

CASE STUDY

Triflex

Delivering solutions together.

CAR PARK REFURBISHMENT
WATERPROOFING AND PROTECTION

CALLAGHAN SQUARE CARDIFF

Authorised Contractor:
Concrete Repairs Ltd (CRL)

Area:
3,160m²

Specifier:
Avison Young

Systems
Triflex DeckFloor
Triflex DeckFloor with Emery
Triflex DeckDefence

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Introduction

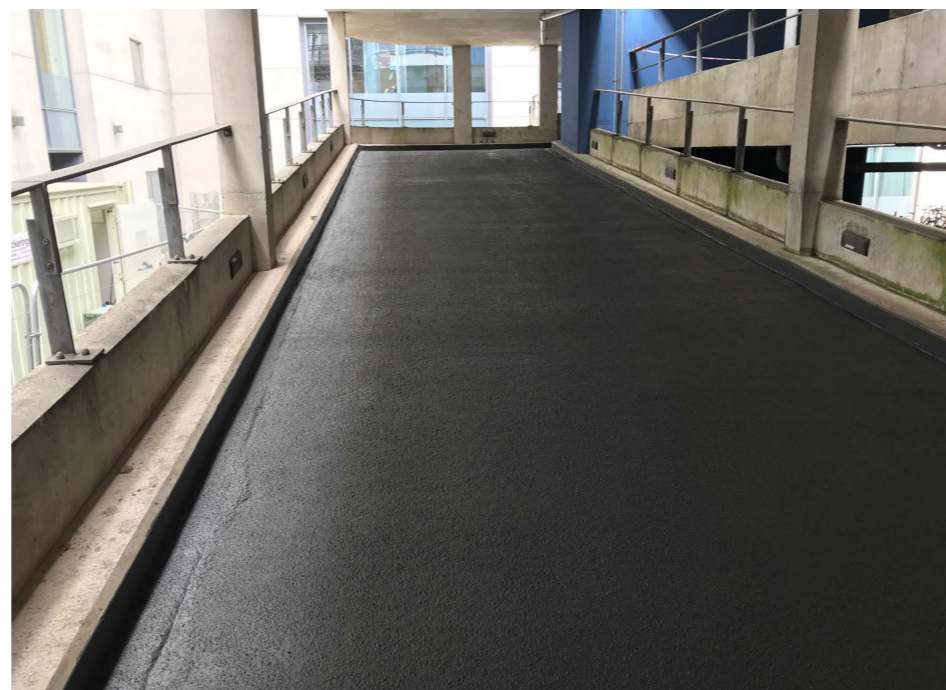
Callaghan Square is a modern development located close to Cardiff's main railway station. Number 1 and 2 is a crescent shaped 15,700m² building overlooking the civic space with fountains. The building is served by a car park that is hidden from view at the rear. The upper, exposed car park deck is level with the elevated railways tracks that run alongside the external parking bays.



The challenge

The existing external car park surface was worn, and showing signs of age. The original, unidentified coating was delaminating in multiple areas, raising concerns as to the ability to protect the underlying structure. The car park required refurbishment to ensure continued waterproofing and protection of the underlying structure, as well as provide an aesthetic in keeping with the office refurbishment.





