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Član EOTA

Member of EOTA

ETA-10/0334

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# European Technical Assessment

English version prepared by ZAG

**GENERAL PART** 

Organ za tehnično ocenjevanje, ki je izdal

Technical Assessment Body issuing the ETA

Komercialno ime gradbenega proizvoda Trade name of the construction product

Družina proizvoda, ki ji gradbeni proizvod pripada

Product family to which the construction product belongs

Holder of Technical Assessment Imetnik tehnične ocene

Proizvodni obrat Manufacturing plant

Ta Evropska tehnična ocena vsebuje This European Technical Assessment contains

Ta ocena zamenjuje This assessment replaces

Ta Evropska tehnična ocena je izdana na podlagi Uredbe (EU) št. 305/2011 na podlagi

This European Technical Assessment is issued in according to Regulation (EU) No 305/2011, on the basis of

ZAG

JUBIZOL MW

04: Zunanji toplotnoizolacijski sestavljeni sistemi z ometom (ETICS) namenjeni za izolacijo zunanjih zidov zgradb

04: External Thermal Insulation Composite Systems with rendering (ETICS) for the use as external insulation to walls of buildings

JUB d.o.o. Dol pri Ljubljani 28 SI-1262 Dol pri Ljubljani Slovenija www.jub.eu

Plant 1 Plant 4 Plant 2 Plant 5 Plant 3

43 strani vključno s 4 prilogami, ki so sestavni del te ocene

43 pages including 4 annexes which form an integral part of the document

ETA-10/0334 izdano dne 26. 11. 2015 ETA-10/0334 issued on 26. 11. 2015

Smernice za evropska tehnična soglasja ETAG 004, izdaja februar 2013, ki se uporablja kot EAD

Guideline for European Technical Approval ETAG 004, edition February 2013, used as EAD

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### SPECIFIC PART

## 1 Technical description of the product

#### 1.1 General

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.

The ETICS kit comprises a prefabricated insulation product of mineral wool (MW) to be:

- purely bonded,
- bonded with supplementary mechanical fittings or
- mechanically fixed with supplementary adhesive.

The methods of fixing and the relevant components are specified in the table below. 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.

## 1.2 Composition of the kit

## 1.2.1 Composition of the ETICS

The ETICS comprises the following: adhesive or mechanical fixings (anchors), insulation core, base coat reinforced with glass fibre mesh, key coat applied on the base coat, finishing coat and ancillary materials. The descriptions of the components are given in Tables 1 to 8, while the system compositions are defined in Tables 9 and 10.

Table 1: ETICS components - Insulation products.

Designation code of the Insulation products according to the EN 13162	Commercial designation of the insulation products	Thickness( mm)
Mineral wool slabs		2692127827827
MW-EN 13162-T5-DS(TH )-CS(10)30-TR(10)-WS-WL(P)-MU3,5	Knauf FKD-S	≤ 300
MW-EN 13162-T5-DS(TH)-CS(10)25-TR(7,5)-WS-WL(P)-MU1	Knauf Smart Wall N C1	≤ 300
MW-EN 13162-T7-CS(10)30-TR(10)-WS-WL(P)-MU1-SD20-AW0,95-AF91	Fibran Geolan BP 021	≤ 300
MW-EN 13162-T5-DS(T+)-DS(TH)-CS(10)20-TR(10)-PL(5)250-WS-WL(P)-MU1	Rockwool Frontrock MAX E	≤ 300
Mineral wool lamellas	The second of th	_ 000
MW-EN 13162-T5-DS(TH )-TR(80)-WS-MU1	Knauf FKL	≤ 300

It is assumed that for composition of the ETICS can be applied only the MW products with at least equivalent properties as products listed in Table 1. Such product shall be verified according to EN 13162 and ETAG 004 (Edition 2000, Amended August 2011 and February 2013).

Table 2: ETICS components - Adhesives.

