DECLARATION OF PERFORMANCE



In accordance with EU Construction Products Regulation (CPR) 305/2011 and 574/2014

DoP Enveo therm Excellent 002/2025

 Unique identification code of the product-type: Enveo therm^s Excellent

2. Intended use:

External Thermal Insulation Composite System (ETICS) with renderings (rendering system) The product is a kit, comprising from number of components

3. Manufacturer:

Saint-Gobain Construction Products CZ a.s. Smrčkova 2485/4 180 00 Praha 8 www.saint-gobain.cz

4. Authorised representative: -

5. System of assessment and verification of constancy of performance:

AVCP System 1

6. Notified body: Technical and Test Institute for Construction Prague / 1020

European Assessment Document: EAD 040083-00-0404 European Technical Assessment: ETA-24/0941 of 15/7/2025

Certificate of constancy of performance: 1020-CPR-020-052474 of 16/7/2025

7. Declared performance: Essential characteristics

| Essential characteristic | Assessment method (EAD clause) | Performance |
|--|--------------------------------------|--|
| Reaction to fire of ETICS | Cl. 2.2.1.1 | See cl. 3.1.1 |
| Reaction to fire of thermal insulation material | Cl. 2.2.1.2 | No performance assessed (See Annex No. 3 for component characteristic) |
| Façade fire performance | Cl. 2.2.2 | See cl. 3.1.2 |
| Propensity to undergo continuous smouldering of ETICS | Cl. 2.2.3 | No performance assessed |
| Content, emission and/or release of dangerous substances – leachable substances | Cl. 2.2.4 | No performance assessed |
| Water absorption of the base coat and the rendering system | Cl. 2.2.5.1 | See cl. 3.2.1 |
| Water absorption of the insulation product | Cl. 2.2.5.2 | No performance assessed (See Annex No. 3 for component characteristic) |
| Water-tightness of the ETICS: hygrothermal behaviour | Cl. 2.2.6 | See cl. 3.2.2 |
| Water-tightness: freeze thaw performance | Cl. 2.2.7 | See cl. 3.2.3 |
| Impact resistance | Cl. 2.2.8 | See cl. 3.2.4 |
| Water vapour permeability of the rendering system (equivalent air thickness s _d) | Cl. 2.2.9.1 | See cl. 3.2.5 |
| Water vapour permeability of thermal insulation product (water-vapour resistance factor) | Cl. 2.2.9.2 | No performance assessed (See Annex No. 3 for component characteristic) |
| Bond strength between the base coat and the thermal insulation product (mortar or paste) | Cl. 2.2.11.1 | See cl. 3.3.1 |
| Bond strength between the adhesive and the substrate | Cl. 2.2.11.2 | See cl. 3.3.2 |



Essential characteristcs

| Bond strength between the adhesive and the thermal insulation product | Cl. 2.2.11.3 | See cl. 3.3.3 |
|---|------------------------------|--|
| Fixing strength (transverse displacement) | Cl. 2.2.12 | No performance assessed |
| Wind load resistance of ETICS – pull-through tests of fixings | Cl. 2.2.13.1 | See cl. 3.3.4 |
| Wind load resistance of ETICS – static foam block test | Cl. 2.2.13.2 | No performance assessed |
| Wind load resistance of ETICS – dynamic wind uplift test | Cl. 2.2.13.3 | No performance assessed |
| Tensile test perpendicular to the faces of the thermal insulation product – in dry conditions | Cl. 2.2.14.1 | No performance assessed (See Annex No. 3 for component characteristic) |
| Tensile test perpendicular to the faces of the thermal insulation product – in wet conditions | Cl. 2.2.14.2 | No performance assessed |
| Shear strength and shear modulus of elasticity test of ETICS | Cl. 2.2.15 | No performance assessed (See Annex No. 3 for component characteristic) |
| Render strip tensile test | Cl. 2.2.17 | No performance assessed |
| Bond strength after ageing of finishing coat tested in the rig | Cl. 2.2.20.1 | See cl. 3.3.5 |
| Bond strength after ageing of finishing coat not tested in the rig | Cl. 2.2.20.2 | See cl. 3.3.6 |
| Tensile strength of the glass fibre mesh | Cl. 2.2.21.1 Cl. 2.2.21.2 | No performance assessed (See Annex No. 5 for component characteristic) |
| Airborne sound insulation of ETICS | Cl. 2.2.22.1 | No performance assessed |
| Dynamic stiffness of the thermal insulation product | Cl. 2.2.22.2 | No performance assessed |
| Air flow resistance of the thermal insulation product | Cl. 2.2.22.3 | No performance assessed |
| Thermal resistance and thermal transmittance of ETICS | Cl. 2.2.23 | See cl. 3.3.7 |
| Thermal resistance of the thermal insulation product | Cl. 2.2.23.1 | No performance assessed (See Annex No. 3 for component characteristic) |

8. the performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 7. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified in point 3.

Signed for and on behalf of the manufacturer

Liberec 22.7.2025

Petr Vlna

Product legislation manager,

Poh len

Weber

Saint-Gobain Construction prodcts CZ a.s.

