

Project review

Ninewells Hospital, Dundee



Triflex

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Ninewells Hospital is a large teaching hospital situated on the Western edge of Dundee and like most hospitals; the demand for on-site parking is extremely high. One particularly busy area is staff car park 4. There was however issues with the ingress of water into this structure and onto cars parked below. This was as a consequence of the premature failure in the existing polyurethane coating. The Client also raised concerns of possible "slips, trips and falls" given the poor anti-skid properties of the coating, which had diminished significantly over time.

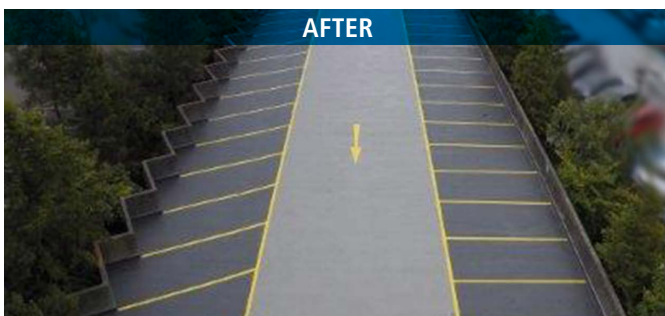
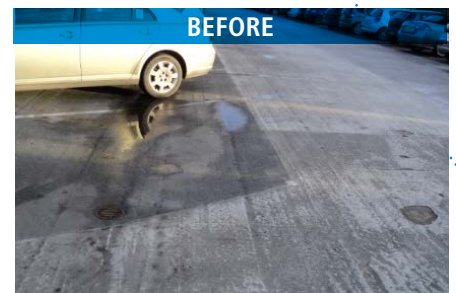
Repairs carried out to an adjacent car park in an effort to increase its longevity had proved largely unsuccessful with ongoing health and safety concerns. Vinci Park therefore took the decision to completely remove the failed coating to Car Park 4 and to install a significantly more robust waterproofing, surfacing and protection system. There were however limitations as all work had to be completed during the six week 'School Summer Holiday' period. Accordingly, it was a pre-requisite that the system chosen could be fast-tracked, without compromise to the quality of the solution delivered.

The heavy duty, Triflex DeckFloor system was the natural choice having been successfully used on previous Vinci Park hospital schemes in the UK, namely the University Hospital of Wales in Cardiff and Broadgreen Hospital in Liverpool. The system is fully compliant with the stringent requirements of BS EN 1504-2 and as such, is CE marked. Triflex DeckFloor boasts an

unparalleled track record in the industry and fulfilled the needs of the Client given the system is based on PMMA resin technology, a fast curing, solvent-free solution, ideal for use where weather windows need to be optimised and delivery timescales are critical.

All defects to the concrete structure were remedied using a combination of traditional cementitious and Triflex PMMA-based repair and filling materials. Dynamic cracks and day-joints were over-banded locally using Triflex's high tensile strength reinforcement, to ensure long term protection from flexural fatigue. Triflex DeckFloor was then applied to the thoroughly prepared car park substrate of approximately 3,000m² ensuring a smooth and aesthetically pleasing deck. The system was complemented with the application of durable markings to the finished deck using both Triflex Kaltplastik and Triflex PrecoLine 300.

The installation of the BS EN 1504-2 certified Triflex DeckFloor system has subsequently remedied all water ingress at car park 4. As a consequence, the deck structure is protected from chloride ingress and carbonation and also provides high-levels of resistance to chemicals commonly found in the car park environment namely petrol, diesel and motor oil. Moreover, the high anti-skid properties of the system provide a safer environment for pedestrians and vehicles alike, and the no-nonsense colour scheme, with bold wayfinding, is a welcome improvement to this well used car park.



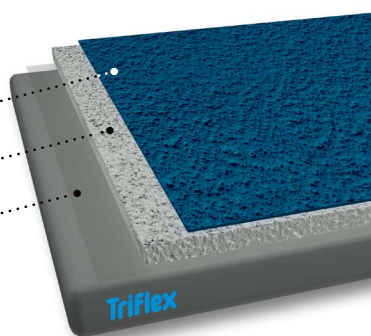
Triflex DeckFloor system

Finish

Waterproof wearing layer

Primer

- Totally waterproof
- Exceptional durability
- Totally cold applied
- BS EN 1504 compliant
- Exceptionally rapid curing even at low temperatures
- Highly abrasion and impact resistant
- Resistant to: de-icing salts, petrol, diesel, battery acid etc
- Wide variety of colours and finishes



Project details

- **Project:** Ninewells Hospital
- **Address:** Dundee, UK
- **System:** Triflex DeckFloor
- **Completed:** 2015
- **Scope of work:** Waterproofing and surfacing of roof-top car park
- **Contractor:** Concrete Repairs Ltd