The solution

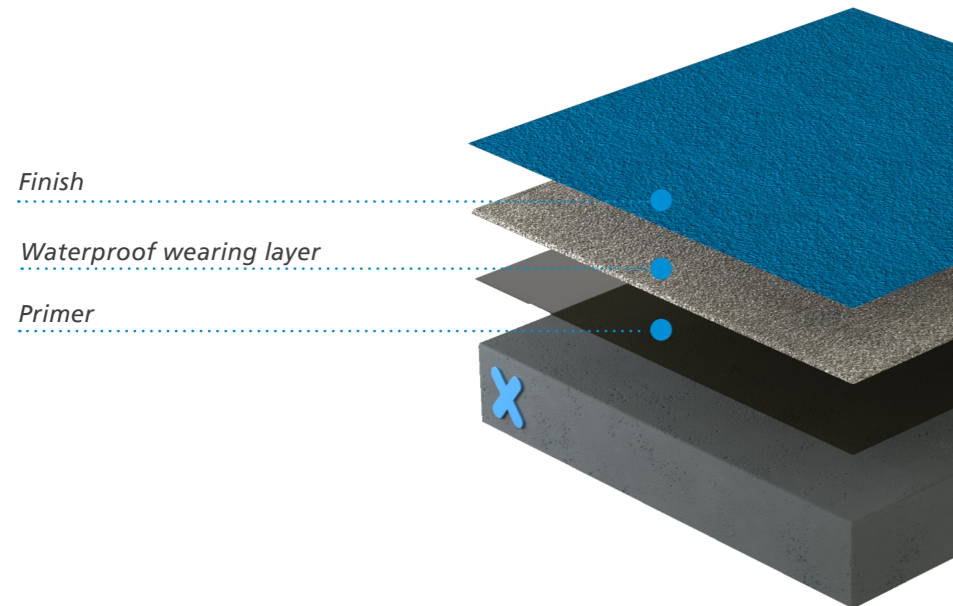
Triflex carried out a survey of the multi-storey car park, to assess the condition of the car park surface. The in-depth technical assessment included adhesive and cohesive strength testing. This confirmed that the existing coating was past its serviceable life, and had failed beyond a state that could be overlaid. To ensure the structural protection of the underlying structure, the partially reinforced PMMA system Triflex DeckFloor with Quartz was specified. The connecting ramps are subject to greater forces with vehicles accelerating and turning at the top and bottom. Here the Triflex Emery aggregate was specified to provide a tough, highly anti-skid finish.

The Triflex DeckFloor systems are highly resistant to chlorides (road salts) and with a robust traffic, impact and load resistant wearing layer it's protection that is engineered to last. The system incorporates an ETA certified, localised waterproofing membrane specifically designed to accommodate movement in car parks. This was used to tackle any cracking or vulnerable areas for long term protection.

In addition, the level 1 car park spaces were refurbished with the Triflex DeckDefence system. The solvent and isocyanate free system combines a self-priming epoxy waterproof coating layer with a PMMA resin-based finish. The two process application benefits from the rapid curing PMMA finish, ensuring an efficient programme of works. With its proven hard-wearing properties, the system has provided a cost effective solution for the internal deck with an improved aesthetic.

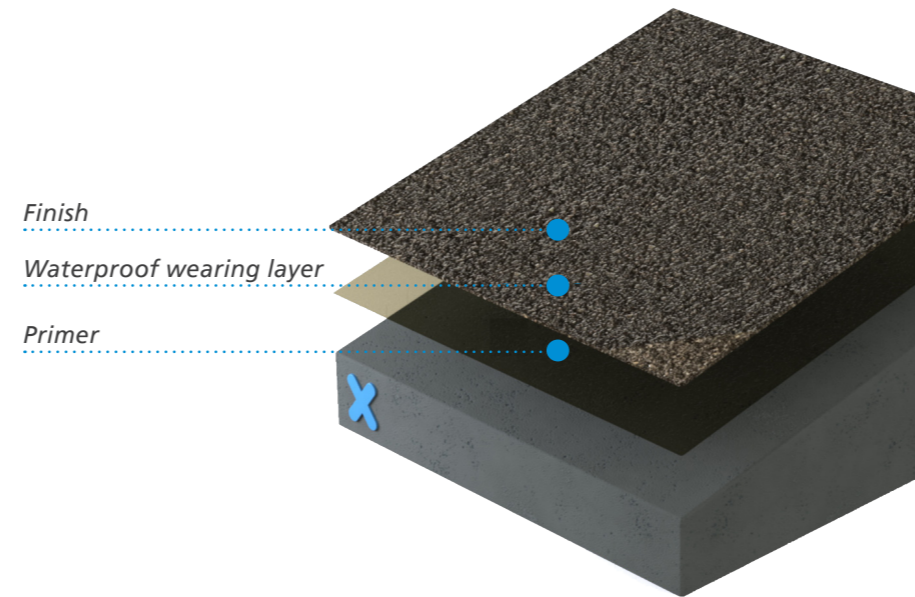
System benefits Triflex DeckFloor

- PMMA system for external and internal decks and ramps
- Compatible with a wide range of substrates, including asphalt, concrete and existing deck coatings
- Locally reinforced with dynamic crack bridging membrane
- High levels of long term skid resistance
- Exceptionally rapid curing, even at low temperatures
- Solvent and isocyanate free
- Totally cold applied, with no risk from hot works



