European Technical Assessment

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European Technical Assessment

ETA 16/0404 of 06/05/2019

General Part

Technical Assessment Body issuing the European Technical Assessment: ICiMB

Trade name of the construction product	TECHNITherm EPS
Product family to which the construction product belongs	External Thermal Insulation Composite Systems (ETICS) with rendering
Manufacturer	TECHNITYNK Sp. z o.o. Rzeczków-Kolonia 60 26-680 Wierzbica, POLAND
Manufacturing plant	Rzeczków-Kolonia 60 26-680 Wierzbica, POLAND
This European Technical Assessment contains	17 pages including 2 Annexes which form an integral part of this assessment. Annex No 3 Control Plan contains confidential information and is not included in the European Technical Assessment when that assessment is publicly disseminated.
This European Technical Assessment is issued in accordance with regulation (EU) No 305/2011, on the basis of	ETAG 004 used as EAD, 2013
This European Technical Assessment replaces	ETA 16/0404, version 2, issued on 29/05/2017

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Specific parts

1. Technical description of the product

This product TECHNITherm EPS is an ETICS (External Thermal Insulation Composite System with rendering) - a kit comprising components which are factory-produced by the manufacturer or component suppliers. The ETICS manufacturer is ultimately responsible for all components of the ETICS specified in this ETA.

The ETICS kit comprises a prefabricated insulation product of expanded polystyrene (EPS) to be bonded onto a wall. The method of fixing and the relevant components are specified in Table 1. The insulation product is faced with a rendering system consisting of one or more layers (site applied), one of which contains reinforcement. The rendering is applied directly to the insulating panels, without any air gap or disconnecting layer.

The ETICS may include special fittings (e.g. base profiles, corner profiles) to treat details of ETICS (connections, apertures, corners, parapets, sills). Assessment and performance of these components is not addressed in this ETA, however the ETICS manufacturer is responsible for adequate compatibility and performance within the ETICS when the components are delivered as a part of the kit.

Table 1.

	Components	Coverage (kg/m^2)	Thickness (mm)
	Bonded ETICS; fully or partially bonded with supplementary mechanical fixings. National application documents shall be taken into account.		
Insulation materials with associated methods of fixing	• **Insulation product:** panels of expanded polystyrene (EPS) according to EN 13163 *Product characteristics - see Annex No 1*	-	20 to 250
	• **Adhesives:** - **TECHNIKlej N / Baufest BF 100 / GRC Klej N / TERMO SILVER PERFECT** cement based powder requiring addition of 0,20-0,22 l/kg of water	3,5 to 5,0 (powder)	-
	- **TECHNIKlej EL / Baufest BF 101 / GRC Klej EL / TERMO GOLD PERFECT** cement based powder requiring addition of 0,20-0,22 l/kg of water	4,0 to 5,5 (powder)	-
	• **Supplementary mechanical fixings:** Plastic anchors covered by relevant ETA	-	-

Table 1. cont.

	Components	Coverage (kg/m²)	Thickness (mm)
Primers	• Ready to use liquids to be used on the substrate: - **TECHNIGrunt A / GRC Grunt A** - **TECHNIGrunt SN** - **TECHNIGrunt S**	 0,10 to 0,25 0,10 to 0,25 0,10 to 0,25	 - - -
Base coat	• **TECHNIKlej EL / Baufest BF 101 / GRC Klej EL / TERMO GOLD PERFECT** cement based powder requiring addition of 0,20-0,22 l/kg of water	2,5 to 3,5 (powder)	2,0 to 5,0
Reinforce-ment	• **Standard glass fibre mesh** **- HALICO A150** *Product characteristics - see Annex No 2*	-	-
Key coats	• **TECHNIFlex A / Baufest PA 101 / TECHNIFlex A – Farba / GRC Flex A** ready to use paste to be used with acrylic (including mosaic) and siloxane finishing coats and with panels	0,20 to 0,35	-
	• **TECHNIFlex SN / Baufest PSN 101 / TECHNIFlex SN – Farba / GRC Flex SN** ready to use paste to be used with silicone finishing coats	0,20 to 0,35	-
	• **TECHNIFlex S** ready to use paste to be used with mineral and silicate finishing coats	0,20 to 0,35	-
Finishing coats	• **Mineral finishing coats.** Dry cement based powders requiring addition of 0,20-0,23 l/kg of water **TECHNITynk Mineral Baranek** structure - max. particles size: floated - 1,5; 2,0 mm **TECHNITynk Mineral Kornik** structure - max. particles size: ribbed - 1,5; 2,0 mm	 2,0 to 4,0 (powder) 1,7 to 4,1 (powder)	 Regulated by particles size

Table 1. cont.

