

Case Study

Project/customer name:	Fradley 432 Logistic Center
Year of application:	2020
Location/country:	Lichfield / UK
Building type:	Logistic Building
Authorized contractor:	UK Waterproofing Ltd
Additional project details:	Waterproofing above a Foamglas T3 + insulation board

General view:



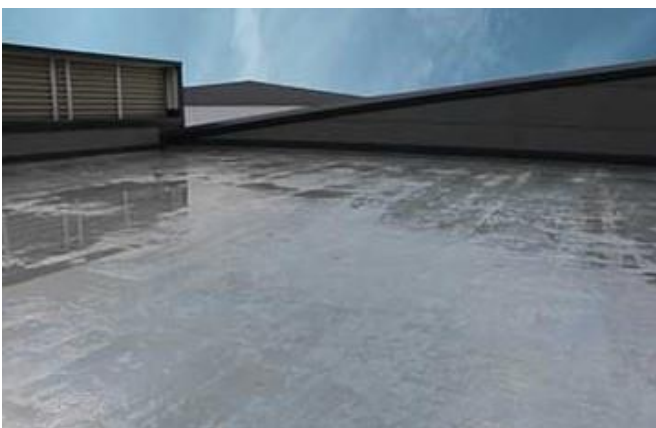
Challenge:

- The 130m² roof was designed to house a small number of air conditioning units as a plant deck area, and would need to allow for infrequent traffic, such as for maintenance and inspection as recommended under BS 6229.
- Foamglas T3+ insulation board had been specified along with Foamglas PC58 adhesive to act as both a vapor control layer and scratch coat. The architect had specified that a U-Value of 0.20W/m²K was required.



Solution:

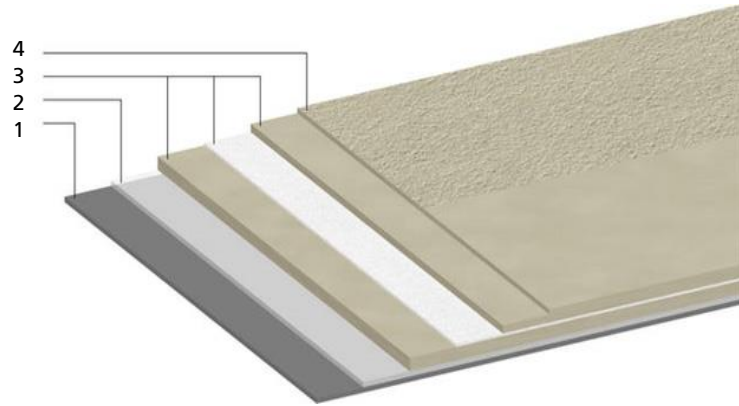
- Triflex ProTect is the ideal solution for providing a waterproofing and surfacing system above the Foamglas T3+ insulation board. A U-Value and condensation risk analysis was conducted based upon this proposed build-up, and was found to meet the 0.20W/m²K requirements.
- Lastly, the heavy-duty embedment layer was installed by casting Triflex Quartz into a layer of Triflex ProTect resin, before a layer of Triflex Ceryl Finish 205 was applied in the chosen finish color.



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

Continually improved over 40 years in order to become the market leader in Europe.



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)