Adhesives	Coverage (kg/m²)
JUBIZOL ADHESIVE MORTAR - dry mix cement based adhesive requiring addition of ≈ 20 % water	3.5 – 5.0 (powder)
JUBIZOL STRONG FIX - dry mix cement based adhesive requiring addition of ≈ 20 % water	3.5 – 5.0 (powder)
JUBIZOL ADHESIVE – dry mix cement based adhesive requiring addition of ≈ 20 % water	3.5 – 5,0 (powder)
JUBIZOL ULTRALIGHT FIX - dry mix cement-based mortar with EPS beads, refined with polymer binder, requiring addition of ≈ 24% water.	4,8 – 9,6 (powder)
JUBIZOL UNIWOOL ADHESIVE - dry mix cement-based mortar, refined with polymer binder, requiring addition of ≈ 23% water	4,2 - 8,4 (powder)

Table 3: ETICS components - Anchors.

Table 4: ETICS components – Base coats.

Base coats	Coverage (kg/m²)	Thickness (mm)
<b>JUBIZOL ADHESIVE MORTAR</b> – dry mix cement base coat powder requiring addition of $\approx 20$ % water. Base coat consists of aggregates, cement, dispersion powder, special additives	5.6 – 8.4 (powder)	
JUBIZOL STRONG FIX – dry mix cement base coat powder requiring addition of ≈ 20 % water. Base coat consists of aggregates, cement, dispersion powder, special additives	5.6 – 8.4 (powder)	maximal (dry): 6
JUBIZOL ULTRALIGHT FIX - dry mix cement-based mortar with EPS beads, refined with polymer binder, requiring addition of $\approx$ 24% water.	4,8 – 9,6 (powder)	minimal (dry): 4
JUBIZOL UNIWOOL ADHESIVE - dry mix cement-based mortar, refined with polymer binder, requiring addition of ≈ 23% water	4,2 – 8,4 (powder)	

Table 5: ETICS components - Reinforcement.

	or further description, characteristics and performances of the components)
Reinforcement	
JUBIZOL GLASS FIBRE	MESH where JUBIZOL GLASS FIBRE MESH is ETA holder own designation



Table 6: ETICS components – Key coats.

Key coats	Coverage (I/m²)	
JUBIZOL Unigrund— liquid, water based acrylic slurry primer intended as a key coat for all finishing coats (except mineral based finishing coats JUBIZOL MINERAL finish T, JUBIZOL MINERAL finish S and Nivelin D + Facade paints)	0,15 to 0,20	
ACRYL emulsion - liquid, water based acrylic primer intended as a key coat for the acrylic and mineral based finishing coats	≈ 0,1	
<b>Acrylcolor</b> - liquid exterior acrylic waterborne facade paint as a key coat for the acrylic and mineral based finishing coats	≈ 0,1	
<b>SILICATEprimer</b> - liquid, water based silicate primer intended as a key coat for the silicate based finishing coats	≈ 0,1	
<b>SILICONEprimer</b> - liquid, water based silicone primer intended as a key coat for the silicone based finishing coats	≈ 0,1	

Table 7: ETICS components – finishing coats.

