

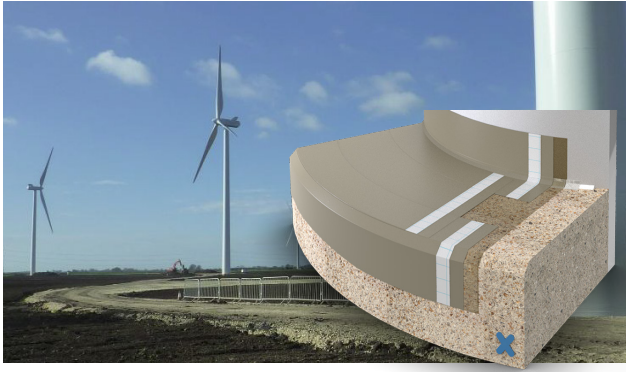


## System overview

# Triflex Towersafe®

Designed to protect and waterproof wind turbine foundations from the extreme forces exerted on them

Wind turbines harness the forces of nature to give us clean, renewable energy. In the process, all elements of the tower and its foundation are exposed to the wind causing the entire structure to move. This movement can result in the formation of cracks allowing moisture to penetrate the structure and leading to long term damage. Triflex Towersafe is a specially developed solution designed to waterproof the entire wind turbine, including the tower, foundation, rotor blades and nacelles. The fully reinforced system can be installed quickly to minimise downtime, and can easily withstand the unique demands of this tough environment.



## System highlights

### Universal application

The specially formulated solution is designed to waterproof the entire wind turbine. From the tower and base to rotor blades and nacelles, 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 root and rhizome resistant as standard.

### Cold applied, fast curing with rapid installation

Rapid curing and easy to install, Triflex allows works to be completed in less than a day resulting in shorter downtimes. Installation can be carried out all year round and the system still cures quickly at temperatures down to -5°C and is rainproof in just 30 minutes. There is also no risk from hot works during installation as all our materials are applied in a totally cold liquid form, curing to create a solution that lasts.

### Single process application

Reduce installation costs associated with multi-coat solvent based systems, save significant time on site and eliminate risks from inter-layer adhesion with our simple, single process waterproofing application. Triflex Towersafe has a thixotropic formulation as standard, allowing it to be used on vertical or even inverted surfaces.

### Full reinforced technology

The special polyester fleece used in Triflex Towersafe is designed to accommodate high levels of movement and cracking within the structure and between substrates. Proven fully reinforced waterproofing technology that stands the test of time.

### Tried and tested

Triflex TowerSafe offers a complete wind turbine waterproofing solution that will last for years to come. The system is not only certified and tested to the highest UK and European standards, it has also been successfully installed for more than 40 years in projects across the globe.

### Colours and finishes

Create a design to meet your aesthetic or safety requirements with a wide range of colours and two optional finishes - refer to Triflex colour card.

## Application areas

- Wind turbine towers
- Foundations
- Nacelles
- Flange
- Propellers

## Compatible substrates

- Cementitious materials (concrete, brickwork, masonry)
- Metals and coated metals
- Coatings (e.g. polyurethane, polyurea, polymethyl methacrylate)

## Approvals

Fully certified to the highest UK and European standards and classifications, including:



**BBA certified** - Certificate 13/5051 Product sheet 1 Durability: Under normal service conditions the system will provide a durable roof waterproofing with a service life in excess of 25 years



**ETAG 005 certified**  
Highest classification in all criteria including W3 – 25 year durability



**UKTA certified**  
UKTA-0836-22/6228 of 03/11/2022



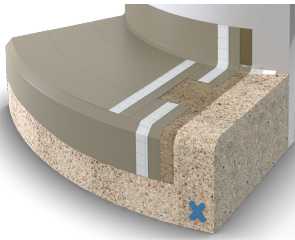
**Root and rhizome resistant**  
FLL Certified: Root and rhizome resistant