Specific Parts

1 Technical description of the product

1.1 Composition of the product (kit)

Table 1

| Use and variant | Component | Coverage [kg/m²] | Thickness [mm] |
|------------------------------|--|-----------------------------------|----------------------|
| Adhesive 1 | EnveoKleber Excellent Powder requiring addition of water 0.24 l/kg Use as adhesive or supplementary adhesive | 3 – 10 (dry powder) | 2 - 20 |
| Thermal insulation product 1 | Factory made expanded polystyrene (EPS) See Annex No. 3 | N/A | 40 - 300 |
| Anchors | Plastic anchors See Annex No. 4 | N/A | N/A |
| Base coat 1 | EnveoKleber Excellent Powder requiring addition of water 0.24 l/kg | 4 - 5 (dry powder) | 3 – 5 |
| Reinforcement 1 | EnveoTherm R131 Standard glass fibre mesh, one or two layers Embedded in base coat See Annex No. 5 | 0.150–0.172 (per layer) | < 1.0 (per layer) |
| Reinforcement 2 | EnveoTherm R117 Standard glass fibre mesh, one or two layers Embedded in base coat See Annex No. 5 | 0.139–0.155 (per layer) | < 1.0 (per layer) |
| Reinforcement 3 | Standard glass fibre mesh, one or two layers Embedded in base coat See Annex No. 5 | 0.139–0.172 (per layer) | < 1.0 (per layer) |
| Key coat 1 | EnveoGrund Mandatory use with finishing coats 1 – 17 Applied in one layer 0.20 (lice | | < 0.2 |
| Finishing coat 1 | EnveoPutz Silicat Ready-to-use paste, floated structure | 2.2 – 2.7 (paste) | ~ 1.5 |
| Finishing coat 2 | EnveoPutz Silicat Ready-to-use paste, floated structure | 3.1 – 3.8 (paste) | ~ 2.0 |
| Finishing coat 3 | EnveoPutz Silicat Ready-to-use paste, rilled structure | 3.1 – 3.8 (paste) | ~ 2.0 |
| Finishing coat 4 | EnveoPutz Silicon Ready-to-use paste, floated structure | 2.2 – 2.7 (paste) | ~ 1.5 |
| Finishing coat 5 | EnveoPutz Silicon Ready-to-use paste, floated structure | 3.1 – 3.8 (paste) | ~ 2.0 |
| Finishing coat 6 | EnveoPutz Silicon Ready-to-use paste, rilled structure | 3.1 – 3.8 (paste) | ~ 2.0 |
| Finishing coat 7 | EnveoPutz Premium Silicon Ready-to-use paste, floated structure | 2.2 – 2.7 (paste) | ~ 1.5 |
| Finishing coat 8 | EnveoPutz Premium Silicon Ready-to-use paste, rilled structure EnveoPutz Premium Aqua | 3.1 – 3.8 (paste) 2.2 – 2.7 | ~ 2.0 |
| Finishing coat 9 | Ready-to-use paste, floated structure EnveoPutz Premium Aqua | (paste) 3.1 – 3.8 | ~ 1.5 |
| Finishing coat 10 | Ready-to-use paste, floated structure EnveoPutz Premium Aqua | (paste) 3.1 – 3.8 | ~ 2.0 |
| Finishing coat 11 | Ready-to-use paste, rilled structure EnveoPutz Premium Clean | (paste) | ~ 2.0 |
| Finishing coat 12 | Ready-to-use paste, floated structure EnveoPutz Premium Clean | (paste) 3.1 – 3.8 | ~ 1.5 |
| Finishing coat 13 | Ready-to-use paste, floated structure | | ~ 2.0 |

| Use and variant | Component | Coverage [kg/m²] | Thickness [mm] |
|-------------------|---------------------------------------|---------------------|-------------------|
| Einiching coat 14 | EnveoPutz Premium Clean | 3.1 – 3.8 | ~ 2.0 |
| Finishing coat 14 | Ready-to-use paste, rilled structure | (paste) | ~ 2.0 |
| Finishing coat 15 | EnveoPutz Premium Active | 2.2 – 2.7 | ~ 1.5 |
| | Ready-to-use paste, floated structure | (paste) | ~ 1.5 |
| Einiching coat 16 | EnveoPutz Premium Active | 3.1 – 3.8 | ~ 2.0 |
| Finishing coat 16 | Ready-to-use paste, floated structure | (paste) | ~ 2.0 |
| Finishing coat 17 | EnveoPutz Premium Active | 3.1 – 3.8 | ~ 2.0 |
| | Ready-to-use paste, rilled structure | (paste) | 2.0 |

Types of the ETICS can be distinguished, depending on the fixing method of thermal insulation:

Table 2

| | Type of ETICS | | | | Type of ETICS | | |
|----------------------------|--|--|--|--|---------------|--|--|
| Component | Purely bonded ETICS with supplementary anchors | | Mechanically fixed ETICS with anchors with supplementary adhesive | | | | |
| Adhesive | EnveoKleber Excellent Min. 40 % area covered by adhesive | EnveoKleber Excellent Min. 40 % area covered by adhesive | EnveoKleber Excellent | | | | |
| Thermal insulation product | Thermal insulation product 1 | Thermal insulation product 1 | Thermal insulation product 1 | | | | |
| Anchors | Not to be used | See Annex No. 4 | See Annex No. 4 | | | | |

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

This product is an External Thermal Insulation Composite System (ETICS) with renderings (rendering system). The product is a kit, comprising from number of components.

The ETICS may include special fittings (e.g. base profiles, corner profiles ...) to treat details of ETICS (connections, apertures, corners, parapets, sills ...). Special fittings are not listed nor assessed in this ETA.

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

The ETICS may be used on new or existing (retrofit) vertical building walls. The walls can be made of masonry (bricks, blocks, stones, etc.) or concrete (cast on site or as prefabricated panels). The surface can be rendered or unrendered.

The ETICS is designed for use on vertical walls but can also be used on horizontal or inclined surfaces which are not exposed to precipitation.

The ETICS is a non-load-bearing construction element and it does not contribute directly to the stability of the wall on which it is installed.

The ETICS provides additional thermal insulation and protection from effect of weathering.

The provisions made in this ETA are based on an assumed intended working life of at least 25 years, provided that the ETICS installed and maintained properly. The indications given as to the working life of the construction product cannot be interpreted as a guarantee, but are regarded as means for expressing the expected economically reasonable working life of the product.