Finishing coats	d performances of the components)  Coverage Thickness (kg/m²) (mm)		
JUBIZOL MINERAL finish T 2,0/2,5 Ready-mixed lime-cement based mortar requiring addition of water 20-23 %, based on lime, cement, aggregates, additives.	2.6 to 3.1 kg/m² (powder)		
JUBIZOL MINERAL finish S 1.5/2.5 Ready-mixed lime-cement based mortar requiring addition of water 20-23 %, based on lime, cement, aggregates, additives.	2.6 to 3.6 kg/m² (powder)		
JUBIZOL SILICATE finish T 2.0/2.5 Ready to use paste based on potassium silicate and water-based acrylic binder, aggregates, additives.	2.5 to 3.2 kg/m² (paste)		
JUBIZOL SILICATE finish S 1.5/2.0/2.5 Ready to use paste based on potassium silicate and water-based acrylic binder, aggregates, additives	3.0 to 5.5 kg/m² (paste)		
JUBIZOL SILICONE finish T 2.0/2.5 Ready to use paste based on silicone emulsion and water-based acrylic binder, aggregates, additives.	2.8 to 3.5 kg/m² (paste)		
JUBIZOL SILICONE finish S 1.5/2.0/2.5 Ready to use paste based on silicone emulsion and water-based acrylic binder, aggregates, additives.	2.4 to 4.7 kg/m² (paste)		
JUBIZOL ACRYL finish T2.0/2.5 Ready to use paste based on water-based acrylic binder, aggregates, additives	2.5 to 3.2 kg/m² (paste)	Regulated by	
JUBIZOL ACRYL finish \$1.5/2.0/2.5 Ready to use paste based on water- based acrylic binder, aggregates, additives	2.5 to 5.0 kg/m² (paste)	particle size	
Nivelin D + Façade paints* Ready mixed polymer based mortar requiring addition of water ~ 30 %, based on polymer, lime, cement, aggregates, additives + liquid exterior micro reinforced acrylic waterborne anti-mildew paint.	4.5 to 0.5 l/m <sup>2</sup> (powder + liquid)		
Finishing coats Nivelin D + Facade paints shall be applied without key coat.			
JUBIZOL UNIXIL finish S Ready to use paste. Siloxanised acryl render finish S1.0/1.5/2.0/2.5 - based on water-based acrylic binders, mineral fillers, special additives	2.5 to 5.0 kg/m² (paste)		
JUBIZOL UNIXIL Winter finish S Ready to use paste. Siloxanised acryl render finish finish S1.5/2.0/2.5 - based on water-based acrylic binders, mineral fillers, special additives	2.5 to 5.0 kg/m² (paste)	-	
JUBIZOL Unixil finish T 2.0/2.5 Ready to use paste. Siloxanised acryl render finish - based on water-based acrylic binders, mineral fillers, special additives	2.5 to 3.2 kg/m² (paste)		
JUBIZOL NANO finish \$ 1.5/2.0/2.5 Ready to use paste. Self-cleaning silicone render finish - based on water-based silicone and acrylic binders, nano structures, mineral fillers and special additives	2.6 to 4.7 kg/m² (paste)		



Table 8: ETICS components - Facade paints.

Façade paints	Coverage (ml/m²)	
Acrylcolor – based on water-based acrylic binders, special additives in	200	
combination with all finishing coats.	(solution)	
Revitalcolor AG - based on water-based acrylic binders, special additives,	270	
micro-reinforcing fibers in combination with all finishing coats.	(solution)	
Jubosilcolor Silicone - based on water-based silicon binders, special additives	200	
in combination with all finishing coats.	(solution)	
Nanoxilcolor - based on water-based silicone binders, special additives,	270	
special fillers, micro-reinforcing fibers.	(solution)	
Revitalcolor Silicone - based on water-based silicone binders, special	270	
additives, micro-reinforcing fibers.	(solution)	
Jubosilcolor Silicate - based on water-based potassium silicate binder, special	200	
additives in combination with all finishing coats.	(solution)	
Revitalcolor Silicate - based on water-based potassium silicate binder, special	270	
additives, micro-reinforcing fibers.	(solution)	
Décor Antique - based on water-based potassium silicate binder, special	180	
additives (in combination with all finishing coats.	(solution)	

Table 9: Components to be applied for bonded ETICS.

Bo	nde	dF	TICS
	,,,,,,	, C4 Im	1100

#### Insulation

mineral wool lamellas

Knauf FKL [MW-EN 13162-T5-DS(TH )-TR80-WS-MU1]

#### adhesives

 ${\tt JUBIZOL\ ADHESIVE\ MORTAR,\ JUBIZOL\ STRONG\ FIX,\ JUBIZOL\ ADHESIVE,\ JUBIZOL\ ULTRALIGHT\ FIX,\ JUBIZOL\ UNIWOOL\ ADHESIVE}$ 

#### Reinforcement

JUBIZOL GLASS FIBRE MESH

#### Base coats

JUBIZOL ADHESIVE MORTAR, JUBIZOL STRONG FIX, JUBIZOL ULTRALIGHT FIX, JUBIZOL UNIWOOL ADHESIVE

#### Key coats

JUBIZOL Unigrund, ACRYL emulsion, Acrylcolor, SILICATEprimer, SILICONEprimer

## Finishing coat

JUBIZOL MINERAL finish T 2,0/2,5, JUBIZOL MINERAL finish S 1.5/2.0/2.5

JUBIZOL SILICATE finish T 2.0/2.5, JUBIZOL SILICATE finish S 1.5/2.0/2.5

JUBIZOL SILICONE finish T 2.0/2.5, JUBIZOL SILICONE finish S 1.5/2.0/2.5

JUBIZOL ACRYL finish T2.0/2.5, JUBIZOL ACRYL finish S1.5/2.0/2.5

JUBIZOL UNIXIL finish S1.0/1.5/2.0/2.5, JUBIZOL UNIXIL Winter finish S 1.5/2.0/2.5,

