



European Technical Assessment

ETA-22/0546-version 1 of 07/03/2023

GENERAL PART

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

Centre Scientifique et Technique du Bâtiment
(CSTB)

Trade name of the construction product:

REVITHERM EP Résol

**Product family to which the construction
product belongs:**

Product Area Code: 04
External Thermal Insulation Composite System
with rendering (ETICS)

Manufacturer:

PPG AC-FRANCE
1 rue de l'Union
FR-92500 RUEIL-MALMAISON

Manufacturing plant(s):

PPG AC-FRANCE
1 rue de l'Union
FR-92500 RUEIL-MALMAISON

**This European Technical Assessment
contains:**

18 pages including 4 Annexes which form an
integral part of this assessment

Annex 4 contains confidential information and
is/are 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 Assessment Document (EAD)
040083-00-0404
External Thermal Insulation Composite Systems
(ETICS) with renderings

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SPECIFIC PART

1. Technical description of the product

The External Thermal Insulation Composite System “**REVITHERM EP Résol**”, 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 1.3.13 of the EAD¹. 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 1.1 of the EAD .

Method of fixing	Component	Coverage (kg/m ²)	Thickness (mm)
Mechanically fixed ETICS with anchors	Insulation product		
	Insulation product, phenolic foam (PF):		
	Kooltherm K5 FR, by Kingspan, see Annex 1		80 to 200
	Supplementary adhesives		
	ENDUIT EP-THERM: grey or white cement based powder requiring addition of 21 to 25% in weight water.	3.0 to 3.5 [powder]	—
	COLLE PSE-LdR: grey cement based powder requiring addition of 20 to 22% in weight water.	2.5 to 2.9 [powder]	—
	Anchors for insulation product		
	Plastic anchors, see Annex 2	—	—
	Base coats		
	ENDUIT EP-THERM: grey or white powder requiring addition of 21 to 25% wt. water, consisting of cement binder, vinylic copolymer, calcium carbonate and silica as particles, fibres and specific additives.	About 9.0 [powder]	Mean (dry): 7.5 Minimal (dry): 6.0
	Meshes		
	Glass fibre meshes (standard and reinforced), see Annex 3		
	Key coats		

¹ EAD 040083-00-0404 is available on the EOTA website: www.eota.eu.

Method of fixing	Component	Coverage (kg/m²)	Thickness (mm)
	REVITHERM PRIM: pigmented liquid (can be diluted with 10% in weight water maximum), acrylic binder to apply optionally before finishing coats CRÉPI INITEX 2.0, CRÉPI INITEX 2.5, PANTI INITEX n°2, CRÉPI INITEX 2.0 FH and CRÉPI INITEX 2.5 FH.	About 0.20 [prepared]	—
	SILIKAMAT PRIM: ready-to-use pigmented liquid, silicate binder, to apply mandatory before finishing coats SILIKAMAT TALOCHÉ 2.0 and SILIKAMAT TALOCHÉ 2.5.	About 0.20 [prepared]	—
	Finishing coats		
	Ready-to-use pastes - organic binder: - CRÉPI INITEX 2.0 (particles size 1.0 mm) - CRÉPI INITEX 2.5 (particles size 1.5 mm) - PANTI INITEX n°2 (particles size 2.0 mm)	About 2.0 About 2.5 About 2.5	Regulated by particles size
	Ready-to-use pastes - acrylic copolymer binder: - CRÉPI INITEX 2.0 FH (particles size 1.0 mm) - CRÉPI INITEX 2.5 FH (particles size 1.5 mm)	About 2.0 About 2.5	
	Ready-to-use pastes – silicate binder: - SILIKAMAT TALOCHÉ 2.0 (particle size 1.0 mm) - SILIKAMAT TALOCHÉ 2.5 (particle size 1.5 mm)	About 2.0 About 2.5	
	Two-components product constituted of powder MINERSTYL POUDRE to be mixed with 30% in weight MINERSTYL LIANT (two layers application): - MINERSTYL	3.5 to 4.5 [prepared]	
Ancillary materials	Descriptions in accordance with § 1.3.13 of the EAD Remain under the ETA-Manufacturer responsibilities		

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 m².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.