Concerning product packaging, transport, storage, maintenance, replacement and repair it is the responsibility of the manufacturer to undertake the appropriate measures and to advice his clients on the transport, storage, maintenance, replacement and repair of the product as he considers necessary.

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

Table 3

| Essential characteristic | Assessment method (EAD clause) | Performance |
|---|--------------------------------------|--|
| Reaction to fire of ETICS | Cl. 2.2.1.1 | See cl. 3.1.1 |
| Reaction to fire of thermal insulation material | Cl. 2.2.1.2 | No performance assessed (See Annex No. 3 for component characteristic) |
| Façade fire performance | Cl. 2.2.2 | See cl. 3.1.2 |
| Propensity to undergo continuous smouldering of ETICS | Cl. 2.2.3 | No performance assessed |
| Content, emission and/or release of dangerous substances – leachable substances | Cl. 2.2.4 | No performance assessed |
| Water absorption of the base coat and the rendering system | Cl. 2.2.5.1 | See cl. 3.2.1 |
| Water absorption of the insulation product | Cl. 2.2.5.2 | No performance assessed (See Annex No. 3 for component characteristic) |
| Water-tightness of the ETICS: hygrothermal behaviour | Cl. 2.2.6 | See cl. 3.2.2 |
| Water-tightness: freeze thaw performance | Cl. 2.2.7 | See cl. 3.2.3 |
| Impact resistance | Cl. 2.2.8 | See cl. 3.2.4 |
| Water vapour permeability of the rendering system (equivalent air thickness s _d) | Cl. 2.2.9.1 | See cl. 3.2.5 |
| Water vapour permeability of thermal insulation product (water-vapour resistance factor) | Cl. 2.2.9.2 | No performance assessed (See Annex No. 3 for component characteristic) |
| Bond strength between the base coat and the thermal insulation product (mortar or paste) | Cl. 2.2.11.1 | See cl. 3.3.1 |
| Bond strength between the adhesive and the substrate | Cl. 2.2.11.2 | See cl. 3.3.2 |
| Bond strength between the adhesive and the thermal insulation product | Cl. 2.2.11.3 | See cl. 3.3.3 |
| Fixing strength (transverse displacement) | Cl. 2.2.12 | No performance assessed |
| Wind load resistance of ETICS – pull-through tests of fixings | Cl. 2.2.13.1 | See cl. 3.3.4 |
| Wind load resistance of ETICS – static foam block test | Cl. 2.2.13.2 | No performance assessed |
| Wind load resistance of ETICS – dynamic wind uplift test | Cl. 2.2.13.3 | No performance assessed |
| Tensile test perpendicular to the faces of the thermal insulation product – in dry conditions | Cl. 2.2.14.1 | No performance assessed (See Annex No. 3 for component characteristic) |
| Tensile test perpendicular to the faces of the thermal insulation product – in wet conditions | Cl. 2.2.14.2 | No performance assessed |
| Shear strength and shear modulus of elasticity test of ETICS | Cl. 2.2.15 | No performance assessed (See Annex No. 3 for component characteristic) |
| Render strip tensile test | Cl. 2.2.17 | No performance assessed |
| Bond strength after ageing of finishing coat tested in the rig | Cl. 2.2.20.1 | See cl. 3.3.5 |
| Bond strength after ageing of finishing coat not tested in the rig | Cl. 2.2.20.2 | See cl. 3.3.6 |

| Essential characteristic | Assessment method (EAD clause) | Performance |
|---|--------------------------------------|--|
| Tensile strength of the glass fibre mesh | Cl. 2.2.21.1 Cl. 2.2.21.2 | No performance assessed (See Annex No. 5 for component characteristic) |
| Airborne sound insulation of ETICS | Cl. 2.2.22.1 | No performance assessed |
| Dynamic stiffness of the thermal insulation product | Cl. 2.2.22.2 | No performance assessed |
| Air flow resistance of the thermal insulation product | Cl. 2.2.22.3 | No performance assessed |
| Thermal resistance and thermal transmittance of ETICS | Cl. 2.2.23 | See cl. 3.3.7 |
| Thermal resistance of the thermal insulation product | Cl. 2.2.23.1 | No performance assessed (See Annex No. 3 for component characteristic) |

Table 4 – Table 20 lay down assessments of essential characteristics of specific combinations of ETICS components.

Any combination of components not meeting the criteria of Table 4 – Table 21 is assessed as "No performance assessed" in regard to the relevant essential characteristic.

3.1 Safety in case of fire (BWR 2)

3.1.1 Reaction to fire of ETICS

Table 4

| Reaction to fire of ETICS: B-s1, d0 | | | | |
|-------------------------------------|---|--|--|--|
| Component | ETICS configuration | | | |
| Adhesive | In accordance with Table 1 | | | |
| Thermal insulation product | Thermal insulation product 1 Max. apparent density (EN 1602): 15 kg/m ³ | | | |
| Anchors | In accordance with Table 1 | | | |
| Base coat | In accordance with Table 1 Min. thickness 4 mm | | | |
| Reinforcement | Reinforcement 1, 2 or 3 in max. two layers with max. combined heat of combustion for both layers 2.12 MJ/m ² | | | |
| Key coat | In accordance with Table 1 | | | |
| Finishing coat | In accordance with Table 1 | | | |

