Deutsches Institut für Bautechnik

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European Technical Assessment

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General Part

Technical Assessment Body issuing the European Technical Assessment:	Deutsches Institut für Bautechnik
Trade name of the construction product	Glasfaser-Armierungsgewebe TEXTOLAN TG 15 und Glasfaser-Armierungsgewebe TEXTOLAN TG 22
Product family to which the construction product belongs	Product area code : 4 Thermal insulation produts. Composite insulating kits/systems.
Manufacturer	BKW Textilglas GmbH Friedensstraße 2 37318 Bornhagen DEUTSCHLAND
Manufacturing plant	BKW Textilglas GmbH Friedensstraße 2 37318 Bornhagen DEUTSCHLAND
This European Technical Assessment contains	6 pages which form an integral part of this assessment
This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of	EAD 040016-00-0404

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Specific Part

1. Technical description of the product

1.1 General

Glass fibre meshes "Glasfaser-Armierungsgewebe TEXTOLAN TG 15" and "Glasfaser-Armierungsgewebe TEXTOLAN TG 22" for reinforcement of cement based renderings are leno woven fabrics made of glass fibre strands. To ensure alkali resistance, they are coated by an organic layer. The distance of the strands is at least 3 mm so that the rendering or mortar to be reinforced sufficiently penetrates the meshes.

2. Specification of the intended use(s) in accordance with the applicable European Assessment Document (hereinafter EAD)

The products are used as reinforcement of cement based renderings (mortars) with a thickness of 2 - 10 mm. The reinforcement shall be embedded in fresh mortar and sufficiently covered. The reinforcement prevents the hardened mortar from cracking, caused especially by dilatation.

The glass fibre meshes are used in base coats of external thermal insulation composite systems (ETICS) with rendering.

The Verifications and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of the glass fibre mesh for reinforcement of cement based renderings of 25 years (provided that the glass fibre mesh for reinforcement of cement based renderings has been correctly installed).

The indications given as to the working life of the construction product cannot be interpreted as a guarantee but are to be regarded only as a means for choosing the right product in relation to the expected economically reasonable working life of the works.

Concerning product packaging, transport, storage, maintenance, replacement and repair it is the responsibility of the manufacturer to take the appropriate measures and to advise his clients on the transport, storage, maintenance, replacement and repair of the product as he considers necessary.

It is assumed that the product will be installed in accordance with the manufacturer's instructions or (in absence of such instructions) in accordance with the usual practice of the building professionals.

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

3.1 Safety in case of fire (BWR 2)

3.1.1 Reaction to fire

Trade name of the mesh	Reaction to fire class in accordance with Commission Delegated Regulation (EU) 2016/364
Glasfaser-Armierungsgewebe TEXTOLAN TG 15	No performance assessed
Glasfaser-Armierungsgewebe TEXTOLAN TG 22	No performance assessed

3.1.2 Organic content

Trade name of the mesh	Ash content [%]			Organic content [%]		
Glasfaser-Armierungsgewebe TEXTOLAN TG 15	81,98	82,16	82,14	18,02	17,84	17,86
Glasfaser-Armierungsgewebe TEXTOLAN TG 22	80,65	80,77	80,45	19,35	19,23	19,55

3.1.3 Heat combustion

Trade name of the mesh	Heat combustion Q_{PCS} [MJ/kg]
Glasfaser-Armierungsgewebe TEXTOLAN TG 15	6,573
Glasfaser-Armierungsgewebe TEXTOLAN TG 22	6,431

3.2 Safety and accessibility in use (BWR 4)

Glasfaser-Armierungsgewebe TEXTOLAN TG 15			
Mesh size	Average mesh size [mm x mm]		5,0 x 4,0
	Mesh opening [mm x mm]		3,9 x 3,5
Roll width	1001 mm		
Weaving accuracy	Untrimmed edges of any length		No performance assessed
	Deflected (uneven) fronts of rolls over ± 5 mm (measured from the edge of the inner tube)		
	Gaps over treble distance of wefts or warps of any length		
	Weft skewing or weft waving over 4 % of width of the fabric (measured by a rectangular ruler)		
	Cracked yarn		
Tensile strength and elongation (warp and weft direction)	In the as-delivered state	warp direction	weft direction
	- tensile strength - elongation ε	44,1 N/mm 3,55 %	53 N/mm 3,77 %
	After alkali conditioning - tensile strength - elongation ε	warp direction	weft direction
		27,8 N/mm 2,31 %	32,9 N/mm 2,21 %
	The average value of the tensile strength after alkali conditioning shall be at least 20 N/mm and at least 50 % of the strength in the as-delivered state (residual strength): passed: ≥ 20 N/mm after alkali conditioning and residual strength ≥ 50 % of the strength in the as-delivered		
Mass per unit area	163 g/m^2		
Thickness	0,50 mm		

Glasfaser-Armierungsgewebe TEXTOLAN TG 22			
Mesh size	Average mesh size		5,8 x 4,7
	Mesh opening		4,6 x 4,3
Roll width	1001 mm		
Weaving accuracy	Untrimmed edges of any length		No performance assessed
	Deflected (uneven) fronts of rolls over ± 5 mm (measured from the edge of the inner tube)		
	Gaps over treble distance of wefts or warps of any length		
	Weft skewing or weft waving over 4 % of width of the fabric (measured by a rectangular ruler)		
	Cracked yarn		
Tensile strength and elongation (warp and weft direction)	In the as-delivered state	warp direction	weft direction
	- tensile strength - elongation ε	49 N/mm 3,7 %	46 N/mm 3,8 %
	After alkali conditioning - tensile strength - elongation ε	warp direction	weft direction
		27 N/mm 2,1 %	24,7 N/mm 2 %
	The average value of the tensile strength after alkali conditioning shall be at least 20 N/mm and at least 50 % of the strength in the as-delivered state (residual strength): passed: ≥ 20 N/mm after alkali conditioning and residual strength ≥ 50 % of the strength in the as-delivered		
Mass per unit area	151 g/m^2		
Thickness	0,50 mm		

4. Assessment and verification of constancy of performance (hereinafter AVCP) system applied, with reference to its legal base

In accordance with EAD No. 40016-00-0404, the applicable European legal act is: 97/556/EC.
The system to be applied is: **system 2+.**

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

The manufacturer shall perform permanent internal factory production control. The factory production control is specified in Cl. 3.2 und 3.3 of EAD 040016-00-0404 Glass fibre mesh for reinforcement of cement based renderings.

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beglaubigt:
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