The ETICS is installed in accordance with Manufacturer's installation instructions.

Design, execution, maintenance and repair of the construction works 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 chapter 2 of the EAD.

These performances, given in the following paragraphs, are valid as long as the components are the ones described in § 1 and Annexes 1 to 3 of this ETA.

3.1 Safety in case of fire (BWR 2)

No	Essential characteristic	Assessment method (EAD clause)	Performance
1	Reaction to fire	2.2.1	
	- Reaction to fire of ETICS	2.2.1.1	B-s1, d0 See below for the details
	- Reaction to fire of thermal insulation material	2.2.1.2	Phenolic foam: Class C-s2,d0
	- Reaction to fire of PU foam adhesive	2.2.1.3	Not applicable
2	Façade fire performance	2.2.2 The ETICS has been tested according to the French test method "LEPIR 2" ² , as foreseen by Annex C of EAD 040083-00-0404.	According to the French test method "LEPIR 2": •The criteria requiring that the fire doesn't propagate through the second level above the fire level is met. •The criteria requiring that the fire does not spread through the facade floor junction is met.
3	Propensity to undergo continuous smouldering of ETICS	2.2.3	No performance assessed

² The successful completion of the "LEPIR 2" test fulfils the requirements of French Regulation

Reaction to fire of ETICS

Configuration	Declared organic content ⁽¹⁾	Declared flame retardant content ⁽¹⁾	Class according to EN 13501-1
- Supplementary adhesives: - ENDUIT EP-THERM - COLLE PSE-LDR - Insulation product: - Phenolic foam boards - Reaction to fire Class C-s2,d0 - Thickness ≥ 20 mm - Density ≤ 35 kg/m³ - Base coats: - ENDUIT EP-THERM (white or grey) - Meshes: - R 131 A 101 C+ - 04-0161B - Key coats: - REVITHERM PRIM - SILIKAMAT PRIM - Finishing coats: - CRÉPI INITEX 2.0 - CRÉPI INITEX 2.5 - PANTI INITEX n°2 - CRÉPI INITEX 2.0 FH - CRÉPI INITEX 2.5 FH - SILIKAMAT TALOCHÉ 2.0 - SILIKAMAT TALOCHÉ 2.5 - MINERSTYL	Base coats: 4.5 % Key coats: 9.7 to 12.3 % Finishing coats: 6.5 to 9.2 % Except for MINERSTYL (MINERSTYL: 0.0% with MINERSTYL LIANT: 31.5%)	Base coats: 0.0 % Key coats: 0.0 % Finishing coats: 0.0 to 23.4 %	B – s1, d0

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

3.2 Hygiene, health and the environment (BWR 3)

No	Essential characteristic	Assessment method (EAD clause)	Performance
4	Content, emission and/or release of dangerous substances – leachable substances	2.2.4	No performance assessed
5	Water absorption	2.2.5	-
	- of the base coat and the rendering system	2.2.5.1	See cl. 3.2.1
	- of the thermal insulation product	2.2.5.2	≤ 1 kg/m ² (EN 1609- Method A)
6	Water-tightness of the ETICS: Hygrothermal behaviour	2.2.6	Hygrothermal cycles have been performed on a rig. The ETICS is assessed resistant to hygrothermal cycles, it means system "REVITHERM EP RESOL" passed the test without defects.
7	Water-tightness: Freeze thaw performance	2.2.7	See cl. 3.2.2:
8	Impact resistance	2.2.8	See cl. 3.2.3
9	Water vapour permeability	2.2.9	-
	- of the rendering system (equivalent air thickness s _d)	2.2.9.1	See cl. 3.2.4
	- of thermal insulation product (water-vapour resistance factor)	2.2.9.2	See Annex 1

3.2.1 Water absorption – capillarity test

3.2.1.1 Water absorption of the base coat

- After 1 hour: mean value of the water absorption: 0.08 kg/m²
- After 24 hours: mean value of the water absorption: 0.37 kg/m²

