



## System overview

# Triflex DeckCoat

Protective coating for internal concrete decks and ramps above parking or ground bearing concrete decks and ramps

The majority of multi-storey car parks feature internal concrete decks and ramps over parking or ground bearing concrete decks and ramps. While these areas are generally not exposed to the same external weather influences as exposed decks, they are generally subject to significantly higher levels of chloride contamination and abrasion through traffic. Studies have shown that the worst degradation to the reinforcement in car park structures typically occurs on the lower levels and lower ramps of car parks. It is essential that these decks and ramps are waterproofed, surfaced and protected to ensure the structure is not compromised, and Triflex DeckCoat is the perfect solution. The system features our unique, ultra-fast curing PMMA resin technology that offers significant installation advantages over rigid epoxy, polyurethane and polyaspartic systems. In combination with the waterproof and durable anti-skid wearing layer, the system can also include a reinforced, elastomeric and dynamic crack bridging waterproofing membrane for high risk areas.



## System highlights

### Rapid installation

With a self priming coating layer (subject to testing) the system can be installed in a simple, two process application, saving time on site and increasing productivity.

### Optional locally reinforced, elastomeric waterproofing membrane

Even high risk areas pose no problem for this durable solution, as the system can incorporate a fully reinforced, localised waterproofing membrane designed specifically to accommodate the dynamic movement and cracking within parking structures.

### Tough and durable protection

The demands of even the highest trafficked, highest space change rate car parks are no issue for the highly traffic, impact and load resistant wearing layer and durable surface finish used in the Triflex DeckCoat system. The system is unaffected by ponding water and is resistant to chlorides (road salts), carbon dioxide ingress, petrol, diesel, brake fluid, engine oil, battery acid, and de-icing and cleaning products. Protection that's built to last, with a low life cycle cost.

### Tried and tested

Triflex DeckCoat offers a complete waterproof, protective coating solution for refurbishment and new-build projects that will last for years to come. The Triflex DeckCoat system is not only highly certified and tested to UK and European standards, it has also been successfully installed for more than 15 years in projects across the globe.

### Rapid curing, cold applied system

Exceptionally fast curing, Triflex systems allow car parks to remain open during installation, limiting access restrictions and unnecessary disruptions. Installation can be carried out all year round and the system still cures quickly at temperatures down to 0°C. There is no risk from hot works during installation as all Triflex materials are applied in a totally cold liquid form, quickly curing to create a solution that lasts.

### Anti-skid

The system offers high levels of long-term skid resistance in wet and dry conditions, providing a secure and safe solution for both vehicles and pedestrians.

## Application areas

- Internal concrete car park decks and ramps over parking
- Ground bearing concrete car park decks and ramps

## Suitable for

- Refurbishment
- New build

## Compatible substrates

- Concrete, concrete repair materials and screeds
- Existing membranes

## Suitable constructions

- Cast in situ concrete
- Permanent formwork with in situ concrete
- Precast concrete planks with or without structural topping
- Precast double tee units with or without structural topping

## Approvals

Certified to the highest UK and European standards and classifications, including:

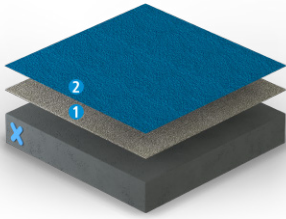
**CE** EN 1504-2 certified (full system)

- Fire performance:
  - EN 13501-1

### Manufacturer certification

- ISO 9001 Quality Management
- ISO 14001 Environmental Management
- ISO 50001 Energy Management

## System build-up and consumptions - Quartz

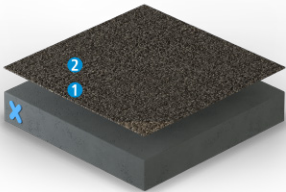


Layer	Product	Consumption <sup>(1)</sup>	Aggregate / Broadcast	Overcoat / traffic <sup>(2)</sup>
1 Waterproof wearing layer	Decks: Triflex DeckCoat 246 Ramps: Triflex DeckCoat Thixo	2.40Kg/m <sup>2</sup>	Quartz: 6.00Kg/m <sup>2</sup>	1 hour
2 Finish	Triflex Cryl Finish 209	0.55Kg/m <sup>2</sup>	-	Foot traffic: 1 hour Vehicle traffic: 2 hours

<sup>(1)</sup> Minimum consumption assuming a smooth, even, non-absorbent substrate.

<sup>(2)</sup> The times stated are based on +20°C – the times will not be significantly extended at low temperatures.

## System build-up and consumptions - Emery



Layer	Product	Consumption <sup>(1)</sup>	Aggregate / Broadcast	Overcoat / traffic <sup>(2)</sup>
1 Waterproof wearing layer	Decks: Triflex DeckCoat (Black - 9005) Ramps: Triflex DeckCoat Thixo (Black - 9005)	2.40Kg/m <sup>2</sup>	Emery: 7.00Kg/m <sup>2</sup>	1 hour
2 Finish	Triflex Cryl Finish 202	0.80Kg/m <sup>2</sup>	-	Foot traffic: 1 hour Vehicle traffic: 2 hours

<sup>(1)</sup> Minimum consumption assuming a smooth, even, non-absorbent substrate.

