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European Technical Assessment ETA 24/0454 of 29/10/2024

General Part

Technical Assessment Body issuing the ETA:	**TECNALIA RESEARCH & INNOVATION**
Trade name of the construction product	**PREMIERTERM MWR**
Product family to which the construction product belongs	External Thermal Insulation Composite System with rendering on mineral wool (MW) for use as external thermal insulation to the wall of buildings.
Manufacturer	UNICALCE SpA Via Ponti, 18 24012 Val Brembilla (BG) Italy www.unicalce.it
Manufacturing plants	Str. di Prisciano 104, 05100 San Carlo (TR) Italy Via di S. Vincenzo, 57021 Campiglia Marittima (LI) Italy Contrada Lupini, 74019 Palagiano, (TA) Italy
This European Technical Assessment contains	19 pages including 2 Annexes 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 040083-00-0404 External Thermal Insulation Composite Systems (ETICS) with Rendering

Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and should be identified as such.

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1. Technical description of the product

This product 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 (European Technical Assessment).

The ETICS kit comprises a prefabricated insulation product of mineral wool (MW) to be mechanically fixed onto the wall and bonded to the wall with at least a 40% as bonded area. The methods 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 such as connections, apertures, corners, parapets, sills, etc. Assessment and performance of these components is not addressed on 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.

The components of the kit are:

	Components	Coverage (kg/m^2)	Thickness (mm)
	ETICS mechanically fixed with supplementary adhesive. According to ETA holder's prescriptions the minimal bonded surface shall be at least 40%. National application documents shall be taken into account.		
Insulation material with associated method of fixing	Insulation product:		
	• **PREMIERTERM MWR** Factory prefabricated mineral wool (MW) board according to EN 13162	--	50-200
	Mechanical fixings		
	• Screwed-in plastic anchor ref. **TERMOFIX V8 EVO**	$6/m^2$	
	Supplementary adhesive:		
	• **RASATERM RB21 Fibro** (cement-based mortar in powder requiring addition of 26 % wt water) according to EN 998-1. Particle size 1,2 mm.	3,0 – 5,5 (dry mix)	3 (dry)
	• **RASATERM LIGHT** (cement-based mortar in powder requiring addition of 30-33 % wt water) according to EN 998-1. Particle size 1,2 mm.	2,0 – 4,0 (dry mix)	3 (dry)
Base coat	• **RASATERM RB21 Fibro** (cement-based mortar in powder requiring addition of 26 % wt water) according to EN 998-1. Particle size 0,8 mm.	4,0 (dry mix)	5 (dry)
	• **RASATERM LIGHT** (cement-based mortar in powder requiring addition of 30-33 % wt water) according to EN 998-1. Particle size 0,8 mm.	4,0 – 5,0 (dry mix)	5 (dry)

	Components	Coverage (kg/m^2)	Thickness (mm)
Glass fibre mesh	• **ARMATURA R60** Alkali resistant glass fibre mesh with mass per unit area of about 160 g/m^2 and mesh size of about 4,5 x 5,9 mm.	--	0,46
Key coat	• **CHROMOFILL PRIMER**. Water solution of siloxane resin.	10 m^2/l	--
Finishing coat	• **CHROMOCOAT SISILPLUS** Ready to use paste. External render based on siloxane and silicate binders according to EN 15284. Particle size 1,5 mm.	2,8-3,3	1,5
	• **CHROMOCOAT SILKOVER** Ready to use paste. External render based on siloxane binders according to EN 15284. Particle size 1,5 mm,	2,8-3,3	1,5
Ancillary materials	Supplementary profiles: • Polyvinyl chloride (PVC) or aluminium profiles for corners, expansion joints, junctions with doors and windows, balconies, etc.	Remain under the ETA holder responsibility	

Table 1: Components PREMIERTERM MWR.

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

2.1. Intended use

This ETICS is intended for use as external insulation of building walls. The walls are made of masonry (bricks, block, stones…) or concrete (cast on site or as prefabricated panels). The characteristics of the walls shall be verified prior to use of the ETICS, especially regarding conditions for reaction to fire classification and for fixing of the ETICS either by bonding or mechanically. The ETICS is designed to give the wall, to which it is applied, satisfactory thermal insulation.

