



## Designated according to The Construction Products (Amendment etc.) (EU Exit) Regulations 2020 (as amended 2022)

| UK Technical Assessment                                                                                                                                            | UKTA-0836-25/7478 of 24/10/2025                                                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Technical Assessment Body issuing the UK Technical Assessment:                                                                                                     | British Board of Agrément                                                                                       |
| Trade name of the construction product:                                                                                                                            | EWI Pro Timber Frame & Park Home System                                                                         |
| Product family to which the construction product belongs:                                                                                                          | EWIS with renderings for the use on timber frame buildings<br>Insulation product – expanded polystyrene (EPS)   |
| Manufacturer:                                                                                                                                                      | EWI Pro Insulation Systems Ltd<br>Unit 1&2 King Georges Trading Estate<br>Davis Road,<br>Chessington<br>KT9 1TT |
| Manufacturing plant(s):                                                                                                                                            | EWI Pro Insulation Systems Ltd<br>Unit 1&2 King Georges Trading Estate<br>Davis Road,<br>Chessington<br>KT9 1TT |
| This UK Technical Assessment contains:                                                                                                                             | 43 pages including 4 Annexes which form an integral part of this assessment.                                    |
| This UK Technical Assessment is issued in accordance with The Construction Products (Amendment etc.) (EU Exit) Regulations 2020 (as amended 2022) on the basis of: | UKAD 040089-00-0404 “ETICS with renderings for the use on timber frame buildings”                               |

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## 1. Technical description of the product

### 1.1 Composition of the product (kit)

Table 1

| Use and variant              | Component                                                                                                                                                                                                                             | Coverage<br>[kg.m <sup>-2</sup> ] | Thickness<br>[mm] |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|-------------------|
| External board 1             | <b>Plywood in accordance with EN 636</b><br>- mounted on a timber frame<br>- density: 570 ± 10% kg.m <sup>-3</sup>                                                                                                                    | N/A                               | 21 – 25           |
| External board 2             | <b>Fiber-cement flat sheets in accordance with EN 12467+A2</b><br>- class of strength: 4<br>- mechanical resistance: minimum 18 MPa<br>- mounted on a timber frame<br>- density: 1220 ± 10% kg.m <sup>-3</sup>                        | N/A                               | 12 – 12.5         |
| External board 3             | <b>OSB boards in accordance with EN 300</b><br>- mounted on a timber frame<br>- density: 610 ± 10% kg.m <sup>-3</sup>                                                                                                                 | N/A                               | 12.5 – 25         |
| Primer for external boards   | <b>EWI-310 Universal Primer</b><br>Ready-to-use primer to increase adhesion of the adhesive to the external boards<br>Use optionally with external boards 1 – 3                                                                       | 0.25 – 0.5<br>(liquid)            | < 1.0             |
| Adhesive 1                   | <b>EWI-220 EPS Basecoat</b><br>Powder requiring addition of water 0.22 – 0.24 l.kg <sup>-1</sup>                                                                                                                                      | 3 – 5<br>(dry powder)             | 2 – 40            |
| Thermal insulation product 1 | <b>EPS BOARD (TR110)</b><br>Factory made expanded polystyrene (EPS) in accordance with EN 13163<br>See Annex No. 2                                                                                                                    | N/A                               | 40 – 300          |
| Mechanical fixing device 1   | <b>RAWLPLUG R-WW-T</b><br>Metal screw for wooden substrate<br>To be used with plastic <b>RAWLPLUG KC</b> insulation washer (only for surface use)<br>See Annex No. 3                                                                  | N/A                               | N/A               |
| Mechanical fixing device 2   | <b>Wkret-met Klimas KMH</b><br>Hardened countersunk flat head metal screw with partial thread<br>To be used with plastic <b>Klimas TD-060</b> or <b>TDP-060</b> washer<br>See Annex No. 3                                             |                                   |                   |
| Mechanical fixing device 3   | <b>RAWLPLUG WX-T</b><br>Metal screw for wooden substrate<br>To be used with plastic <b>RAWLPLUG KC</b> insulation washer (only for surface use) or <b>RAWLPLUG KCX-105</b> insulation washer (for countersunk use)<br>See Annex No. 3 |                                   |                   |
| Mechanical fixing device 4   | <b>Wkret-met Klimas KMWHT</b><br>Hardened countersunk flat head metal screw with partial thread<br>To be used with plastic <b>Klimas TD-060</b> or <b>TDP-060</b> washer<br>See Annex No. 3                                           |                                   |                   |

| Use and variant            | Component                                                                                                                                                                                                     | Coverage<br>[kg.m <sup>-2</sup> ]                                               | Thickness<br>[mm]                                              |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|----------------------------------------------------------------|
| Mechanical fixing device 5 | <b>Ejot TKR 4.8</b><br>Case-hardened steel screw for wooden substrate<br>To be used with plastic <b>Ejot SBH-T 65/25</b> insulation washer (only for surface use)<br>See Annex No. 3                          | N/A                                                                             | N/A                                                            |
| Mechanical fixing device 6 | <b>Ejothrm STR H</b><br>Mechanical fastener made of metal case hardened steel with plastic washer for wooden substrate<br>See Annex No. 3                                                                     |                                                                                 |                                                                |
| Base coat 1                | <b>EWI-225 Premium Basecoat</b><br>Powder requiring addition of water 0.24 – 0.26 l.kg <sup>-1</sup>                                                                                                          | 6 – 8<br>(dry powder)                                                           | 4 – 6<br>For 1 layer of mesh<br>6 – 10<br>For 2 layers of mesh |
| Reinforcement 1            | <b>EWI Pro Fibreglass Mesh FGM – 165</b><br>Standard glass fibre mesh, one or two layers<br>Embedded in base coat<br>See Annex No. 4                                                                          | 0.16 – 0.18<br>(per layer)                                                      | < 1.0<br>(per layer)                                           |
| Reinforcement 2            | <b>MASTERNET CLASSIC 145</b><br>Standard glass fibre mesh, one or two layers<br>Embedded in base coat<br>See Annex No. 4                                                                                      | 0.14 – 0.16<br>(per layer)                                                      | < 1.0<br>(per layer)                                           |
| Reinforcement 3            | <b>MASTERNET CLASSIC 160</b><br>Standard glass fibre mesh, one or two layers<br>Embedded in base coat<br>See Annex No. 4                                                                                      | 0.16 – 0.18<br>(per layer)                                                      | < 1.0<br>(per layer)                                           |
| Reinforcement 4            | <b>EWI Pro Fibreglass Mesh – (165g) Masternet Pro (965)</b><br>Standard glass fibre mesh, one or two layers<br>Embedded in base coat<br>See Annex No. 4                                                       | 0.15 – 0.18<br>(per layer)                                                      | < 1.0<br>(per layer)                                           |
| Key coat 1                 | <b>EWI-333 Topcoat Primer</b><br>Use mandatorily with finishing coats 3 – 6                                                                                                                                   | 0.2 – 0.3<br>(liquid)                                                           | < 0.2                                                          |
| Key coat 2                 | <b>EWI-334 Brick Effect Primer</b><br>Use mandatorily with finishing coats 11 – 14                                                                                                                            | 0.2 – 0.3<br>(liquid)                                                           | < 0.2                                                          |
| Finishing coat 1           | <b>EWI Pro Dash Receiver</b><br>Powder requiring addition of water 0.19 – 0.20 l.kg <sup>-1</sup><br>Trowelled on and sprinkled with <b>decorative pebble dash aggregate</b><br>Sizing of aggregate: 3 – 8 mm | 12.5 – 12.8<br>Approx.<br>1.6 kg per<br>mm / per m <sup>2</sup><br>(dry powder) | ~ 8.0                                                          |
| Finishing coat 2           | <b>EWI-077-1.0 Nano Drex Silicone Render</b><br>Silicone based finishing coat<br>Trowelled on and plastic floated for a textured finish<br>Maximum particle size 1.0 mm                                       | 1.9 – 2.1<br>(paste)                                                            | ~ 1.0                                                          |
| Finishing coat 3           | <b>EWI-077-1.5 Nano Drex Silicone Render</b><br>Silicone based finishing coat<br>Trowelled on and plastic floated for a textured finish<br>Maximum particle size 1.5 mm                                       | 2.4 – 3.1<br>(paste)                                                            | ~ 1.5                                                          |
| Finishing coat 4           | <b>EWI-077-2.0 Nano Drex Silicone Render</b><br>Silicone based finishing coat<br>Trowelled on and plastic floated for a textured finish<br>Maximum particle size 2.0 mm                                       | 3.1 – 3.6<br>(paste)                                                            | ~ 2.0                                                          |
| Finishing coat 5           | <b>EWI-077-3.0 Nano Drex Silicone Render</b><br>Silicone based finishing coat<br>Trowelled on and plastic floated for a textured finish<br>Maximum particle size 3.0 mm                                       | 4.0 – 4.5<br>(paste)                                                            | ~ 3.0                                                          |

| Use and variant     | Component                                                                                                                                                                                                                                                                         | Coverage<br>[kg.m <sup>-2</sup> ]                                             | Thickness<br>[mm] |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-------------------|
| Finishing coat 6    | <b>EWI-075-1.0 Silicone Render</b><br>Silicone based finishing coat<br>Trowelled on and plastic floated for a textured finish<br>Maximum particle size 1.0 mm                                                                                                                     | 1.9 – 2.1<br>(paste)                                                          | ~ 1.0             |
| Finishing coat 7    | <b>EWI-075-1.5 Silicone Render</b><br>Silicone based finishing coat<br>Trowelled on and plastic floated for a textured finish<br>Maximum particle size 1.5 mm                                                                                                                     | 2.4 – 3.1<br>(paste)                                                          | ~ 1.5             |
| Finishing coat 8    | <b>EWI-075-2.0 Silicone Render</b><br>Silicone based finishing coat<br>Trowelled on and plastic floated for a textured finish<br>Maximum particle size 2.0 mm                                                                                                                     | 3.1 – 3.6<br>(paste)                                                          | ~ 2.0             |
| Finishing coat 9    | <b>EWI-075-3.0 Silicone Render</b><br>Silicone based finishing coat<br>Trowelled on and plastic floated for a textured finish<br>Maximum particle size 3.0 mm                                                                                                                     | 4.0 – 4.5<br>(paste)                                                          | ~ 3.0             |
| Finishing coat 10   | <b>EWI-078-1.0 Brick Effect Stencil Render</b><br>Silicone based finishing coat<br>Trowelled on and plastic floated for a textured finish<br>Brick effect finish made with self-adhesive stencil<br>(removed after the finishing coat is applied)<br>Maximum particle size 1.0 mm | 1.9 – 2.1<br>(paste)                                                          | ~ 1.0             |
| Finishing coat 11   | <b>EWI-078-1.5 Brick Effect Stencil Render</b><br>Silicone based finishing coat<br>Trowelled on and plastic floated for a textured finish<br>Brick effect finish made with self-adhesive stencil<br>(removed after the finishing coat is applied)<br>Maximum particle size 1.5 mm | 2.4 – 3.1<br>(paste)                                                          | ~ 1.5             |
| Finishing coat 12   | <b>EWI-078-2.0 Brick Effect Stencil Render</b><br>Silicone based finishing coat<br>Trowelled on and plastic floated for a textured finish<br>Brick effect finish made with self-adhesive stencil<br>(removed after the finishing coat is applied)<br>Maximum particle size 2.0 mm | 3.1 – 3.6<br>(paste)                                                          | ~ 2.0             |
| Finishing coat 13   | <b>EWI-078-3.0 Brick Effect Stencil Render</b><br>Silicone based finishing coat<br>Trowelled on and plastic floated for a textured finish<br>Brick effect finish made with self-adhesive stencil<br>(removed after the finishing coat is applied)<br>Maximum particle size 3.0 mm | 4.0 – 4.5<br>(paste)                                                          | ~ 3.0             |
| Finishing coat 14   | <b>EWI-070 Wood Effect Render (Moulding)</b><br>Mineral decorative finishing coat<br>Trowelled on and then stencilled for the wood effect<br>finish<br>Maximum particle size 0.5 mm                                                                                               | 0.7 – 0.8<br>Approx.<br>1.5 Kg per<br>mm / per m <sup>2</sup><br>(dry powder) | ~ 0.5             |
| Decorative coat 1   | <b>EWI Glazure Paint</b><br>Ready-to-use decorative paint<br>To be used with finishing coat 11                                                                                                                                                                                    | 0.2 – 0.3<br>(liquid)                                                         | < 0.2             |
| Decorative coat 2   | <b>EWI-007 Nano Drex Silicone Paint</b><br>Ready-to-use hydrophobic silicone-based paint<br>To be used with finishing coat 11                                                                                                                                                     | 0.2 – 0.3<br>(liquid)                                                         | < 0.2             |
| Ancillary materials | Remain under the manufacturer's responsibility                                                                                                                                                                                                                                    |                                                                               |                   |

