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# Assessment

## European Technical ETA-13/0485-version 1 of 17/06/2018

#### **GENERAL PART**

**Technical Assessment Body issuing the European Technical Assessment:** 

Centre Scientifique et Technique du Bâtiment

(CSTB)

Trade name of the construction product:

**PARISO PSE - E** 

Product family to which the construction

product belongs:

Product Area Code: 04

External Thermal Insulation Composite System

with rendering (ETICS)

Manufacturer:

ParexGroup S.A.

19 place de la Résistance

CS 50053

FR-92445 Issy-les-Moulineaux Cedex

Manufacturing plant(s):

ParexGroup S.A.

19 place de la Résistance

CS 50053

FR-92445 Issy-les-Moulineaux Cedex

**This European Technical Assessment** contains:

15 pages including 3 Annexes which form an

integral part of this assessment

Annexe 4 contains confidential information and is not included in the European Technical Assessment when that assessment is publicly

available

This European Technical Assessment is issued in accordance with regulation (EU) No 305/2011, on the basis of:

European Technical Approval Guideline No 004 (ETAG 004), edition 2013, used as European

Assessment Document (EAD)

This version replaces:

ETA-13/0485 valid from 17/06/2013 to 16/06/2018

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#### **SPECIFIC PART**

#### 1. Technical description of the product

The External Thermal Insulation Composite System "PARISO PSE - E", subject to this European Technical Assessment (hereinafter ETA) and called ETICS in the following text, is a kit designed and installed in accordance with the Manufacturer's instructions, deposited with the CSTB. The ETICS comprises the components listed in the following table, which are factory-produced by the Manufacturer or a supplier. The ETICS is made up on site from these components.

The ETICS also includes ancillary materials which are defined in clause 3.2.2.5 of the ETAG 004<sup>1</sup>. They shall be used in accordance with the Manufacturer's instructions.

The ETICS is described according to its method of fixing, as defined in clause 2.2 of the ETAG 004.

Method of fixing	Component	Coverage (kg/m²)	Thickness (mm)	
	Insulation product			
	Expanded polystyrene (EPS) boards, see An	nex 1	40 to 300	
	Adhesives			
Bonded ETICS (purely bonded	<ul> <li>MAITE (white cement-based powder requiring addition of about 17% wt. water)</li> </ul>	2.6 to 3.5 (powder)	_	
or bonded with supplementary anchors)	COLLE CCP+ (grey cement-based powder requiring addition of 21 to 22% wt. water)	2.6 to 3.5 (powder)	_	
unionorsy	EASYCOAT (white cement-based powder requiring addition of about 21% wt. water)	2.6 to 3.5 (powder)	Ι	
	Supplementary anchors for insulation product			
	Plastic anchors, see Annex 2	_	_	
	Insulation product			
	Expanded polystyrene (EPS) boards, see An	60 to 300		
	Supplementary adhesives			
Mechanically fixed ETICS	<ul> <li>MAITE (white cement-based powder requiring addition of about 17% wt. water)</li> </ul>	2.6 to 3.5 (powder)	_	
with anchors and supplementary	COLLE CCP+ (grey cement-based powder requiring addition of 21 to 22% wt. water)	2.6 to 3.5 (powder)	_	
adhesive	EASYCOAT (white cement-based powder requiring addition of about 21% wt. water)	2.6 to 3.5 (powder)	ı	
	Anchors for insulation product			
	Plastic anchors, see Annex 2			

<sup>&</sup>lt;sup>1</sup> ETAG 004 is available on the EOTA website: <u>www.eota.eu</u>.