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 its durability by providing enhanced protection from the effect of weathering.

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 not intended to ensure the airtightness of the building structure.

The choice of the method of fixing depends on the characteristics of the substrate, which could need preparation and shall be done in accordance with the national instructions.

The provisions made in this ETA are based on an assumed working life of 25 years as minimum, provided that the conditions laid down in the sections below (manufacturing, transport, installation, use, maintenance, etc) are met. The indications given on the working life cannot be interpreted as a guarantee given by the manufacturer, 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.

2.2. Manufacturing

The ETA is issued for the ETICS, on the basis of agreed data/information, deposited at Tecnalia Research & Innovation, which identifies the ETICS that has been assessed and judged. Changes to the ETICS or the components or their production process, which could result in this deposited data/information being incorrect, shall be notified to Tecnalia Research & Innovation before the changes are introduced. Tecnalia Research & Innovation will decide whether or not such changes affect the ETA and consequently the validity of the CE marking on the basis of the ETA and, if so, whether further assessment or alterations to the ETA shall be necessary.

2.3. Design and installation

The ETICS is installed on site. The installation instructions, including special installation techniques and provisions for the qualification of the personnel, are given in the manufacturer´s technical documentation. It is responsibility of the manufacturer to guarantee that the information about design and installation are easily accessible to the concerned people.

2.4. Packaging, transport and storage

The information on packaging, transport and storage is given in the manufacturer's technical documentation. It is responsibility of the manufacturer to ensure that this information is easily accessible for the concerned people.

2.5. Use, maintenance and repair

The finishing coat shall normally be maintained in order to fully preserve the ETICS's performance.

Maintenance includes at least:

- Visual inspections of the ETICS.
- The repairing of localised damaged areas due to accidents.
- The application of various products or paints, possibly after washing or ad hoc preparation.

Necessary repairs should be performed as soon as the need has been identified.

It is important to be able to carry out maintenance as far as possible using readily available products and equipment, without spoiling appearance. Only products which are compatible with the ETICS shall be used.

The information on use, maintenance and repair is given in the manufacturer's technical documentation. It is the responsibility of the manufacturer to ensure that this information is made know to the concerned people.

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

The identification tests and the assessment for the intended use of this ETICS according to the Basic Work Requirements, were carried out in compliance with the EAD 040083-00-0404 External Thermal Insulation Composite Systems (ETICS) with Rendering (hereinafter referred as "EAD").

Safety in case of fire (BWR 2)

3.1 Reaction to fire (EAD 040083-00-0404, Clause 2.2.1)

3.1.1 Reaction to fire of ETICS (EAD 040083-00-0404, Clause 2.2.1.1)

Components	Max. organic content/Max. heat of combustion	Flame retardant content
Adhesive (RASATERM RB21 Fibro)	--/-1,26 MJ/kg	No flame retardant
Adhesive (RASATERM LIGHT)	--/-0,83 MJ/kg	No flame retardant
Insulation (PREMIERTERM MWR)	--/2 MJ/kg	No flame retardant
Fixings	--	--
Base Coat (RASATERM RB21 Fibro)	--/-1,26 MJ/kg	No flame retardant
Base coat (RASATERM LIGHT)	--/-0,83 MJ/kg	No flame retardant
Glass Fibre Mesh ARMATURA R60	- / 6,54 MJ/kg	No flame retardant
Key Coat (CHROMOFILL PRIMER)	-- /5,5 MJ/kg	No flame retardant
Finishing coat (CHROMOCOAT SISILPLUS)	-- / 2,7 MJ/kg	No flame retardant
Finishing coat (CHROMOCOAT SILKOVER)	-- / 2,6 MJ7kg	No flame retardant

Table 2: Organic content, heat of combustion and flame retardant content of PREMIERTERM MWR components.

The reaction to fire according to EN 13501-1 and Commission Delegated Regulation (EU) No 2016/364 of PREMIERTERM MWR ETICS is class A2-s1, d0.

