

Case Study

Project/customer name:	Derby Royal Hospital
Year of application:	n/n
Location/country:	Derby / UK
Building type:	Car park
Authorized contractor:	Concrete Repairs Ltd.
Additional project details:	Refurbishment of a car park to restore long-term waterproofing and surfacing

General view:



Challenge:

- The car park's waterproofing system had come to the end of its warranted life and was no longer protecting the structure. The previous solution was substantially worn, delaminating, and splitting, all of which affected its waterproofing.
- There was a risk of long-term structural damage through chloride ingress, in addition to contaminated and potentially caustic water dripping onto cars and people below.
- The contractor was looking for a system that would not only minimize disruption during installation, but would also extend the waterproofing warranty beyond the lifetime of their agreement.



Solution:

- Contractors can often apply Triflex solutions directly on top of existing coatings, but in this case the substrate had deteriorated too badly so the team recommended removing the original coating before applying Triflex ProPark.
- Triflex ProPark incorporates a fully reinforced, elastomeric membrane, certified under EN1504-2 for crack bridging ability to B4.2 (-20°C). This means the contractor could apply the waterproofing system confident that it would deal with continued structural movement and associated cracking.
- Using the Triflex system an entire area could be completed in just a day so that there was no fear of rain affecting the progress. In fact, the time-consuming element of the refurbishment was removing the existing coating before applying Triflex ProPark.



Products used at a glance:

Triflex offers liquid PMMA* based resins (e.g. ProDetail for details or ProTect for areas):

1. Substrate
2. Primer, if necessary
3. Waterproofing layers
 - a) Triflex ProDetail (2kg / sqm)
 - b) Triflex Special Fleece
 - c) Triflex ProDetail (1 kg / sqm)
4. Finish, if wanted

* Polymethyl methacrylate



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Main benefits (European Guideline ETAG 005):

- 25 years estimated working life performance
- Fast curing time and rainproof after only 30 minutes
- Application possible till humidity of 99% and withstands surface temperature after application up to 90° C
- A liquid seamless solution that fits to any structure with complex geometry
- Adherence to any surfaces (Aluminum, steel, plastic, glass, bitumen, concrete, ...)
- Solvent free, environmental friendly and with no risk to health
- High resistance to chemicals, roots and rhizome, alkali and hydrolysis
- Cold application with no flame and flame retardant
- Highly UV resistant (1000 MJ/m² = 325 days)
- Easy to impose loads after application (for particular demands as green roofs)