3.1.2 Façade fire performance (MSZ 14800-6:2020)

Table 5

| Table 5 | Test method: MSZ 14800- | 6:2020 | |
|---|--|---|--|
| Component | Sample co see report M1-T273K-28984- | _ | |
| Substrate wall | Ytong cellular concrete (| A1 reaction to fire class) | |
| Adhesive | EnveoKlebe reaction to fire A2, or | rganic content 3.0 % | |
| Thermal insulation product | BACHL NIKEC 300 mm thickness, reaction MSZ EN 13163-T(1)-L(2)-W(2)-S(2)-P(TR | n to fire class E, 15 kg/m³, 5)-BS125-CS(10)80-DS(N)2-DS(70,-)2- | |
| Lintel of window 200 mm high, 300 mm overstretch | ISOVER Fassa reaction to fire A1, app | | |
| Anchors | Ejot STR U 2 | 2G, 6 pcs/m ² | |
| Base coat | EnveoKlebe (reaction to fire A2, or | | |
| Reinforcement | Webertherm glass fibre mesh, 145 g/m ² | | |
| Key coat | Enveo | Grund | |
| Finishing coat | EnveoPutz Pi 1.5 mm thickness, or | | |
| Performa | nce characteristics | Reaching the criterion | |
| | e burning of the facade coating, tends to the upper plane of the parapet | no limit state has occurred | |
| The surface burn of the facade coating, cladding, insulation system shall extend from the side of the firebox window opening in the horizontal direction to 1.50 m at any point along the full height of the model. | | no limit state has occurred | |
| One of the thermocouples located in the air gap or inside the structure measures temperatures above no limit state has occurred 500 °C. | | no limit state has occurred | |
| The difference between the temperature (T_{Iz}) at the exit from the fire zone at the given points in the flame zone to be considered for the assessment and the temperature (measured at the projection) in m: the window opening (T_{any}) in the observation deck shall not exceed 300 K for a period of more than 2 minutes. T_{Iz} - $T_{any} \le 300$ K | | no limit state has occurred | |
| In the case of cladding system dangerous falling of individual (m > 5 kg) | | no limit state has occurred | |
| Façade fire spread limit | | T _h = 45 minutes | |

3.2 Hygiene, health and the environment (BWR 3)

3.2.1 Water absorption of the base coat and the rendering system

Table 6

| Water absorption of the reinforced base coat | | | |
|---|------|------|--|
| ETICS configuration requirements: After After 1 h 24 h [kg/m²] [kg/m | | | |
| EnveoKleber Excellent | 0.02 | 0.26 | |

Table 7

| Water absorption of the complete rendering | | | | |
|--|-----------------------------------|--------------|---------------|---------|
| ETICS configuration requirements: | | After 1 h | After 24 h | |
| Base coat | Finishing coat Key coat | | [kg/m²] | [kg/m²] |
| EnveoKleber Excellent | EnveoPutz Silicat floated | EnveoGrund | 0.02 | 0.12 |
| EnveoKleber Excellent | EnveoPutz Silicat rilled | EnveoGrund | 0.01 | 0.11 |
| EnveoKleber Excellent | EnveoPutz Silicon floated | EnveoGrund | 0.01 | 0.06 |
| EnveoKleber Excellent | EnveoPutz Silicon rilled | EnveoGrund | 0.02 | 0.11 |
| EnveoKleber Excellent | EnveoPutz Premium Silicon floated | EnveoGrund | 0.01 | 0.10 |
| EnveoKleber Excellent | EnveoPutz Premium Silicon rilled | EnveoGrund | 0.01 | 0.11 |
| EnveoKleber Excellent | EnveoPutz Premium Aqua floated | EnveoGrund | 0.02 | 0.10 |
| EnveoKleber Excellent | EnveoPutz Premium Aqua rilled | EnveoGrund | 0.02 | 0.13 |
| EnveoKleber Excellent | EnveoPutz Premium Clean floated | EnveoGrund | 0.01 | 0.06 |
| EnveoKleber Excellent | EnveoPutz Premium Clean rilled | EnveoGrund | 0.01 | 0.10 |
| EnveoKleber Excellent | EnveoPutz Premium Active floated | EnveoGrund | 0.02 | 0.22 |
| EnveoKleber Excellent | EnveoPutz Premium Active rilled | EnveoGrund | 0.02 | 0.26 |

3.2.2 Water-tightness of the ETICS: hygrothermal behaviour

Table 8

Water-tightness of the ETICS: hygrothermal behaviour

Hygrothermal cycles have been performed on products tested in the hygrothermal rig. The ETICS passed the test and is assessed as **resistant to hygrothermal cycles**.

3.2.3 Water-tightness: freeze thaw performance

Table 9

Water-tightness: freeze thaw performance

The ETICS is **freeze-thaw resistant**, because the water absorption of both, reinforced base coat and the rendering system, are less than 0.5 kg/m² after 24 hours.

3.2.4 Impact resistance

Table 10

| Impact resistance (products tested after hygrothermal cycles on the rig) | | | | | |
|---|---|--|-------------------------|----------------------------|------------------------|
| ETICS c | ETICS configuration requirements: | | | Max. | Impact |
| Base coat | Finishing coat | Reinforcement and key coat | Cracks | impact diameter [mm] | resistance category |
| EnveoKleber Excellent | EnveoPutz Silicat floated | Reinforcement 1 or 2 or 3 and EnveoGrund | Yes – 3 J Yes – 10 J | 30 – 3 J 49 – 10 J | III |
| EnveoKleber Excellent | EnveoPutz Silicon floated | Reinforcement 1 or 2 or 3 and EnveoGrund | Yes – 3 J Yes – 10 J | 26 – 3 J 46 – 10 J | III |
| EnveoKleber Excellent | EnveoPutz Premium Aqua floated | Reinforcement 1 or 2 or 3 and EnveoGrund | Yes – 3 J Yes – 10 J | 25 – 3 J 50 – 10 J | III |
| EnveoKleber Excellent | webertene extraClean active floated | Reinforcement 1 or 2 or 3 and EnveoGrund | Yes – 3 J Yes – 10 J | 30 – 3 J 61 – 10 J | III |

