

## Case Study

Project/customer name:	Victoria shopping center
Year of application:	2019
Location/country:	Southend-on-Sea / UK
Building type:	Parking deck
Authorized contractor:	Makers Construction Limited
Additional project details:	Top deck carpark refurbishment

General view:



## Challenge:

- The park deck consisted of an asphalt waterproofing and surfacing system. Unfortunately, the original asphalt had become badly split and cracked in places.
- Typically, a traditional asphalt system to a car park will consist of two mastic asphalt layers, the base layer for waterproofing is c.a. 20mm thick, the paving layer on top is c.a. 30mm, providing the wearing course and typically includes coarse aggregate. In this case, there was a soft bituminous rich layer within the surface of the asphalt at an average of 7mm depth with little or no coarse aggregate. This can cause defects to appear at the surface of the asphalt car park in the form of wheel indentations, tyre marks, ruckling and crazing.
- Careful consideration was also required on areas of the top deck which contained a large amount of air conditioning units and other plant. These areas required a significant amount of detailed waterproofing.



## Solution:

- Initial preparation required removing the soft layer of asphalt at the surface, which was then thoroughly swept and vacuumed to remove dust prior to the installation of Triflex ProPark for waterproofing and surfacing. Before, cracks, ruckling and tyre indentations were made good with a combination of Triflex repair materials including Triflex Cryl Paste, Triflex Cryl Paste Mortar, Triflex FlexFiller and Triflex Asphalt Levelling Mortar.
- The detailed waterproofing systems Triflex ProDetail and Triflex ProFibre were specified alongside Triflex ProPark to ensure that all complex details around air conditioning units and plant were thoroughly waterproofed.



## 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/m<sup>2</sup> = 325 days)
- Easy to impose loads after application (for particular demands as green roofs)