JUBIZOL UNIXIL finish T 2.0/2.5, JUBIZOL NANO finish S 1.5/2.0/2.5,

Nivelin D + Façade paints

#### Façade paints

Acrylcolor, Revitalcolor AG, Jubosilcolor Silicone, Nanoxilcolor, Revitalcolor Silicone, Jubosilcolor Silicate, Revitalcolor Silicate, Décor Antique



Table 10: Components to be applied to ETICS with supplementary mechanical fixings – anchors or ETICS fixed with supplementary adhesive.

## ETICS with supplementary mechanical fixings or ETICS fixed with supplementary adhesive 1

#### Insulation

mineral wool slabs

Knauf FKD-S [MW-EN 13162 - T5-DS(TH)-CS(10)30-TR10-WS-WL(P)-MU3,5]

Fibran Geolan BP 021 [MW-EN 13162-T7-CS(10)30-TR(10)-WS-WL(P)-MU1-SD20-AW0,95-AF91]

mineral wool lamellas

Knauf FKL [MW-EN 13162-T5-DS(TH)-TR80-WS-MU1]

#### adhesives

JUBIZOL ADHESIVE MORTAR, JUBIZOL STRONG FIX, JUBIZOL ADHESIVE, JUBIZOL ULTRALIGHT FIX, JUBIZOL UNIWOOL ADHESIVE

#### Anchors\*

EJOT H3, Ejoterm STR-U, Ejoterm STR-U 2G, SDM-T plus, SDF-K plus, Ejoterm NT-U, Ejoterm NK-U, Ejoterm NTK-U Hilti SX-FV, SD-FV 8

Fischer Termoz 8 U, 8 N

Leskovec Plastično pritrdilo PP, Pritrdilno sidro PSK, Pritrdilno sidro PPV

Kosmatin UD PK

\*Note: The wind load resistances of the anchor / insulation combinations determined according to clause 5.1.4.3 of ETAG 004 for granting presented ETA, are given in clause 3.4.4. These wind load resistances can be adopted for further extension of the applicable anchor / insulation combinations, but only for extension on the insulation products side with the: a) insulations of the same chemical composition but thicker or b) insulations of the same chemical compositions and thickness, but with supreme mechanical properties.

#### Reinforcement

JUBIZOL GLASS FIBRE MESH

#### Base coats

JUBIZOL ADHESIVE MORTAR, JUBIZOL STRONG FIX, JUBIZOL ULTRALIGHT FIX, JUBIZOL UNIWOOL ADHESIVE

#### Key coats

JUBIZOL Unigrund, ACRYL emulsion, Acrylcolor, SILICATEprimer, SILICONEprimer

#### Finishing coat

JUBIZOL MINERAL finish T 2,0/2,5, JUBIZOL MINERAL finish S 1.5/2.0/2.5

JUBIZOL SILICATE finish T 2.0/2.5, JUBIZOL SILICATE finish S 1.5/2.0/2.5

JUBIZOL SILICONE finish T 2.0/2.5, JUBIZOL SILICONE finish S 1.5/2.0/2.5

JUBIZOL ACRYL finish T2.0/2.5, JUBIZOL ACRYL finish S1.5/2.0/2.5

JUBIZOL UNIXIL finish S1.0/1.5/2.0/2.5, JUBIZOL UNIXIL Winter finish S 1.5/2.0/2.5,

JUBIZOL UNIXIL finish T 2.0/2.5, JUBIZOL NANO finish S 1.5/2.0/2.5,

Nivelin D + Façade paints

#### Façade paints

Acrylcolor, Revitalcolor AG, Jubosilcolor Silicone, Nanoxilcolor, Revitalcolor Silicone, Jubosilcolor Silicate, Revitalcolor Silicate, Décor Antique



