

# Triflex TSS

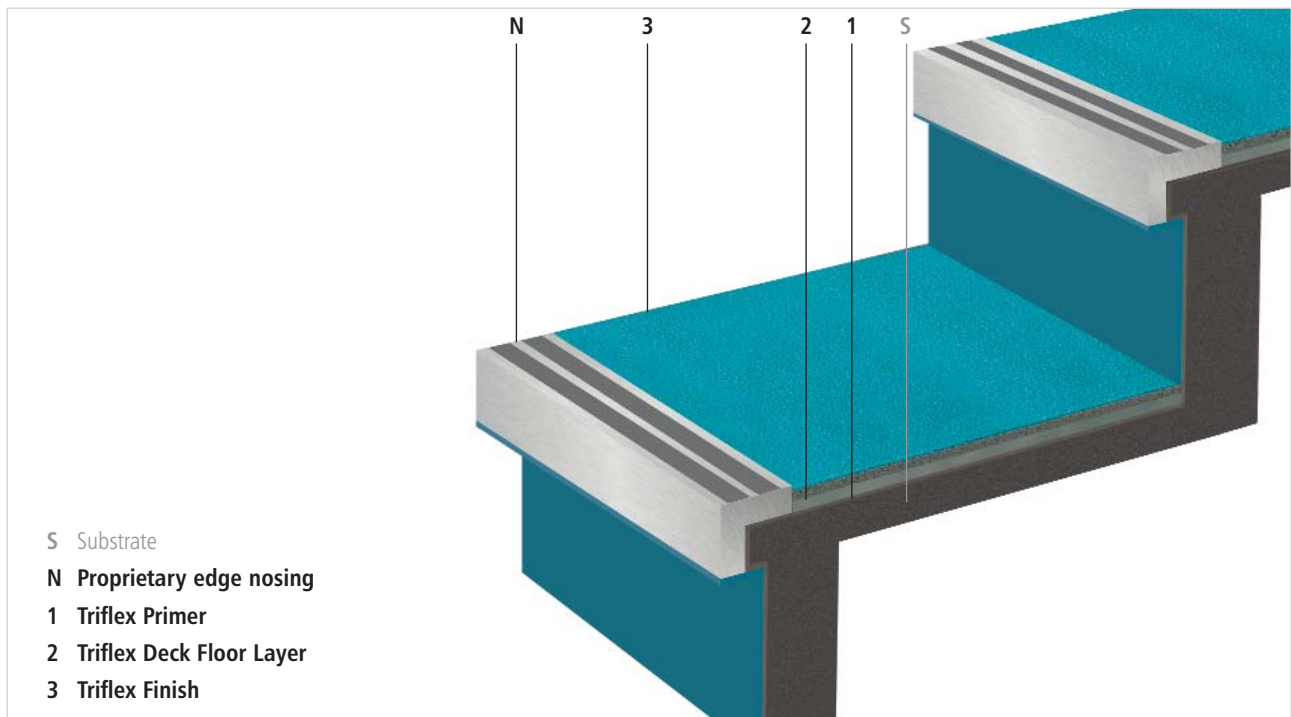
# System Data Sheet

Fast curing, thick layer, heavy duty waterproofing and surfacing system for stairs and stairwells

## Properties

- Waterproof, thick layer system (>4mm Dry Film Thickness) to treads and stairwells
- Available with the following finish options:
  - 0.7 - 1.2mm crystal quartz with pigmented seal
  - 0.7 - 1.2mm coloured quartz with clear seal
  - 1.0 - 1.6mm basalt with Traffic Grey pigmented seal
- Anti-skid
- Localised reinforcement to deal with dynamic cracking and movement zones
- Flexible
- Impact and abrasion resistant
- Durable - resistant to static and dynamic loads
- Totally cold applied
- Exceptionally fast curing
- Based on highly advanced PMMA technology
- Quick and easy to apply
- Compatible with a wide range of substrates
- Suitable for all common stair and stairwell constructions
- Fully bonded with excellent inter layer adhesion
- Chemical resistant
- Resistant to Chloride and Carbon Dioxide ingress
- Vapour permeable
- Low temperature curing - 0°c
- UV resistant
- Solvent free
- Isocyanate free
- Halogen free
- Fire resistant:
  - EN ISO-11925-2:2002
  - EN ISO-9239-1:2002
- Tailored design options
- 10 year materials warranty as standard
- Optional extended warranties available

## System Build Up



## System Details

### Treads and stairwells:

**Triflex Primer** - Primer for sealing of substrate and to improve adhesion.

**Triflex Deck Floor Layer** - Waterproof, self levelling surfacing layer with large grain, hard wearing crystal quartz, coloured quartz or basalt aggregate.

