

Case Study

Project/customer name:	Gold Wind Science Tech
Year of application:	2019
Location/country:	Henan / China
Building type:	Wind Energy
Authorized contractor:	Ruifeng (Wuhan) construction Co., Ltd
Additional project details:	Waterproofing of wind turbine basement

General view:



Challenge:

- The task was to waterproof the bases of wind turbines to prevent water ingress that would corrode the steel structure underneath.
- The special challenge was to find a product that can withstand the high vibrations caused by the turbines.
- The solution had also to withstand the extreme climate in this area.



Solution:

- To prepare for the work, the renovation specialists first needed to clean the surface. It was then primed with Triflex Towersafe Primer and the metal part was sprayed with Triflex Metal Primer and sealed with Duct Tape.
- Afterwards Triflex Towersafe waterproofing, which can realize seamless connection from metal to concrete was applied to the complete foundation.
- Triflex Towersafe was developed to exactly withstand such vibrations and is not affected by extreme climate conditions.

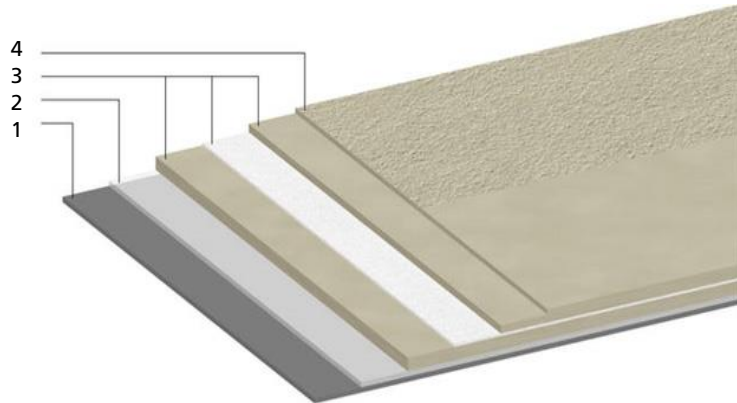


Products used at a glance:

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)