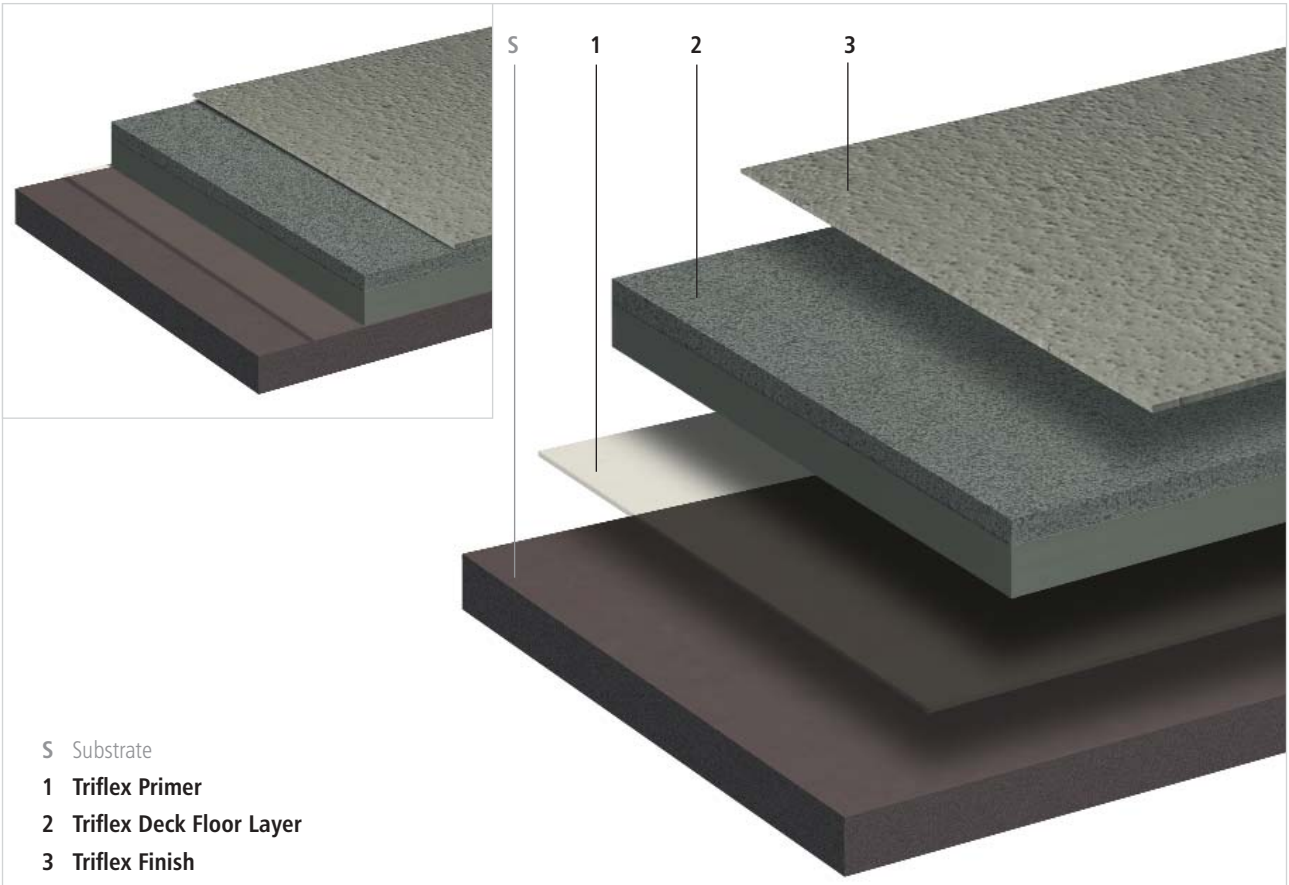
Triflex DFS-External System Data Sheet

Heavy duty, thick layer, waterproofing and surfacing system for external car park decks