Note: A 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 (e.g., on the basis of a large-scale test) might be necessary to comply with Member State regulations, until the existing European classification system has been completed.

3.1.2 Reaction to fire of thermal insulation material (EAD 040083-00-0404, Clause 2.2.1.2)

The reaction to fire of thermal insulation material PREMIERTERM MWR, according to EN 13501-1 and Commission Delegated Regulation (EU) No 2016/364, is class A1.

3.1.3 Reaction to fire of PU foam adhesive (EAD 040083-00-0404, Clause 2.2.1.3)

Not relevant.

3.2 Façade fire performance (EAD 040083-00-0404, Clause 2.2.2)

Performance not assessed.

3.3 Propensity to undergo continuous smouldering (EAD 040083-00-0404, Clause 2.2.3)

Performance not assessed.

Hygiene, health and environment (BWR 3)

3.4 Content, emission and/or release of dangerous substances (EAD 040083-00-0404, Clause 2.2.4)

Performance not assessed.

3.5 Water absorption (EAD 040083-00-0404, Clause 2.2.5)

3.5.1 Water absorption of the base coat and the rendering system

Base Coat	Rendering	Water absorption (kg/m²)	
		After 1 hour	After 24 hours
RASATERM RB21Fibro	Without rendering	0,277	0,485
	With rendering CHROMOCOAT SISILPLUS	0,124	0,245
	With rendering CHROMOCOAT SILKOVER	0,121	0,238
RASATERM LIGHT	Without rendering	0,239	0,489
	With rendering CHROMOCOAT SISILPLUS	0,123	0,242
	With rendering CHROMOCOAT SILKOVER	0,119	0,234

Table 3: Water absorption (capillarity test).

3.5.2 Water absorption of the thermal insulation product.

Water absorption of the thermal insulation product has been obtained from the DoP of the thermal insulation panels according to EN 13162. See Annex 1 for declared values.

3.6 Hygrothermal behaviour (EAD 040083-00-0404, Clause 2.2.6)

The hygrothermal performance of the ETICS was tested on two rigs.

None of the following defects occurred on the assessed external renderings or the base coat during and after the hygrothermal cycles:

- Blistering or peeling of any finishing coat.
- Failure or cracking associated with joints between insulation product boards or profiles fitted with ETICS.
- Detachment of the render coat.
- Cracking allowing water penetration to the insulating layer (normally ≤ 0.2 mm).

Therefore, the ETICS is considered resistant to hygrothermal cycles.

3.7 Freeze-thaw behaviour (EAD 040083-00-0404, Clause 2.2.7)

Water absorption of the base coat and all the finishing coats is lower than 0.5 kg/m^2 after 1 hour and 24 hours. Based on these test results, the system can be considered freeze-thaw resistant and there is no need for further testing.

3.8 Impact resistance (EAD 040083-00-0404, Clause 2.2.8)

The impact resistance of the ETICS was tested on the rig.

Rendering system	Maximum Impact diameter (mm)/damage		Category of use
	3 J	10 J	
Base coat RASATERM RB21 Fibro + glass fibre mesh ARMATURA R60 + key coat CHROMOFILL PRIMER + finishing coat CHROMOCOAT SISILPLUS	18,55/no cracking	38,20/cracks without reaching the thermal insulation product	II
Base coat RASATERM RB21 Fibro + glass fibre mesh ARMATURA R60 + key coat CHROMOFILL PRIMER + finishing coat CHROMOCOAT SILKOVER	17,10/no cracking	45,30/cracks without reaching the thermal insulation product	II
Base coat RASATERM LIGHT + glass fibre mesh ARMATURA R60 + key coat CHROMOFILL PRIMER + finishing coat CHROMOCOAT SISILPLUS	29,60/no cracking	48,43/cracks without reaching the thermal insulation product	II
Base coat RASATERM LIGHT + glass fibre mesh 160 g/m^2 + key coat CHROMOFILL PRIMER + finishing coat CHROMOCOAT SILKOVER	26,47/no cracking	50,90/cracks without reaching the thermal insulation product	II

Table 4: Impact resistance.