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

**Table 2**

| Component                  | Type of EWIS                                                        |                                                                      |                                                                      |
|----------------------------|---------------------------------------------------------------------|----------------------------------------------------------------------|----------------------------------------------------------------------|
|                            | Purely bonded EWIS                                                  | Bonded EWIS with supplementary anchors                               | Mechanically fixed EWIS with anchors with supplementary adhesive     |
| External board             | External board 1<br>or<br>External board 2                          | External board 1<br>or<br>External board 2<br>or<br>External board 3 | External board 1<br>or<br>External board 2<br>or<br>External board 3 |
| Adhesive                   | <b>EWI-220 EPS Basecoat</b><br>Minimum 60% area covered by adhesive | <b>EWI-220 EPS Basecoat</b><br>Minimum 30% area covered by adhesive  | <b>EWI-220 EPS Basecoat</b><br>Minimum 30% area covered by adhesive  |
| Thermal insulation product | Thermal insulation product 1                                        | Thermal insulation product 1                                         | Thermal insulation product 1                                         |
| Mechanical fixing device   | Not to be used                                                      | See Annex No. 3                                                      | See Annex No. 3                                                      |

## 2. Specification of the intended use(s) in accordance with the applicable UK Assessment Document (hereinafter UKAD)

This product is an External Wall Insulation System (EWIS) with renderings for the use on timber framed buildings. The surface for the application of EWIS is a board substrate (see Table 1). The product is a kit, comprising from number of components.

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

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

The EWISS can be used on new or existing (retrofit) vertical timber framed building walls. It can also be used on horizontal or inclined surfaces which are not exposed to precipitation.

The EWIS is a non-load-bearing construction element. It does not contribute directly to the stability of the timber framed wall on which it is installed, but it can contribute to durability by providing enhanced protection from the effect of weathering.

The EWIS is not intended to ensure the airtightness of the building structure. The timber framed building wall has to be sufficiently airtight to reduce the thermal transmittance of the wall and to avoid interstitial condensation due to convection.

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

The provisions made in this UKTA are based on an assumed intended working life of at least 25 years, provided that the EWIS 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                                                               |
|---------------------------------------------------------------------------------|----------------------------------|---------------------------------------------------------------------------|
| EWIS: Reaction to fire of EWIS                                                  | Cl. 2.2.1.1                      | See Cl. 3.2.1                                                             |
| EWIS: Water absorption                                                          | Cl. 2.2.2.1                      | See Cl. 3.3.1                                                             |
| EWIS: Water tightness: Hygrothermal behaviour                                   | Cl. 2.2.2.2                      | See Cl. 3.3.3                                                             |
| EWIS: Water tightness: Freeze-thaw behaviour                                    | Cl. 2.2.2.3                      | See Cl. 3.3.3                                                             |
| EWIS: Water tightness: Moisture content and gradient                            | Cl. 2.2.2.4                      | No performance assessed                                                   |
| EWIS: Water tightness: Water penetration                                        | Cl. 2.2.2.5                      | No performance assessed                                                   |
| EWIS: Water vapour permeability                                                 | Cl. 2.2.2.6                      | See Cl. 3.3.4                                                             |
| EWIS: Bond strength between: base coat and insulation product (mortar or paste) | Cl. 2.2.3.1                      | See Cl. 3.4.1                                                             |
| EWIS: Bond strength between: adhesive and substrate (external board)            | Cl. 2.2.3.2                      | See Cl. 3.4.2                                                             |
| EWIS: Bond strength between: adhesive and insulation product                    | Cl. 2.2.3.3                      | See Cl. 3.4.3                                                             |
| EWIS: Fixing strength (transverse displacement)                                 | Cl. 2.2.3.5                      | No performance assessed                                                   |
| EWIS: Wind load resistance:<br>- <b>pull-through tests of fixings</b>           | Cl. 2.2.3.6.1                    | See Cl. 3.4.4                                                             |
| EWIS: Wind load resistance:<br>- <b>static foam block</b>                       | Cl. 2.2.3.6.2                    | No performance assessed                                                   |
| EWIS: Wind load resistance:<br>- <b>dynamic wind uplift test</b>                | Cl. 2.2.3.6.3                    | No performance assessed                                                   |
| EWIS: Wind load resistance:<br>- <b>resistance to soft body impact</b>          | Cl. 2.2.3.6.4                    | No performance assessed                                                   |
| EWIS: Impact resistance                                                         | Cl. 2.2.3.19                     | See Cl. 3.4.5                                                             |
| EWIS: Bond strength after ageing                                                | Cl. 2.2.3.20 and<br>Cl. 2.2.3.21 | See Cl. 3.4.6 and<br>See Cl. 3.4.7                                        |
| EWIS: Airborne sound insulation                                                 | Cl. 2.2.4.1                      | No performance assessed                                                   |
| EWIS: Thermal resistance and thermal transmittance                              | Cl. 2.2.5.1                      | See Cl. 3.4.11                                                            |
| Insulation product: Reaction to fire                                            | Cl. 2.2.1.3                      | No performance assessed<br>(See Annex No. 2 for component characteristic) |
| Insulation product: Water absorption                                            | Cl. 2.2.2.7                      | No performance assessed<br>(See Annex No. 2 for component characteristic) |
| Insulation product: Water permeability                                          | Cl. 2.2.2.8                      | No performance assessed<br>(See Annex No. 2 for component characteristic) |
| Insulation product: Tensile test                                                | Cl. 2.2.3.7 and<br>Cl. 2.2.3.8   | No performance assessed<br>(See Annex No. 2 for component characteristic) |

| Essential characteristic                                                | Assessment method (EAD clause)               | Performance                                                               |
|-------------------------------------------------------------------------|----------------------------------------------|---------------------------------------------------------------------------|
| Insulation product: Shear strength and shear modulus of elasticity test | Cl. 2.2.3.9                                  | No performance assessed<br>(See Annex No. 2 for component characteristic) |
| Insulation product: Bending strength                                    | Cl. 2.2.3.10                                 | No performance assessed                                                   |
| Insulation product: Dynamic stiffness                                   | Cl. 2.2.4.2                                  | No performance assessed                                                   |
| Insulation product: Thermal resistance                                  | Cl. 2.2.5.2                                  | No performance assessed<br>(See Annex No. 2 for component characteristic) |
| Insulation product: Air flow resistance                                 | Cl. 2.2.5.3                                  | No performance assessed                                                   |
| Mechanical fixings: Reaction to fire                                    | Cl. 2.2.1.2                                  | No performance assessed                                                   |
| Mechanical fixings: Pull-out strength of mechanical fixings (anchors)   | Cl. 2.2.3.14                                 | See Cl. 3.4.8                                                             |
| Mechanical fixings: Protection against corrosion                        | Cl. 2.2.3.22                                 | No performance assessed                                                   |
| Base coat: performances                                                 | Cl. 2.2.3.15 and<br>Cl. 2.2.3.16             | See Cl. 3.4.9                                                             |
| Rendering system: tensile strength                                      | Cl. 2.2.3.12                                 | See Cl. 3.4.10                                                            |
| Reinforcement: tearing strength and elongation                          | Cl. 2.2.3.23<br>Cl. 2.2.3.24<br>Cl. 2.2.3.25 | No performance assessed<br>(See Annex No. 4 for component characteristic) |

Tables 4 to 37 lay down assessments of essential characteristics of specific combinations of EWIS components.

Any combination of components not meeting the criteria of Tables 4 to 37 are assessed as “No performance assessed” with regards to the relevant essential characteristic.

### 3.1. Mechanical resistance and stability (BWR 1)

Not applicable

### 3.2. Safety in case of fire (BWR 2)

#### 3.2.1 Reaction to fire of EWIS

Table 4

| Reaction to fire of EWIS: B – s2, d0 |                                                                                                                                                                                   |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component                            | EWIS configuration                                                                                                                                                                |
| External board (substrate)           | In accordance with Table 1                                                                                                                                                        |
| Primer for external boards           | None                                                                                                                                                                              |
| Adhesive                             | In accordance with Table 1                                                                                                                                                        |
| Thermal insulation product           | Thermal insulation product 1<br>Maximum apparent density (EN 1602): <b>15 kg.m<sup>-3</sup> ± 10 %</b><br>Thickness: <b>≥ 40 mm</b><br>Reaction to fire class: <b>E or better</b> |
| Anchors                              | In accordance with Table 1                                                                                                                                                        |
| Base coat                            | <b>In accordance with Table 1 in thickness of minimum 5 mm</b>                                                                                                                    |
| Reinforcement                        | In accordance with Table 1 in maximum two layers<br><b>Provided reinforcement has maximum heat of combustion 1.19 MJ.m<sup>-2</sup></b>                                           |
| Key coat                             | In accordance with Table 1                                                                                                                                                        |
| Finishing coat                       | In accordance with Table 1                                                                                                                                                        |
| Decorative coat                      | In accordance with Table 1                                                                                                                                                        |

Table 5

| Reaction to fire of EWIS: B – s1, d0 |                                                                                                                                                                                       |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component                            | EWIS configuration                                                                                                                                                                    |
| External board (substrate)           | In accordance with Table 1                                                                                                                                                            |
| Primer for external boards           | None                                                                                                                                                                                  |
| Adhesive                             | In accordance with Table 1                                                                                                                                                            |
| Thermal insulation product           | Thermal insulation product 1<br>Maximum apparent density (EN 1602): <b>15.65 kg.m<sup>-3</sup> ± 10 %</b><br>Thickness: <b>≥ 170 mm</b><br>Reaction to fire class: <b>E or better</b> |
| Anchors                              | In accordance with Table 1                                                                                                                                                            |
| Base coat                            | <b>In accordance with Table 1 in thickness of minimum 4 mm</b>                                                                                                                        |
| Reinforcement                        | In accordance with Table 1 in maximum two layers<br><b>Provided reinforcement has maximum heat of combustion 1.19 MJ.m<sup>-2</sup></b>                                               |
| Key coat                             | In accordance with Table 1                                                                                                                                                            |
| Finishing coat                       | EWI Pro Dash Receiver with decorative pebble dash aggregate                                                                                                                           |
| Decorative coat                      | In accordance with Table 1                                                                                                                                                            |