3.2.1.2 Water absorption of the rendering system

Rendering system: Base coat + finishing coat indicated below	Mean value of the water absorption (kg/m ²) after	
	1 hour	24 hours
Without REVITHERM PRIM: - CRÉPI INITEX 2.0 - CRÉPI INITEX 2.5 - PANTI INITEX n°2	0.03	0.47
	Test result obtained with CRÉPI INITEX 3.0*	
With REVITHERM PRIM: - CRÉPI INITEX 2.0 - CRÉPI INITEX 2.5 - PANTI INITEX n°2	0.06	0.51
	Test result obtained with CRÉPI INITEX 3.0*	
With or without REVITHERM PRIM: - CRÉPI INITEX 2.0 FH - CRÉPI INITEX 2.5 FH	0.02	0.11
	Test result obtained with CRÉPI INITEX 2.5 FH without key coat	
With SILIKAMAT PRIM: - SILIKAMAT TALOCHÉ 2.0 - SILIKAMAT TALOCHÉ 2.5	0.24	0.85
	Test result obtained with SILIKAMAT TALOCHÉ 2.5	
- MINERSTYL	0.08	0.35

* The finishing coat CRÉPI INITEX 3.0 constituted the worst case (thickest layer) for this type of finishing coat however it is no longer produced. Then, the ETICS does not include this finishing coat.

3.2.2 Freeze-thaw behaviour

Water absorptions of rendering system with the finishing coats SILIKAMAT TALOCHÉ 2.0 and SILIKAMAT TALOCHÉ 2.5 are more than 0.5 kg/m² after 24 hours.

Bond strength tests were carried out after freeze/thaw cycles:

Rendering system: Base coat + finishing coat indicated below	Bond strength (kPa)		Type of failure insulation product / rendering system
	Minimal	Average	
With SILIKAMAT PRIM: - SILIKAMAT TALOCHÉ 2.0 - SILIKAMAT TALOCHÉ 2.5	50	50	Cohesive in the insulation product
	Test result obtained with SILIKAMAT TALOCHÉ 2.5		

Water absorptions of the rendering system with the finishing coats CRÉPI INITEX 2.0, CRÉPI INITEX 2.5 and PANTI INITEX n°2 without key coat are more than 0.5 kg/m² after 24 hours. The ETICS has not been assessed as freeze/thaw resistant for these configurations

Water absorptions of both the base coat and rendering systems with the other finishing coats are less than 0.5 kg/m² after 24 hours. The ETICS is therefore assessed as freeze/thaw resistant for these configurations.

3.2.3 Impact resistance

Rendering system: Base coat + finishing coat indicated below		Presence of cracks	Maximum impact diameter (mm)	Use category
With or without REVITHERM PRIM: - CRÉPI INITEX 2.0 - CRÉPI INITEX 2.5 - PANTI INITEX n°2	single standard mesh	No – 3J Yes – 10J	/ – 3J 26 – 10J	Category II
	double standard mesh	No – 3J Yes – 10J	/ – 3J 20 – 10J	Category II
	reinforced mesh + standard mesh	No – 3J Yes – 10J	/ – 3J 11 – 10J	Category II
With or without REVITHERM PRIM: - CRÉPI INITEX 2.0 FH - CRÉPI INITEX 2.5 FH	single standard mesh	No – 3J Yes – 10J	/ – 3J 20 – 10J	Category II
	double standard mesh	No – 3J No – 10J	/ – 3J 11 – 10J	Category I
	reinforced mesh + standard mesh	No – 3J No – 10J	/ – 3J / – 10J	Category I
With SILIKAMAT PRIM: - SILIKAMAT TALOCHÉ 2.0 - SILIKAMAT TALOCHÉ 2.5	single standard mesh	No – 3J Yes – 10J	/ – 3J 26 – 10J	Category II
	double standard mesh	No – 3J No – 10J	/ – 3J 17 – 10J	Category I
	reinforced mesh + standard mesh	No – 3J No – 10J	/ – 3J 9 – 10J	Category I
- MINERSTYL	single standard mesh	No – 3J Yes – 10J	10 – 3J 31 – 10J	Category II
	double standard mesh	No – 3J Yes – 10J	10 – 3J 18 – 10J	Category II
	reinforced mesh + standard mesh	No – 3J Yes – 10J	10 – 3J 22 – 10J	Category II

