



Designated according to The Construction Products (Amendment etc.) (EU Exit) Regulations 2020

UK Technical Assessment	UKTA-0836-22/6231 of 02/11/2022
Technical Assessment Body issuing the UK Technical Assessment:	British Board of Agrément
Trade name of the construction product:	Triflex Towersafe
Product family to which the construction product belongs:	Liquid applied roof waterproofing kits based on flexible reactive polymethylmethacrylate
Manufacturer:	Triflex (U.K.) Limited Whitebridge Way Stone, Staffordshire ST15 8JS
Manufacturing plant(s):	Triflex GmbH & Co. KG, Karlstraße 59, 32423, Minden, Germany
This UK Technical Assessment contains:	8 pages including 3 annexes which form an integral part of this assessment
This UK Technical Assessment is issued in accordance with The Construction Products (Amendment etc.) (EU Exit) Regulations 2020 on the basis of:	UKAD 030350-00-0402 <i>Liquid applied roof waterproofing kits</i>

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1 Technical description of the product

The liquid applied roof waterproofing Triflex Towersafe is a kit, which consists of the following components:

- primer (if required),
- liquid applied roof waterproofing based on flexible reactive polymethylmethacrylate,
- polyester fleece layer as reinforcement.

For adequate adhesion of the waterproofing layer – depending on the type of substrate – a primer may be required. In general, the primer suitable for the substrate is given in the manufacturers technical documents.

In each case, the manufacturer is responsible for giving guidance which pre-treatment/primer is required. The minimum layer thickness of the roof waterproofing applied is 1.8 mm.

As an assembled system these components form a homogeneous seamless roof waterproofing.

Annex A1 shows the system build-up of the roof waterproofing Triflex Towersafe.

2 Specification of the intended use(s) in accordance with the applicable UK Assessment Document (hereinafter UKAD)

The product is used for the waterproofing of roof surfaces against penetration of atmospheric water.

In the technical file the manufacturer gives information concerning the substrates which the product is suitable for and how these substrates shall be pre-treated/primed.

The levels of use categories are given in Annex A1.

The verification and assessment methods on which this UK Technical Assessment is based lead to the assumption of working life of the product of at least 25 years. The indications given on the working life cannot be interpreted as a guarantee given by the manufacturer, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

The levels of use categories and performances given in Annex A1 are only valid if the liquid applied roof waterproofing is used in compliance with the conditions given in Annex B and the installation instructions of the manufacturer stated in the technical documents.

3 Performance of the product and references to the methods used for its assessment

3.1 Mechanical resistance and stability (BWR 1)

Not relevant

3.2 Safety in case of fire (BWR 2)

Essential characteristic	Performance
External fire performance	See Annex A1 and A2
Reaction to Fire	See Annex A1

3.3 Health, hygiene and the environment (BWR 3)

Essential characteristic	Performance
Water vapour permeability	See Annex A1
Watertightness	See Annex A1
Content of dangerous substances	
Substance/s classified as EU-cat carc. 1A and/or 1B ^{a)}	The product does not contain these dangerous substances. ^{b)}
Substances classified as EU-cat Muta 1A and/or 1B ^{a)}	
Substances classified as EU-cat Repr. 1A and/or 1B ^{a)}	
Release scenario regarding BWR 3 : S/W 2	
Resistance to mechanical damage (perforation)	See Annex A1, Levels of use categories
Resistance to plant roots	See Annex A1

a) In accordance with the Regulation (EG) No. 1272/2008.

b) Assessment based on the detailed manufacturer's statements

3.4 Safety and accessibility in use (BWR 4)

Essential characteristic	Performance
Resistance to wind loads	See Annex A1
Slipperiness	See Annex A1

3.5 Protection against noise (BWR 5)

Not relevant.

3.6 Energy economy and heat retention (BWR 6)

Not relevant.

3.7 Sustainable use of natural resources (BWR 7)

No Performance assessed.