3.9 Water vapour permeability (resistance to water vapour diffusion) (EAD 040083-00-0404, Clause 2.2.9)

3.9.1 Water vapour permeability of the rendering system

Composition of the system		Thickness (m)	Equivalent air thickness S_d (m)
Reinforced base coat+ finishing coat	Base coat RASATERM RB21 Fibro + glass fibre mesh ARMATURA R60 + key coat CHROMOFILL PRIMER + finishing coat CHROMOCOAT SISILPLUS	0,008	0,3
	Base coat RASATERM RB21 Fibro + glass fibre mesh ARMATURA R60 + key coat CHROMOFILL PRIMER + finishing coat CHROMOCOAT SILKOVER	0,009	0,3
	Base coat RASATERM LIGHT + glass fibre mesh ARMATURA R60 + key coat CHROMOFILL PRIMER + finishing coat CHROMOCOAT SISILPLUS	0,008	0,4
	Base coat RASATERM LIGHT + glass fibre mesh ARMATURA R60 + key coat CHROMOFILL PRIMER + finishing coat CHROMOCOAT SILKOVER	0,009	0,3

Table 5: Water vapour permeability of the rendering system.

3.9.2 Water vapour permeability of thermal insulation product

Water vapour permeability of the thermal insulation product is MU1.

Safety and accessibility in use (BWR 4)

3.10 Bond strength

3.10.1 Bond strength between base coat and thermal insulation product (EAD 040083-00-0404, Clause 2.2.11.1)

Composition	Initial State		After hygrothermal cycles		After freeze/thaw cycles	
	Minimum value	Mean value	Minimum value	Mean value	Minimum value	Mean value
PREMIERTERM MWR + base coat RASATERM RB21 Fibro + glass fibre mesh ARMATURA R60	24 kPa	25 kPa	10 kPa	12 kPa	Test not performed (system is considered freeze thaw resistant)	
PREMIERTERM MWR + base coat RASATERM LIGHT + glass fibre mesh ARMATURA R60	23 kPa	23 kPa	11 kPa	12 kPa	Test not performed (system is considered freeze thaw resistant)	

Table 6: bond strength between base coat and insulation product

Rupture type: cohesive break in the insulation material.

3.10.2 Bond Strength between adhesive and substrate (EAD 040083-00-0404, Clause 2.2.11.2)

Not relevant for ETICS mechanically fixed with supplementary adhesive.

3.10.3 Bond Strength between adhesive and insulation product (EAD 040083-00-0404, Clause 2.2.11.3)

Not relevant for ETICS mechanically fixed with supplementary adhesive.

3.11 Fixing strength (transverse displacement strength) (EAD 040083-00-0404, Clause 2.2.12)

Not relevant.

3.12 Wind load resistance of ETICS (EAD 040083-00-0404, Clause 2.2.13)

3.12.1 Pull-through test (EAD 040083-00-0404, Clause 2.2.13.1)

Characteristics of components				
Anchors	Trade name		TERMOFIX V8 EVO	
	Plate diameter		60 mm	
MW panels	Thickness (mm)		≥ 50	
	Tensile strength perpendicular to the faces (kPa)		≥ 7,5	
Pull-through test				
Failure loads (N)	Anchors not placed at the panel joints	R_{panel}	In dry conditions	Minimum: 414 Average: 437
	Anchors placed at the panel joints	R_{joint}		Minimum: 351 Average: 396

Table 7: pull-through test of fixings.

