

Case Study

Project/customer name:	Onslow Square
Year of application:	2019
Location/country:	London / UK
Building type:	Garden square estate
Authorized contractor:	Carringtons Building & Civil Engineering Ltd
Additional project details:	Solving a long term water ingress issue to cantilevered balconies

General view:



Challenge:

- The properties feature cantilevered balconies with steel handrail stanchion penetrations. The balconies had been allowing water to ingress for several years, which had caused areas of damp within the properties below.
- The client had tried several unsuccessful repair attempts including completely overlaying the existing asphalt with new asphalt. Over time, this too had failed and had left the client looking for alternative solutions.
- Following a thorough site investigation by Triflex, it was established that the water ingress was not caused by a failure within the main area waterproofing, but in fact the detailed handrail penetration to the asphalt substrate. However, the client required an overall renovation.



Solution:

- Prior to installation, the tiles which partially covered the balcony required removal. Then, overbands were installed to movement joints and cracks using Triflex ProTerra, a fully reinforced system that provides maximum strength and dynamic crack bridging.
- Triflex ProFloor Quartz Design was installed as the main area waterproofing system, a partially reinforced system for use on cantilevered structures that's highly durable, ultra-fast curing, cold liquid applied and flexible enough to accommodate movement within the structure. The small grain quartz in the finish provides enhanced anti-slip properties.
- Triflex ProDetail was installed to all penetrations, handrails and vertical surfaces, where its factory-set thixotropic formula was perfectly suited to these difficult areas.



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)