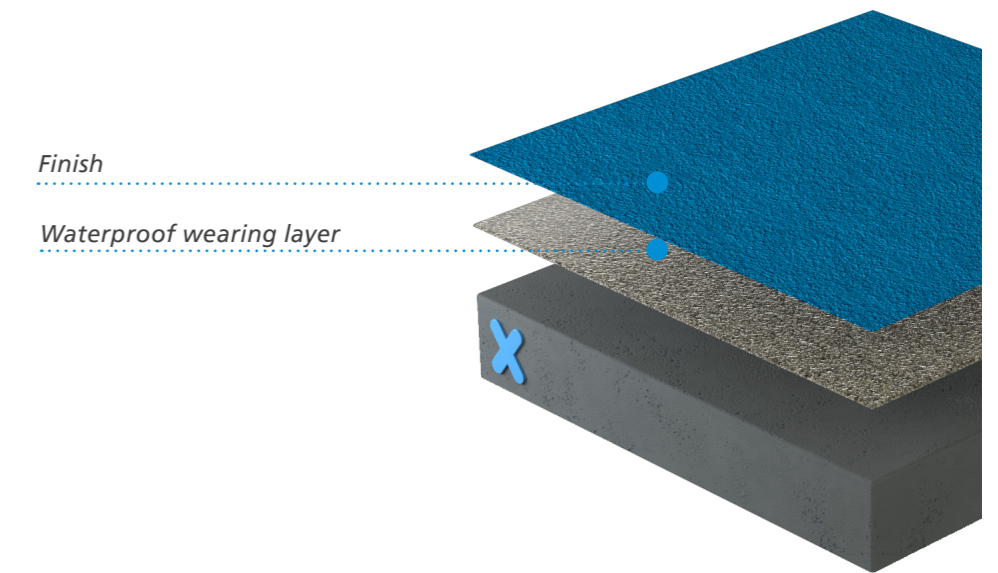
System benefits Triflex DeckFloor with Emery

- All the benefits of Triflex DeckFloor with enhanced anti-skid and durability
- Engineered for areas subject to extreme forces and heavy traffic
- Perfect for ramps, hammerheads and turning zones
- Quickly trafficable
- Compatible with a wide range of substrates including asphalt, concrete and existing deck coatings
- Highly abrasion resistant, anti-skid surface



System benefits Triflex DeckDefence

- Cost effective hybrid system with fast installation
- Compatible with concrete substrates
- Installed in a simple, two process application
- Available in a wide range of colours for versatile design aesthetic
- Solvent and isocyanate free
- Totally cold applied, with no risk from hot works





Delivering solutions together.

Triflex is the leading European specialist in cold liquid applied waterproofing, surfacing and marking resins. Our high-quality systems provide reliable and lasting waterproofing, surfacing, protection and markings for roofs, walkways, balconies, terraces, car parks, roads and infrastructure.

We are a family owned and operated company that provides tailored solutions worldwide. From our production facilities based in Minden, Germany, we have been researching and developing solutions designed to protect and repair the built environment for more than 40 years.

From our UK and Ireland headquarters based in Stone, Staffordshire we pride ourselves on providing our clients with tailored solutions and exceptional levels of service and support throughout all stages of their project. From conducting in-depth site surveys to our comprehensive testing and off-site and on-site support, Triflex delivers the highest standards.

Triflex solutions are certified to the highest standards and are backed up by long-term meaningful warranties, ensuring peace of mind for years to come.



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