Table 6

| Reaction to fire of EWIS: B – s1, d0 |                                                                                                                                                                                                                                                                                |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component                            | EWIS configuration                                                                                                                                                                                                                                                             |
| External board (substrate)           | In accordance with Table 1                                                                                                                                                                                                                                                     |
| Primer for external boards           | None                                                                                                                                                                                                                                                                           |
| Adhesive                             | In accordance with Table 1                                                                                                                                                                                                                                                     |
| Thermal insulation product           | Thermal insulation product 1<br>Maximum apparent density (EN 1602): <b>18.5 kg.m<sup>-3</sup> ± 10 %</b><br>Thickness: <b>≥ 160 mm</b><br>Reaction to fire class: <b>E or better</b>                                                                                           |
| Anchors                              | In accordance with Table 1                                                                                                                                                                                                                                                     |
| Base coat                            | <b>In accordance with Table 1 in thickness of minimum 5 mm</b>                                                                                                                                                                                                                 |
| Reinforcement                        | Reinforcement 1 in one layer<br>or<br>Reinforcement 2 in one layer<br>or<br>Reinforcement 3 in one layer<br><b>Provided reinforcement has maximum heat of combustion 1.16 MJ.m<sup>-2</sup></b>                                                                                |
| Key coat                             | In accordance with Table                                                                                                                                                                                                                                                       |
| Finishing coat                       | EWI-075-1.0 Silicone Render <b>in thickness of 1.0 mm</b> ,<br>EWI-077-1.0 Nano Drex Silicone Render <b>in thickness of 1.0 mm</b> ,<br>EWI-078-1.0 Brick Effect Stencil Render <b>in thickness of 1.0 mm</b> ,<br>EWI Pro Dash Receiver with decorative pebble dash aggregate |
| Decorative coat                      | None                                                                                                                                                                                                                                                                           |

Table 7

| Reaction to fire of EWIS: B – s1, d0 |                                                                                                                                                                                                 |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component                            | EWIS configuration                                                                                                                                                                              |
| External board (substrate)           | In accordance with Table 1                                                                                                                                                                      |
| Primer for external boards           | None                                                                                                                                                                                            |
| Adhesive                             | In accordance with Table 1                                                                                                                                                                      |
| Thermal insulation product           | Thermal insulation product 1<br>Maximum apparent density (EN 1602): <b>25 kg.m<sup>-3</sup> ± 10 %</b><br>Thickness: <b>≥ 160 mm</b><br>Reaction to fire class: <b>E or better</b>              |
| Anchors                              | In accordance with Table 1                                                                                                                                                                      |
| Base coat                            | <b>In accordance with Table 1 in thickness of minimum 6 mm</b>                                                                                                                                  |
| Reinforcement                        | Reinforcement 1 in one layer<br>or<br>Reinforcement 2 in one layer<br>or<br>Reinforcement 3 in one layer<br><b>Provided reinforcement has maximum heat of combustion 1.16 MJ.m<sup>-2</sup></b> |
| Key coat                             | In accordance with Table 1                                                                                                                                                                      |
| Finishing coat                       | EWI Pro Dash Receiver with decorative pebble dash aggregate                                                                                                                                     |
| Decorative coat                      | None                                                                                                                                                                                            |

### 3.3. Health, hygiene and the environment (BWR 3)

#### 3.3.1 Water absorption

Table 8

| Water absorption of the reinforced base coat |                                    |                                     |
|----------------------------------------------|------------------------------------|-------------------------------------|
| EWIS configuration requirements:             | After 1 h<br>[kg.m <sup>-2</sup> ] | After 24 h<br>[kg.m <sup>-2</sup> ] |
| EWI-225 Premium Basecoat                     | 0.02                               | 0.20                                |

Table 9

| Water absorption of the complete rendering |                                                       |                            |                                    |                                     |
|--------------------------------------------|-------------------------------------------------------|----------------------------|------------------------------------|-------------------------------------|
| EWIS configuration requirements:           |                                                       |                            | After 1 h<br>[kg.m <sup>-2</sup> ] | After 24 h<br>[kg.m <sup>-2</sup> ] |
| Base coat                                  | Finishing coat                                        | Key coat                   |                                    |                                     |
| EWI-225 Premium Basecoat                   | EWI Pro Dash Receiver with pebble dash aggregate      | In accordance with Table 1 | 0.78                               | 1.07                                |
|                                            | EWI-077 Nano Drex Silicone Render (all grain sizes)   |                            | 0.04                               | 0.37                                |
|                                            | EWI-075 Silicone Render (all grain sizes)             |                            | 0.28                               | 0.48                                |
|                                            | EWI-078 Brick Effect Stencil Render (all grain sizes) |                            | 0.02                               | 0.31                                |
|                                            | EWI-070 Wood Effect Render (Moulding)                 |                            | 0.05                               | 0.24                                |

#### 3.3.2 Water tightness: Hygrothermal behaviour

Table 10

| Water tightness: Hygrothermal behaviour                                                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hygrothermal cycles have been performed on products tested in the hygrothermal rig. The EWIS passed the test and is assessed as <b>resistant to hygrothermal cycles</b> . |

#### 3.3.3 Water tightness: Freeze thaw behaviour

Table 11

| Water tightness: Freeze thaw behaviour                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Applies to finishing coats 2 – 14</p> <p>The EWIS is <b>freeze-thaw resistant</b>, because the water absorption of both, reinforced base coat and the rendering system, are less than 0.5 kg/m<sup>2</sup> after 24 hours.</p> <p>Applies to finishing coat 1:</p> <p>The EWIS is <b>freeze-thaw resistant</b>, because none of the following defects occurred during the testing on the rendering system:</p> <ul style="list-style-type: none"> <li>- Blistering or peeling of the finishing coat</li> <li>- Failure or cracking associated with joints between thermal insulation product boards or profiles fitted with the EWIS,</li> <li>- Detachment of the finishing coat</li> <li>- Width of cracks bigger than 0.2 mm allowing water penetration to the thermal insulating layer.</li> </ul> |

### 3.3.4 Water vapour permeability

**Table 12**

| Water vapour permeability of the rendering system (equivalent air thickness $s_d$ ) |                                                                            |                            |                                    |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------|----------------------------|------------------------------------|
| EWIS configuration requirements:                                                    |                                                                            |                            | Equivalent air thickness $s_d$ [m] |
| Base coat                                                                           | Finishing coat                                                             | Key coat                   |                                    |
| EWI-225 Premium Basecoat<br>Maximum thickness 10 mm                                 | EWI Pro Dash Receiver with pebble dash aggregate<br>Maximum thickness 8 mm | In accordance with Table 1 | <b>0.4</b>                         |
|                                                                                     | EWI-077 Nano Drex Silicone Render<br>Maximum thickness 3 mm                |                            | <b>0.4</b>                         |
| EWI-225 Premium Basecoat<br>Maximum thickness 10 mm                                 | EWI-075 Silicone Render<br>Maximum thickness 3 mm                          | In accordance with Table 1 | <b>0.4</b>                         |
|                                                                                     | EWI-078 Brick Effect Stencil Render<br>Maximum thickness 3 mm              |                            | <b>0.3</b>                         |
|                                                                                     | EWI-070 Wood Effect Render (Moulding)<br>Maximum thickness 2 mm            |                            | <b>0.3</b>                         |

### 3.4. Safety and accessibility in use (BWR 4)

#### 3.4.1 Bond strength between: base coat and insulation product (mortar or paste)

**Table 13**

| Bond strength between base coat (mortar or paste) and insulation product |                          |                               |                                                     |                     |       |
|--------------------------------------------------------------------------|--------------------------|-------------------------------|-----------------------------------------------------|---------------------|-------|
| EWIS configuration requirements:                                         |                          | Conditioning before the test  | Rupture type                                        | Bond strength [MPa] |       |
| Insulation product                                                       | Base coat                |                               |                                                     | Minimum             | Mean  |
| Insulation product 1                                                     | EWI-225 Premium Basecoat | Initial state (dry condition) | In the insulation product                           | 0.126               | 0.135 |
| Insulation product 1                                                     | EWI-225 Premium Basecoat | After hygrothermal cycles     | In between the insulation product and the base coat | 0.128               | 0.137 |

### 3.4.2 Bond strength between: adhesive and substrate (external board) (EAD 040089-00-0404 - clause 2.2.3.2)

**Table 14**

| Bond strength between adhesive (mortar or paste) and substrate (external boards) |                                 |                                                                                                                       |                 |                     |       |
|----------------------------------------------------------------------------------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------------|---------------------|-------|
| EWIS configuration requirements:                                                 |                                 | Conditioning before the test                                                                                          | Rupture type    | Bond strength [MPa] |       |
| Substrate                                                                        | Adhesive (and tested thickness) |                                                                                                                       |                 | Minimum             | Mean  |
| Plywood according to EN 636 (21 mm)                                              | EWI-220 EPS Basecoat (5 mm)     | Initial state (dry condition)                                                                                         | In the adhesive | 0.379               | 0.409 |
|                                                                                  |                                 | 7 days at $23 \pm 2^\circ\text{C}$ and $95 \pm 5\%$                                                                   | In the adhesive | 0.185               | 0.255 |
|                                                                                  |                                 | 7 days at $23 \pm 2^\circ\text{C}$ and $95 \pm 5\%$ and 7 days of drying at $23 \pm 2^\circ\text{C}$ and $50 \pm 5\%$ | In the adhesive | 0.358               | 0.392 |

**Table 14 (continued)**

| Bond strength between adhesive (mortar or paste) and substrate (external boards)    |                                 |                                                                                                                       |                                           |                     |       |
|-------------------------------------------------------------------------------------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------|-------------------------------------------|---------------------|-------|
| EWIS configuration requirements:                                                    |                                 | Conditioning before the test                                                                                          | Rupture type                              | Bond strength [MPa] |       |
| Substrate                                                                           | Adhesive (and tested thickness) |                                                                                                                       |                                           | Minimum             | Mean  |
| Fiber-cement flat sheets according to EN 12467+A2 (12 mm)                           | EWI-220 EPS Basecoat (5 mm)     | Initial state (dry condition)                                                                                         | In between the substrate and the adhesive | 0.395               | 0.455 |
|                                                                                     |                                 | 7 days at $23 \pm 2^\circ\text{C}$ and $95 \pm 5\%$                                                                   | In the adhesive                           | 0.272               | 0.304 |
|                                                                                     |                                 | 7 days at $23 \pm 2^\circ\text{C}$ and $95 \pm 5\%$ and 7 days of drying at $23 \pm 2^\circ\text{C}$ and $50 \pm 5\%$ | In the substrate                          | 0.351               | 0.455 |
| OSB boards according to EN 300 (12.5 mm) with one layer of EWI-310 Universal Primer | EWI-220 EPS Basecoat (5 mm)     | Initial state (dry condition)                                                                                         | In between the key coat and the adhesive  | 0.030               | 0.050 |
|                                                                                     |                                 | 7 days at $23 \pm 2^\circ\text{C}$ and $95 \pm 5\%$                                                                   | In between the key coat and the adhesive  | 0.009               | 0.016 |
|                                                                                     |                                 | 7 days at $23 \pm 2^\circ\text{C}$ and $95 \pm 5\%$ and 7 days of drying at $23 \pm 2^\circ\text{C}$ and $50 \pm 5\%$ | In between the key coat and the adhesive  | 0.024               | 0.042 |
| Concrete (40 mm)                                                                    | EWI-220 EPS Basecoat (5 mm)     | 2 days immersion in water and 2 hours of drying at $23 \pm 2^\circ\text{C}$ and $50 \pm 5\%$                          | In the adhesive                           | 0.251               | 0.280 |