3.8 General aspects

The verification of durability and serviceability is part of testing the essential characteristics. Durability and serviceability are only ensured if the conditions set in Annex B and the specifications of the technical file of the manufacturer are followed.

4 Assessment and verification of constancy of performance (hereinafter AVCP) system applied

4.1 System of assessment and verification of constancy of performance

According to UKAD No. 030350-00-0402 and Annex V of the Construction Products Regulation (Regulation (EU) 305/2011 as brought into UK law and amended), the system of assessment and verification of constancy of performance (AVCP) 3 applies.

5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable UKAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited with the British Board of Agrément and made available to the UK Approved Bodies involved in the conformity attestation process.

5.1 UKCA marking for the product/ system must contain the following information:

- Identification number of the Approved Body
- Name/address of the manufacturer of the product/ system
- Marking with intention of clarification of intended use
- Date of marking
- UKTA number.

On behalf of the British Board of Agrément



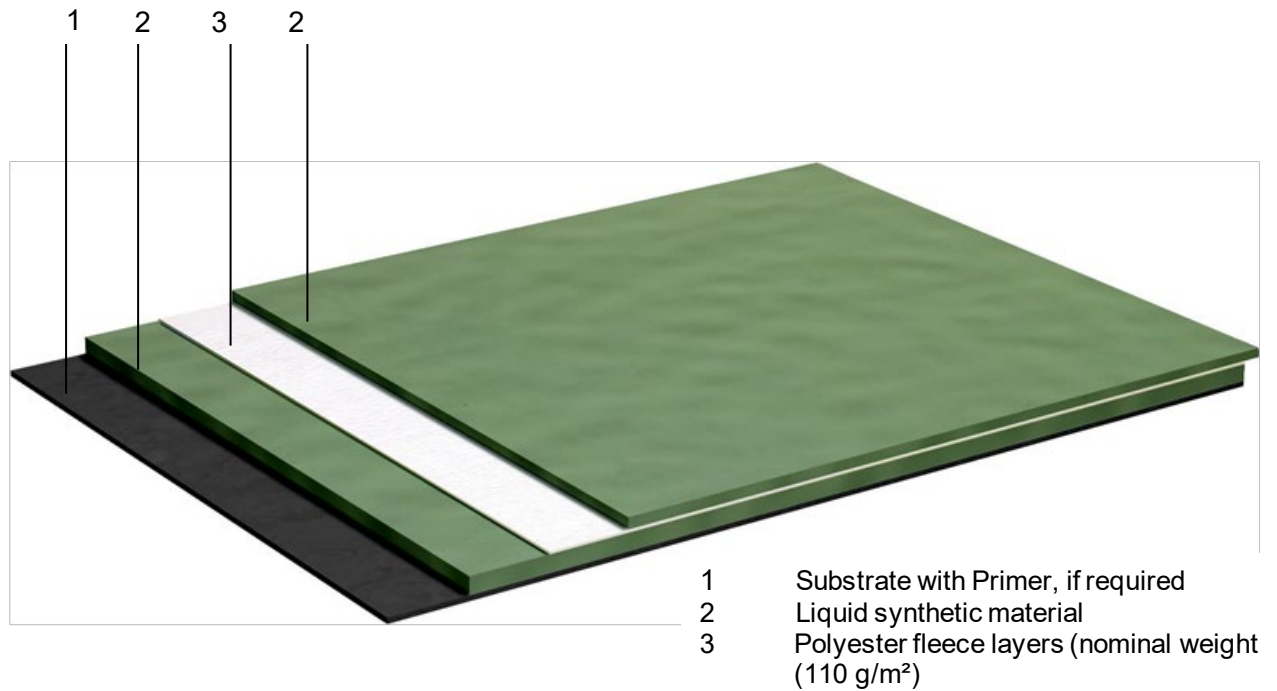
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ANNEX A1
System build-up and classifications