Properties

- Waterproof, thick layer system
- Anti-skid - SRT 70-81
- Available with the following finish options:
  - 0.7-1.2mm crystal quartz with pigmented seal
  - 1.0-1.6mm basalt with Traffic Grey pigmented seal
  - 1.0-2.0mm crushed granite with Traffic Grey pigmented seal
- Tough – highly abrasion resistant
- Exceptionally fast curing
- Cold applied
- Compatible with a wide range of substrates
- Seamless
- Flexible
- Fire resistant EN ISO-11925-2:2002
  EN ISO-9239-1:2002
- Chemical resistant
- Resistant to Chloride and Carbon Dioxide ingress
- Vapour permeable
- Low temperture curing-0˚c
- UV resistant
- Solvent free
- Isocyanate free
- Tailored design options

System Build Up



S Substrate
1 **Triflex Primer**
2 **Triflex Deck Floor Layer**
3 **Triflex Finish**

System Details

Triflex Primer - Primer for sealing of substrate and to improve adhesion.
Triflex Deck Floor Layer - Waterproof, self levelling surfacing layer with hard wearing crystal quartz, basalt or crushed granite aggregate.
Triflex Finish - Abrasion resistant system seal coat.

Applications

The system is suitable for the waterproofing and surfacing of external car park decks which are not over occupied premises, and for the waterproofing and surfacing of internal decks over occupied premises.

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Substrate preparation and priming

		Priming	
Substrate	**Preparation Notes**	**Triflex DFS-External main area**	**Triflex prodetail® for details**
Asphalt	1	Triflex Cryl Primer 222	Triflex Cryl Primer 222
Hot Rolled Asphalt (HRA)	1 / 8	Triflex Cryl Primer 222	Triflex Cryl Primer 222
Stone Mastic Asphalt (SMA)	1 / 8	Triflex Cryl Primer 222	Triflex Cryl Primer 222
Felt	2	N/A details only	No primer required
SBS Felt	2	N/A details only	No primer required
APP Felt	3	N/A details only	No primer required
Concrete / Screed	1 / 6	Triflex Cryl Primer 276	Triflex Cryl Primer 276
Lightweight concrete	1 / 6	Triflex Cryl Primer 276	Triflex Cryl Primer 276
Polymer modified concrete repair materials	1 / 6	Triflex Cryl Primer 276	Triflex Cryl Primer 276
Steel	4	N/A details only	No primer required
Galvanised steel	4	N/A details only	No primer required
Stainless steel	4	N/A details only	No primer required
Aluminium	4	N/A details only	No primer required
Copper	4	N/A details only	No primer required
Zinc	4	N/A details only	No primer required
Lead	4	N/A details only	No primer required
Glass	4	N/A details only	No primer required
Wood	2	N/A details only	Triflex Cryl Primer 276
Plastics (sheets, coatings, mouldings)			
CPE	4	N/A details only	No primer required
EVA	2	N/A details only	No primer required
PIB	2	N/A details only	No primer required
PVC-P, nB	4	N/A details only	No primer required
UPVC	4	N/A details only	No primer required
GRP	4	N/A details only	No primer required
PU (polyurethane)	5 / 7	No primer required	No primer required
PMMA (acrylic)	5 / 7	No primer required	No primer required
UP (polyester)	5 / 7	No primer required	No primer required
EP (epoxy)	5 / 7	No primer required	No primer required

For other substrates, consult Triflex (UK) Limited for required preparation methods and priming.

Notes:

1 = Scarify, grind or lightly bead blast

2 = Clean thoroughly

3 = Liquefy surface by application of heat and immediately top with quartz

4 = Rub down thoroughly with Triflex Cleaners, and sand/grind metals and hard plastics (steel must be ground or blasted to bright metal)

5 = Lightly sand and carry out adhesion test

6 = The equilibrium moisture content of cementitious substrates must not exceed 6% or 75% RH. Where moisture levels are in excess of 6% equilibrium moisture or 75% RH refer to Triflex Pox R103.

