

Case Study

Project/customer name:	Photovoltaic roof of municipal building
Year of application:	2009
Location/country:	Bamberg / Germany
Building type:	Commercial building
Authorized contractor:	Jüttner & Straub GmbH Bauwerksabdichtungen
Additional project details:	Energy friendly waterproofing of roof with solar cells

General view:



Challenge:

- Fast renovation and long-term sealing of the surface and connections was required.
- The system should have a colored background with a reflection value that optimizes the efficiency of the installed photovoltaic elements.
- The system had to be highly resistant to mechanical and thermal loads.



Solution:

- Triflex ProTect was chosen for the task, because it provides a fast renovation (curing time of 30 min) as well as long-term waterproofing security (25 years).
- Sealing with Triflex Cryl Finish 205 in pure white is also a guarantee for optimal efficiency of the attached photovoltaic elements.
- The fleece-reinforcement ensures a high crack-bridging ability and PMMA based products are resistant to thermal loads too.

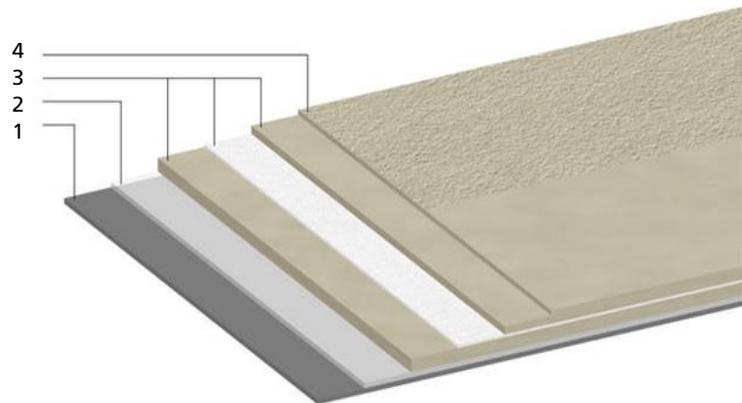


Products used at a glance:

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)