Applicable to the roof waterproofing **Triflex Towersafe**:

Polyester fleece with at least a weight of	110 g/m ²
Minimum layer thickness	1.8 mm
Minimum quantity consumed:	3.0 kg/m ²
<u>Levels of use categories with relation to:</u>	
Working life:	W3 (25 years)
Climatic zones	M and S (moderate and severe climatic)
Resistance to mechanical damage (perforation) (compressible and non-compressible substrates)	P1 to P4 (from low to high)
Roof slope	S1 to S4 (each slope)
Lowest surface temperature	TL4 (-30 °C)
Highest surface temperature	TH4 (90 °C)
<u>Performance of the product:</u>	
External fire performance EN 13501-5	B _{ROOF} (t1), B _{ROOF} (t2), B _{ROOF} (t3) and B _{ROOF} (t4)*
Reaction to fire EN 13501-1	class E
Water vapour diffusion resistance factor μ	$\mu \approx 10000$
Watertightness	pass
Statement on dangerous substances	see section 3.3
Resistance to plant roots	no performance assessed
Resistance to wind loads	≥ 50 kPa for tear resistant substrates
Resistance to slipperiness	no performance assessed

* For the classification of the external fire performance according EN 13501-5 see Annex A2.

ANNEX A2

Reaction to external fire

Classification of the external fire performance according EN 13501-5 for the following supporting decks for the roof waterproofing Triflex Towersafe.

Class B_{ROOF} (t1)

The classification is valid for the following supporting decks:

- all roof pitches
- any wooden continuous deck with a minimum thickness of 16 mm and with gaps not exceeding 0.5 mm
- any non-combustible continuous deck with a minimum thickness of 10 mm
- with bitumen sheet covered expanded polystyrene (EPS) with a minimum thickness of 50 mm and a minimum density of 20 kg/m³ covered with two layers of bitumen sheets for roof waterproofing

Class B_{ROOF} (t2)

The classification is valid for the following supporting decks:

- all roof pitches
- any combustible or non-combustible continuous deck having a density greater or equal to 0.75 times the density used in the tests (tests with standard substrates: all standard substrates according EN 13501-5 clause 6.4.3.3)

Class B_{ROOF} (t3)

The classification is valid for the following supporting decks:

- roof pitches ≤ 70 %
- any wooden continuous wood deck with a minimum thickness of 16 mm and with gaps not exceeding 0.5 mm
- any non-combustible continuous deck with a minimum thickness of 10 mm
- with bitumen sheet covered expanded polystyrene (EPS) with a minimum thickness of 50 mm and a minimum density of 20 kg/m³ covered with two layers of bitumen sheets for roof waterproofing

Class B_{ROOF} (t4)

The classification is valid for the following supporting decks:

- roof pitches ≤ 10 %
- any wooden continuous wood deck with a minimum thickness of 19 mm
- Vapour control layer
- Insulation with a minimum thickness of 120 mm covered with a minimum 0.6 mm thick self-adhesive carrier membrane

Any other roof system for which classification documents for B_{ROOF} (tX) according to EN 13501-5 are available.

ANNEX B

Installation

The levels of use categories and the performances of the roof waterproofing can be assumed only, if the installation is carried out according to the installation instructions stated in the technical file of the manufacturer, taking account of the following points:

- installation by appropriately trained personnel,
- installation of only those components which are marked components of the kit,
- installation with the required tools and adjuvants,
- precautions during installation,
- inspecting the roof surface for cleanliness and correct preparation, if need be, applying a primer before applying the product,
- inspecting compliance with suitable weather and curing conditions,
- finding out whether to the given ambient temperature the application with the adjustment for summer or winter is to be accomplished,
- ensuring a thickness of the cured waterproofing of at least 1.8 mm by processing appropriate minimum quantities of material,
- inspections during installation and of the finished product and documentation of the results



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