<sup>(2)</sup> The times stated are based on +20°C – the times will not be significantly extended at low temperatures.

## Primary test data

### System performance

EN 1504-2 Products and systems for the protection and repair of concrete structures.

#### Without primer:

CE	
0770	
Triflex GmbH & Co. KG Karlstraße 59, 32 423 Minden Germany	
12	
12 -2333-01-01/06	
EN 1504-2: ZA.1f and ZA.1g	
Car park waterproofing and surfacing system Triflex DCS-C (DeckCoat) Variation 1	
Abrasion resistance	≤ 3000 mg
Permeability to CO <sub>2</sub>	Sd > 50
Water vapour permeability	Class II
Permeability to water	< 0,1 kg/(m <sup>2</sup> ·√h)
Adhesion strength by pull off test	≥ 2,0 N/mm <sup>2</sup>
Resistance to thermal shock / thermal compatibility	≥ 2,0 N/mm <sup>2</sup>
Resistance to severe chemical attack	Class I, 3 d without pressure
Reaction to fire after application	Cfl-s1
Skid resistance	Class III
Impact resistance	Class I

#### With primer:

CE	
0770	
Triflex GmbH & Co. KG Karlstraße 59, 32 423 Minden Germany	
12	
12 -2333-01-01/07	
EN 1504-2: ZA.1f and ZA.1g	
Car park waterproofing and surfacing system Triflex DCS-C (DeckCoat) Variation 2	
Abrasion resistance	≤ 3000 mg
Permeability to CO <sub>2</sub>	Sd > 50
Water vapour permeability	Class II
Permeability to water	< 0,1 kg/(m <sup>2</sup> ·√h)
Adhesion strength by pull off test	≥ 2,0 N/mm <sup>2</sup>
Resistance to thermal shock / thermal compatibility	≥ 2,0 N/mm <sup>2</sup>
Resistance to severe chemical attack	Class I, 3 d without pressure
Reaction to fire after application	Cfl-s1
Skid resistance	Class III
Impact resistance	Class I

#### Anti-skid

Tests carried out wet on new indicative samples in accordance with UKSRG Guidelines (2016):

- With 0.4 - 1.2mm quartz:
  - PTV approx. 75 (Four S rubber / Slider 96)
  - PTV approx. 68 (TRRL rubber / Slider 55)
- With 1.0 - 3.0mm emery:
  - PTV approx. 90 (Four S rubber / Slider 96)
  - PTV approx. 95 (TRRL rubber / Slider 55)

## Colours and finishes

Available in a wide range of colours - refer to Triflex colour card.

## Next steps

To ensure a thorough understanding of the construction, the substrate and to determine the most appropriate specification, Triflex carries out free of charge surveys, testing, investigations and analysis prior to preparing a bespoke project specification proposal. To arrange a meeting or site visit please contact Triflex Customer Services.

The advice we 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 means that it is necessary for the Contractor to test the product for suitability in any given case. Triflex reserve the right to make alterations in keeping with technical developments or improvements.



Colour card

# Triflex DeckCoat

Notes: There may be slight variations in shade between actual colours and those shown below, texture is indicative only.  
RAL colours are approximate.

## Triflex DeckCoat finish colours

						
7016 Anthracite grey	7030 Stone grey	7031 Blue grey	7032 Pebble grey	7035 Light grey	7037 Dusty grey	7043 Traffic grey
						
1023 Traffic yellow	2009 Traffic orange	3020 Traffic red	4006 Traffic purple	5017 Traffic blue	6024 Traffic green	9005 Jet black

## Triflex DeckCoat finish colours: Additional colours (available on request)

							
2052 Amber 01	2053 Amber 02	1090 Amber 03	1091 Amber 04	7040 Slate 01	7037 Slate 02	7043 Slate 03	
							
8088 Marble 01	7087 Marble 02	7088 Marble 03	7089 Marble 04	5088 Azurite 01	5089 Azurite 02	5090 Azurite 03	
							
9010 Sand 01	7090 Sand 02	8089 Sand 03	8090 Sand 04	7092 Granite 01	7093 Granite 02	7094 Granite 03	7095 Granite 04
							
2088 Agate 01	8091 Agate 02	8092 Agate 03	8054 Agate 04	5091 Opal 01	5092 Opal 02	5081 Opal 03	5094 Opal 04
							
8094 Garnet 01	8095 Garnet 02	8096 Garnet 03		7096 Malachite 01	7097 Malachite 02	7098 Malachite 03	7073 Malachite 04
							
8081 Ruby 01	3089 Ruby 02	3090 Ruby 03	3091 Ruby 04	6088 Jade 01	6089 Jade 02	6090 Jade 03	6096 Jade 04
							
7091 Amethyst 01	3092 Amethyst 02	4088 Amethyst 03		7035 Quartz 01	7032 Quartz 02	7030 Quartz 03	7034 Quartz 04

## Additional colours

Other and special colours can be produced to order.

Request a sample online at [triflex.co.uk/samplerrequest](http://triflex.co.uk/samplerrequest)

Find out more at [triflex.co.uk](http://triflex.co.uk)