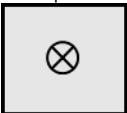
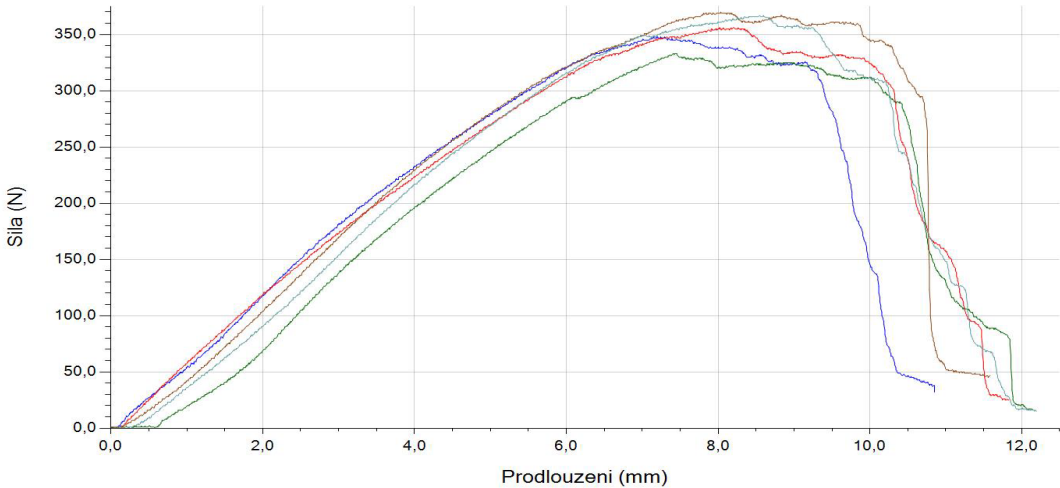
### 3.4.3 Bond strength between: adhesive and insulation product

**Table 15**

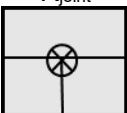
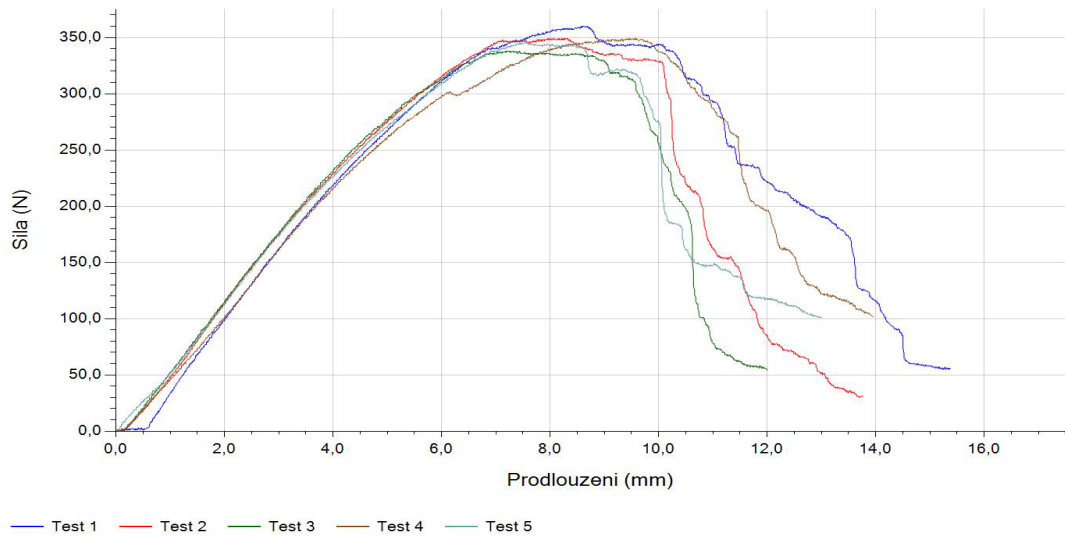
| Bond strength between adhesive (mortar or paste) and insulation product |                                 |                                                        |                                                            |                     |       |
|-------------------------------------------------------------------------|---------------------------------|--------------------------------------------------------|------------------------------------------------------------|---------------------|-------|
| EWIS configuration requirements:                                        |                                 | Conditioning before the test                           | Rupture type                                               | Bond strength [MPa] |       |
| Insulation product                                                      | Adhesive (and tested thickness) |                                                        |                                                            | Minimum             | Mean  |
| Insulation product 1                                                    | EWI-220 EPS Basecoat (5 mm)     | Initial state (dry condition)                          | In between the adhesive and the thermal insulation product | 0.111               | 0.126 |
|                                                                         |                                 | 2 days immersion in water and 2 hours of drying        | In between the adhesive and the thermal insulation product | 0.106               | 0.109 |
|                                                                         |                                 | 2 days immersion in water and minimum 7 days of drying | In the thermal insulation product                          | 0.128               | 0.131 |

### 3.4.4 Wind load resistance – pull-through tests of fixings

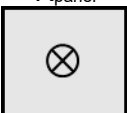
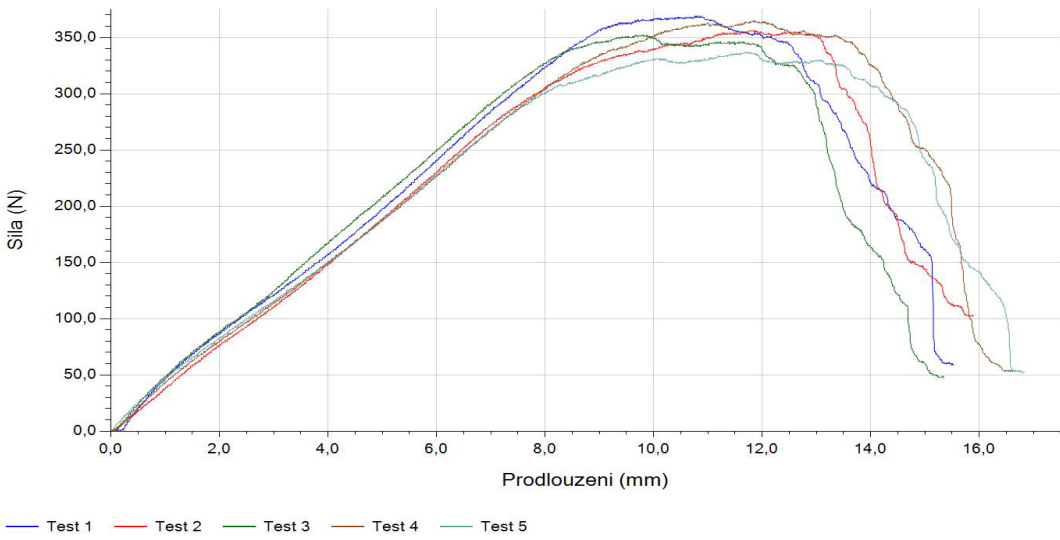
**Table 16**

| Wind load resistance of EWIS                                                                                                                                                                                                                                                                                                                                                     |                                                                         |                                                                                                         |                                                                              |                                           |       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-------------------------------------------|-------|
| Assessed by means of:<br>pull-through tests of fixings                                                                                                                                                                                                                                                                                                                           |                                                                         |                                                                                                         |                                                                              |                                           |       |
| EWIS configuration requirements:                                                                                                                                                                                                                                                                                                                                                 |                                                                         | Tested position                                                                                         | Test conditions                                                              | Failure load per fixing [kN]              |       |
| Insulation product                                                                                                                                                                                                                                                                                                                                                               | Fixing                                                                  |                                                                                                         |                                                                              | Individual                                | Mean  |
| Insulation product 1<br>(EPS)<br>Thickness:<br>$\geq 40$ mm<br>Tensile strength in dry condition:<br>$\geq 120$ kPa                                                                                                                                                                                                                                                              | RAWLPLUG R-WW-T<br>with<br>RAWLPLUG KC<br>washer ( $\varnothing 60$ mm) | $R_{\text{panel}}$<br> | Dry condition<br>$23^{\circ}\text{C}$<br>and<br>50% relative humidity of air | 0.348<br>0.356<br>0.333<br>0.370<br>0.367 | 0.355 |
| Load / displacement graph:                                                                                                                                                                                                                                                                                                                                                       |                                                                         |                                                                                                         |                                                                              |                                           |       |
|  <p> <span style="color: blue;">—</span> Test 1              <span style="color: red;">—</span> Test 2              <span style="color: green;">—</span> Test 3              <span style="color: brown;">—</span> Test 4              <span style="color: cyan;">—</span> Test 5         </p> |                                                                         |                                                                                                         |                                                                              |                                           |       |

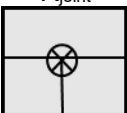
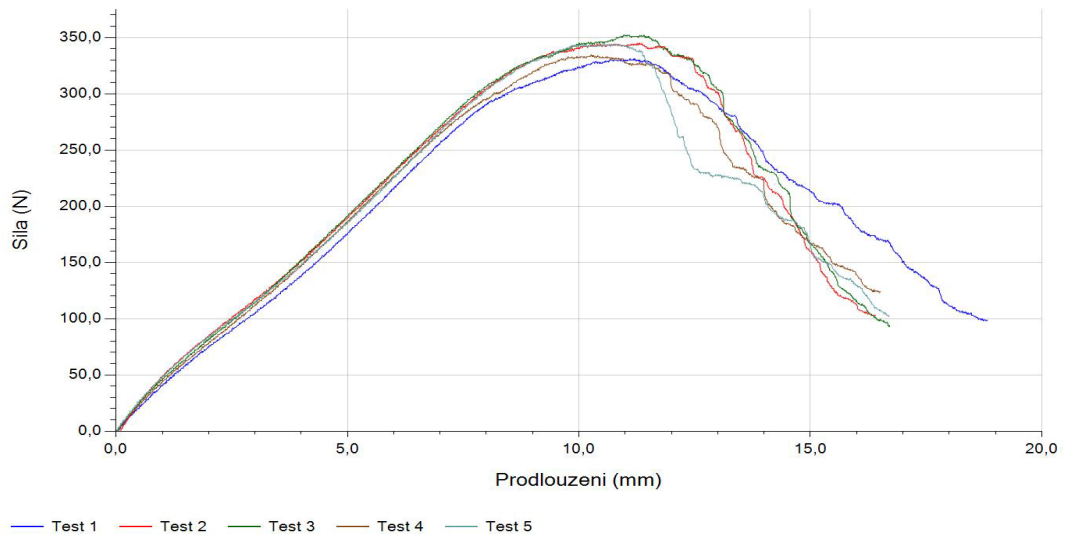
**Table 17**

| Wind load resistance of EWIS                                                                               |                                                                |                                                                                   |                                                        |                                           |       |
|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------|-------------------------------------------|-------|
| Assessed by means of:<br>pull-through tests of fixings                                                     |                                                                |                                                                                   |                                                        |                                           |       |
| EWIS configuration requirements:                                                                           |                                                                | Tested position                                                                   | Test conditions                                        | Failure load per fixing [kN]              |       |
| Insulation product                                                                                         | Fixing                                                         |                                                                                   |                                                        | Individual                                | Mean  |
| Insulation product 1 (EPS)<br>Thickness: $\geq 40$ mm<br>Tensile strength in dry condition: $\geq 120$ kPa | RAWLPLUG R-WW-T with RAWLPLUG KC washer ( $\varnothing 60$ mm) |  | Dry condition<br>23°C and 50% relative humidity of air | 0.360<br>0.349<br>0.338<br>0.349<br>0.346 | 0.348 |
| Load / displacement graph:                                                                                 |                                                                |                                                                                   |                                                        |                                           |       |
|                         |                                                                |                                                                                   |                                                        |                                           |       |