Method of fixing	Component	Coverage (kg/m²)	Thickness (mm)
	Base coat		
	EASYCOAT: powder requiring addition of about 21% wt. water, consisting of white cement, a vinylic micronized copolymer, mineral pigments, calcium carbonate and silica as particles and specific additives.	About 4.5 (powder)	Mean (dry): 3.5 Minimal (dry): 3.0
	Meshes		
	Glass fibre meshes (standard and reinforced	), see Annex 3	
	Key coats		
	<ul> <li>REVLANE+ RÉGULATEUR: ready-to- use pigmented liquid, acrylic binder, to be mandatory applied prior to acrylic and acrylosiloxane finishing coats.</li> </ul>	0.15 to 0.20	_
	<ul> <li>SILICANE FOND: uncoloured liquid, silicate binder, requiring addition of 100 % wt. SILICANE PEINTURE, to apply mandatory prior to silicate finishing coats.</li> </ul>	0.10 to 0.15	_
	Finishing coats		1
	Ready-to-use pastes, acrylic binder: - REVLANE+ IGNIFUGÉ TALOCHÉ FIN (particles size 1.0 mm)	2.2 to 2.5	
	- REVLANE+ IGNIFUGÉ TALOCHÉ	2.7 to 3.0	
Every method of fixing	GROS (particles size 1.6 mm) - REVLANE+ IGNIFUGÉ RIBBÉ FIN (particles size 1.6 mm)	2.5 to 2.7	
	- REVLANE+ IGNIFUGÉ RIBBÉ GROS (particles size 2.5 mm)	3.0 to 3.5	
			Regulated by
	Ready-to-use pastes, acrylsiloxane binder: - REVLANE+ SILOXANÉ IGNIFUGÉ TF	2.4 to 2.9	particle size
	(particles size 1.0 mm) - REVLANE+ SILOXANÉ IGNIFUGÉ RB (particles size 1.6 mm)	2.0 to 2.5	
	Ready-to-use paste, acrylic binder with coloured marble aggregates: GRANILANE+ (particles size 1.8 mm)	4.5 to 5.0	
	Ready-to-use paste, silicate binder: SILICANE TALOCHÉ FIN (particles size 1.0 mm)	1.5 to 2.0	
	Cement-based powder requiring addition of about 21 % wt. water (EASYCOAT) associated with the following paint:	About 2.0 (powder)	About 1.5
	Pigmented liquid requiring addition of about 20 % wt. SILICANE FOND, to apply in two layers, silicate binder: SILICANE PEINTURE (application of SILICANE FOND after EASYCOAT and before SILICANE PEINTURE)	About 0.4 (two layers of 0.2)	_
Ancillary materials	Descriptions in accordance with § 3.2.2.5 of Remain under the ETA-Manufacturer respon		



The ETICS is designed to give the walls to which it is applied satisfactory thermal insulation. The minimum thermal resistance of the ETICS shall be higher than 1.0 m<sup>2</sup>.K/W.

The components are protected from moisture during transport and storage by means of appropriate packaging, unless other measures are foreseen by the Manufacturer for this purpose.

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

This ETICS is intended to be used as thermal insulation of buildings' external walls made of masonry (bricks, blocks, stones, *etc.*) or concrete (cast on site or as prefabricated panels).

The ETICS can be installed on new or existing (retrofit) vertical walls. It can also be installed 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 walls 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 walls.

The provisions made in this ETA are based on an assumed working life of at least 25 years, provided that the construction works are subject to appropriate design, execution, maintenance and repair. The indications given as to 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, execution, maintenance and repair of the construction works shall take into account principles given in chapter 7 of the ETAG 004 and shall be done in accordance with national instructions.

# 3. Performances of the product and references to the methods used for their assessment

Performances of the ETICS, related to the basic requirements for construction works (hereinafter BWR), were determined according to chapters 4, 5 and 6 of the ETAG 004.

These performances, given in the following paragraphs, are valid as long as the components are the ones described in § 1 and Annexes 1 to 4 of this ETA.

#### 3.1 Mechanical resistance and stability (BWR 1)

Not relevant.



#### 3.2 Safety in case of fire (BWR 2)

Reaction to fire:

Configuration	Declared organic content <sup>(1)</sup>	Declared flame retardant content <sup>(1)</sup>	Class according to EN 13501-1
Adhesives / supplementary adhesives:         - MAITÉ         - COLLE CCP+         - EASYCOAT			
Insulation product:     EPS boards, reaction to fire Class E,     thickness ≤ 300 mm,     density ≤ 20 kg/m³			
Base coat:     EASYCOAT	Base coat: 3.6%	Base coat: 0%	D 0 10
<ul> <li>Meshes:</li> <li>SSA-1363 F+ (IAVPC)</li> <li>R 131 A 101 C+ (IAVPC)</li> <li>R 131 A 102 C+ (IAVU)</li> </ul>	Finishing coats: 6.5 to 13.7%	Finishing coats: 0.0 to 17.5%	B-s2,d0
Finishing coats: REVLANE+ IGNIFUGÉ RIBBÉ FIN / GROS REVLANE+ IGNIFUGÉ TALOCHÉ FIN / GROS REVLANE+ SILOXANÉ IGNIFUGÉ TF / RB SILICANE TALOCHÉ FIN SILICANE PEINTURE GRANILANE+			

<sup>(1)</sup> Percentage declared by the Manufacturer, relative to the dried weight of the component as delivered.

