

Case Study

Project/customer name:	Barbican Estate
Year of application:	n/n
Location/country:	London / UK
Building type:	Housing estate
Authorized contractor:	VolkerLaser
Additional project details:	Waterproofing solution that is also impact resistant, can be applied as quickly as possible with the possibility to apply loads upon it.

General view:



Challenge:

- The client was looking for a solution which would not only stop the ingress of water to occupied areas beneath the podium and terrace areas, but would be also impact resistant enabling it to withstand the vast amount of pedestrian foot traffic.
- Minimizing disruption was also important given the large numbers of residents and general public trafficking the area. The client therefore needed a system that was versatile, ultra-fast curing and ultimately able to be overlaid and re-trafficked as quickly as possible, minimizing inconvenience to users.
- The project also required the waterproofing of two concrete water features.



Solution:

- After the brick slip tiles, screed and original foamglas insulation was removed, the asphalt was overlaid with new Foamglas insulation board. The Triflex ProTect heavy duty waterproofing system adhered then perfectly to this Foamglas
- The Triflex ProTect system is rapid curing and can be re-opened to traffic in as little as 1 hour. Once the system was fully cured, it was overlaid with screed and brick slip tiles incorporating the movement joints, as detailed in the CAD drawings.
- Triflex ProTect was also used to waterproof the water features. Unlike many other waterproofing systems, Triflex ProTect is hydrolysis resistant meaning that it won't break down when permanently submerged in water over long periods of time.

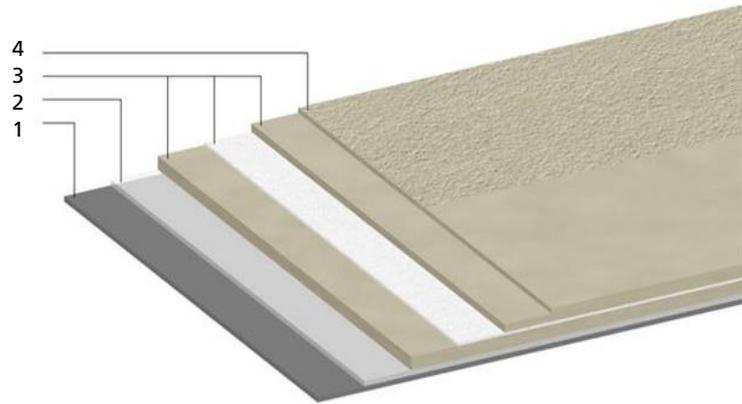


Products used at a glance:

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)