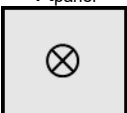
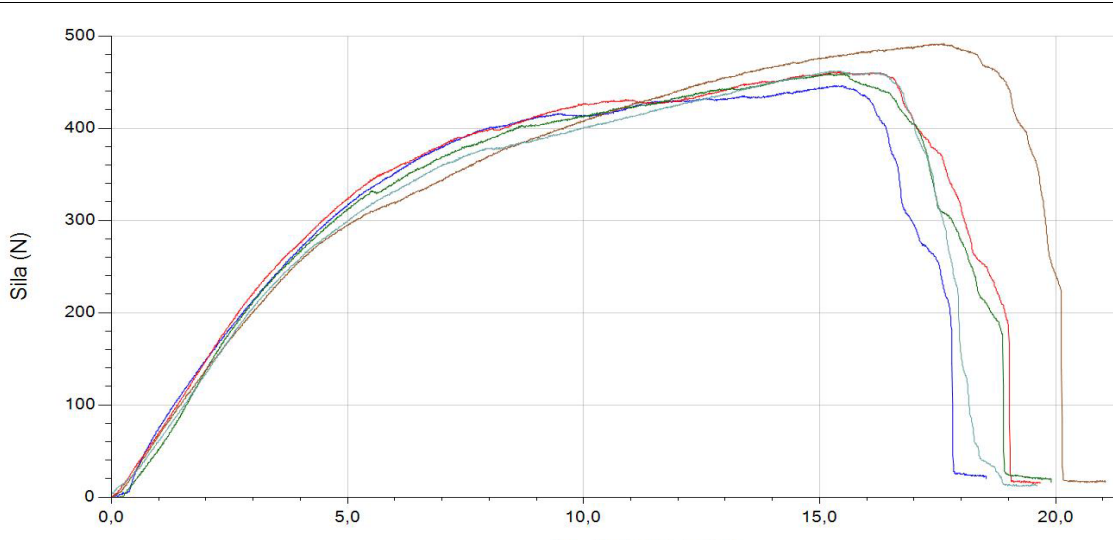
**Table 18**

| Wind load resistance of EWIS                                                                                                                                    |                                                              |                                                                                                         |                                                        |                                           |       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-------------------------------------------|-------|
| Assessed by means of:<br>pull-through tests of fixings                                                                                                          |                                                              |                                                                                                         |                                                        |                                           |       |
| EWIS configuration requirements:                                                                                                                                |                                                              | Tested position                                                                                         | Test conditions                                        | Failure load per fixing [kN]              |       |
| Insulation product                                                                                                                                              | Fixing                                                       |                                                                                                         |                                                        | Individual                                | Mean  |
| Insulation product 1 (EPS)<br>Thickness: $\geq 40$ mm<br>Tensile strength in dry condition: $\geq 120$ kPa                                                      | Wkret-met Klimas KMH with<br>Wkret-met Klimas TDP-060 washer | $R_{\text{panel}}$<br> | Dry condition<br>23°C and 50% relative humidity of air | 0.369<br>0.356<br>0.352<br>0.365<br>0.337 | 0.356 |
| Load / displacement graph:                                                                                                                                      |                                                              |                                                                                                         |                                                        |                                           |       |
|  <p>             — Test 1 — Test 2 — Test 3 — Test 4 — Test 5           </p> |                                                              |                                                                                                         |                                                        |                                           |       |

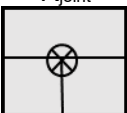
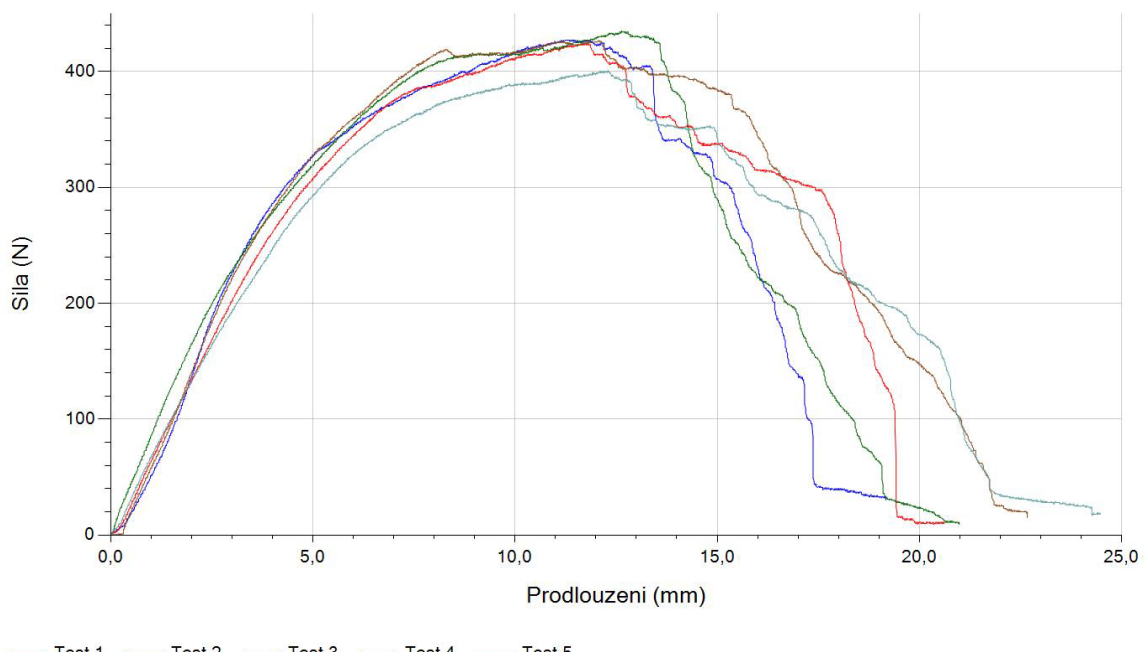
**Table 19**

| Wind load resistance of EWIS                                                                               |                                                              |                                                                                   |                                                        |                                           |       |
|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------|-------------------------------------------|-------|
| Assessed by means of:<br>pull-through tests of fixings                                                     |                                                              |                                                                                   |                                                        |                                           |       |
| EWIS configuration requirements:                                                                           |                                                              | Tested position                                                                   | Test conditions                                        | Failure load per fixing [kN]              |       |
| Insulation product                                                                                         | Fixing                                                       |                                                                                   |                                                        | Individual                                | Mean  |
| Insulation product 1 (EPS)<br>Thickness: $\geq 40$ mm<br>Tensile strength in dry condition: $\geq 120$ kPa | Wkret-met Klimas KMH with<br>Wkret-met Klimas TDP-060 washer |  | Dry condition<br>23°C and 50% relative humidity of air | 0.331<br>0.345<br>0.352<br>0.335<br>0.344 | 0.341 |
| Load / displacement graph:                                                                                 |                                                              |                                                                                   |                                                        |                                           |       |
|                         |                                                              |                                                                                   |                                                        |                                           |       |

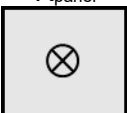
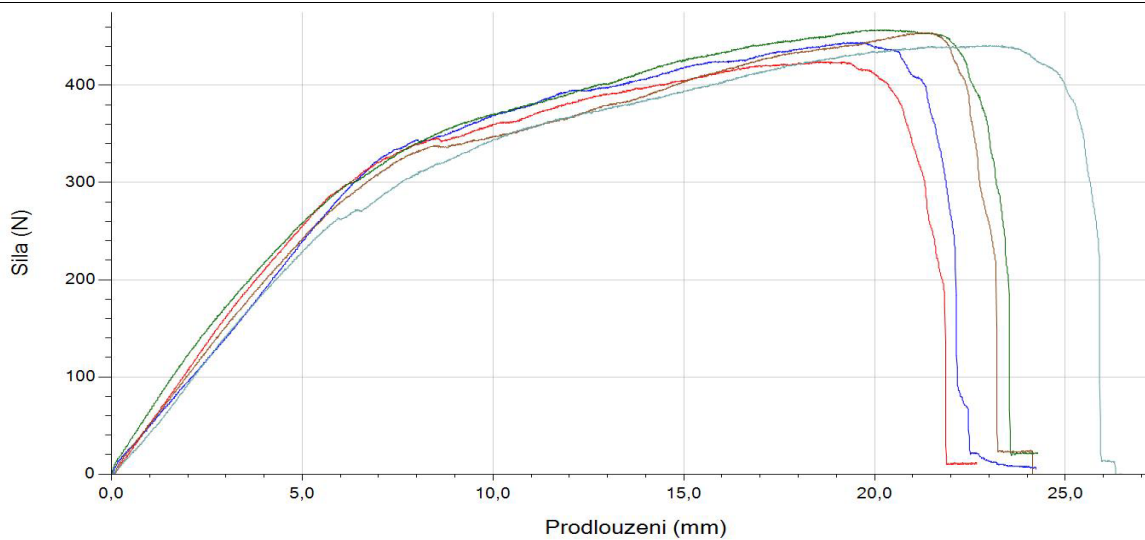
**Table 20**

| Wind load resistance of EWIS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                              |                                                                                                         |                                                        |                                           |       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-------------------------------------------|-------|
| Assessed by means of:<br>pull-through tests of fixings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                              |                                                                                                         |                                                        |                                           |       |
| EWIS configuration requirements:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                              | Tested position                                                                                         | Test conditions                                        | Failure load per fixing [kN]              |       |
| Insulation product                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Fixing                                                       |                                                                                                         |                                                        | Individual                                | Mean  |
| Insulation product 1 (EPS)<br>Thickness: $\geq 50$ mm<br>Tensile strength in dry condition: $\geq 144$ kPa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | RAWLPLUG WX-T with RAWLPLUG KC washer ( $\varnothing 60$ mm) | $R_{\text{panel}}$<br> | Dry condition<br>23°C and 50% relative humidity of air | 0.446<br>0.461<br>0.459<br>0.492<br>0.462 | 0.464 |
| Load / displacement graph:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                              |                                                                                                         |                                                        |                                           |       |
|  <p>             The graph displays five test curves (Test 1 to Test 5) showing the relationship between Force (N) and Displacement (mm). The y-axis represents Force (N) from 0 to 500, and the x-axis represents Displacement (mm) from 0.0 to 20.0. All curves show a similar trend: an initial linear increase in force with displacement, reaching a peak force between 400 N and 500 N at displacements between 15 mm and 20 mm, followed by a sharp drop in force.           </p> <p>             Legend:<br/>             Test 1 (Blue line)<br/>             Test 2 (Red line)<br/>             Test 3 (Green line)<br/>             Test 4 (Brown line)<br/>             Test 5 (Cyan line)           </p> |                                                              |                                                                                                         |                                                        |                                           |       |

