

Triflex

Delivering solutions together.

Waterproofing system for wind turbines
Triflex Towersafe[®]



Specialist in onshore and offshore wind turbines

Wind turbines exploit the forces of nature and give us clean energy. In the process, the tower and foundation are exposed to the force of the wind, and the constant movement stresses the structure. The forces can cause cracks in the tower foundation and at flanges / joints in the tower itself. Penetrating moisture can lead to long term damage of the structure.

Triflex Towersafe is a waterproofing and protection system specially developed for wind turbines. A flexible, special-purpose fleece reinforcement ensures permanently elastic system properties. Its liquid form allows upstands and even complex details like bolt cage foundations, to be waterproofed leaving no seams or joints. Triflex Towersafe is the only specialist waterproofing with BBA Certification specifically for wind turbines, offering you a quality technical solution certified to the highest standard.

Universal application

The specially formulated Triflex Towersafe solution is designed to waterproof all areas of the wind turbine. From the tower and base to the nacelle, Triflex Towersafe can be used to provide long lasting and sustainable protection. Even areas under soil can be reliably waterproofed as the cured membrane is FLL certified as root and rhizome resistant as standard. Triflex Towersafe is not only an excellent waterproofing solution for wind turbine towers and foundations, but is also the ideal choice for nacelles, transformer buildings and even blade roots.



Foundations



Tower flanges / joints



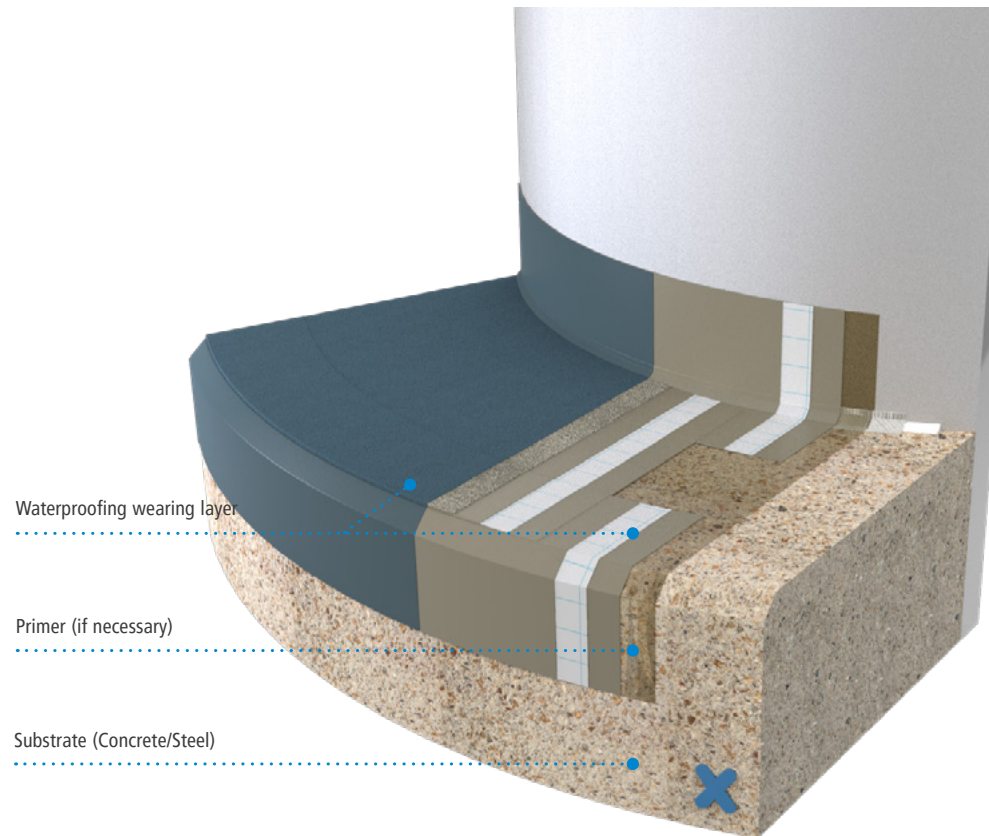
Nacelles



Blade roots



Triflex Towersafe fully reinforced waterproofing system for wind turbine protection



- Specifically formulated for the harshest conditions
- Cold applied liquid technology
- Simple, single coat waterproofing for efficient installation
- Rapid curing, even in low temperatures (-5°C)
- Rainproof in 30 minutes and walkable in an hour
- High chemical and mechanical resistance for durable protection
- Solvent and isocyanate free
- Available in a wide range of colours and optional finishes

[Read more here](#)



And this is how it's installed by Triflex's national network of authorised contractors...



1. Concrete substrates are ground or blasted.



2. Metals and coatings tested for adhesion and compatibility are cleaned with Triflex Cleaner.



3. The concrete foundation is primed with Triflex Towersafe Primer.



4. A permanently elastic joint is incorporated.



5. Triflex Towersafe is applied to the details; Triflex Reinforcement Fleece is embedded, removing any air bubbles...



6. A top layer of Triflex Towersafe is applied wet on wet.



7. Then Triflex Towersafe with Triflex Reinforcement Fleece are applied to the horizontal surfaces...



8. ... a top layer of Triflex Towersafe is applied to the foundation surface wet on wet.



9. An optional anti-skid wearing layer can be applied.



10. Then finished with Triflex Towersafe Finish.



11. The surface is rainproof after 30 minutes and can be walked on after 60 minutes.

Technical support services

Triflex experts provide a suite of technical support and expert advice. With our network of trained authorised contractors, project delivery is supported right through to completion.



Click or scan the QR code to see the system in action



Triflex Towersafe comparison

	Triflex Towersafe PMMA cold liquid system	Two component Polyurethane (PU) resin-based systems
Substrate temperature	-5°C to +40°C	+5°C to +35°C
Humidity	max. 95%	max. 85%
Fully cured	60 minutes even down to -5°C	Approx. 72 hours
Walkable	After 1 hour even down to -5°C	Approx. 24 hours
Rainproof	After 30 minutes even down to -5°C	Approx. 2 hours




Innovation and experience

Triflex has more than 45 years of experience in the waterproofing of structures. The specially developed Triflex Towersafe wind turbine foundation coating system delivers unique polymethyl methacrylate (PMMA) resin expertise to onshore and offshore wind turbine waterproofing and protection.

Proven in the harshest environments, the advanced polymer coating offers superior defence to minimise ongoing wind turbine maintenance.

Triflex (UK) Ltd
Whitebridge Way
Stone
Staffordshire
ST15 8JS

 01785 819119

 info@triflex.co.uk

 triflex.co.uk

 Triflex (UK) Ltd

 Triflex_UK

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