**Triflex Finish** - Abrasion resistant system seal coat.

### Risers:

**Triflex Primer** - Primer for sealing of substrate and to improve adhesion.

**Triflex Finish** - Abrasion resistant system seal coat.

## Applications

The system is suitable for the waterproofing and surfacing of stairs and stairwells.

For full waterproofing of stairs and stairwells to include the risers contact Triflex (UK) Limited.

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## Substrate preparation and priming

Substrate	Preparation Notes	Priming
		Triflex TSS main area
Asphalt	1	Triflex Cryl Primer 222
Concrete / Screed	1 / 5	Triflex Cryl Primer 276
Lightweight concrete	1 / 5	Triflex Cryl Primer 276
Polymer modified concrete repair materials	1 / 5	Triflex Cryl Primer 276
Steel	3	No primer required
Galvanised steel	3	No primer required
Timber	2	Triflex Cryl Primer 276
Plastics (sheets, coatings, mouldings)		
PU (polyurethane)	4 / 6	No primer required
PMMA (acrylic)	4 / 6	No primer required
UP (polyester)	4 / 6	No primer required
EP (epoxy)	4 / 6	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 = Rub down thoroughly with Triflex Cleaners, and abrade / grind metals and hard plastics to achieve a roughened surface  
(steel must be ground or blasted to bright metal – where all rust cannot be practically removed an approved active anti-corrosion primer may be used)
- 4 = Lightly abrade and carry out an adhesion test
- 5 = The equilibrium moisture content of cementitious materials must not exceed 6% or 75% RH. Where moisture levels are in excess of these values refer to Triflex Pox R103
- 6 = Subject to testing of insitu material and approval by Triflex (UK) Limited

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, laitance, 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/m<sup>2</sup> 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/m<sup>2</sup> 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/m<sup>2</sup> 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 or Triflex Cryl Paste. Allow to dry for a minimum of 1 hour.

Larger indentations can be filled with Triflex Cryl 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/m<sup>2</sup> 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/m<sup>2</sup> 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).

## Edge Nosing

Mechanically fix 4mm thick proprietary edge nosing (e.g. Gradus) in accordance with manufacturers instructions, bedding in Triflex Cryl Paste.

## Stairs and Stairwells

Apply Triflex Cryl RS 233 (4.0kg/m<sup>2</sup> min.) by trowel.

Embed into the wet Triflex Cryl RS 233 a full cover of crystal quartz (0.7 - 1.2mm), coloured quartz (0.7 - 1.2mm), or basalt (1.0 - 1.6mm) (5.0kg/m<sup>2</sup>) 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

### Risers

Apply Triflex Cryl Finish 205 Thixo (0.5kg/m<sup>2</sup> min.) using a lambswool roller.

Rainproof after approx. 30 minutes.

Can be walked upon after approx. 1 hour.

### Treads and Stairwells

Crystal quartz / basalt systems (pigmented seal) - Apply Triflex Cryl Finish 205 (0.65kg/m<sup>2</sup> min.), (0.8kg/m<sup>2</sup> min.) if over basalt) using a lambswool roller and remove excess material / level with a dry lambswool roller.

Coloured quartz systems (clear seal) - Apply Triflex Cryl Finish 202 (0.65kg/m<sup>2</sup> min.) using a lambswool roller and remove excess material / level with a dry lambswool roller.

Rainproof after approx. 30 minutes.

Can be walked upon after approx. 1 hour.

Can be subjected to loads after approx. 3 hours.

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## 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 Cryl RS 240**

**Triflex Cryl Mortar**

**Triflex Cryl Paste Mortar**

**Triflex Cryl R210**

**Triflex 110g Reinforcement**

**Triflex Cryl RS 233**

**Triflex Cryl Finish 205**

**Triflex Cryl Finish 202**

## 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.

**Dimensional stability:** All factors which may affect the subsequent performance of the system e.g. failed structural elements etc. must be repaired.

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

**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<sup>2</sup>

All other substrates: 0.8N/mm<sup>2</sup>

## 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.