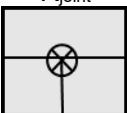
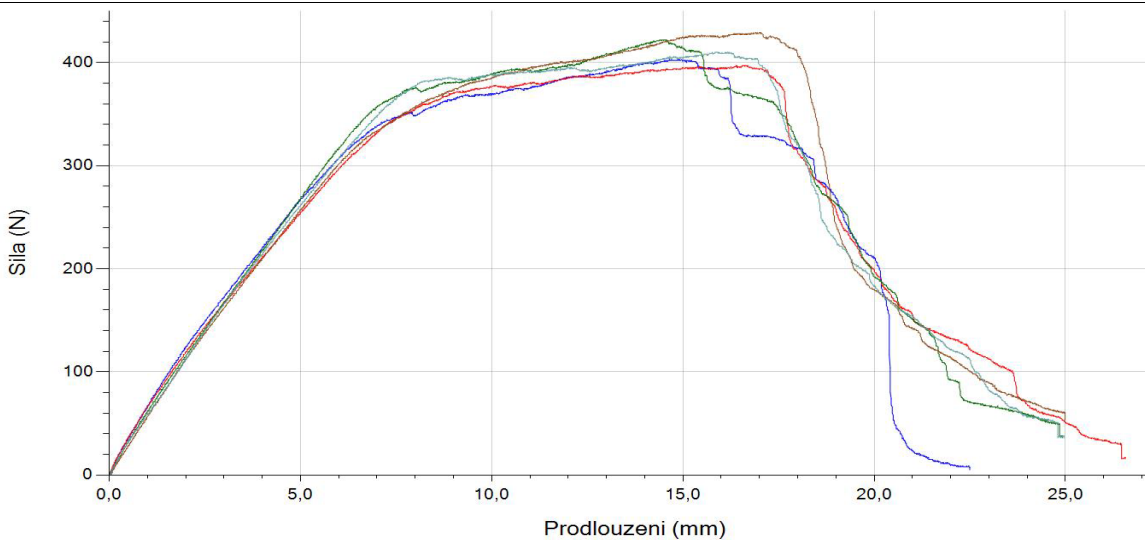
**Table 21**

| Wind load resistance of EWIS                                                                               |                                                              |                                                                                   |                                                        |                                           |       |
|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------|-------------------------------------------|-------|
| Assessed by means of:<br>pull-through tests of fixings                                                     |                                                              |                                                                                   |                                                        |                                           |       |
| EWIS configuration requirements:                                                                           |                                                              | Tested position                                                                   | Test conditions                                        | Failure load per fixing [kN]              |       |
| Insulation product                                                                                         | Fixing                                                       |                                                                                   |                                                        | Individual                                | Mean  |
| Insulation product 1 (EPS)<br>Thickness: $\geq 50$ mm<br>Tensile strength in dry condition: $\geq 144$ kPa | RAWLPLUG WX-T with RAWLPLUG KC washer ( $\varnothing 60$ mm) |  | Dry condition<br>23°C and 50% relative humidity of air | 0.427<br>0.425<br>0.435<br>0.427<br>0.401 | 0.423 |
| Load / displacement graph:                                                                                 |                                                              |                                                                                   |                                                        |                                           |       |
|                         |                                                              |                                                                                   |                                                        |                                           |       |

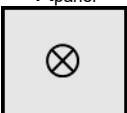
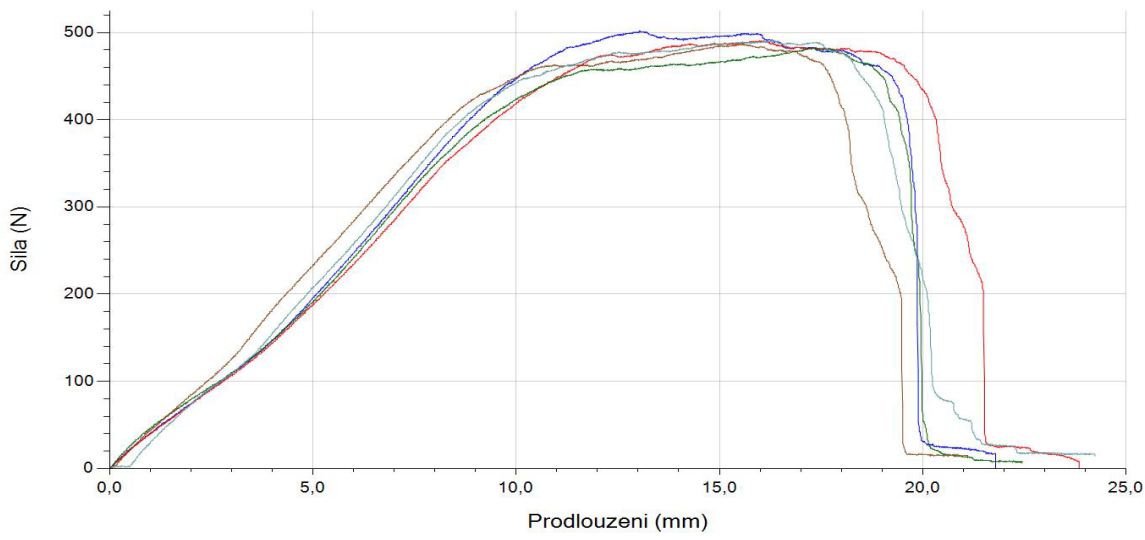
**Table 22**

| Wind load resistance of EWIS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                               |                                                                                                  |                                                                 |                                           |       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------|-------|
| Assessed by means of:<br>pull-through tests of fixings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                               |                                                                                                  |                                                                 |                                           |       |
| EWIS configuration requirements:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                               | Tested position                                                                                  | Test conditions                                                 | Failure load per fixing [kN]              |       |
| Insulation product                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Fixing                                        |                                                                                                  |                                                                 | Individual                                | Mean  |
| Insulation product 1<br>(EPS)<br>Thickness:<br>≥ 50 mm<br>Tensile strength in dry condition:<br>≥ 144 kPa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | RAWLPLUG WX-T with<br>RAWLPLUG KCX-105 washer | $R_{panel}$<br> | Dry condition<br>23°C and<br>50% relative<br>humidity of<br>air | 0.444<br>0.424<br>0.457<br>0.454<br>0.441 | 0.444 |
| Load / displacement graph:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                               |                                                                                                  |                                                                 |                                           |       |
|  <p>The graph plots Force (N) on the y-axis (0 to 400) against Displacement (mm) on the x-axis (0.0 to 25.0). Five curves are shown: Test 1 (blue), Test 2 (red), Test 3 (green), Test 4 (brown), and Test 5 (teal). All curves show a similar trend: an initial linear increase in force with displacement, reaching a peak force between 400 N and 450 N at a displacement of approximately 20 mm to 25 mm. After the peak, the force drops sharply to zero. Test 3 and Test 4 reach the highest peak forces, while Test 2 reaches the lowest.</p> |                                               |                                                                                                  |                                                                 |                                           |       |

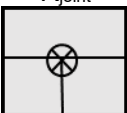
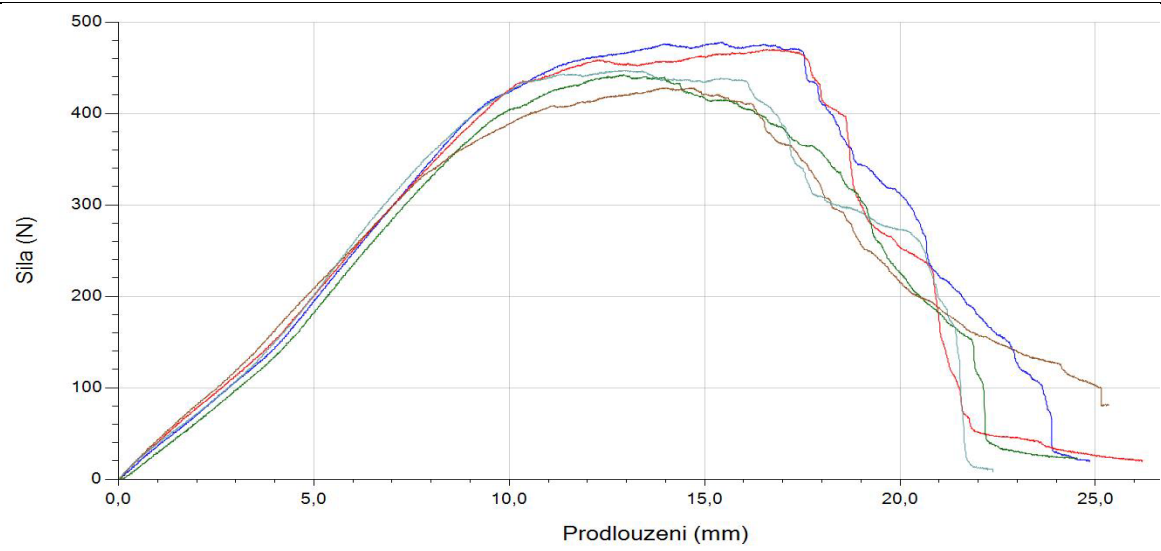
**Table 23**

| Wind load resistance of EWIS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                               |                                                                                   |                                                                 |                                           |       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------|-------|
| Assessed by means of:<br>pull-through tests of fixings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                               |                                                                                   |                                                                 |                                           |       |
| EWIS configuration requirements:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                               | Tested position                                                                   | Test conditions                                                 | Failure load per fixing [kN]              |       |
| Insulation product                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Fixing                                        |                                                                                   |                                                                 | Individual                                | Mean  |
| Insulation product 1<br>(EPS)<br>Thickness:<br>$\geq 50$ mm<br>Tensile strength in dry condition:<br>$\geq 144$ kPa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | RAWLPLUG WX-T with<br>RAWLPLUG KCX-105 washer |  | Dry condition<br>23°C and<br>50% relative<br>humidity of<br>air | 0.403<br>0.397<br>0.422<br>0.429<br>0.410 | 0.412 |
| Load / displacement graph:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                               |                                                                                   |                                                                 |                                           |       |
|  <p>The graph plots Force (N) on the y-axis (0 to 400) against Displacement (mm) on the x-axis (0.0 to 25.0). Five test curves are shown: Test 1 (blue), Test 2 (red), Test 3 (green), Test 4 (orange), and Test 5 (teal). All curves show a similar trend: a linear increase in force up to approximately 10 mm displacement, followed by a non-linear increase to a peak force between 350 N and 420 N at around 15-18 mm displacement. After the peak, the force drops sharply, with Test 1 showing the most rapid decline and Test 4 showing the most gradual.</p> |                                               |                                                                                   |                                                                 |                                           |       |

