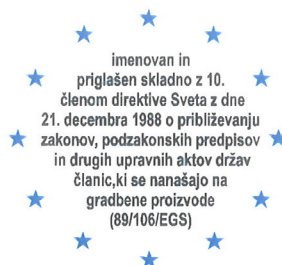


Zavod za gradbeništvo Slovenije
*Slovenian National Building and Civil
Engineering Institute*
Dimičeva 12,
1000 Ljubljana, Slovenia

Tel.: +386 (0)1-280 44 72, +386 (0)1-280-45-37
Fax: +386 (0)1-280 44 84
e-mail: info.ta@zag.si
<http://www.zag.si>



član EOTA
Member of EOTA

European Technical Approval ETA-13/0633

[English translation prepared by ZAG Ljubljana – Original version in Slovenian language]

Trade name:

Komercialno ime:

JUBIZOL PB EPS

Holder of approval:

Imetnik soglasja:

JUB d.o.o.

Dol pri Ljubljani 28

SI-1262 Dol pri Ljubljani

Slovenija

**Generic type and use of
construction product:**

Tip gradbenega proizvoda in njegova
predvidena uporaba::

**External Thermal Insulation Composite Systems
with rendering for the use as external insulation to
timber frame buildings**

Zunanji toplotnoizolacijski sestavljeni sistemi z ometom
(ETICS) namenjeni za izolacijo na montažnih hišah z leseno
nosilno konstrukcijo

Validity

Veljavnost

from / to:

od / do:

29. 6. 2013

28. 6. 2018

Manufacturing plant:

Proizvodni obrat:

Plant 1

Plant 2

Plant 3

Plant 4

Plant 5

Issue Nr.:

Izdaja št.:

1

**This European Technical
Approval contains:**

To Evropsko tehnično soglasje
vsebuje:

31 pages including 2 annex

31 strani vključno z 2 prilogama



Evropska organizacija za tehnična soglasja
European Organisation for Technical Approvals



I LEGAL BASES AND GENERAL CONDITIONS

1. This European Technical Approval is issued by the Slovenian National Building and Civil Engineering Institute (ZAG Ljubljana) in accordance with:
 - Council Directive 89/106/EEC of 21 December 1988 on the approximation of laws, regulations and administrative provisions of Member States relating to construction products¹, modified by the Council Directive 93/68/EEC² and Regulation (EC) no. 1882/2003 of the European Parliament and of the Council³,
 - Zakon o gradbenih proizvodih (ZGPro)⁴,
 - Common Procedural Rules for Requesting, Preparing and the Granting of European Technical Approvals set out in the Annex of Commission Decision 94/23/EC⁵,
 - Common Understanding of Assessment Procedure CUAP 04.04/26 for an European Technical Approval according to Article 9.2 of the Construction Products Directive ETICS with rendering for the use on timber frame buildings Version October 2007⁶.
2. The Slovenian National Building and Civil Engineering Institute (ZAG Ljubljana) is authorised to check whether the provisions of this European Technical Approval are met. Checking may take place in the manufacturing plant. Nevertheless, the responsibility for the conformity of the products to the European Technical Approval and for their fitness for the intended use remains with the holder of the European Technical Approval.
3. This European Technical Approval is not to be transferred to manufacturers or agents of manufacturer other than those indicated on page 1; or manufacturing plants other than those laid down in the context of this European Technical Approval.
4. This European Technical Approval may be withdrawn by the Slovenian National Building and Civil Engineering Institute (ZAG Ljubljana), in particular pursuant to information by the Commission according to Article 5(1) of the Council Directive 89/106/EEC.
5. Reproduction of this European Technical Approval including transmission by electronic means shall be in full. However, partial reproduction can be made with the written consent of the Slovenian National Building and Civil Engineering Institute (ZAG Ljubljana). In this case partial reproduction has to be designated as such. Texts and drawings of advertising brochures shall not contradict or misuse the European Technical Approval.
6. The European Technical Approval is issued by the approval body in its official language. This version corresponds fully to the version circulated within EOTA. Translations into other languages have to be designated as such.

¹ Official Journal of the European Communities no. L 40, 11.2.1989, p.12
² Official Journal of the European Communities no. L 220, 30.8.1993, p.1
³ Official Journal of the European Union no. L 284, 31.10.2003, p.1
⁴ Official Gazette of the Republic of Slovenia, no. 52/00 and no. 110/02
⁵ Official Journal of the European Communities no. L 17, 20.1.1994, p.34
⁶ In this document reference to CUAP 04.04/26



II SPECIFIC CONDITIONS OF THE EUROPEAN TECHNICAL APPROVAL

1. Definition of products and intended use

The External Thermal Insulation Composite System " **JUBIZOL PB EPS**", called ETICS in the following text, is designed and installed in accordance with the ETA-holder's design and installation instructions, deposited with ZAG, Ljubljana. The ETICS comprises the following components, which are factory-produced by the ETA-holder or a supplier. The ETA-holder is ultimately responsible for the ETICS.

