

Zavod za gradbeništvo Slovenije
Slovenian National Building and Civil
Engineering Institute

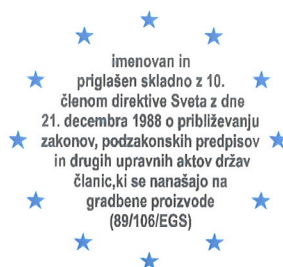
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član EOTA
Member of EOTA

European Technical Approval ETA-10/0334

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

Trade name:

Komercialno ime:

JUBIZOL MW

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 the walls of buildings**

Zunanji toplotnoizolacijski sestavljeni sistemi z ometom,
namenjeni za izolacijo zunanjih zidov zgradb

Validity from /to:

Veljavnost

od:

do:

28. 06. 2013

29. 07. 2015

This Approval replaces:

To soglasje zamenjuje:

ETA-10/0334 valid from 30.07.2010 to 29.07.2015

ETA-10/0334 veljavno od 30.07.2010 do 29.07.2015

Manufacturing plant:

Proizvodni obrat:

Plant 1 Plant 4

Plant 2 Plant 5

Plant 3

2

Issue Nr.:

Izdaja št.:

31 pages including 2 annexes

31 strani vključno z 2 prilogama

**This European Technical
Approval contains:**

To Evropsko tehnično soglasje
vsebuje:



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,
 - Guideline for European Technical Approval of “External Thermal Insulation Composite Systems with rendering”, ETAG no. 004, edition March 2000, amended June 2008⁶.
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.
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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 the reference is edition 2011 of the ETAG 004



II SPECIFIC CONDITIONS OF THE EUROPEAN TECHNICAL APPROVAL

1. Definition of products and intended use

The External Thermal Insulation Composite System, "JUBIZOL MW" 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.

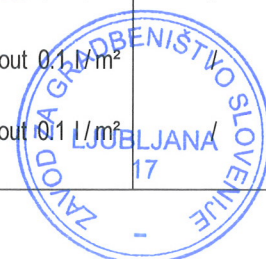
This ETICS can be sold under the trade name "JUBIZOL MW".

1.1. Definition of the construction product (kit)

| | Components (see § 2.3 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"> • Insulation product mineral wool lamellas (MW-EN 13162-T5-CS(10)30-TR80) • Adhesive <ul style="list-style-type: none"> a) JUBIZOL ADHESIVE MORTAR – dry mix cement based adhesive requiring addition of ~20 % water b) JUBIZOL ADHESIVE – dry mix cement based adhesive requiring addition of ~20 % water c) JUBIZOL ULTRALIGHT FIX - dry mix cement-based mortar with EPS beads, refined with polymer binder, requiring addition of ~24% water. d) JUBIZOL UNIWOOL ADHESIVE - dry mix cement-based mortar, refined with polymer binder, requiring addition of ~23% water | / | to 300 |
| | Bonded ETICS with supplementary mechanical fixings <ul style="list-style-type: none"> • Insulation product mineral wool lamellas (MW-EN 13162-T5-CS(10)30-TR80) • Adhesive <ul style="list-style-type: none"> a) JUBIZOL ADHESIVE MORTAR – dry mix cement based adhesive requiring addition of ~20 % water b) JUBIZOL ADHESIVE – dry mix cement based adhesive requiring addition of ~20 % water c) JUBIZOL ULTRALIGHT FIX - dry mix cement-based mortar with EPS beads, refined with polymer binder, requiring addition of ~24% water. d) JUBIZOL UNIWOOL ADHESIVE - dry mix cement-based mortar, refined with polymer binder, requiring addition of ~23% water • Anchors <ul style="list-style-type: none"> • EJOT Ejoterm ST U, Ejoterm STR-U, SDM-T plus, SDF-K plus, Ejoterm NT-U, Ejoterm NK-U, Ejoterm NTK-U • Hilti SX-FV, SD-FV 8, XI-FV • Fischer Termoz 8 U, 8 N • Leskovec Plastično pritrdilo PP, Pritrdilno sidro PSK, Pritrdilno sidro PPV <p>Anchors are used only where necessary to provide stability until adhesive has dried.</p> | / | to 300 |