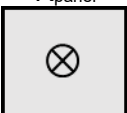
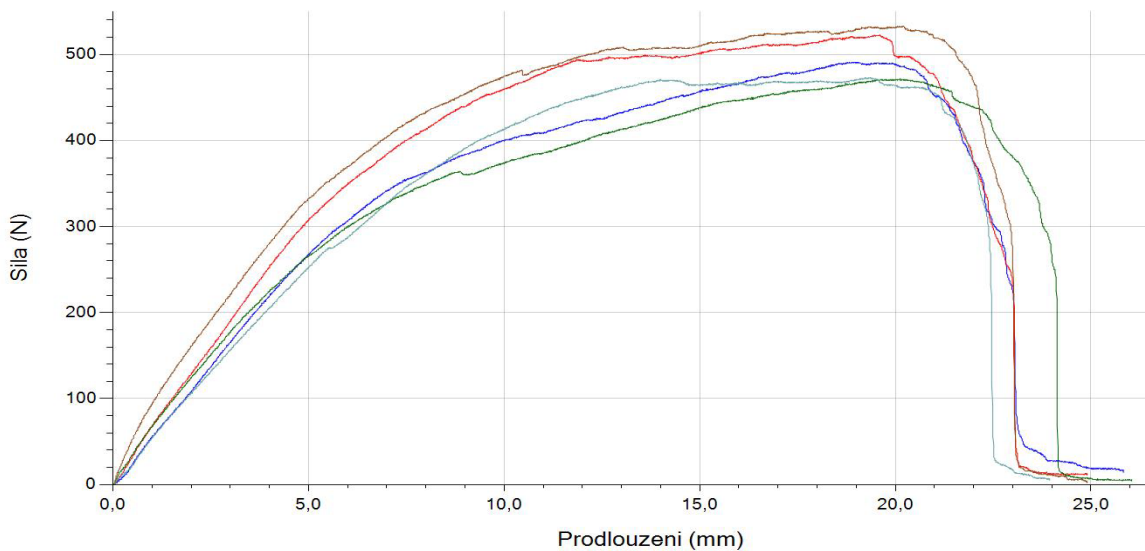
**Table 24**

| Wind load resistance of EWIS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                              |                                                                                                  |                                                                          |                                           |       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|-------------------------------------------|-------|
| Assessed by means of:<br>pull-through tests of fixings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                              |                                                                                                  |                                                                          |                                           |       |
| EWIS configuration requirements:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                              | Tested position                                                                                  | Test conditions                                                          | Failure load per fixing [kN]              |       |
| Insulation product                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Fixing                                                       |                                                                                                  |                                                                          | Individual                                | Mean  |
| Insulation product 1<br>(EPS)<br>Thickness:<br>≥ 50 mm<br>Tensile strength in<br>dry condition:<br>≥ 144 kPa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Wkret-met Klimas<br>KMWHT<br>with<br>Klimas TD-060<br>washer | $R_{panel}$<br> | Dry<br>condition<br>23°C<br>and<br>50%<br>relative<br>humidity of<br>air | 0.502<br>0.491<br>0.483<br>0.487<br>0.491 | 0.491 |
| Load / displacement graph:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                              |                                                                                                  |                                                                          |                                           |       |
|  <p>             The graph plots Force (N) on the y-axis (0 to 500) against Displacement (mm) on the x-axis (0.0 to 25.0). Five test curves are shown: Test 1 (blue), Test 2 (red), Test 3 (green), Test 4 (brown), and Test 5 (light blue). All curves exhibit a similar trend: an initial linear increase in force with displacement, reaching a peak force between 450 N and 500 N at a displacement of approximately 15 mm. After the peak, the force drops sharply, with most tests reaching zero force by a displacement of 20 mm. Test 2 (red) shows the highest peak force, while Test 3 (green) shows the lowest.           </p> |                                                              |                                                                                                  |                                                                          |                                           |       |

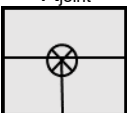
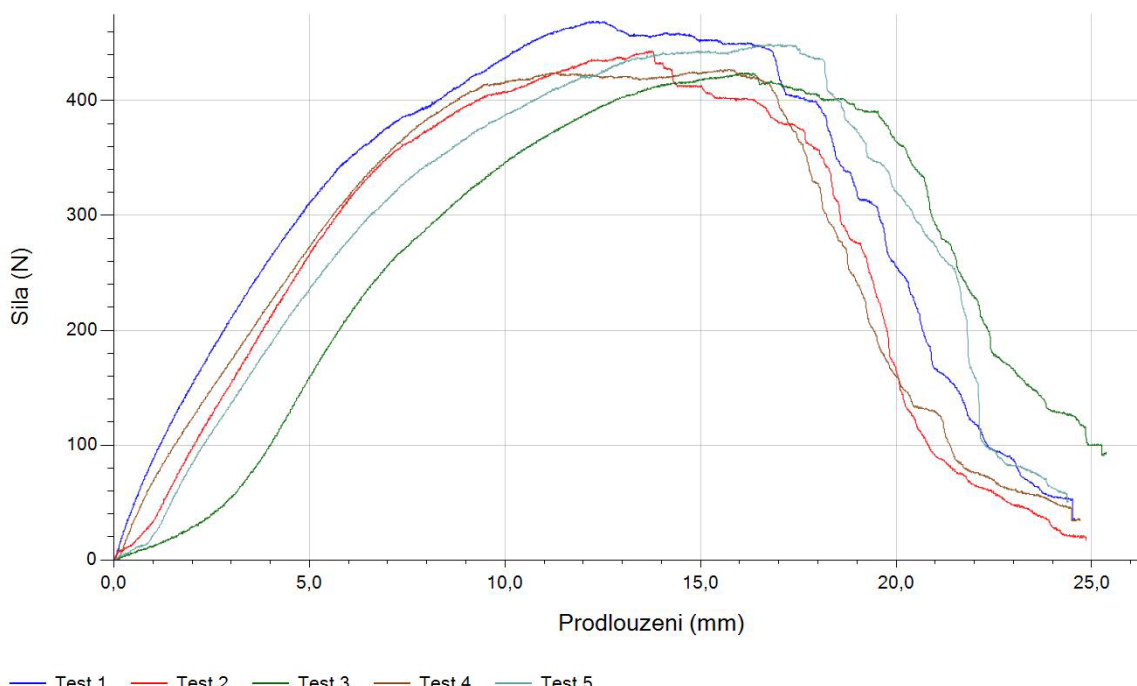
**Table 25**

| Wind load resistance of EWIS                                                                                        |                                                              |                                                                                   |                                                                       |                                           |       |
|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------------|-------|
| Assessed by means of:<br>pull-through tests of fixings                                                              |                                                              |                                                                                   |                                                                       |                                           |       |
| EWIS configuration requirements:                                                                                    |                                                              | Tested position                                                                   | Test conditions                                                       | Failure load per fixing [kN]              |       |
| Insulation product                                                                                                  | Fixing                                                       |                                                                                   |                                                                       | Individual                                | Mean  |
| Insulation product 1<br>(EPS)<br>Thickness:<br>$\geq 50$ mm<br>Tensile strength in dry condition:<br>$\geq 144$ kPa | Wkret-met Klimas<br>KMWHT<br>with<br>Klimas TD-060<br>washer |  | Dry condition<br>23°C<br>and<br>50%<br>relative<br>humidity of<br>air | 0.478<br>0.470<br>0.443<br>0.428<br>0.447 | 0.453 |
| Load / displacement graph:                                                                                          |                                                              |                                                                                   |                                                                       |                                           |       |
|                                  |                                                              |                                                                                   |                                                                       |                                           |       |

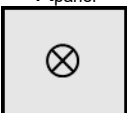
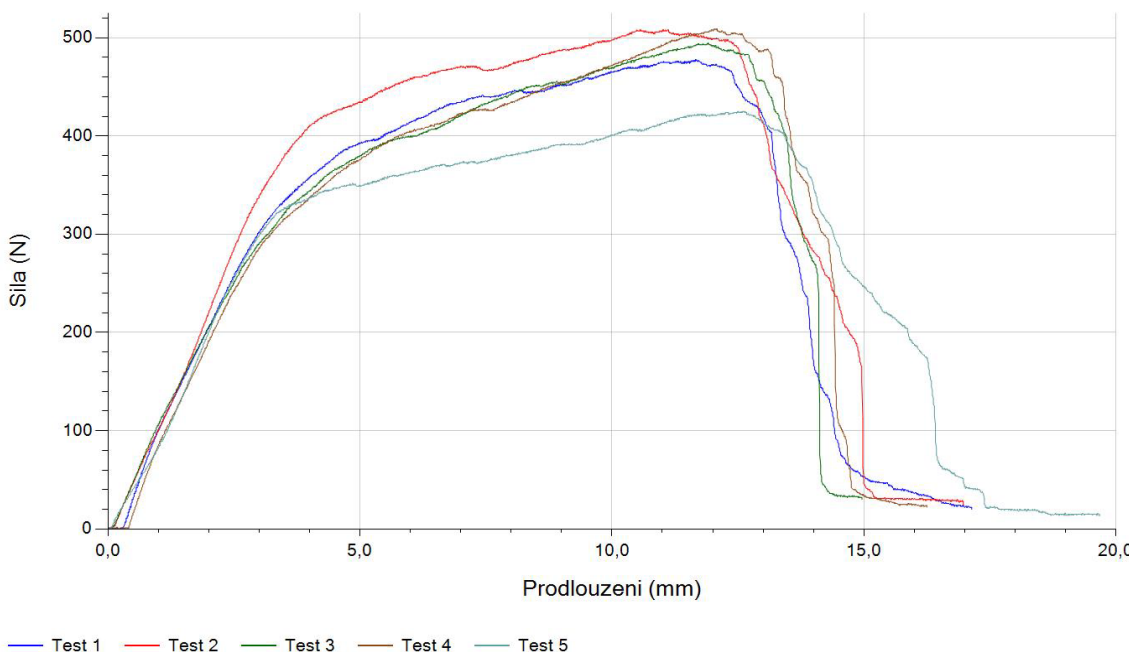
**Table 26**

| Wind load resistance of EWIS                                                                                                                                                |                                                    |                                                                                                  |                                                                          |                                           |       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|-------------------------------------------|-------|
| Assessed by means of:<br>pull-through tests of fixings                                                                                                                      |                                                    |                                                                                                  |                                                                          |                                           |       |
| EWIS configuration requirements:                                                                                                                                            |                                                    | Tested position                                                                                  | Test conditions                                                          | Failure load per fixing [kN]              |       |
| Insulation product                                                                                                                                                          | Fixing                                             |                                                                                                  |                                                                          | Individual                                | Mean  |
| Insulation product 1<br>(EPS)<br>Thickness:<br>≥ 50 mm<br>Tensile strength in<br>dry condition:<br>≥ 144 kPa                                                                | Ejot TKR 4.8<br>with<br>Ejot SBH-T 65/25<br>washer | $R_{panel}$<br> | Dry<br>condition<br>23°C<br>and<br>50%<br>relative<br>humidity of<br>air | 0.491<br>0.523<br>0.472<br>0.533<br>0.473 | 0.498 |
| Load / displacement graph:                                                                                                                                                  |                                                    |                                                                                                  |                                                                          |                                           |       |
|  <p>             — Test 1    — Test 2    — Test 3    — Test 4    — Test 5           </p> |                                                    |                                                                                                  |                                                                          |                                           |       |