Note: a European reference fire scenario has not been laid down for façades. In some Member States, the classification of ETICS according to EN 13501-1 might not be sufficient for the use in façades. An additional assessment of ETICS according to national provisions (e.g., on the basis of a large scale test) might be necessary to comply with Member States regulations, until the existing European classification system has been completed.



#### 3.3 Hygiene, health and the environment (BWR 3)

#### 3.3.1 Water absorption – capillarity test

#### 3.3.1.1 Water absorption of the base coat

- After 1 hour: water absorption < 1 kg/m<sup>2</sup>
- After 24 hours: water absorption < 0.5 kg/m<sup>2</sup>

#### 3.3.1.2 Water absorption of the rendering system

Rendering system:	Water absorptio	n after 24 hours
Base coat + finishing coat indicated below	< 0.5 kg/m²	≥ 0.5 kg/m²
With REVLANE+ RÉGULATEUR: - REVLANE+ IGNIFUGÉ TALOCHÉ FIN - REVLANE+ IGNIFUGÉ TALOCHÉ GROS - REVLANE+ IGNIFUGÉ RIBBÉ FIN - REVLANE+ IGNIFUGÉ RIBBÉ GROS	X	
With REVLANE+ RÉGULATEUR: - REVLANE+ SILOXANÉ IGNIFUGÉ TF - REVLANE+ SILOXANÉ IGNIFUGÉ RB	Х	
With REVLANE+ RÉGULATEUR: GRANILANE+	Х	
With SILICANE FOND: SILICANE TALOCHÉ FIN	X	
EASYCOAT with SILICANE FOND with SILICANE PEINTURE	Х	

#### 3.3.2 Watertightness

#### 3.3.2.1 Hygrothermal behaviour

Heat-rain and heat-cold cycles have been performed on a rig. The ETICS is assessed as resistant to hygrothermal cycles.

#### 3.3.2.2 Freeze-thaw behaviour

Water absorptions of both the base coat and the rendering systems are less than 0.5 kg/m<sup>2</sup> after 24 hours. The ETICS is therefore assessed as resistant to freeze-thaw.



### 3.3.3 Impact resistance

		Use category	
Rendering system: Base coat + finishing coat indicated below	single standard mesh	double standard mesh	reinforced mesh + standard mesh
With REVLANE+ RÉGULATEUR: - REVLANE+ IGNIFUGÉ TALOCHÉ FIN - REVLANE+ IGNIFUGÉ TALOCHÉ GROS - REVLANE+ IGNIFUGÉ RIBBÉ FIN - REVLANE+ IGNIFUGÉ RIBBÉ GROS	Category II		Category I
With REVLANE+ RÉGULATEUR: - REVLANE+ SILOXANÉ IGNIFUGÉ TF - REVLANE+ SILOXANÉ IGNIFUGÉ RB	Category I		
With REVLANE+ RÉGULATEUR: GRANILANE+	Category I		
With SILICANE FOND: SILICANE TALOCHÉ FIN	Category III		
EASYCOAT with SILICANE FOND with SILICANE PEINTURE	E Category III		