	Components	Coverage (kg/m²)	Thickness (mm)
Finishing coats	• **Acrylic finishing coats.** Ready to use pastes - acrylic binder:		Regulated by particles size
	TECHNITynk-A Baranek / Baufest TA 101 Baranek / GRC Tynk A Baranek structure - max. particles size: floated - 1,0; 1,5; 2,0; 2,5 mm	2,0 to 3,5	
	TECHNITynk-A Kornik / Baufest TA 101 Kornik / GRC Tynk A Kornik structure - max. particles size: ribbed - 1,5; 2,0; 2,5 mm	2,5 to 3,5	
	TECHNITynk-M / Baufest TM 101 / GRC Tynk M structure – max. particles size: mosaic - 1,2; 1,6 mm	2,5 to 4,0	
	• **Silicone finishing coats.** Ready to use pastes - silicone-acrylic binder:		
	TECHNITynk-SN Baranek / Baufest TSN 101 Baranek / GRC Tynk SN Baranek structure - max. particles size: floated - 1,0; 1,5; 2,0; 2,5 mm	2,0 to 3,5	
	TECHNITynk-SN Kornik / Baufest TSN 101 Kornik / GRC Tynk SN Kornik structure - max. particles size: ribbed - 1,5; 2,0; 2,5 mm	2,5 to 3,5	
	• **Siloxane finishing coats.** Ready to use pastes - silicone-acrylic binder:		
	TECHNITynk-SIX Baranek / Baufest TSIX 101 Baranek / GRC Tynk SIX Baranek structure - max. particles size: floated - 1,0; 1,5; 2,0; 2,5 mm	2,0 to 3,5	
	TECHNITynk-SIX Kornik / Baufest TSIX 101 Kornik / GRC Tynk SIX Kornik structure - max. particles size: ribbed - 1,5; 2,0; 2,5 mm	2,5 to 3,5	
	• **Silicate finishing coats.** Ready to use pastes - silicate-acrylic binder:		
	TECHNITynk-S Baranek / GRC Tynk S Baranek structure - max. particles size: floated - 1,0; 1,5; 2,0; 2,5 mm	2,0 to 3,5	
	TECHNITynk-S Kornik / GRC Tynk S Kornik structure - max. particles size: ribbed - 1,5; 2,0; 2,5 mm	2,5 to 3,5	

Table 1. cont.

	Components	Coverage (kg/m²)	Thickness (mm)
Finishing coats	• Ready to use panels imitating wood – silicone-acrylic binder **TECHNIBoard** length x width: 200 cm x 15,5 cm	0,31 m²	2
	Panels are used with: **- Adhesive - TECHNIStor** ready to use paste – acrylic binder and	2,0 to 2,5	-
	- Decorative coat - TECHNILako 2w1 ready to use pigmented liquid used at the surface of panels - acrylic binder	0,20 to 0,30	-
Decorative coats (paints)	• **Acrylic decorative coat** **TECHNIFarb-AZ / GRC Farba AZ** ready to use pigmented liquid to be used optionally with acrylic finishing coats (except mosaic)	0,20 to 0,40	-
	• **Silicone decorative coat** **TECHNIFarb-SN / GRC Farba SN** ready to use pigmented liquid to be used optionally with mineral and silicone finishing coats	0,20 to 0,40	
	• **Siloxane decorative coat** **TECHNIFarb-SIX** ready to use pigmented liquid to be used optionally with siloxane finishing coats	0,20 to 0,40	
	• **Silicate decorative coat** **TECHNIFarb-S** ready to use pigmented liquid to be used optionally with mineral and silicate finishing coats	0,20 to 0,40	
Ancillary materials	Remain under the manufacturer's responsibility		

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

This ETICS is intended for use as external insulation of buildings' walls. The walls are made of masonry (bricks, blocks, stones) or concrete (cast on site or as prefabricated panels).

The ETICS can be used on new or existing (retrofit) vertical walls. It can also be used on horizontal or inclined surfaces which are not exposed to precipitation.