This ETICS can be sold under the trade name "**JUBIZOL PB EPS**".

1.1. Definition of the construction product (kit)

The ETICS comprises the following: adhesive, insulation core, base coat reinforced with glass fibre mesh, key coat applied on the base coat, finishing coat and ancillary materials. The definition of the product and description of the components is following:

	Components (see § 2.2 for further description, characteristics and performances of the components)	Coverage (kg/m ²)	Thickness (mm)
Insulation materials with associated methods of fixing	Bonded ETICS		
	<ul style="list-style-type: none"> <i>Insulation product</i> EPS panels EPS-EN 13163-T2-L1-W2-S2-P4-DS(N)2-DS(70,-)1-TR150-BS100 	/	50 to 300
	<ul style="list-style-type: none"> <i>Primer</i> VEZAKRIL - shall be used prior to JUBIZOL ADHESIVE MORTAR on substrates Chipboard (LSB-P5) and Wood oriented strand board (OSB) 	/	/
	<ul style="list-style-type: none"> <i>Adhesives</i> <ol style="list-style-type: none"> JUBIZOL ADHESIVE MORTAR – dry mix cement based adhesive requiring addition of ~20 % water JUBIZOL CEMENT FREE ADHESIVE – ready to use paste 	3.5 – 4.0 (powder) 1.9 – 2.5 (paste)	/ /



	Components (see § 2.2 for further description, characteristics and performances of the components)	Coverage (kg/m ²)	Thickness (mm)
	Bonded ETICS with supplementary mechanical fixings <ul style="list-style-type: none"> <i>Insulation product</i> EPS panels EPS-EN 13163-T2-L1-W2-S2-P4-DS(N)2-DS(70,-)1-TR150-BS100 <i>Primer</i> VEZAKRIL - shall be used prior to JUBIZOL ADHESIVE MORTAR on substrates Chipboard (LSB-P5) and Wood oriented strand board (OSB) <i>Adhesives</i> <ol style="list-style-type: none"> JUBIZOL ADHESIVE MORTAR – dry mix cement based adhesive requiring addition of ~20 % water JUBIZOL CEMENT FREE ADHESIVE – ready to use paste <i>Anchors</i> <ol style="list-style-type: none"> EJOT Ejoterm STR H, Ejoterm STR H A2 Leskovec PZV and Pritisna ploščica PP or similar products with required documentation <p>Anchors are used only as ancillary material, where necessary to provide stability until adhesive has dried</p> 	/	50 to 300
Base coat	<ol style="list-style-type: none"> JUBIZOL ADHESIVE MORTAR – dry mix cement base coat powder requiring addition of ~ 20 % water. JUBIZOL ADHESIVE MORTAR consists of aggregates, cement, dispersion powder, special additives JUBIZOL CEMENT FREE BASE COAT – polymer based adhesive, paste form. JUBIZOL CEMENT FREE BASE COAT consists of aggregates, polymer, binders, special additives EPS ADHESIVE MORTAR – powdered high-elasticity cement-based mortar, refined with polymer binder, requiring addition of 20 % water. EPS ADHESIVE MORTAR consists of aggregates, cement, polymer binders, special additives JUBIZOL ULTRALIGHT FIX – dry mix cement base light coat powder requiring addition of ~ 23 % water. JUBIZOL ULTRALIGHT FIX consists of aggregates, cement, dispersion powder, special additives 	4.2 – 8.4 (powder) 3.8 – 4.5 (paste) 4.2 – 5.6 (powder) 6.5-8.5 (powder)	maximal (dry): 6 minimal (dry): 3 maximal (dry): 3 minimal (dry): 2.5 maximal (dry): 4 minimal (dry): 3 maximal (dry): 7.5 minimal (dry): 5
Glass fibre mesh	Standard meshes (glass fibres meshes with mesh size between 3.5 and 4.7 mm): <ul style="list-style-type: none"> JUBIZOL GLASS FIBRE MESH Where: - JUBIZOL GLASS FIBRE MESH = ETA- holder own designation 	1.1 m ² /m ²	/