### 3.3.4 Water vapour permeability – resistance to water vapour diffusion

Rendering system: Base coat + finishing coat indicated below	Equivalent air thickness s <sub>d</sub> (m)
With REVLANE+ RÉGULATEUR:  - REVLANE+ IGNIFUGÉ TALOCHÉ FIN  - REVLANE+ IGNIFUGÉ TALOCHÉ GROS  - REVLANE+ IGNIFUGÉ RIBBÉ FIN  - REVLANE+ IGNIFUGÉ RIBBÉ GROS	≤ 1.0 (Test result obtained with REVLANE+ IGNIFUGÉ RIBBÉ GROS: 0.6)
With REVLANE+ RÉGULATEUR: - REVLANE+ SILOXANÉ IGNIFUGÉ TF - REVLANE+ SILOXANÉ IGNIFUGÉ RB	≤ 1.0 (Test result obtained with REVLANE+ SILOXANÉ IGNIFUGÉ TF: 0.6)
With REVLANE+ RÉGULATEUR: GRANILANE+	≤ 1.0 (Test result obtained: 0.3)
With SILICANE FOND: SILICANE TALOCHÉ FIN	≤ 1.0 (Test result obtained: 0.2)
EASYCOAT with SILICANE FOND with SILICANE PEINTURE	≤ 1.0 (Test result obtained: 0.2)



#### 3.3.5 Release of dangerous substances

The ETICS belong to Category S/W2, according to EOTA Technical Report No 034.

A written declaration was submitted by the Manufacturer.

In addition to the specific clauses relating to dangerous substances contained in this ETA, there may be other 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 also to be complied with, when and where they apply.

#### 3.4 Safety and accessibility in use (BWR 4)

#### 3.4.1 Bond strength

- 3.4.1.1 Bond strength of the base coat onto insulation product
  - Initial state: bond strength ≥ 0.08 MPa
  - After hygrothermal cycles: bond strength  $\geq 0.08$  MPa
  - After freeze-thaw cycles: test not required (see § 3.3.2.2 of this ETA)
- 3.4.1.2 Bond strength of the adhesives onto substrate and insulation product

#### • MAITÉ, COLLE CCP+, EASYCOAT:

	Bond strength (MPa) after:			
	Initial state	48 h immersion water + 48 h immersion water + 2 h at 23°C-50% RH 7 days at 23°C-50%		
Concrete	≥ 0.25	≥ 0.08	≥ 0.25	
Insulation product	≥ 0.08	≥ 0.03	≥ 0.08	

The ETICS can so be installed on the substrate with application of the adhesive on the following minimal surfaces:

	Tensile strength perpendicular to the faces of EPS				
	≥ 100 kPa ≥ 120 kPa ≥ 150 kPa				
MAITÉ	30% 25% 20%				
COLLE CCP+	30% 25% 20%				
EASYCOAT	30% 25% 20%				



### 3.4.2 Fixing strength (transverse displacement)

Test not required because the ETICS fulfils the following criteria:

*E.d* < 50,000 N/mm

- E modulus of elasticity of the base coat without mesh (MPa)
- d mean dried thickness of the base coat (mm)

#### 3.4.3 Resistance to wind load

#### 3.4.3.1 Resistance to wind load of mechanically-fixed ETICS using anchors

	Plate diameter (mm)		≥ 60		
Anchors	Anchors Plate stiffness (kN/mm)		≥ 0.3		
	Туре	EPS boards			
Insulation product	I perpendicular to the   > 120		≥ 120		
	Thickness (mm)	≥ 60	≥ 80	≥ 100	
	Anchors not placed at		Minimal: 649	Minimal: 658	
•		Average: 512	Average: 657	Average: 688	
	Anchors placed at the	Minimal: 429	Minimal: 554	Minimal: 611	
	panel joints: R <sub>joint</sub> (N)	Average: 455	Average: 570	Average: 616	

Anchors  Plate diameter (mm)  Plate stiffness (kN/mm)		≥ 60		
		≥ 0.6		
	Туре	EPS boards		
Insulation product	Tensile strength perpendicular to the face (kPa)	≥ 120		
	Thickness (mm)	≥ 60	≥ 80	≥ 100
	Anchors not placed at	Minimal: 509	Minimal: 707	Minimal: 949
Maximum load	the panel joints:  R <sub>panel</sub> (N)	Average: 520	Average: 720	Average: 968
(Pull-through test)	Anchors placed at the	Minimal: 433	Minimal: 610	Minimal: 806
	panel joints: <i>R</i> <sub>joint</sub> (N)	Average: 464	Average: 617	Average: 821



For the use of anchors mounted countersunk, the above indicated values apply for insulation thickness greater or equal to 80 mm and plate diameter equal to 60 mm.