The ETICS is made of non load-bearing construction elements. It does not contribute directly to the stability of the wall on which it is installed, but it can contribute to durability by providing enhanced protection from the effect of weathering.

The ETICS is not intended to ensure the airtightness of the building structure.

The provisions made in this European Technical Assessment are based on an assumed working life of the ETICS of at least 25 years, provided that the requirements for the packaging, transport, storage, installation as well as appropriate use, maintenance and repair are met. The indication given on the working life cannot be interpreted as a guarantee given by the manufacturer or the Technical Assessment Body, but should only be regarded as a means for choosing the appropriate products in relation to the expected, economically reasonable working life of the works.

Design, installation, maintenance and repair of ETICS shall be done in accordance with principles introduced in chapter 7 of ETAG 004, used as EAD, and shall be in conformity with Member States' legislation requirements.

The instructions regarding packaging, transport, storage and installation of ETICS are specified in the manufacturer's technical documentation.

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

The performances of the kit as described in this chapter are valid provided that the components of the kit comply with Annexes No 1÷2.

3.1. Safety in case of fire (BWR 2)

3.1.1. Reaction to fire (ETAG 004: clause 5.1.2.1, EN 13501-1)

Table 2.

Configuration	Max. organic content / Max. heat of combustion	Flame retardant content	Euroclass acc. to EN 13501-1
TECHNITherm EPS			
Primer Adhesive EPS panels* density ≤ 16 kg/m³ Base coat Glass fibre mesh Key coat Finishing coat excluding TECHNIBoard Decorative coat excluding TECHNILako 2w1	5,5 % / - 2,0 % / - - / - 2,0 % / - - / 0,97 MJ/m² 9,0 % / - 9,0 % / 4,32 MJ/m² 12,0 % / 0,99 MJ/m²	No flame retardant	B-s2, d0
Primer Adhesive EPS panels* density ≤ 16 kg/m³ Base coat Glass fibre mesh Key coat Adhesive TECHNIStor Finishing coat TECHNIBoard Decorative coat TECHNILako 2w1	5,5 % / - 2,0 % / - - / - 2,0 % / - - / 0,97 MJ/m² 9,0 % / - 9,0 % / 6,92 MJ/m² 9,0 % / 12,20 MJ/m² 19,0 % / 1,52 MJ/m²	No flame retardant	C-s2, d0
*flame retardant content in quantity ensuring Euroclass E according to EN 13501-1			

Note: European reference fire scenario has not been laid down for facades. In some Member States, the classification of ETICS according to EN 13501-1 might not be sufficient for the use in facades. An additional assessment of ETICS according to national provisions might be necessary to comply with Member State regulations, until the existing European classification system has been completed.

3.2. Hygiene, health and environment (BWR 3)

3.2.1. Water absorption (ETAG 004: clause 5.1.3.1)

- Base coat TECHNIKlej EL / Baufest BF 101 / GRC Klej EL / TERMO GOLD PERFECT:
  - Water absorption after 1 hour < 1 kg/m²;
  - Water absorption after 24 hours < 0,5 kg/m².
- Rendering system: Table 3

Table 3.

		Water absorption after 24 hours	
		<0,5 kg/m²	≥0,5 kg/m²
Rendering system: Base coat TECHNIKlej EL / Baufest BF 101 / GRC Klej EL / TERMO GOLD PERFECT + relevant key coat + finishing coat indicated hereafter:	TECHNITynk Mineral Baranek TECHNITynk Mineral Kornik	x	-
	TECHNITynk-A Baranek / Baufest TA 101 Baranek / GRC Tynk A Baranek TECHNITynk-A Kornik / Baufest TA 101 Kornik / GRC Tynk A Kornik	x	-
	TECHNITynk-M / Baufest TM 101 / GRC Tynk M	x	-
	TECHNITynk-SN Baranek / Baufest TSN 101 Baranek / GRC Tynk SN Baranek TECHNITynk-SN Kornik / Baufest TSN 101 Kornik / GRC Tynk SN Kornik	x	-
	TECHNITynk-SIX Baranek / Baufest TSIX 101 Baranek / GRC Tynk SIX Baranek TECHNITynk-SIX Kornik / Baufest TSIX 101 Kornik / GRC Tynk SIX Kornik	x	-
	TECHNITynk-S Baranek / GRC Tynk S Baranek TECHNITynk-S Kornik / GRC Tynk S Kornik	x	-
	TECHNIBoard + TECHNILako 2w1	x	-

3.2.2. Watertightness (ETAG 004: clause 5.1.3.2)

3.2.2.1. Hygrothermal behaviour (ETAG 004: clause 5.1.3.2.1)

Pass (without defects).