| | Components (see § 2.3 for further description, characteristics and performances of the components) | Coverage (kg/m ²) | Thickness (mm) |
|----------------------------|--|--|--|
| | Mechanically fixed ETICS with anchors and supplementary adhesive (see § 2.2.8.3.a) for possible associations MW/anchors) <ul style="list-style-type: none"> • Insulation product <ul style="list-style-type: none"> a) mineral wool slabs (MW-EN 13162-T5-CS(10)30-TR10) or b) mineral wool lamellas (MW-EN 13162-T5-CS(10)30-TR80) • Adhesive <ul style="list-style-type: none"> a) JUBIZOL ADHESIVE MORTAR – dry mix cement based adhesive requiring addition of ~20 % water b) JUBIZOL ADHESIVE – dry mix cement based adhesive requiring addition of ~20 % water c) JUBIZOL ULTRALIGHT FIX - dry mix cement-based mortar with EPS beads, refined with polymer binder, requiring addition of ~ 24% water. d) JUBIZOL UNIWOOL ADHESIVE - dry mix cement-based mortar, refined with polymer binder, requiring addition of ~ 23% water • Anchors <ul style="list-style-type: none"> • EJOT Ejoterm ST U , Ejoterm STR-U, SDM-T plus, SDF-K plus, Ejoterm NT-U, Ejoterm NK-U, Ejoterm NTK-U • Hilti SX-FV , SD-FV 8, XI-FV • Fischer Termoz 8 U, 8 N • Leskovec Plastično pritrdilo PP and Pritrdilno sidro PSK, Pritrdilno sidro PPV | / / 3.5 - 5 (powder) 3.5 - 5 (powder) 4,8 – 9,6 (powder) 4,2 – 8,4 (powder) | to 300 to 300 / / |
| Base coat | <ul style="list-style-type: none"> a) 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 b) JUBIZOL ULTRALIGHT FIX - dry mix cement-based mortar with EPS beads, refined with polymer binder, requiring addition of ~ 24% water. c) JUBIZOL UNIWOOL ADHESIVE - dry mix cement-based mortar, refined with polymer binder, requiring addition of ~ 23% water | 5.6 – 8.4 (powder) 4,8 – 9,6 (powder) 4,2 – 8,4 (powder) | maximal (dry): 6 minimal (dry): 4 |
| Glass fibres meshes | <ul style="list-style-type: none"> • Standard meshes (glass fibres meshes with mesh size between 3.5 and 4.7 mm): • JUBIZOL GLASS FIBRE MESH Where: JUBIZOL GLASS FIBRE MESH = ETA- holder own designation | / | / |
| 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 about 0.1 about 0.1 l / m ² about 0.1 l / m ² about 0.1 l / m ² | / / / / / |



| | Components (see § 2.3 for further description, characteristics and performances of the components) | Coverage (kg/m ²) | Thickness (mm) |
|----------------------------|---|--|-----------------------------|
| 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 • 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 • Ready to use paste – Silicate Trowelled Render 2.0 / 2.5 - based on potassium silicate and water-based acrylic binder, aggregates, additives. • Ready to use paste – Silicate Smooth Render 1.5 / 2.0 / 2.5 - based on potassium silicate and water-based acrylic binder, aggregates, additives • Ready to use paste – Silicone Trowelled Render 2.0 / 2.5 - based on silicone emulsion and water-based acrylic binder, aggregates, additives • Ready to use paste – Silicone Smooth Render 1.5 / 2.0 / 2.5 - based on silicone emulsion and water-based acrylic binder, aggregates, additives • Ready to use paste – Acrylic Trowelled Render 2.0 / 2.5 - based on water-based acrylic binder, aggregates, additives • Ready to use paste – Acrylic Smooth Render 1.5 / 2.0 / 2.5 - based on water-based acrylic binder, aggregates, additives • 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 • 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 • Ready to use paste – Unixil Z - Siloxanised Acrylic Trowelled Render 2.0 / 2.5 - based on water-based acrylic binders, mineral fillers, special additives • 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 | <p>2.6 to 3.1 (powder)</p> <p>2.6 to 3.6 (powder)</p> <p>2.5 to 3.2 (paste)</p> <p>3.0 to 5.5 (paste)</p> <p>2.8 to 3.5 (paste)</p> <p>2.4 to 4.7 (paste)</p> <p>2.5 to 3.2 (paste)</p> <p>2.5 to 5.0 (paste)</p> <p>~ 4.5 + (~ 0.5 l/m²) (powder + liquid)</p> <p>2.5 to 5.0 (paste)</p> <p>2.5 to 3.2 (paste)</p> <p>2.6 to 4.7 (paste)</p> | Regulated by particles size |
| Ancillary materials | Descriptions in accordance with § 3.2.2.5 of the ETAG 004. Remain under the ETA-holder responsibilities | | |

* 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 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 the national instructions.

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 conditions laid down in sections 4.2, 5.1 and 5.2 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 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 "ETA Guideline no. 004" concerning External Thermal Insulation Composite Systems with rendering – edition March 2000, amended June 2008 (called ETAG no. 004 in this ETA).