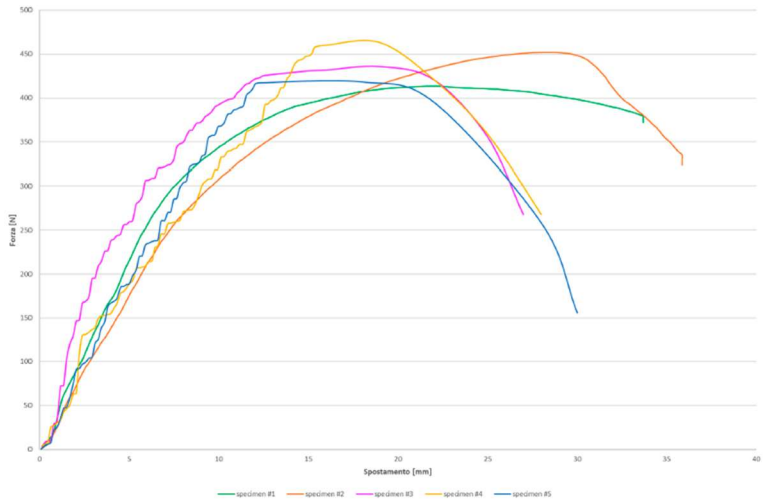

Figure 1: Load displacement graph of pull through tests at the body of the panel.

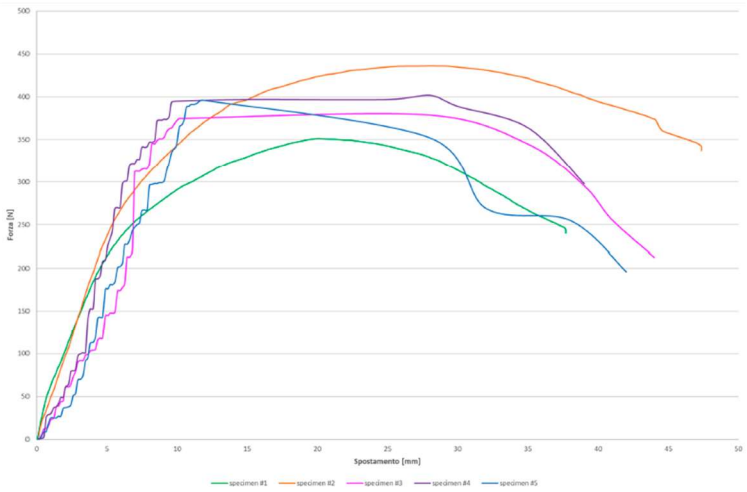

Figure 2: Load displacement graph of pull through tests at the joint of the panel

Pull through test on wet conditions: not relevant.

3.12.2 Static foam block test (EAD 040083-00-0404, Clause 2.2.13.2)

No performance assessed.

3.12.3 Dynamic wind uplift EAD 040083-00-0404, Clause 2.2.13.3)

Not relevant.

3.13 Tensile test perpendicular to the faces of thermal insulation product (EAD 040083-00-0404, Clause 2.2.14)

Tensile strength of thermal insulation product in dry conditions has been obtained from the DoP of the thermal insulation panels according to EN 13162. Declared value is TR ≥ 7,5 kPa.

Tensile strength of thermal insulation product in wet conditions:

	After 7 days conditioning and 7 drying period		After 28 days conditioning and drying period	
	Minimum value	Mean value	Minimum value	Mean value
PREMIERTERM MWR (50 mm)	6,4 kPa	7,4 kPa	6,1 kPa	7,5 kPa
PREMIERTERM MWR (200 mm)	6,4 kPa	8,2 kPa	9,8 kPa	11,1 kPa

Table 8: tensile strength of thermal insulation product in wet conditions.

3.14 Shear strength and shear modulus of elasticity test of ETICS (EAD 040083-00-0404, Clause 2.2.15)

Not relevant.

3.15 Pull-through resistance of fixing from profiles (EAD 040083-00-0404, Clause 2.2.16)

Not relevant.

3.16 Render strip tensile test (EAD 040083-00-0404, Clause 2.2.17)

No performance assessed.

3.17 Shear strength and shear modulus of foam adhesive (EAD 040083-00-0404, Clause 2.2.18)

Not relevant.

3.18 Post expansion behaviour of foam adhesives (EAD 040083-00-0404, Clause 2.2.19)

Not relevant.

3.19 Bond strength after ageing (EAD 040083-00-0404, Clause 2.2.20)

Bond strength after ageing of finishing coats tested on the rig.