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## ETICS with supplementary mechanical fixings or ETICS fixed with supplementary adhesive 2

#### Insulation

mineral wool slabs Knauf Smart Wall N C1 [MW-EN 13162-T5-DS(TH)-CS(10)25-TR(7,5)-WS-WL(P)-MU1]

#### adhesives

JUBIZOL ADHESIVE MORTAR, JUBIZOL STRONG FIX, JUBIZOL ULTRALIGHT FIX, JUBIZOL UNIWOOL ADHESIVE

#### Anchors\*

EJOT H3, Ejoterm STR-U, Ejoterm STR-U 2G, SDM-T plus, SDF-K plus, Ejoterm NT-U, Ejoterm NK-U, Ejoterm NTK-U Hilti SX-FV, SD-FV 8

Fischer Termoz 8 U, 8 N

Leskovec Plastično pritrdilo PP, Pritrdilno sidro PSK, Pritrdilno sidro PPV

Kosmatin UD PK

\*Note: The wind load resistances of the anchor / insulation combinations determined according to clause 5.1.4.3 of ETAG 004 for granting presented ETA, are given in clause 3.4.4. These wind load resistances can be adopted for further extension of the applicable anchor / insulation combinations, but only for extension on the insulation products side with the: a) insulations of the same chemical composition but thicker or b) insulations of the same chemical compositions and thickness, but with supreme mechanical properties.

#### Reinforcement

JUBIZOL GLASS FIBRE MESH

#### Base coats

JUBIZOL UNIWOOL ADHESIVE

#### Key coats

JUBIZOL Unigrund, ACRYL emulsion, Acrylcolor, SILICATEprimer, SILICONEprimer

#### Finishing coat

JUBIZOL MINERAL finish T 2,0/2,5, JUBIZOL MINERAL finish S 1.5/2.0/2.5

JUBIZOL SILICATE finish T 2.0/2.5, JUBIZOL SILICATE finish S 1.5/2.0/2.5

JUBIZOL SILICONE finish T 2.0/2.5, JUBIZOL SILICONE finish S 1.5/2.0/2.5

JUBIZOL ACRYL finish T2.0/2.5, JUBIZOL ACRYL finish S1.5/2.0/2.5

JUBIZOL UNIXIL finish S1.0/1.5/2.0/2.5, JUBIZOL UNIXIL Winter finish S 1.5/2.0/2.5,

JUBIZOL UNIXIL finish T 2.0/2.5, JUBIZOL NANO finish S 1.5/2.0/2.5,

Nivelin D + Façade paints

#### Façade paints

Acrylcolor, Revitalcolor AG, Jubosilcolor Silicone, Nanoxilcolor, Revitalcolor Silicone, Jubosilcolor Silicate, Revitalcolor Silicate, Décor Antique

## ETICS with supplementary mechanical fixings or ETICS fixed with supplementary adhesive 3

#### Insulation

Mineral wool slabs

Rockwool Frontrock MAX E [MW-EN 13162-T5-DS(T+)-DS(TH)-CS(10)20-TR(10)-PL(5)250-WS-WL(P) MU1]

#### adhesives

JUBIZOL ADHESIVE MORTAR, JUBIZOL STRONG FIX, JUBIZOL ULTRALIGHT FIX, JUBIZOL UNIWOOL ADHESIVE

#### Anchors\*

EJOT H3, Ejoterm STR-U, Ejoterm STR-U 2G, SDM-T plus, SDF-K plus, Ejoterm NT-U, Ejoterm NK-U, Ejoterm NTK-U Hilti SX-FV ,SD-FV 8

Fischer Termoz 8 U, 8 N

Leskovec Plastično pritrdilo PP, Pritrdilno sidro PSK, Pritrdilno sidro PPV

Kosmatin UD PK

\*Note: The wind load resistances of the anchor / insulation combinations determined according to clause 5.1.4.3 of ETAG 004 for granting presented ETA, are given in clause 3.4.4. These wind load resistances can be adopted for further extension of the applicable anchor / insulation combinations, but only for extension on the insulation products side with the: a) insulations of the same chemical composition but thicker or b) insulations of the same chemical compositions and thickness, but with supreme mechanical properties.