Table 11

| Table 11 | Impact resistance (products tested after immersion in water) | | | | |
|--------------------------|--|--|-------------------------|----------------------------|----------------------------------|
| ETICS c | ETICS configuration requirements: | | | Max. | |
| Base coat | Finishing coat | Reinforcement and key coat | Cracks | impact diameter [mm] | Impact resistance category |
| EnveoKleber Excellent | EnveoPutz Silicat rilled | Reinforcement 1 or 2 or 3 and EnveoGrund | Yes – 3 J Yes – 10 J | 37 – 3 J 71 – 10 J | III |
| EnveoKleber Excellent | EnveoPutz Silicon rilled | Reinforcement 1 or 2 or 3 and EnveoGrund | Yes – 3 J Yes – 10 J | 30 – 3 J 62 – 10 J | III |
| EnveoKleber Excellent | EnveoPutz Premium Silicon floated | Reinforcement 1 or 2 or 3 and EnveoGrund | Yes – 3 J Yes – 10 J | 24 – 3 J 77 – 10 J | III |
| EnveoKleber Excellent | EnveoPutz Premium Silicon rilled | Reinforcement 1 or 2 or 3 and EnveoGrund | Yes – 3 J Yes – 10 J | 46 – 3 J 57 – 10 J | III |
| EnveoKleber Excellent | EnveoPutz Premium Aqua rilled | Reinforcement 1 or 2 or 3 and EnveoGrund | Yes – 3 J Yes – 10 J | 28 – 3 J 56 – 10 J | III |
| EnveoKleber Excellent | EnveoPutz Premium Clean floated | Reinforcement 1 or 2 or 3 and EnveoGrund | Yes – 3 J Yes – 10 J | 31 – 3 J 44 – 10 J | III |
| EnveoKleber Excellent | EnveoPutz Premium Clean rilled | Reinforcement 1 or 2 or 3 and EnveoGrund | Yes – 3 J Yes – 10 J | 35 – 3 J 56 – 10 J | III |
| EnveoKleber Excellent | EnveoPutz Premium Active rilled | Reinforcement 1 or 2 or 3 and EnveoGrund | Yes – 3 J Yes – 10 J | 50 – 3 J 65 – 10 J | III |

3.2.5 Water vapour permeability of the rendering system (equivalent air thickness s_d)

Table 12

| Water vapour permeability of the rendering system (equivalent air thickness \mathbf{s}_{d}) | | | | |
|--|--|------------|-------------------------|--|
| ETIC | ETICS configuration requirements: | | | |
| Base coat | Finishing coat | Key coat | - S _d [m] | |
| EnveoKleber Excellent | EnveoPutz Silicat floated EnveoGrund | | 0.3 | |
| EnveoKleber Excellent | EnveoPutz Silicat rilled | EnveoGrund | 0.2 | |
| EnveoKleber Excellent | EnveoPutz Silicon floated | EnveoGrund | 0.7 | |
| EnveoKleber Excellent | EnveoPutz Silicon rilled EnveoGrund | | 0.3 | |
| EnveoKleber Excellent | EnveoPutz Premium Silicon floated EnveoGrund | | 0.5 | |
| EnveoKleber Excellent | EnveoPutz Premium Silicon rilled | EnveoGrund | 0.3 | |
| EnveoKleber Excellent | EnveoPutz Premium Aqua floated | EnveoGrund | 0.7 | |
| EnveoKleber Excellent | EnveoPutz Premium Aqua rilled | EnveoGrund | 0.3 | |
| EnveoKleber Excellent | EnveoPutz Premium Clean floated | EnveoGrund | 0.8 | |
| EnveoKleber Excellent | EnveoPutz Premium Clean rilled | EnveoGrund | 0.4 | |
| EnveoKleber Excellent | EnveoPutz Premium Active floated EnveoGrund | | 0.2 | |
| EnveoKleber Excellent | EnveoPutz Premium Active rilled | EnveoGrund | 0.2 | |

3.3 Safety and accessibility in use (BWR 4)

3.3.1 Bond strength between the base coat and the thermal insulation product (mortar or paste)

Table 13

| Bond strength between the base coat and the thermal insulation product (mortar or paste) | | | | | |
|--|-----------------------|----------------------------------|---------------------------|---------------------|------|
| ETICS configuration requirements: | | Conditioning before | Rupture | Bond strength [kPa] | |
| Insulation product | Base coat | the test | type | Min. | Mean |
| Insulation product 1 (min. TR 123 kPa) | EnveoKleber Excellent | Initial state (dry condition) | In the insulation product | 112 | 123 |
| Insulation product 1 (min. TR 157 kPa) | EnveoKleber Excellent | After hygrothermal cycles | In the insulation product | 149 | 157 |

3.3.2 Bond strength between the adhesive and the substrate

Table 14

| Bond strength between the adhesive and the substrate | | | | | |
|--|-------------------------------------|--|-----------------|---------------------|------|
| ETICS conf | ETICS configuration requirements: | | Rupture | Bond strength [kPa] | |
| Substrate | Adhesive (and tested thickness) | before the test | type | Min. | Mean |
| Concrete | EnveoKleber Excellent (3 - 5 mm) | Initial state (dry condition) | In the adhesive | 1640 | 1816 |
| Concrete | EnveoKleber Excellent (3 - 5 mm) | 2 days immersion and 2 hours drying | In the adhesive | 325 | 474 |
| Concrete | EnveoKleber Excellent (3 - 5 mm) | 2 days immersion and min. 7 days drying | In the adhesive | 2652 | 3006 |