Anchors which can be used are described in Annex 2 of this ETA.

The design wind load resistance of the ETICS fixed with anchors is determined as follows:

$$R_{\rm d} = \frac{R_{\rm panel}.\,n_{\rm panel} + R_{\rm joint}.\,n_{\rm joint}}{\gamma}$$

number of anchors not placed at the panel joints, per m<sup>2</sup>

 $n_{\rm joint}$  number of anchors placed at the panel joints, per m<sup>2</sup>

γ national safety factor

#### 3.4.4 Width of crack – Render Strip Tensile Test

No performance was determined for the ETICS.

#### 3.5 Protection against noise (BWR 5)

No performance was determined for the ETICS.

#### 3.6 Energy economy and heat retention (BWR 6)

Thermal resistance and thermal transmittance are defined in clause 5.1.6 of the ETAG 004.

#### 3.7 Sustainable use of natural resources (BWR 7)

No performance was determined for the ETICS.



### 3.8 Aspects of durability and serviceability

Bond strength after ageing:

Rendering system: Base coat + finishing coat indicated below	Bond strength (MPa)
With REVLANE+ RÉGULATEUR: - REVLANE+ IGNIFUGÉ TALOCHÉ FIN - REVLANE+ IGNIFUGÉ TALOCHÉ GROS - REVLANE+ IGNIFUGÉ RIBBÉ FIN - REVLANE+ IGNIFUGÉ RIBBÉ GROS	
With REVLANE+ RÉGULATEUR: - REVLANE+ SILOXANÉ IGNIFUGÉ TF - REVLANE+ SILOXANÉ IGNIFUGÉ RB	
With REVLANE+ RÉGULATEUR: GRANILANE+	≥ 0.08
With SILICANE FOND: SILICANE TALOCHÉ FIN	
EASYCOAT with SILICANE FOND with SILICANE PEINTURE	



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

According to Decision 97/556/EC (Decision of the Commission of 14 July 1997, L 229 of 20.8.1997, p. 15), as amended by Decision 2001/596/EC (Decision of the Commission of 8 January 2001, L 209 of 2.8.2001, p. 33)<sup>2</sup>, the systems of AVCP given in the following table apply:

Product	Intended use	Levels or classes (Reaction to fire)	System
	in external walls subject to	A1 <sup>(1)</sup> , A2 <sup>(1)</sup> , B <sup>(1)</sup> or C <sup>(1)</sup>	1
External Thermal Insulation Composite Systems with rendering	fire regulation	- A1 <sup>(2)</sup> , A2 <sup>(2)</sup> , B <sup>(2)</sup> , C <sup>(2)</sup> - D, E, F - (A1 to E) <sup>(3)</sup>	2+
	in external walls not subject to fire regulation	any	2+

<sup>(1)</sup> Products/materials for which as 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).

The systems of AVCP are described in Annex V of Regulation (EU) No 305/2011, as amended by Delegated Regulation (EU) No 568/2014.

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

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at the CSTB.

The control plan is given in Annex 4. As the control plan contains confidential information, Annex ... is not included in the published parts of this ETA.

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by

Charles BALOCHE, Technical Manager of the CSTB

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<sup>(2)</sup> Products/materials not covered by footnote 1.

<sup>(3)</sup> 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).

<sup>&</sup>lt;sup>2</sup> Decisions are published in the *Official Journal of the European Union (OJEU)*, see <a href="www.new.eur-lex.europa.eu/oj/direct-access.html">www.new.eur-lex.europa.eu/oj/direct-access.html</a>.



Factory-prefabricated, uncoated boards made of expanded polystyrene (EPS) according to EN 13163 and having characteristics described in the following table. The surface of the boards is homogeneous and without "skin". Coverage (kg/m²) depends on both thickness of the board and density of EPS.