3.2.2.2. Freeze-thaw behaviour (ETAG 004: clause 5.1.3.2.2)

ETICS is frost resistant according to water absorption test.

3.2.3. Impact resistance (ETAG 004: clause 5.1.3.3)

Table 4.

		Single layer of standard mesh
Rendering system: Base coat TECHNIKlej EL / Baufest BF 101 / GRC Klej EL / TERMO GOLD PERFECT + relevant key coat + finishing coat indicated hereafter:	TECHNITynk Mineral Baranek TECHNITynk Mineral Kornik	Category III
	TECHNITynk-A Baranek / Baufest TA 101 Baranek / GRC Tynk A Baranek TECHNITynk-A Kornik / Baufest TA 101 Kornik / GRC Tynk A Kornik	Category III
	TECHNITynk-M / Baufest TM 101 / GRC Tynk M	Category II
	TECHNITynk-SN Baranek / Baufest TSN 101 Baranek / GRC Tynk SN Baranek TECHNITynk-SN Kornik / Baufest TSN 101 Kornik / GRC Tynk SN Kornik	Category III
	TECHNITynk-SIX Baranek / Baufest TSIX 101 Baranek / GRC Tynk SIX Baranek TECHNITynk-SIX Kornik / Baufest TSIX 101 Kornik / GRC Tynk SIX Kornik	Category III
	TECHNITynk-S Baranek / GRC Tynk S Baranek TECHNITynk-S Kornik / GRC Tynk S Kornik	Category III
	TECHNIBoard + TECHNILako 2w1	Category I

3.2.4. Water vapour permeability (ETAG 004: clause 5.1.3.4)

Table 5.

		Equivalent air thickness s_d
Rendering system: Base coat TECHNIKlej EL / Baufest BF 101 / GRC Klej EL / TERMO GOLD PERFECT + relevant key coat + finishing coat indicated hereafter + relevant decorative coat:	TECHNITynk Mineral Baranek TECHNITynk Mineral Kornik + - TECHNIFarb-SN / GRC Farba SN - TECHNIFarb-S	≤ 2 m, results: 0,09 m 0,07 m
	TECHNITynk-A Baranek / Baufest TA 101 Baranek / GRC Tynk A Baranek TECHNITynk-A Kornik / Baufest TA 101 Kornik / GRC Tynk A Kornik + - TECHNIFarb-AZ / GRC Farba AZ	≤ 2 m, result: 0,33 m
	TECHNITynk-M / Baufest TM 101 / GRC Tynk M*	≤ 2 m, result: 0,16 m
	TECHNITynk-SN Baranek / Baufest TSN 101 Baranek / GRC Tynk SN Baranek TECHNITynk-SN Kornik / Baufest TSN 101 Kornik / GRC Tynk SN Kornik + - TECHNIFarb-SN / GRC Farba SN	≤ 2 m, result: 0,18 m
	TECHNITynk-SIX Baranek / Baufest TSIX 101 Baranek / GRC Tynk SIX Baranek TECHNITynk-SIX Kornik / Baufest TSIX 101 Kornik / GRC Tynk SIX Kornik + - TECHNIFarb-SIX	≤ 2 m, result: 0,22 m
	TECHNITynk-S Baranek / GRC Tynk S Baranek TECHNITynk-S Kornik / GRC Tynk S Kornik + - TECHNIFarb-S	≤ 2 m, result: 0,15 m
	TECHNIBoard + TECHNILako 2w1	≤ 2 m, result: 0,30 m

*decorative coat not used

3.2.5. Release of dangerous substances (ETAG 004: clause 5.1.3.5, EOTA TR034)

No performance assessed.

Note: There may be requirements applicable to the ETICS falling within its scope (e.g. transposed European legislation and national laws, regulations and administrative provisions). In order to meet the provisions of the Regulation (EU) No 305/2011, these requirements need to be complied with, when and where they apply.

3.3. Safety and accessibility in use (BWR 4)

3.3.1. Bond strength between base coat and insulation product (ETAG 004: clause 5.1.4.1.1)

Initial state and after hygrothermal cycles:

- Bond strength between base coat TECHNIKlej EL / Baufest BF 101 / GRC Klej EL / TERMO GOLD PERFECT and insulation product ≥ 0,08 MPa

3.3.2. Bond strength between adhesive and substrate (ETAG 004: clause 5.1.4.1.2)

Table 6.