3.3.3 Bond strength between the adhesive and the thermal insulation product

Table 15

| Bond strength between the adhesive and the thermal insulation product | | | | | |
|---|-------------------------------------|--|--|-----------------------|------|
| ETICS configura | ETICS configuration requirements: | | Rupture | Bond strengt [kPa] | |
| Insulation product | Adhesive (and tested thickness) | before the test | type | Min. | Mean |
| Insulation product 1 (min. TR 122 kPa) | EnveoKleber Excellent (3 - 5 mm) | Initial state (dry condition) | In the insulation product | 113 | 122 |
| Insulation product 1 (min. TR 113 kPa) | EnveoKleber Excellent (3 - 5 mm) | 2 days immersion and 2 hours drying | In between the insulation product and the adhesive | 107 | 113 |
| Insulation product 1 (min. TR 127 kPa) | EnveoKleber Excellent (3 - 5 mm) | 2 days immersion and min. 7 days drying | In the insulation product | 116 | 127 |

3.3.4 Wind load resistance of ETICS – pull-through tests of fixings

Table 16

Wind load resistance of ETICS Assessed by means of: pull-through tests of fixings Failure load per fixing ETICS configuration requirements: Tested Test [kN] position conditions Individual **Insulation product Fixing** Mean Surface assembly Insulation product 1 or Thickness: countersunk assembly ≥ 40 mm Dry condition 0.394 (only single layer R_{panel} 23 °C 0.402 insulation product) ≥ 100 mm for and 0.442 0.400 Anchors in accordance 8 50 % relative countersunk with Annex No. 4 0.351 humidity of assembly Plate diameter: 0.412 air Tensile strength in ≥ 60 mm dry condition: Plate stiffness: ≥ 140 kPa ≥ 0.6 kN/mm Load / displacement graph: 400 300 Sila (N) 200 20,0 40,0 50.0 Prodlouzeni (mm) Test 1 — Test 2 — Test 3 — Test 4 — Test 5

| | Wind load i | resistance of E | TICS | | |
|--|---|-----------------|--|---|-------|
| Assessed by means of: pull-through tests of fixings | | | | | |
| ETICS configura | ation requirements: | Tested | Test | Failure load [kN | - |
| nsulation product | Fixing | position | conditions | Individual | Mean |
| nsulation product 1 Thickness: ≥ 40 mm or ≥ 100 mm for countersunk assembly Tensile strength in dry condition: ≥ 140 kPa | Surface assembly or countersunk assembly (only single layer insulation product) Anchors in accordance with Annex No. 4 Plate diameter: ≥ 60 mm Plate stiffness: ≥ 0.6 kN/mm | Rjoint | Dry condition 23 °C and 50 % relative humidity of air | 0.378 0.420 0.329 0.443 0.345 | 0.383 |
| pad / displacement g | угарп. | | | | |
| 300 (Z) (W) (D) 100 0,0 | 5,0 10,0 1 | 5,0 20,0 | 25,0 | 30,0 38 | 5,0 |
| 0,0 5,0 10,0 15,0 20,0 25,0 30,0 35,0 Prodlouzeni (mm) | | | | | |

3.3.5 Bond strength after ageing of finishing coat tested in the rig

Table 18

| Γable 18 | Во | | | finishing coat | | | | | | | | | | | | | | | | | | | | | |
|--|--|----------------------|---------------------------|---|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|------------|---------------------------|---------|---------|---------|---------|---------|---------|---------|---------|--|---------------------------|-----|--|
| ETICS configuration requirements: | | | ested in the rig | Rupture | Bond strength [kPa] | | | | | | | | | | | | | | | | | | | | |
| Insulation product | Base coat | Finishing coat | Key coat | type | Individual | Mean | | | | | | | | | | | | | | | | | | | |
| | | | | In the insulation product | 129 | | | | | | | | | | | | | | | | | | | | |
| Insulation | | EnveoPutz Silicat | | In the insulation product | 154 | | | | | | | | | | | | | | | | | | | | |
| product 1 (min. TR 150 | EnveoKleber Excellent | or | EnveoGrund | In the insulation product | 143 | 150 | | | | | | | | | | | | | | | | | | | |
| kPa) | | rilled | | In the insulation product | 162 | | | | | | | | | | | | | | | | | | | | |
| | | | | In the insulation product | 164 | | | | | | | | | | | | | | | | | | | | |
| | | | | In the insulation product | 174 | | | | | | | | | | | | | | | | | | | | |
| Insulation | | EnveoPutz Silicon | | In the insulation product | 139 | | | | | | | | | | | | | | | | | | | | |
| product 1 (min. TR 158 | product 1 EnveoKleber floated in. TR 158 Excellent | | In the insulation product | 167 | 158 | | | | | | | | | | | | | | | | | | | | |
| KPa) I I | rilled | | In the insulation product | 143 | | | | | | | | | | | | | | | | | | | | | |
| | | | In the insulation product | 165 | | | | | | | | | | | | | | | | | | | | | |
| | | | | In between the insulation and the base coat | 158 | | | | | | | | | | | | | | | | | | | | |
| Insulation | - | Premium Aqua floated | Premium Aqua | Premium Aqua floated | Premium Aqua floated | Premium Aqua floated | Premium Aqua floated | Premium Aqua floated | Premium Aqua floated | Premium Aqua floated | Premium Aqua floated | Premium | Premium | Premium | Premium | Premium | Premium | Premium | Premium | Premium | Premium | | In the insulation product | 158 | |
| product 1 (min. TR 165 kPa) | EnveoKleber Excellent | | | | | | | | | | | EnveoGrund | In the insulation product | 171 | 165 | | | | | | | | | | |
| ιι α) | | rilled | | In the insulation product | 172 | | | | | | | | | | | | | | | | | | | | |
| | | | | In the insulation product | 168 | | | | | | | | | | | | | | | | | | | | |
| | | | | In the insulation product | 165 | | | | | | | | | | | | | | | | | | | | |
| Inquiction | | EnveoPutz Premium | | In the insulation product | 176 | | | | | | | | | | | | | | | | | | | | |
| Insulation product 1 EnveoKleber (min. TR 167 kPa) | Active floated | EnveoGrund | In the insulation product | 169 | 167 | | | | | | | | | | | | | | | | | | | | |
| | or rilled | | In the insulation product | 166 | | | | | | | | | | | | | | | | | | | | | |
| | | | | In between the insulation and the base coat | 157 | | | | | | | | | | | | | | | | | | | | |