7 = Must be applied over dimensionally stable, fully bonded substrate with a minimum hardness of 25N/mm^2 and subject to approval by Triflex (UK) Limited.

8 = For HRA and SMA, increase primer consumption by 50% and use maximum practical catalyst (minimum 6%).

Where there are any doubts as to adhesion, carry out an adhesion test.

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Substrate Assessment

In all cases the condition and stability of the underlying substrate should be assessed prior to the commencement of work. See Substrate Testing section.

Concrete structures should be designed in accordance with BS8110/CP110.

Substrate Preparation

Refer to substrate preparation and priming schedule.

Generally:

Remove existing paint and finishes etc. by grinding.

Ensure that the prepared surface is clean, dry and free from dust, laitence, grease, oil and any other contaminants.

Priming

Refer to substrate preparation and priming schedule.

Triflex Cryl Primer 222:

Apply with a lambswool roller (0.4kg/m² min.)

Rainproof after approx. 30 minutes.

Can be walked upon/next coat applied after approx. 45 minutes.

Triflex Cryl Primer 276:

Apply with a lambswool roller (0.4kg/m² min.)

Rainproof after approx. 30 minutes.

Can be walked upon/next coat applied after approx. 45 minutes.

Note: For new cementitious materials where it is not practical to allow the substrate to hydrate to below 6% equilibrium moisture content and 75% RH, or for existing cementitious substrates with higher levels of moisture, Triflex Pox R103 can be used where the equilibrium moisture content is less than 10%.

Triflex Pox R103:

Apply with a lambswool roller (0.5kg/m² min.)

Can be walked on after approx. 8 hours.

Next coat applied after approx. 18 hours.

Able to withstand stress after approx. 24 hours.

Surface Repairs and Filling

Cut out blisters and repair all minor indentations with scratch coat of Triflex Cryl RS 233. Allow to dry for a minimum of 1 hour.

Fill all voids in vertical surfaces and at upstand transitions with Triflex Cryl Paste and allow to dry for a minimum of 1 hour.

Larger indentations can be filled with Triflex RS 240 (cementitious substrates), Triflex Cryl Mortar or Triflex Cryl Paste Mortar (non-cementitious substrates).

Dynamic Cracks and Dayjoints

Remove any existing filler material and fill with Triflex Cryl RS 233.

Apply Triflex Cryl R 210 (1.5kg/m² min.) with a lambswool roller.

Roll a strip of Triflex 110g Reinforcement into the wet resin, pressing trapped air free using the lambswool roller, ensuring a minimum 50mm overlap between the reinforcement sheets.

Apply Triflex Cryl R 210 (1.0kg/m² min.) wet on wet to ensure full saturation of the fleece. Allow to dry for a minimum of 1 hour.

Minimum fleece overlap either side of dynamic crack/dayjoint - 75mm.

Note: Identification of Dynamic Cracks should include a survey of the soffit (where visible).

Interface Details

Apply in accordance with standard and project specific sketch details.

General Details:

Apply Triflex prodetail® (2.0 kg/m² min.) with a lambswool roller.

Roll a strip of Triflex 110g Reinforcement into the wet resin, pressing trapped air free using the lambswool roller, ensuring a minimum 50mm overlap between the reinforcement sheets.

Apply Triflex prodetail® (1.0 kg/m² min.) wet on wet to ensure full saturation of the fleece.

Rainproof after approx. 30 minutes

Can be walked on/next coat applied after approx. 45 minutes.

Complex Details:

Where due to access restrictions, or complexity of the detail, prodetail® is not practical:

Apply Triflex Cryl R 295 fibre reinforced resin (1.5 kg/m² min.) with a brush and allow to cure for a minimum of 45 minutes.

Apply a further layer of Triflex Cryl R 295 fibre reinforced resin (1.5 kg/m² min.) by brush.