Reaction to fire / EN 13501-1		Class E	
Thermal resistance / EN 13163		Defined in the CE marking	
	Thickness / EN 823	± 1.0 mm [T2]	
Dimensional tolerances	Length / EN 822	± 2.0 mm [L2]	
	Width / EN 822	± 2.0 mm [W2]	
	Squareness / EN 824	± 2% [S2]	
	Flatness / EN 825	≤ 5 mm [P5]	
Dimensional stability	Under specified temperature and humidity / EN 1604: 48 h at 70°C	≤ 1% [DS (70,-)1]	
	Under specified temperature and humidity / EN 1604: 48 h at 70°C and 90% RH	≤ 1% [DS(70,90)1]	
	Under laboratory condition / EN 1603	± 0.2% [DS(N)2]	
Water absorption	on (partial immersion) / EN 1609 – method A	< 1 kg/m²	
Water vapour diffusion resistance factor (μ) / EN 12086		20 to 60	
Tensile strength perpendicular to the faces in dry conditions / EN 1607		≥ 100 kPa	
Shear strength / EN 12090		≥ 0.02 N/mm <sup>2</sup>	
Shear modulus / EN 12090		≥ 1.0 N/mm²	
Dynamic stiffness / EN 29052-1		No performance determined	
Air flow resistance / EN 29053		Not relevant	

ETICS PARISO PSE - E	ANNEX 1	
Insulation product for bonded ETICS or mechanically- fixed ETICS with anchors	of ETA-13/0485-version 1	



Anchors with ETA according to European Technical Approval Guideline No 014 (hereinafter ETAG 014) or to EAD 330196-ED-0604 (hereinafter EAD anchors). The anchors are composed of a plastic expansion sleeve with a plate having diameter of 60 mm and a plastic or metallic nail or screw. Use categories and characteristic resistances in the substrate are given in each anchor's ETA. Validity of the anchor's ETA shall be checked before using the anchor.

Trade name	ETA reference	Mounting <sup>(1)</sup>	Plate stiffness (kN/mm)
Koelner KI-10, KI-10M, KI-10PA	ETA-07/0291	а	
Koelner KI-10N, KI-10NS	ETA-07/0221	а	≥ 0.3
Ejotherm NTK U	ETA-07/0026	а	
Koelner TFIX-8M	ETA-07/0336	а	
Koelner TFIX-8S	ETA-11/0144	а	
Koelner TFIX-8ST	ETA-11/0144	b	
Ejotherm STR U, STR U 2G	ETA-04/0023	a, b	≥ 0.6
Ejot H1 eco	ETA-11/0192	а	
Rawlplug Insulation System R-TFIX-8S	ETA-17/0161	a, b	
Rawlplug Façade Insulation Fixing R-TFIX-8M	ETA-17/0592	а	

<sup>(1)</sup> a: surface mounting; b: countersunk mounting.

Additionally, every anchor with an ETA according to ETAG 014 or EAD anchors and having the following characteristics can be used:

- plate diameter ≥ 60 mm;
- plate stiffness ≥ 0.3 kN/mm according to EOTA Technical Report No 026;
- load resistance of the plate  $\geq$  1.0 kN according to EOTA Technical Report No 026.

These characteristics, the use categories and the characteristic resistances in the substrate shall be taken from the corresponding anchor's ETA.

ETICS PARISO PSE - E	ANNEX 2 of ETA-13/0485-version 1	
Anchors for insulation product		



#### Glass fibre meshes:

- standard meshes: with mesh size between 3 and 6 mm;
- reinforced meshes: implemented in addition to the standard mesh, to improve the impact resistance.

Trade name	Mass per unit area		strength ng (N/mm)		dual strength ing (%) <sup>(1)</sup>
(g/m²)	(g/m²)	Warp	Weft	Warp	Weft
Standard meshes					
SSA-1363 F+ (IAVPC)	167	≥ 20	≥ 20	≥ 50	≥ 50
R 131 A 101 C+ (IAVPC)	166	≥ 20	≥ 20	≥ 50	≥ 50
R 131 A 102 C+ (IAVPC)	161	≥ 20	≥ 20	≥ 50	≥ 50
Reinforced meshes					
G-WEAVE 660L 55AB x 100CM (IAVR)	710	≥ 20	≥ 20	≥ 40	≥ 40
R 585 A 101 (IAVR)	696	≥ 20	≥ 20	≥ 40	≥ 40

<sup>(1)</sup> Percentage of the strength in the as-delivered state.

ETICS PARISO PSE - E	ANINEY 2
Glass fibre meshes	ANNEX 3 of ETA-13/0485-version 1