	Components (see § 2.2 for further description, characteristics and performances of the components)	Coverage (kg/m ²)	Thickness (mm)
Key coat	<ul style="list-style-type: none"> • UNIGRUND – liquid, water based acrylic slurry primer intended as a key coat for all finishing coats (except mineral based finishing coats Mineral Trowelled Render, Mineral Smooth Render and Nivellin D + Revitalcolor AG) • AKRIL EMULSION - liquid, water based acrylic primer intended as a key coat for the acrylic and mineral based finishing coats • ACRYLCOLOR - liquid exterior acrylic waterborne facade paint as a key coat for the acrylic and mineral based finishing coats • JUBOSIL GX - liquid, water based silicate primer intended as a key coat for the silicate based finishing coats • JUBOSIL G - liquid, water based silicone primer intended as a key coat for the silicone based finishing coats 	0.15 - 0.20 ~ 0.1 ~ 0.1 l / m ² ~ 0.1 l / m ² ~ 0.1 l / m ²	/
Finishing coats	<ul style="list-style-type: none"> • Mineral Trowelled Render 2.0 / 2.5 – ready-mixed lime-cement based mortar requiring addition of water 20-23 %, based on lime, cement, aggregates, additives (in combination with all base coats except CEMENT FREE BASE COAT) • Mineral Smooth Render 1.5 / 2.5 – ready-mixed lime-cement based mortar requiring addition of water 20-23 %, based on lime, cement, aggregates, additives (in combination with all base coats except CEMENT FREE BASE COAT) • Ready to use paste – Silicate Trowelled Render 2.0 / 2.5 - based on potassium silicate and water-based acrylic binder, aggregates, additives. (in combination with all base coats except CEMENT FREE BASE COAT) • Ready to use paste – Silicate Smooth Render 1.5 / 2.0 / 2.5 - based on potassium silicate and water-based acrylic binder, aggregates, additives (in combination with all base coats except CEMENT FREE BASE COAT) • Ready to use paste – Silicone Trowelled Render 2.0 / 2.5 - based on silicone emulsion and water-based acrylic binder, aggregates, additives (in combination with all base coats) • Ready to use paste – Silicone Smooth Render 1.5 / 2.0 / 2.5 - based on silicone emulsion and water-based acrylic binder, aggregates, additives (in combination with all base coats) • Ready to use paste – Acrylic Trowelled Render 2.0 / 2.5 - based on water-based acrylic binder, aggregates, additives (in combination with all base coats) • Ready to use paste – Acrylic Smooth Render 1.5 / 2.0 / 2.5 - based on water-based acrylic binder, aggregates, additives (in combination with all base coats) • Nivellin D + Revitalcolor AG* – 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 (only in combination with base coat JUBIZOL ADHESIVE MORTAR) 	2.6 to 3.1 (powder) 2.6 to 3.6 (powder) 2.5 to 3.2 (paste) 3.0 to 5.5 (paste) 2.8 to 3.5 (paste) 2.4 to 4.7 (paste) 2.5 to 3.2 (paste) 2.5 to 5.0 (paste) ~ 4.5 + (~ 0.5 l/m ²) (powder + liquid)	Regulated by particles size



	Components (see § 2.2 for further description, characteristics and performances of the components)	Coverage (kg/m ²)	Thickness (mm)
	<ul style="list-style-type: none"> • Ready to use paste – Unixil G - Siloxanised Acrylic Smooth Render 1.5 / 2.0 / 2.5 - based on water-based acrylic binders, mineral fillers, special additives (in combination with all base coats) • Ready to use paste – Unixil Z - Siloxanised Acrylic Trowelled Render 2.0 / 2.5 - based on water-based acrylic binders, mineral fillers, special additives (in combination with all base coats) • Ready to use paste – Nanoxil G - Self-cleaning Silicone Smooth Render 1,5 / 2,0 / 2,5 - based on water-based silicone and acrylic binders, nano structures, mineral fillers and special additives (in combination with all base coats) 	2.5 to 5.0 (paste) 2.5 to 3.2 (paste) 2.6 to 4.7 (paste)	
Ancillary materials	Descriptions of the ancillary materials is to be in accordance with § 3.2.2.5 of the ETAG 004. The description and use of the appropriate materials remains under the ETA-holder's responsibility.		

* Note: Finishing coat Nivellin D + Revitalcolor AG is applied without key coat .



1.2. Intended use

This ETICS is intended for use as external insulation of timber frame buildings' walls. The substrates for the ETICS may be wood based substrate which has a density equal to or greater than 630 kg/m^3 and reaches Euroclass D according to EN 13501-1, and also any substrate of Euroclasses A1 and A2, according to EN 13501-1 or 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 no-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 airtightness 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 CUAP for ETA request 04.04/26) and shall be done in accordance with the national instructions. The ETICS if fixed by bonding.

The provisions made in this European Technical Approval (ETA) are based on an assumed intended working life of at least 25 years, provided that the installed ETICS is subjected to an appropriate use and maintenance. The indications given as to the working life cannot be interpreted as a guarantee given by the manufacturer or the Approval 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 Characteristics of product and methods of verification

2.1 General

The identification tests and the assessment of the fitness for use of this ETICS according to the Essential Requirements were carried out in compliance with the "Common Understanding of Assessment Procedure CUAP 04.04/26 for an European Technical Approval according to Article 9.2 of the Construction Products Directive ETICS with rendering for the use on timber frame buildings Version October 2007 (called CUAP 04.04/26 in this ETA).

The ETA is issued for the ETICS on the basis of agreed data, deposited with the approval body (i.e. ZAG Ljubljana), which identifies the ETICS that has been assessed and judged. Changes to the ETICS production process or the ETICS, which could result in this deposited data being incorrect, should be notified to ZAG Ljubljana before the changes are introduced. The approval body (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, and/or modification of the ETA, shall be necessary.

The characteristics (of the components as well as of the ETICS), not mentioned in this ETA nor in the annexes shall correspond to the respective values laid down in the technical documentation of this ETA, checked by ZAG Ljubljana.