Rainproof after approx. 30 minutes.

Can be walked upon/next coat applied after approx. 45 minutes.

Note: Where details may be subject to mechanical damage from vehicles, consult Triflex (UK) Limited for mechanical protection solutions.

Main Deck - Deck Floor Layer

Apply Triflex Cryl RS 233 (4.5kg/m2 min.) by trowel.

Embed into the wet Triflex Cryl RS 233 a full cover of crystal quartz (0.7-1.2mm), basalt (1.0-1.6mm), or crushed granite (1.0-2.0mm) (5.0kg/m²) approx. Allow to dry for a minimum of 2 hours, sweep away excess aggregate and vacuum clean.

Rainproof after approx. 30 minutes.

Can be walked upon after approx. 1 hour.

Next coat applied after approx. 2 hours.

Finish

Interface Details

Apply Triflex Cryl Finish 205 (0.5kg/m²min) using a lambswool roller.

Rainproof after approx. 30 minutes.

Can be walked upon after approx. 1 hour.

Note: For interface details in excess of 250mm high, use Triflex Cryl Finish 205 Thixo

Main Deck

Apply Triflex Cryl Finish 205 (0.65kg/m² min.), (0.80kg/m² min.) if over basalt or crushed granite) using a hard squeegee and a dry lambswool roller.

Rainproof after approx. 30 minutes.

Can be walked upon after approx. 1 hour.

Can be driven upon after approx. 3 hours.

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Expansion Joints

Consult Triflex (UK) Limited for confirmation of design details required.

Interruptions During Works

If work is interrupted for more than 12 hours, use Triflex Cleaner to clean and reactivate the transition area.

Evaporation time: at least 20 minutes - overlay within 60 minutes.

For reinforced details, the subsequent waterproofing layers must overlap by at least 100 mm, including the Reinforcement.

System Components

Please refer to the appropriate Product Data Sheet for details about areas of application/application conditions/mixing instructions (available on request):

Triflex Cryl Primer 222
Triflex Cryl Primer 276
Triflex Pox R103
Triflex Cryl Paste
Triflex RS 240
Triflex Cryl Mortar
Triflex Cryl Paste Mortar
Triflex Cryl R 210
Triflex 110g Reinforcement
Triflex prodetail®
Triflex Cryl R 295
Triflex Cryl RS 233
Triflex Cryl Finish 205

Quality Standard

All products are manufactured to ISO 9001.

Substrate Testing

Prior to the commencement of work the Contractor must check and only proceed if he has satisfied the following requirements.

Hardness: All concrete substrates, concrete repair materials, screeds and mortars shall be cured and allowed to achieve a minimum hardness of 25N/mm^2.

Moisture: Prior to overlay with Triflex systems, the equilibrium moisture content of the substrate must not exceed 6% and 75% RH. For cementitious substrates with higher levels of moisture (less than 10% equilibrium) refer to Triflex Pox R103.

Adhesion: Trial areas to be prepared to ensure that the System achieves a minimum bond to the substrate of:

Concrete, concrete repair materials, screeds and mortars: 1.5N/mm^2

All other substrates: 0.8N/mm^2

Health and Safety

Refer to product Health and Safety data prior to using the materials.

Coverage Rates

The coverage rates given are guidelines based on smooth, level substrates. Allowances must be made if the substrate is uneven, rough or porous.

Drying Times

The drying times stated are at +20˚C and are dependent upon weather conditions.

Important Notes

It is the Contractors' responsibility to ensure that the substrate is suitable and that the system is applied in all areas in accordance with Technical Data Sheets and Application Guidelines in force at the time.

The advice we can provide on the application of our products is based on extensive development work as well as many years of experience and is given to the best of our knowledge. However, the wide variety of requirements for a building under the most diverse conditions mean that it is necessary for the Contractor to test the product for suitability in any given case. We reserve the right to make alterations in keeping with technical developments or improvements.