3.2.4 Water vapour permeability – resistance to water vapour diffusion

Rendering system: Base coat + finishing coat indicated below	Thickness of rendering system (mm)	Equivalent air thickness s_d (m)
With or without REVITHERM PRIM: - CRÉPI INITEX 2.0 - CRÉPI INITEX 2.5 - PANTI INITEX n°2	9.3	≤ 2.0 (Test result obtained with REVITHERM PRIM + CRÉPI INITEX 3.0*: 0.4)
	9.8	≤ 2.0 (Test result obtained with CRÉPI INITEX 3.0*: 0.3)
With or without REVITHERM PRIM: - CRÉPI INITEX 2.0 FH - CRÉPI INITEX 2.5 FH	9.6	≤ 2.0 (Test result obtained with REVITHERM PRIM + CRÉPI INITEX 2.5 FH: 0.8)
	9.7	≤ 2.0 (Test result obtained with CRÉPI INITEX 2.5 FH: 0.9)
With SILIKAMAT PRIM: - SILIKAMAT TALOCHÉ 2.0 - SILIKAMAT TALOCHÉ 2.5	9.3	≤ 2.0 (Test result obtained with SILIKAMAT TALOCHÉ 2.5: 0.2)
- MINERSTYL	10.0	≤ 2.0 (Test result obtained: 0.3)

* The finishing coat CRÉPI INITEX 3.0 constituted the worst case (thickest layer) for this type of finishing coat however it is no longer produced. Then, the ETICS does not include this finishing coat.

3.3 Safety and accessibility in use (BWR 4)

No	Essential characteristic	Assessment method (EAD clause)	Performance
10	Bond strength	2.2.11	-
	- bond strength between the base coat and the thermal insulation product (mortar or paste)	2.2.11.1	See cl. 3.3.1.1
	- bond strength between the adhesive and the substrate	2.2.11.2	Not applicable
	- bond strength between the adhesive and the thermal insulation product	2.2.11.3	Not applicable
	- bond strength of foam adhesives	2.2.11.4	Not applicable
11	Fixing strength	2.2.12	Test not required because the ETICS fulfils the following criteria: $E_d < 50,000$ N/mm

No	Essential characteristic	Assessment method (EAD clause)	Performance
12	Wind load resistance of ETICS	2.2.13	-
	- pull-through tests of fixing	2.2.13.1	See cl. 3.3.2.1
	- static foam block test	2.2.13.2	Not applicable
	- dynamic wind uplift test	2.2.13.3	Not applicable
13	Tensile test perpendicular to the faces of the thermal insulation product	2.2.14	-
	- in dry conditions	2.2.14.1	See cl 3.3.3.1
	- in wet conditions	2.2.14.2	No performance assessed
14	Shear strength and shear modulus of elasticity test of ETICS	2.2.15	Not relevant because the system is mechanically fixed with anchors
15	Pull-through resistance of fixing from profiles	2.2.16	Not relevant because the system is mechanically fixed with anchors
16	Render strip tensile test	2.2.17	No performance assessed
17	Shear strength and shear modulus of foam adhesive	2.2.18	Not relevant
18	Post expansion behaviour of foam adhesives	2.2.19	Not relevant
19	Bond strength after ageing	2.2.20	-
	- bond strength after ageing of finishing coat tested on the rig	2.2.20.1	See cl. 3.3.4
	- bond strength after ageing of finishing coat not tested on the rig	2.2.20.2	See cl. 3.3.4
20	Mechanical and physical characteristics of the mesh	2.2.21	-
	- Tensile strength of the glass fibre mesh	2.2.21.1 2.2.21.2	See cl. 3.3.5
	- Protection of metal mesh	2.2.21.3	Not relevant