- Fire performance:
  - BS 476-3 (EXT.F.AA)
  - EN 13501-5: Class BROOF (t1) / (t2) / (t3) / (t4)
  - EN 13501-1: Class E
- NHBC accepted

### Manufacturer certification

- ISO 9001 Quality Management
- ISO 14001 Environmental Management
- ISO 50001 Energy Management

## System build-up and consumptions



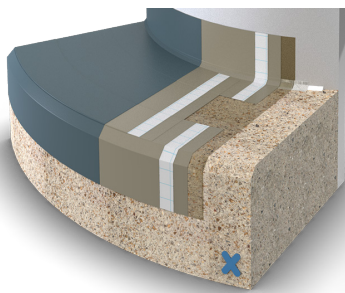
Layer	Product	Consumption <sup>(1)</sup>	Aggregate / Broadcast	Overcoat / traffic <sup>(2)</sup>
1 Primers	Triflex Towersafe Primer	0.40Kg/m <sup>2</sup>	-	45 minutes
	Triflex Metal Primer	0.08 - 0.10L/m <sup>2</sup>	-	30 minutes (spray) 60 minutes (moir roller / brush)
2 Reinforced waterproofing (single process)	Triflex Towersafe reinforced with Triflex 110g Reinforcement	Resin: 3.00Kg/m <sup>2</sup> Reinforcement: 1.05m <sup>2</sup> /m <sup>2</sup>	-	45 minutes
<b>Optional finishes</b>				
Smooth finish	Triflex Towersafe Finish	0.50Kg/m <sup>2</sup>	-	1 hour
Heavy duty finish	Triflex Towersafe	1.00Kg/m <sup>2</sup>	Quartz 0.7 - 1.2mm: 6.00Kg/m <sup>2</sup>	1 hour
	Triflex Towersafe Finish	0.60Kg/m <sup>2</sup>	-	Foor traffic: 1 hour Withstand stress: 2 hours

<sup>(1)</sup> Minimum consumption assuming a smooth, even, non-absorbent substrate.

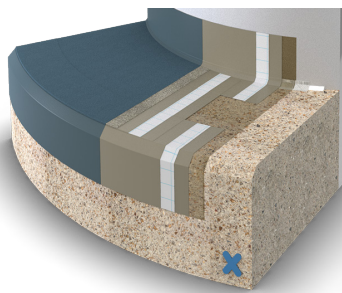
<sup>(2)</sup> The times stated are based on +20°C – the times will not be significantly extended at low temperatures.

## Optional finishes

### Smooth



### Heavy duty



Available in a wide range of colours - refer to Triflex colour card.

## Next steps

To ensure a thorough understanding of the construction, the substrate and to determine the most appropriate specification, Triflex carries out free of charge surveys, testing, investigations and analysis prior to preparing a bespoke project specification proposal. To arrange a meeting or site visit please contact Triflex Customer Services.

The advice we provide on the application of our products is based on extensive development work as well as many years of experience and is given to the best of our knowledge. However, the wide variety of requirements for a building under the most diverse conditions means that it is necessary for the Contractor to test the product for suitability in any given case. Triflex reserve the right to make alterations in keeping with technical developments or improvements.



Colour card

# Triflex Towersafe®

**Notes:** There may be slight variations in shade between actual colours and those shown below.  
RAL colours are approximate.

## Triflex TowerSafe resin colours



7032 Pebble grey  
Quartz 02



7040 Window grey  
Slate 01



7043 Traffic grey 2  
Slate 03

## Optional finish colours



6010 Grass green



7031 Blue grey



7032 Pebble grey  
Quartz 02



7035 Quartz 01  
Light grey



7038 Agate grey



7043 Slate 03  
Traffic grey 2



9018 Papyrus white

Request a sample online at [triflex.co.uk/samplerrequest](https://triflex.co.uk/samplerrequest)

Find out more at [triflex.co.uk](https://triflex.co.uk)