3.3.6 Bond strength after ageing of finishing coat not tested in the rig

Table 19

| Bond strength after ageing of finishing coat NOT tested in the rig | | | | | | | |
|---|-------------------------------|---|-----------------------------|---------------------------|---------------------------|------|--|
| ETICS configuration requirements: | | Rupture | Bond st [kP | _ | | | |
| Insulation product | Base coat | Finishing coat | Key coat | type | Individual | Mean | |
| | | | | In the insulation product | 143 | | |
| Insulation | product 1 EnveoKleber Silicon | Premium Silicon Final Control | Premium Silicon FinyeoGrund | | In the insulation product | 136 | |
| product 1 (min. TR 134 | | | | In the insulation product | 122 | 134 | |
| kPa) | | | In the insulation product | 137 | | | |
| | | | In the insulation product | 132 | | | |
| | EnveoPutz Premium | | | | In the insulation product | 141 | |
| Insulation | | | | In the insulation product | 138 | | |
| product 1 (min. TR 134 kPa) EnveoKleber Excellent floated or rilled | EnveoGrund | In the insulation product | 118 | 134 | | | |
| | | In the insulation product | 129 | | | | |
| | | | In the insulation product | 144 | | | |

3.3.7 Thermal resistance and thermal transmittance of ETICS

Table 20

| Thermal resistance and thermal transmittance of ETICS (R _{ETICS}) | | | |
|---|--------|--|--|
| Thermal resistance [(m²-K)/W] | | | |
| Rrender | 0.02 | | |
| Retics | ≥ 1.00 | | |

See Annex No. 2 for information on calculation of thermal transmittance of ETICS In order to meet criteria of EAD 040083-00-0404, the R_{ETICS} calculated in line with Annex No. 2 has to be min. 1.0 (m²·K)/W.

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

The applicable AVCP system is 2+ for any use except for uses subject to regulations on reaction to fire. For uses subject to regulations on reaction to fire the applicable AVCP systems regarding reaction to fire are 1 or 2+ depending on the conditions defined hereafter.

According to the Decision 97/556/EC as amended by Decision 2001/596/EC of the European Commission the systems of assessment and verification of constancy of performance (see Annex V to Regulation (EU) No 305/2011) given in the following table apply.

Table 21

| Product | Intended uses | Class(es) (reaction to fire) | Systems of assessment and verification of constancy of performance |
|--|--|--|--|
| | | $A(^1) - B(^1) - C(^1)$ | 1 |
| External thermal insulation composite system/kits with rendering (ETICS) | in external wall subject to fire regulations | $\mathbf{A}^{(2)} - \mathbf{B}^{(2)} - \mathbf{C}^{(2)}$ $\mathbf{A} \text{ (without testing)}$ $\mathbf{D} - \mathbf{E} - \mathbf{F}$ | 2+ |
| | in external wall not subject to fire regulations | any | 2+ |

⁽¹⁾ Materials for which the reaction to fire performance is susceptible to change during the production process

⁽²⁾ Materials for which the reaction to fire performance is not susceptible to change during the production process

5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD: 040083-00-0404

The manufacturer and the Technical and Test Institute for Construction Prague have agreed on a Control Plan which is deposited at the Technical and Test Institute for Construction Prague and it accompanies the ETA. The Control Plan specifies the type and frequency of checks/tests conducted on raw materials, manufactured and subcontracted components.

The manufacturer has defined special techniques of installation that shall always be followed.

Installation shall be done by qualified personnel trained in the special installation techniques defined by the manufacturer.

Notified body has to carry out the initial inspection of the manufacturing plant and of factory production control. Notified body also carries out continuous surveillance, assessment and evaluation of factory production control at least once per year.

Issued in Prague on 15/07/2025

by

Ing. Jiří Studnička, Ph.D.

Head of the Technical Assessment Body (TAB)

Annexes:

| Annex No. 1 | List of manufacturing plants |
|-------------|------------------------------------|
| Annex No. 2 | Thermal transmittance of ETICS |
| Annex No. 3 | Thermal insulation product 1 |
| Annex No. 4 | Mechanical fixing device – anchors |
| Annex No. 5 | Reinforcement – glass fibre mesh |

Annex No. 1 List of manufacturing plants

- SAINT-GOBAIN HUNGARY KFT.
 2085 Pilisvörösvár, Bécsi út 07/5 hrsz, Hungary
- Saint-Gobain Construction Products, s.r.o.
 Stará Vajnorská 139, 831 04 Bratislava, Slovakia
- 3. SAINT-GOBAIN GRAĐEVINSKI PROIZVODI D.O.O. Apatin Somborska 122, 25260 Apatin, Serbia
- SAINT-GOBAIN GRAĐEVINSKI PROIZVODI D.O.O.
 Topola Bulevar Vožda Karađorđa 126, 34310 Topola, Serbia
- 5. SAINT-GABAIN BULGARIA 9155 Izvorsko, Bulgaria
- SAINT-GABAIN BULGARIA
 2230 Kostinbrod 13 Imperator Konstantin Veliki str., Bulgaria

Annex No. 2 Thermal transmittance of ETICS

$$\boldsymbol{U}_c = \boldsymbol{U} + \Delta \boldsymbol{U} \left[W/m^2 \cdot K \right]$$

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

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

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

$$U = \frac{1}{R_{ETICS} + R_{substrate} + R_{se} + R_{si}} \left[W/m^2 \cdot K \right]$$

$$R_{ETICS} = R_{insulation} + R_{render} \left[m^2 \cdot K/W \right]$$

 $Where: \quad R_{insulation} = insulation \ thickness \ / \ thermal \ conductivity \ coefficient \ [m^2 \cdot K/W]$

 $R_{render} = 0.02 [m^2 \cdot K/W]$

R_{substrate} thermal resistance of the substrate wall [m²·K/W].