#### Reinforcement

JUBIZOL GLASS FIBRE MESH

#### **Base coats**

JUBIZOL ADHESIVE MORTAR, JUBIZOL STRONG FIX, JUBIZOL ULTRALIGHT FIX, JUBIZOL UNIWOOL ADHESIVE

#### Key coats

JUBIZOL Unigrund, ACRYL emulsion, Acrylcolor, SILICATEprimer, SILICONEprimer

#### Finishing coat

JUBIZOL SILICATE finish T 2.0/2.5, JUBIZOL SILICATE finish S 1.5/2.0/2.5

JUBIZOL SILICONE finish T 2.0/2.5, JUBIZOL SILICONE finish S 1.5/2.0/2.5

JUBIZOL UNIXIL finish S1.0/1.5/2.0/2.5, JUBIZOL UNIXIL Winter finish S 1.5/2.0/2.5,

JUBIZOL UNIXIL finish T 2.0/2.5.

#### Façade paints

Acrylcolor, Revitalcolor AG, Jubosilcolor Silicone, Nanoxilcolor, Revitalcolor Silicone, Jubosilcolor Silicate, Revitalcolor Silicate, Décor Antique

Note: Described ancillary materials in accordance with § 3.2.2.5 of the ETAG 004 remains under the ETA-holder responsibilities.

## 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 buildings' walls. The walls are made of masonry (bricks, blocks, stones ...) or concrete (cast on site or as prefabricated panels) with a reaction to fire classification A1 or A2-s1,d0 according to SIST EN 13501-1 and a minimum density of 820 kg/m³ or A1 according to the EC decision 96/603/EC as amended. 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 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 air-tightness of the building structure.

The choice of the method of fixing depends on the characteristics of the substrate, which could need preparation (see § 7.2.1 of the ETAG no. 004) and shall be done in accordance with national instructions.

The provisions made in this European Technical Assessment (ETA) are based on an assumed intended working life of at least 25 years, provided that the conditions laid down in sections 2.3 and 2.4 for the packaging, transport, storage and installation as well as appropriate use, maintenance and repair are met. The indications given as to the working life cannot be interpreted as a guarantee given by the manufacturer or the 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.

#### 2.2 Manufacturing

The European Technical Assessment is issued for the ETICS on the basis of agreed data/information, deposited with the Zavod za gradbeništvó Slovenije (ZAG Ljubljana), which identifies the ETICS that has been assessed and judged. Changes to the ETICS or production process, which could result in the deposited data/information being incorrect should be notified to the ZAG Ljubljana before the changes are introduced. ZAG Ljubljana 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 installation instructions including special installation techniques and provisions for the qualification of the personnel are given in the manufacturer's technical documentation. Design, installation and execution of ETICS are to be in conformity with national documents. Such documents and the level of their implementation in Member States' legislation are different.

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Therefore, the assessment and declaration if performance are done taking into account general assumptions introduced in the chapter 7 of ETAG 004 used as EAD, which

summarizes how information introduced in the ETA and related documents is intended to be used in the construction process and gives advice to all parties interested when normative documents are missing.

## 2.4 Packaging, transport and storage

The information on packaging, transport and storage is given in the manufacturer's technical documentation. It is the responsibility of the manufacturer(s) to ensure that this information is made know to the concerned people.

## 2.5 Use, maintenance and repair

The finishing coat shall normally be maintained in order to fully preserve the ETICS performance. Maintenance includes at least:

- visual inspection of the ETICS,
- the repairing of localised damaged areas due to accidents,
- the aspect maintenance with products adapted and compatible with the ETICS (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(s) to ensure that this information is made know to the concerned people.

## 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 Essential Requirements were carried out in compliance with the ETA Guidance n. 004: External Thermal Insulation Composite Systems with Rendering- edition June 2013, used as EAD (called "ETAG 004, used as EAD", in this ETA).

## 3.1 Mechanical resistance and stability (BWR 1)

Not relevant.