3.3.1 Bond strength: Bond strength between the base coats and the thermal insulation product

Base coats + thermal insulation product indicated below:	Failure resistance (kPa)		
	Initial state	After conditioning	Type of failure
KOOLTHERM K5 FR	Minimal: 90	Minimal: 70	Cohesive in the insulation product
	Average: 106	Average: 88	

3.3.2 Wind load resistance of the ETICS

3.3.2.1 Pull-through tests of fixings

Anchors	Plate diameter (mm)	≥ 60		
	Plate stiffness (kN/mm)	≥ 0.6		
	Load resistance (kN)	≥ 2.08		
Insulation product	Type	KOOLTHERM K5 FR (Kingspan)		
	Tensile strength perpendicular to the face (kPa)	≥ 80 (declared)		
		Mono-density product		
Maximum load (Pull-through test)	Anchors not placed at the panel joints (dry conditions): R_{panel} (kN/fixing)	≥ 80	≥ 100	≥ 120
		Minimal: 0.558	Minimal: 0.745	Minimal: 0.779
		Average: 0.592	Average: 0.779	Average: 0.811

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

$$R_d = \frac{R_{\text{panel}} \cdot n_{\text{panel}} + R_{\text{joint}} \cdot n_{\text{joint}}}{\gamma}$$

n_{panel} number of anchors not placed at the panel joints, per m²

n_{joint} number of anchors placed at the panel joints, per m²

γ national safety factor

3.3.3 Tensile test perpendicular to the faces of the thermal insulation product

3.3.3.1 Tensile strength perpendicular to the faces in dry conditions

See Declaration of Performances of insulation product.

3.3.3.2 Tensile strength perpendicular to the faces in wet conditions

No performance assessed.

3.3.4 Bond strength after ageing

Rendering system: Base coat + finishing coat indicated below	Bond strength (kPa)		Type of failure
	Minimal	Average	
With or without REVITHERM PRIM: - CRÉPI INITEX 2.0 - CRÉPI INITEX 2.5 - PANTI INITEX n°2	130 ⁽²⁾	150 ⁽²⁾	Cohesive in the insulation product
	Test result obtained with CRÉPI INITEX 3.0* without key coat		
With or without REVITHERM PRIM: - CRÉPI INITEX 2.0 FH - CRÉPI INITEX 2.5 FH	140 ⁽²⁾	160 ⁽²⁾	
	Test result obtained with CRÉPI INITEX 2.5 FH without key coat		
With SILIKAMAT PRIM: - SILIKAMAT TALOCHÉ 2.0 - SILIKAMAT TALOCHÉ 2.5	70 ⁽¹⁾	100 ⁽¹⁾	
	Test result obtained with SILIKAMAT TALOCHÉ 2.5		
- MINERSTYL	90 ⁽²⁾	96 ⁽²⁾	

⁽¹⁾ Test were carried out onto PF panels.

⁽²⁾ Tests were carried out onto EPS panels

* The finishing coat CRÉPI INITEX 3.0 constituted the worst case (thickest layer) for this type of finishing coat however it is no longer produced. Then, the ETICS does not include this finishing coat.

3.3.5 Mechanical and physical characteristics of the mesh: Tensile strength of the glass fibre mesh

Producer's trade name	Tensile strength in the as-delivered state (N/mm)		Elongation at break in the as-delivered state (%)		Resistance after ageing			
					Residual resistance (N/mm)		Relative residual resistance (%)	
	Warp	Weft	Warp	Weft	Warp	Weft	Warp	Weft
ARMATURE 500 (R 131 A 101 C+)	40.3	48.3	4.0	4.6	31.0	25.9	76.9	53.6
TREILLIS 4X4 (04-161B)	45.4	49.2	4.0	4.0	29.7	34.5	65.5	70.2

3.4 Protection against noise (BWR 5)

No	Essential characteristic	Assessment method (EAD clause)	Performance
21	Airborne sound insulation of ETICS	2.2.22.1	No performance assessed
	Dynamic stiffness of the thermal insulation product	2.2.22.2	No performance assessed
	Air flow resistance of the thermal insulation product	2.2.22.3	No performance assessed