Rendering system	After hygrothermal cycles		After freeze/thaw cycles	
	Individual value/type of failure (1)	Mean value	Minimum value	Mean value
Adhesive RASATERM RB21Fibro + PREMIERTERM MWR + base coat RASATERM RB21Fibro + glass fibre mesh ARMATURA R60 + key coat CHROMOFILL PRIMER + finishing coat CHROMOCOAT SISILPLUS	10 kN/m²/ CS	11 kN/m²	Test not performed (system is considered freeze thaw resistant)	
	11 kN/m²/ CS			
	11 kN/m²/ CS			
	11 kN/m²/ CS			
	11 kN/m²/ CS			
Adhesive RASATERM RB21Fibro + PREMIERTERM MWR base coat + RASATERM RB21Fibro + glass fibre mesh ARMATURA R60 + key coat CHROMOFILL PRIMER + finishing coat CHROMOCOAT SILKOVER	11 kN/m²/ CS	15 kN/m²	Test not performed (system is considered freeze thaw resistant	
	19 kN/m²/ CS			
	14 kN/m²/ CS			
	17 kN/m²/ CS			
	15 kN/m²/ CS			
Adhesive RASATERM LIGHT + PREMIERTERM MWR + base coat RASATERM LIGHT + glass fibre mesh ARMATURA R60 + key coat CHROMOFILL PRIMER + finishing coat CHROMOCOAT SISILPLUS	11 kN/m²/ CS	11 kN/m²	Test not performed (system is considered freeze thaw resistant	
	10 kN/m²/ CS			
	11 kN/m²/ CS			
	12 kN/m²/ CS			
	12 kN/m²/ CS			
Adhesive RASATERM LIGHT + PREMIERTERM MWR + base coat RASATERM LIGHT + glass fibre mesh ARMATURA R60 + key coat CHROMOFILL PRIMER + finishing coat CHROMOCOAT SILKOVER	14 kN/m²/ CS	16 kN/m²	Test not performed (system is considered freeze thaw resistant)	
	15 kN/m²/ CS			
	17 kN/m²/ CS			
	17 kN/m²/ CS			
	18 kN/m²/ CS			

Table 9: Bond strength after ageing of finishing coats tested on the rig.

(1) CS: cohesive failure in insulation material.

3.20 Mechanical and physical characteristics of the mesh (EAD 040083-00-0404, Clause 2.2.21)

		Tensile strength in as delivered state (N/mm)	Residual tensile strength after ageing (N/mm)	Relative residual strength after ageing, of the strength in the as delivered state (%)	Elongation in as-delivered state (%)	Elongation after ageing (%)
Glass fibre mesh ARMATURA R60	Warp	39,6	26,4	66,7	2,66	1,81
	Weft	60,1	44,1	73,4	3,54	2,56

Table 10: Mechanical and physical characteristics of the mesh.

Protection against noise (BWR 5)

3.21 Airborne sound insulation of ETICS (EAD 040083-00-0404, Clause 2.2.22)

No performance assessed.

Energy economy and heat retention (BWR 6)

3.22 Thermal resistance and thermal transmittance of ETICS (EAD 040083-00-0404, Clause 2.2.23)

The additional thermal resistance provided by the ETICS (R_{etics}) to the substrate wall is calculated from the thermal resistance of the insulation product ($R_{insulation}$), determined as described in the appropriate harmonized standard (EN 13162 for MW insulation), and the tabulated R_{render} value of the render system (R_{render} is about 0.02 m^2K/W).

$$R_{etics} = R_{insulation} + R_{render} \ [(m^2K)/W]$$

The thermal bridges caused by mechanical fixing devices influence the thermal transmittance of the entire wall and shall be taken into account using the following calculation:

$$U_c = U + \Delta U \ [W/(m^2K)]$$

With:

U_c = corrected thermal transmittance of the entire wall, including thermal bridges.

U = thermal transmittance of the entire wall, including ETICS, without thermal bridges.