R_{se} external surface thermal resistance [m²·K/W].

R_{si} internal surface thermal resistance [m²·K/W].

$$\Delta U = \chi_P \times n + \sum \Psi i \times l_i \left[m^2 \cdot K/W \right]$$

Where: χ_P is point thermal transmittance value of the anchor [W/K]. Specified by the ETA for anchors or as follows:

0.002 [W/K] For anchors with a plastic screw/nail, stainless steel screw/nail with

the head covered by at least 15 mm plastic material, or with a

minimum 15 mm air gap at the head of the screw/nail.

0.004 [W/K] For anchors with a galvanized carbon steel screw/nail with the head

covered by at least 15 mm plastic material or a minimum 15 mm air $\,$

gap at the head of the screw /nail.

0.008 [W/K] For all other anchors (the worst case).

n is number of anchors per m^2 . In case n is more than 16, the U_{c} calculation does not apply.

Ψ_i is linear thermal transmittance value of the profile [W/m·K].

l_i is length of the profile per m².

The influence of thermal bridges can also be calculated as described in EN ISO 10211. If there are more than 16 pcs of anchors per m^2 the declared χ_P shall not be used. The EN ISO 10211 calculation shall be used in such case.

Annex No. 3 Thermal insulation product 1

| Factory made expanded polystyrene (EPS) | | | |
|--|---------------------------|--|--|
| Generic type | | | |
| Requir | ements: | | |
| Harmonized technical specification: | EN 13163 | | |
| Content of graphite: | Allowed | | |
| Composite insulation product: | No | | |
| Multi-layered insulation product | No | | |
| Facing: | No | | |
| Coating: | No | | |
| Max. thermal conductivity coefficient λ_{D} : | max. 0.065 W/(m·K) | | |
| Short-term water absorption: | max. 1.0 kg/m² | | |
| Length: | L(-) | | |
| Width: | W(-) | | |
| Thickness: | T(-) | | |
| Squareness in the direction of length and width: | S(-) | | |
| Flatness: | P(-) | | |
| Dimensional stability: | DS(70,)- DS(N)- | | |
| Reaction to fire of thermal insulation material: | E | | |
| Water vapour permeability of thermal insulation product (water-vapour resistance factor) μ: | 10 – 40[-] 20 – 70 [-] | | |
| Tensile test perpendicular to the faces of the thermal insulation product – in dry conditions: | min. 100 kPa | | |
| Shear strength: | min. 20 kPa | | |
| Shear modulus: | min. 1000 kPa | | |

Annex No. 4 Mechanical fixing device – anchors

| Plastic anchors for fixing external thermal insulation composite systems with rendering | | |
|---|---|--|
| Generic type | | |
| Requirements: | | |
| Harmonized technical specification: | ETAG 014 or EAD 330196-00-0604 or EAD 330196-01-0604 or superseding harmonized technical specification | |
| Setting: | to be screwed-in or nailed-in and: 1) to be installed flush with the insulation product with or without additional, flat, plate 2) to be installed countersunk (incision depth max. 20 mm) to the surface of the insulation product, without additional plate does not apply to multi-layered insulation products | |
| Diameter of the anchor plate: | min. 60 mm | |
| Load resistance of the anchor plate: | min. 1.25 kN | |
| Plate stiffness: | min. 0.6 kN/mm | |
| Material of the nail | plastics or metal | |

Annex No. 5 Reinforcement – glass fibre mesh

| Standard glass fibre mesh | | |
|---|---|--|
| EnveoTherm R131 Requirements: | | |
| | | |
| Mass per unit area: | 0.154 to 0.171 kg/m² | |
| Heat of combustion: | Max. 5.8 MJ/kg | |
| Mesh opening: | in warp direction: 3.0 to 4.5 mm in weft direction: 3.3 to 4.3 mm | |
| Residual tensile strength retained after alkaline conditioning: | in warp direction: min. 20 N/mm in weft direction: min. 20 N/mm | |
| Residual tensile strength after alkaline ageing | in warp direction: min. 50 % in weft direction: min. 50 % | |

| Standard glass fibre mesh | | |
|---|--|--|
| EnveoTherm R117 Requirements: | | |
| | | |
| Mass per unit area: | 0.139 to 0.154 kg/m ² | |
| Heat of combustion: | Max. 6.64 MJ/kg | |
| Mesh opening: | in warp direction: 3.0 to 4.5 mm in weft direction: 4.1 to 5.1 mm | |
| Residual tensile strength retained after alkaline conditioning: | in warp direction: min. 20 N/mm in weft direction: min. 20 N/mm | |
| Residual tensile strength after alkaline ageing | in warp direction: min. 50 % in weft direction: min. 50 % | |

| Standard glass fibre mesh | | |
|---|--|--|
| Generic type Requirements: | | |
| | | |
| Mass per unit area: | 0.139 to 0.172 kg/m ² | |
| Heat of combustion: | Max. 8.74 MJ/kg | |
| Mesh opening: | in warp direction: 3.0 to 4.5 mm in weft direction: 4.1 to 5.1 mm | |
| Residual tensile strength retained after alkaline conditioning: | in warp direction: min. 20 N/mm in weft direction: min. 20 N/mm | |
| Residual tensile strength after alkaline ageing | in warp direction: min. 50 % in weft directions: min. 50 % | |