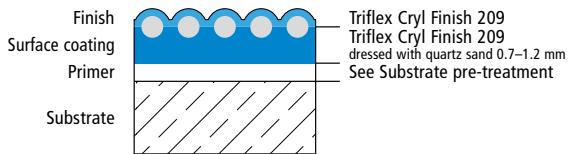


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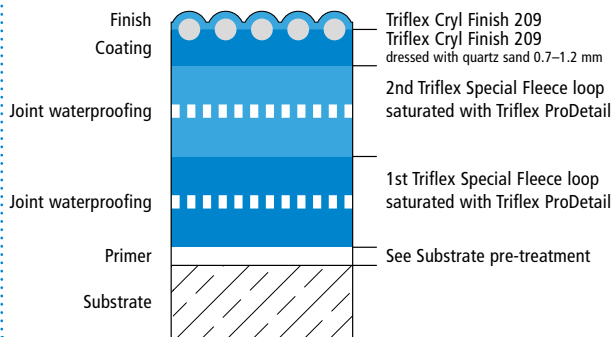


System drawings

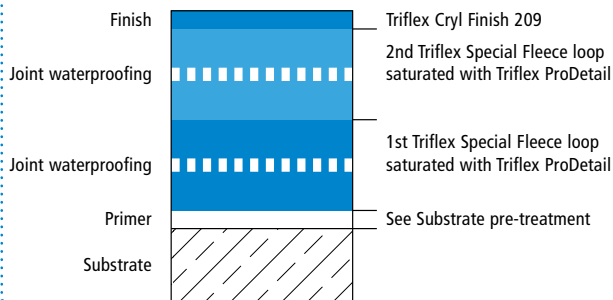
System set-up – Detail A



System set-up – Detail D



System set-up – Detail E





Intermediate Deck Coating System (OS 8)

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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



7040 Window grey



1023 Traffic yellow



2009 Traffic orange



2009 Traffic red



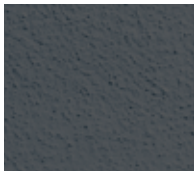
4006 Traffic purple



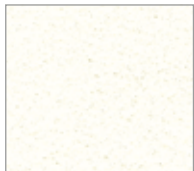
5017 Traffic blue



6024 Traffic green



7043 Traffic grey



9010 White

Note:

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

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Triflex

Delivering solutions together.



International

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