	Initial state	48 h immersion in water + 2 hours 23°C/50% RH	48 h immersion in water + 7 days 23°C/50% RH
TECHNIKlej N / Baufest BF 100 / GRC Klej N / TERMO SILVER PERFECT	≥ 0,25 MPa	≥ 0,08 MPa	≥ 0,25 MPa
TECHNIKlej EL / Baufest BF 101 / GRC Klej EL / TERMO GOLD PERFECT			

3.3.3. Bond strength between adhesive and insulation product (ETAG 004: clause 5.1.4.1.3)

Table 7.

	Initial state	48 h immersion in water + 2 hours 23°C/50% RH	48 h immersion in water + 7 days 23°C/50% RH
TECHNIKlej N / Baufest BF 100 / GRC Klej N / TERMO SILVER PERFECT	≥ 0,08 MPa	≥ 0,03 MPa	≥ 0,08 MPa
TECHNIKlej EL / Baufest BF 101 / GRC Klej EL / TERMO GOLD PERFECT			

3.3.4. Bond strength after ageing (ETAG 004: clause 5.1.7.1)

Table 8.

		After hygrothermal cycles
Rendering system: Base coat TECHNIKlej EL / Baufest BF 101 / GRC Klej EL / TERMO GOLD PERFECT + relevant key coat + finishing coat indicated hereafter:	TECHNITynk Mineral Baranek TECHNITynk Mineral Kornik	≥ 0,08 MPa
	TECHNITynk-A Baranek / Baufest TA 101 Baranek / GRC Tynk A Baranek TECHNITynk-A Kornik / Baufest TA 101 Kornik / GRC Tynk A Kornik	≥ 0,08 MPa
	TECHNITynk-M / Baufest TM 101 / GRC Tynk M	≥ 0,08 MPa
	TECHNITynk-SN Baranek / Baufest TSN 101 Baranek / GRC Tynk SN Baranek TECHNITynk-SN Kornik / Baufest TSN 101 Kornik / GRC Tynk SN Kornik	≥ 0,08 MPa
	TECHNITynk-SIX Baranek / Baufest TSIX 101 Baranek / GRC Tynk SIX Baranek TECHNITynk-SIX Kornik / Baufest TSIX 101 Kornik / GRC Tynk SIX Kornik	≥ 0,08 MPa
	TECHNITynk-S Baranek / GRC Tynk S Baranek TECHNITynk-S Kornik / GRC Tynk S Kornik	≥ 0,08 MPa
	TECHNIBoard + TECHNILako 2w1	≥ 0,08 MPa

3.3.5. Render strip tensile test (ETAG 004: clause 5.5.4.1)

No performance assessed.

3.4. Protection against noise (BWR 5)

3.4.1. Airborne sound insulation (ETAG 004: clause 5.1.5.1)

No performance assessed.

3.5. Energy economy and heat retention (BWR 6)

3.5.1. Thermal resistance (ETAG 004: clause 5.1.6.1)

The thermal transmittance of the substrate wall covered by the ETICS is calculated in accordance with the standard EN ISO 6946:

$$U_c = U + \chi_p \cdot n$$

where:

$\chi_p \cdot n$ has only to be taken into account if it is greater than 0,04 W/(m²·K)

U_c: global (corrected) thermal transmittance of the covered wall (W/ (m²·K))

n: number of anchors (through insulation product) per 1 m²

χ_p: local influence of thermal bridge caused by an anchor. The values listed below can be taken into account if not specified in the anchor's ETA:

= 0,002 W/K for anchors with a stainless steel screw covered by plastic anchors and for anchors with an air gap at the head of the screw ($\chi_p \cdot n$ negligible for n < 20)

= 0,004 W/K for anchors with a galvanized steel screw with the head covered by a plastic material ($\chi_p \cdot n$ negligible for n < 10)

= negligible for anchors with plastic nails (reinforced or not with glass fibres)

U: thermal transmittance of the current part of the covered wall (excluding thermal bridges) (W/ (m²·K)) determined as follows:

$$U = \frac{1}{R_i + R_{render} + R_{substrate} + R_{se} + R_{si}}$$

where:

R_i: thermal resistance of the insulation product (according to declaration in reference to EN 13163) in (m²·K)/W

R_{render}: thermal resistance of the render (about 0,02 in (m²·K)/W or determined by test according to EN 12667 or EN 12664)

$R_{substrate}$: thermal resistance of the substrate of the building (concrete, brick) in (m²·K)/W

R_{se}: external superficial thermal resistance in (m²·K)/W

R_{si}: internal superficial thermal resistance in (m²·K)/W

The value of thermal resistance of each insulation product shall be given in the manufacturer's documentation along with the possible range of thicknesses. In addition, the point thermal conductivity of anchors shall be given when anchors are used in the ETICS.

3.6. Sustainable use of natural resources (BWR 7)

No performance assessed.

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

According to the European Commission decision 97/556/EC amended by the European Commission decision 2001/596/EC, the AVCP systems (further described in Annex V to Regulation (EU) No 305/2011) 1 and 2+ apply.

Table 9.

Product(s)	Intended use(s)	Level(s) or class(es) (Reaction to fire)	System(s)
External thermal insulation composite systems/kits (ETICS) with rendering	in external wall subject to fire regulations	A1 (1), A2 (1), B (1), C (1)	1
		A1 (2), A2 (2), B (2), C (2), D, E, (A1 to E) (3), F	2+
	in external wall not subject to fire regulations	any	2+

(1) Products/materials for which a clearly identifiable stage in the production process results in an improvement of the reaction to fire classification (e.g. an addition of fire retardants or a limiting of organic material)

(2) Products/materials not covered by footnote (1)

(3) Products/materials that do not require to be tested for reaction to fire (e.g. products/materials of Classes A1 according to Commission Decision 96/603/EC)

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

The manufacturer shall exercise permanent control of production. All the elements, requirements and provisions adopted by the manufacturer shall be documented in a systematic manner in the form of written policies and procedures. The production control system shall ensure performance constancy of the product covered by this European Technical Assessment.

The manufacturer may only use materials stated in the technical documentation of this European Technical Assessment. The factory production control shall be performed in accordance with the Control Plan which is a confidential part of this European Technical Assessment. The Control Plan was developed as a part of factory production control system.

The results of factory production control shall be recorded and evaluated in accordance with the provisions of the Control Plan.

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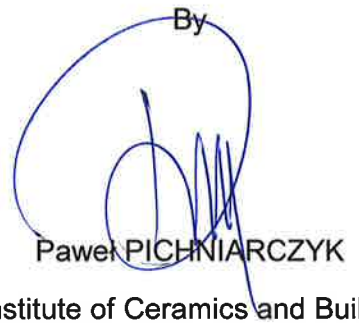
By



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Annexes:

Annex No 1 – Insulation product characteristics

Annex No 2 – Glass fibre mesh characteristics

Annex No 1 – Insulation product characteristics

		Panels of expanded polystyrene EPS
Reaction to fire / EN 13501-1		Euroclass – E max. density: 16 kg/m^3
Thermal resistance		Defined in the CE marking in reference to EN 13163 (m^2·K)/W
Thickness / EN 823		± 1 mm [EN 13163 - T(1)]
Length / EN 822		± 2 mm [EN 13163 - L(2)]
Width / EN 822		± 2 mm [EN 13163 - W(2)]
Squareness / EN 824		± 5 mm/m [EN 13163 - S(5)]
Flatness / EN 825		5 mm [EN 13163 - P(5)]
Dimensional stability under specified conditions	EN 1603	± 0,2 % [EN 13163 - DS(N)2]
	EN 1604	2 % [EN 13163 - DS(70,-)2]
Bending strength / EN 12089		≥ 75 kPa [EN 13163 - BS75]
Water vapour permeability, diffusion factor (μ) / EN 12086 - EN 13163		20 to 40
Tensile strength perpendicular to the faces in dry conditions / EN 1607		≥ 80 kPa [EN 13163 - TR80]
Shear strength / EN 12090 - EN 13163		≥ 35 kPa

Annex No 2 – Glass fibre mesh characteristics

Mesh trade name	Description	Alkalis resistance	
		Residual resistance after ageing (N/mm)	Relative residual resistance: % (after ageing) of the strength in the as delivered state
HALICO A150	Mass per unit area: 150 g/m^2 Mesh size: 4,7 x 4,5 mm	≥ 20	≥ 50

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