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

R_{etics} = thermal resistance of the ETICS [$(m^2K)/W$]

$R_{substrate}$= thermal resistance of the substrate wall [$(m^2K)/W$]

R_{se} = external surface thermal resistance [$(m^2K)/W$]

R_{si} = internal surface thermal resistance [$(m^2K)/W$]

ΔU = correction term of the thermal transmittance for mechanical fixing devices.

$$\Delta U = X_p * n \text{ (for anchors)} + \mathbf{\Sigma}\psi i * \ell i \text{ (for profiles)}$$

X_p = point thermal transmittance value of the anchor [W/K]. See Technical Report no 25. If not specified in the anchors ETA, the following values apply:

= 0.002 W/K for anchors with a plastic screw/nail, stainless steel screw/nail with the head covered by plastic material, and for anchors with an air gap at the head of the screw/nail.

= 0.004 W/K for anchors with a galvanized steel screw/nail with the head covered by a plastic material.

= 0.008 W/K for all other anchors (worst case).

n = number of anchors per m^2

ψi = linear thermal transmittance value of the profile [W/(mK)]

ℓi = length of the profile per m^2

Thermal resistance of ETICS is ≥ 1,0 (m^2.K)/W

The value of thermal resistance of 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.

The range value of thermal resistance of thermal insulation product is from 1,45 (m^2.K)/W to 5,85 (m^2.K)/W (Values obtained from the DoP issued for thermal insulation).

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

According to the European Commission Decision 1997/556/EC, amended by the European Commission Decision 2001/596/EC, system AVCP 2+ applies.

In addition, for uses subject to regulations on reaction to fire and according to the European Commission Decision 1997/556/EC, amended by the European Commission Decision 2001/596/EC, system AVCP 2+ applies.

The AVCP systems 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 Assessment and Verification of Constancy of Performance (AVCP) system are laid down in the control plan deposited at Tecnalia Research & Innovation.

The Control Plan is a confidential part of the ETA and is only handed over to the notified body involved in the assessment and verification of constancy of performance.

Issued in Azpeitia, on 29/10/2024

TECNALIA LAB_SERVICES

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Innovation and Conformity Assessment Point

Tecnalia Research & Innovation

ANNEX 1 CHARACTERISTICS OF THE COMPONENTS

Detailed information on the chemical composition and other identifying characteristics of the components has been deposited at Tecnalia Research & Innovation. Further information can be observed from the product data sheets, which are part of the Technical Documentation for this ETA.

Insulation product

PREMIERTERM MWR Factory-made uncoated panels made of mineral wool, according to EN 13162 "Thermal insulation products for buildings - Factory made mineral wool (MW) products - Specification"

Description and characteristics	Standard	Value
Density		90-100 kg/m^3
Thickness		50-200 mm
Reaction to fire	EN 13501-1	A1
Thermal conductivity (W/mK)	EN 12667	≤ 0,034
Thermal resistance (m²K/W)	----	Defined in the declaration according to EN 13162
Thickness (mm)	EN 823	T5
Water absorption (short term)	EN 1609	WS (<1 kg/m^2)
Water absorption (long term)	EN 12087	WL (P) (<3 kg/m^2)
Water vapour diffusion resistance factor (μ)	EN 12086	MU1
Tensile strength perpendicular to the faces in dry conditions (kPa)	EN 1607	TR7,5
Compressive strength	EN 826	CS(10)20

Mesh

ARMATURA R60 Alkali resistant glass fibre mesh with mass per unit area of about 160 g/m^2 and mesh size of about 4.5 x 5.9 mm

Characteristics	Reference	Value
Mass per unit area (g/m^2)	EAD 040016-00-0404	160 (± 3%)
Mesh size (mm)		4,5 x 5,9
Thickness (mm)		0,46
Ash content (%)		83,6
Organic content (%)		16,4
Heat of combustion (PCS-value) (MJ/kg)		6,54

Plastic fixings

TERMOFIX V8 EVO Screwed-in plastic anchor for fixing of external thermal insulation composite systems with rendering in concrete and masonry (EAD 330196-00-0604).

GENERAL CHARACTERISTICS	
Plate diameter (mm)	60
Load resistance of the anchor plate (kN)	1,7
Plate stiffness (kN/mm)	0,6
Characteristics resistance in the substrate	See ETA 14/0372