3.5 Energy economy and heat retention (BWR 6)

No	Essential characteristic	Assessment method (EAD clause)	Performance
22	Thermal resistance and thermal transmittance of ETICS	2.2.23	Defined in clause 2.2.23 of EAD See cl. 3.5.1
	Thermal resistance and thermal transmittance of the thermal insulation product	2.2.23.1	See cl. 3.5.2

3.5.1 Thermal resistance and thermal transmittance of ETICS

The calculated value of thermal resistance of ETICS with minimal thickness and highest value of thermal conductivity of the insulation material is:

$R_{ETICS} = R_{insulation} + R_{render} [(m^2.K)/W]$	$3.70 + 0.02 = 3.72$
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3.5.2 Thermal resistance and thermal transmittance of the thermal insulation product

See Declaration of performances of the insulation product.

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)³, the systems of AVCP given in the following table apply:

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

⁽¹⁾ 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).

⁽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).

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

4. 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 4 is not included in the published parts of this ETA.

Issued in Marne-la-Vallée on 07/03/2023 by

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Head of "Certification and Assessment" Division
"Building Envelope" Direction



³ Decisions are published in the *Official Journal of the European Union (OJEU)*, see www.new.eu-lex.europa.eu/oj/direct-access.html.

Factory-prefabricated, coated boards made of phenolic foam **KOOLTHERM K5 FR** (PF) according to EN 13166+A2 and having characteristics described in the following table. Mass per unit area (kg/m^2) depends on both thickness of the board and density of phenolic foam.

Reaction to fire / EN 13501-1		Class C-s2,d0
Thermal resistance / EN 13166		Defined in the CE marking
Dimensional tolerances	Thickness / EN 823	T1
Dimensional stability	Under specified temperature and humidity / EN 1604: 48 h at 70°C and 90% RH	DS(70,90) [$\leq 1\%$]
Water absorption (partial immersion) / EN 1609 – method A		WS2 [$\leq 1.0 \text{ kg/m}^2$]
Water vapour diffusion resistance factor (μ) / EN 12086		≤ 50
Tensile strength perpendicular to the faces in dry conditions / EN 1607		TR80 [$\geq 80 \text{ kPa}$]
Dynamic stiffness / EN 29052-1		No performance determined
Air flow resistance / EN 29053		No performance determined
Compressive strength / EN 826		CS(Y)100

ETICS REVITHERM EP Résol	ANNEX 1 of ETA-22/0546-version 1
Insulation product for mechanically-fixed ETICS with anchors	

Anchors with ETA according to European Technical Approval Guideline No 014 (hereinafter ETAG 014) or to European Assessment Document (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 ⁽¹⁾	Plate stiffness (kN/mm)	Load resistance (kN)
Ejot H1 eco	11/0192	a	0.6	1.4
Ejotharm H2 eco	15/0740	a	0.97	1.25
Ejot H3	14/0130	a	0.6	1.25
Ejotharm STR U, STR U 2G	04/0023	a	0.6	2.08
Fischer TERMOZ CN 8	09/0394	a	0.6	1.7
Fischer TERMOZ CN plus 8	09/0394	a	0.6	1.7
Fischer TERMOZ CS II 8	14/0372	a	1.29	2.61

⁽¹⁾ a: surface mounting

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

ETICS REVITHERM EP Résol

Anchors for insulation product

ANNEX 2

of ETA-22/0546-version 1

Glass fibre meshes:

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

Trade name	Mass per unit area (g/m ²)	Residual strength after ageing (N/mm)		Relative residual strength after ageing (%) ⁽¹⁾	
		Warp	Weft	Warp	Weft
Standard meshes					
ARMATURE 500 (R 131 A 101 C+)	167	≥ 20	≥ 20	≥ 50	≥ 50
TREILLIS 4X4 (04-0161B)	161	≥ 20	≥ 20	≥ 50	≥ 50
Reinforced mesh					
ARMATURE HR (R 585 A 101)	696	≥ 20	≥ 20	≥ 40	≥ 40

⁽¹⁾ Percentage of the strength in the as-delivered state.

ETICS REVITHERM EP Résol

Glass fibre meshes

ANNEX 3

of ETA-22/0546-version 1