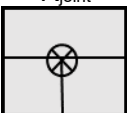
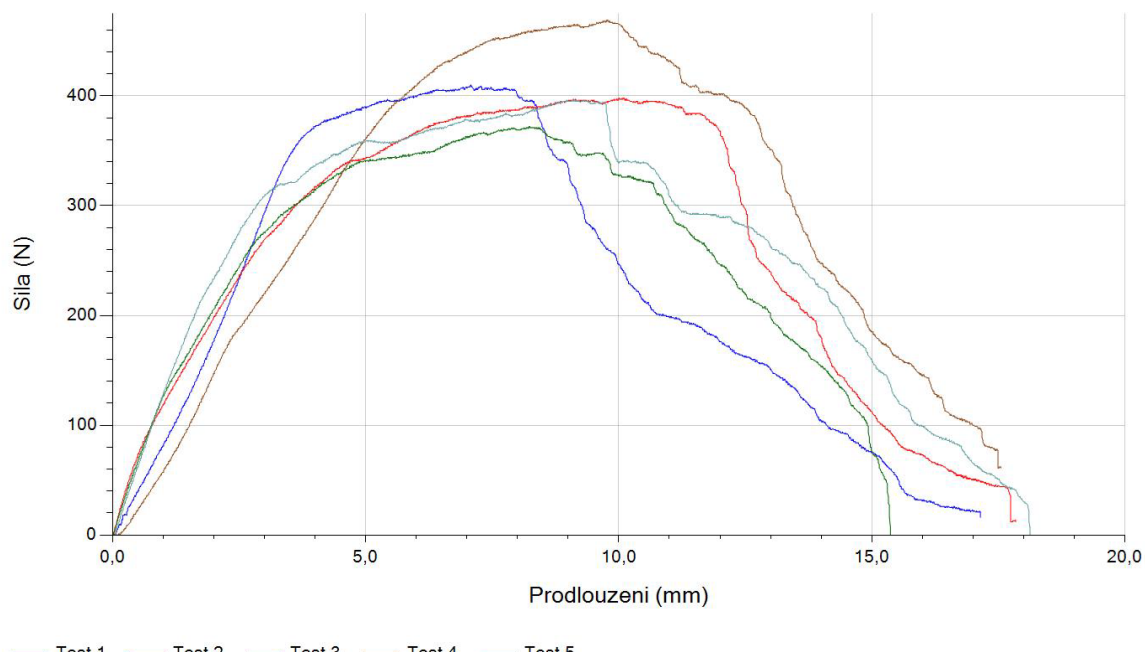
**Table 27**

| Wind load resistance of EWIS                                                                                        |                                                 |                                                                                   |                                                              |                                           |       |
|---------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------|-------|
| Assessed by means of:<br>pull-through tests of fixings                                                              |                                                 |                                                                                   |                                                              |                                           |       |
| EWIS configuration requirements:                                                                                    |                                                 | Tested position                                                                   | Test conditions                                              | Failure load per fixing [kN]              |       |
| Insulation product                                                                                                  | Fixing                                          |                                                                                   |                                                              | Individual                                | Mean  |
| Insulation product 1<br>(EPS)<br>Thickness:<br>$\geq 50$ mm<br>Tensile strength in dry condition:<br>$\geq 144$ kPa | Ejot TKR 4.8<br>with<br>Ejot SBH-T 65/25 washer |  | Dry condition<br>23°C<br>and<br>50% relative humidity of air | 0.469<br>0.443<br>0.424<br>0.427<br>0.449 | 0.424 |
| Load / displacement graph:                                                                                          |                                                 |                                                                                   |                                                              |                                           |       |
|                                  |                                                 |                                                                                   |                                                              |                                           |       |

**Table 28**

| Wind load resistance of EWIS                                                                                                                                                |                |                                                                                                  |                                                                       |                                           |       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------------|-------|
| Assessed by means of:<br>pull-through tests of fixings                                                                                                                      |                |                                                                                                  |                                                                       |                                           |       |
| EWIS configuration requirements:                                                                                                                                            |                | Tested position                                                                                  | Test conditions                                                       | Failure load per fixing [kN]              |       |
| Insulation product                                                                                                                                                          | Fixing         |                                                                                                  |                                                                       | Individual                                | Mean  |
| Insulation product 1<br>(EPS)<br>Thickness:<br>≥ 50 mm<br>Tensile strength in<br>dry condition:<br>≥ 144 kPa                                                                | Ejotherm STR H | $R_{panel}$<br> | Dry condition<br>23°C<br>and<br>50%<br>relative<br>humidity of<br>air | 0.478<br>0.508<br>0.495<br>0.509<br>0.425 | 0.483 |
| Load / displacement graph:                                                                                                                                                  |                |                                                                                                  |                                                                       |                                           |       |
|  <p>             — Test 1    — Test 2    — Test 3    — Test 4    — Test 5           </p> |                |                                                                                                  |                                                                       |                                           |       |

**Table 29**

| Wind load resistance of EWIS                                                                                        |                |                                                                                   |                                                              |                                           |       |
|---------------------------------------------------------------------------------------------------------------------|----------------|-----------------------------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------|-------|
| Assessed by means of:<br>pull-through tests of fixings                                                              |                |                                                                                   |                                                              |                                           |       |
| EWIS configuration requirements:                                                                                    |                | Tested position                                                                   | Test conditions                                              | Failure load per fixing [kN]              |       |
| Insulation product                                                                                                  | Fixing         |                                                                                   |                                                              | Individual                                | Mean  |
| Insulation product 1<br>(EPS)<br>Thickness:<br>$\geq 50$ mm<br>Tensile strength in dry condition:<br>$\geq 144$ kPa | Ejotherm STR H |  | Dry condition<br>23°C<br>and<br>50% relative humidity of air | 0.410<br>0.398<br>0.372<br>0.469<br>0.396 | 0.409 |
| Load / displacement graph:                                                                                          |                |                                                                                   |                                                              |                                           |       |
|                                  |                |                                                                                   |                                                              |                                           |       |

## Impact resistance

**Table 30**

| Impact resistance<br>(products tested after hygrothermal cycles on the rig) |                                                       |                                                                                                       |                         |                              |
|-----------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------|-------------------------|------------------------------|
| EWIS configuration requirements:                                            |                                                       |                                                                                                       | Cracks                  | Maximum impact diameter [mm] |
| Base coat                                                                   | Finishing coat                                        | Reinforcement and key coat                                                                            |                         |                              |
| EWI-225 Premium Basecoat (4 mm)                                             | EWI Pro Dash Receiver with pebble dash aggregate      | Reinforcement: all of Table 1 in one layer<br>Key coat and decorative coat in accordance with Table 1 | No – 3 J<br>No – 10 J   | None – 3 J<br>None – 10 J    |
|                                                                             | EWI-077 Nano Drex Silicone Render (all grain sizes)   |                                                                                                       | Yes – 3 J<br>Yes – 10 J | 34 – 3 J<br>59 – 10 J        |
|                                                                             | EWI-075 Silicone Render (all grain sizes)             |                                                                                                       | Yes – 3 J<br>Yes – 10 J | 34 – 3 J<br>74 – 10 J        |
|                                                                             | EWI-078 Brick Effect Stencil Render (all grain sizes) |                                                                                                       | Yes – 3 J<br>Yes – 10 J | 26 – 3 J<br>77 – 10 J        |
|                                                                             | EWI-070 Wood Effect Render (Moulding)                 |                                                                                                       | Yes – 3 J<br>Yes – 10 J | 32 – 3 J<br>66 – 10 J        |

**Table 31**

| Impact resistance<br>(products tested after immersion in water) |                                                       |                                                                                                        |                         |                              |
|-----------------------------------------------------------------|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-------------------------|------------------------------|
| EWIS configuration requirements:                                |                                                       |                                                                                                        | Cracks                  | Maximum impact diameter [mm] |
| Base coat                                                       | Finishing coat                                        | Reinforcement and key coat                                                                             |                         |                              |
| EWI-225 Premium Basecoat (6 mm)                                 | EWI Pro Dash Receiver with pebble dash aggregate      | Reinforcement: all of Table 1 in two layers<br>Key coat and decorative coat in accordance with Table 1 | No – 3 J<br>No – 10 J   | None – 3 J<br>None – 10 J    |
|                                                                 | EWI-077 Nano Drex Silicone Render (all grain sizes)   |                                                                                                        | No – 3 J<br>Yes – 10 J  | None – 3 J<br>28 – 10 J      |
|                                                                 | EWI-075 Silicone Render (all grain sizes)             |                                                                                                        | No – 3 J<br>Yes – 10 J  | None – 3 J<br>53 – 10 J      |
|                                                                 | EWI-078 Brick Effect Stencil Render (all grain sizes) |                                                                                                        | Yes – 3 J<br>Yes – 10 J | 20 – 3 J<br>50 – 10 J        |
|                                                                 | EWI-070 Wood Effect Render (Moulding)                 |                                                                                                        | Yes – 3 J<br>Yes – 10 J | 30 – 3 J<br>40 – 10 J        |

### 3.4.6 Bond strength after ageing of finishing coat tested in the rig

**Table 32**

| Bond strength after ageing of finishing coat tested in the rig |                          |                                                       |                            |                           |                     |       |
|----------------------------------------------------------------|--------------------------|-------------------------------------------------------|----------------------------|---------------------------|---------------------|-------|
| EWIS configuration requirements:                               |                          |                                                       |                            | Rupture type              | Bond strength [MPa] |       |
| Insulation product                                             | Base coat                | Finishing coat                                        | Key coat Decorative coat   |                           | Individual          | Mean  |
| Insulation product 1                                           | EWI-225 Premium Basecoat | EWI-075 Silicone Render (all grain sizes)             | In accordance with Table 1 | In the insulation product | 0.127               | 0.122 |
|                                                                |                          |                                                       |                            | In the insulation product | 0.119               |       |
|                                                                |                          |                                                       |                            | In the insulation product | 0.122               |       |
|                                                                |                          |                                                       |                            | In the insulation product | 0.123               |       |
|                                                                |                          |                                                       |                            | In the insulation product | 0.120               |       |
|                                                                |                          | EWI-078 Brick Effect Stencil Render (all grain sizes) | In accordance with Table 1 | In the insulation product | 0.104               | 0.105 |
|                                                                |                          |                                                       |                            | In the insulation product | 0.100               |       |
|                                                                |                          |                                                       |                            | In the insulation product | 0.124               |       |
|                                                                |                          |                                                       |                            | In the insulation product | 0.105               |       |
|                                                                |                          |                                                       |                            | In the insulation product | 0.092               |       |
|                                                                |                          | EWI-070 Wood Effect Render (Moulding)                 | In accordance with Table 1 | In the insulation product | 0.120               | 0.114 |
|                                                                |                          |                                                       |                            | In the insulation product | 0.113               |       |
|                                                                |                          |                                                       |                            | In the insulation product | 0.126               |       |
|                                                                |                          |                                                       |                            | In the insulation product | 0.131               |       |
|                                                                |                          |                                                       |                            | In the insulation product | 0.082               |       |

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

**Table 33**

| Bond strength after ageing of finishing coat<br>NOT tested in the rig |                          |                                                     |                            |                           |                     |       |
|-----------------------------------------------------------------------|--------------------------|-----------------------------------------------------|----------------------------|---------------------------|---------------------|-------|
| EWIS configuration requirements:                                      |                          |                                                     |                            | Rupture type              | Bond strength [MPa] |       |
| Insulation product                                                    | Base coat                | Finishing coat                                      | Reinforcement and key coat |                           | Individual          | Mean  |
| Insulation product 1                                                  | EWI-225 Premium Basecoat | EWI Pro Dash Receiver with pebble dash aggregate    | In accordance with Table 1 | In the insulation product | 0.125               | 0.126 |
|                                                                       |                          |                                                     |                            | In the insulation product | 0.124               |       |
|                                                                       |                          |                                                     |                            | In the insulation product | 0.129               |       |
|                                                                       |                          |                                                     |                            | In the insulation product | 0.122               |       |
|                                                                       |                          |                                                     |                            | In the insulation product | 0.128               |       |
|                                                                       |                          | EWI-077 Nano Drex Silicone Render (all grain sizes) | In accordance with Table 1 | In the insulation product | 0.134               | 0.133 |
|                                                                       |                          |                                                     |                            | In the insulation product | 0.136               |       |
|                                                                       |                          |                                                     |                            | In the insulation product | 0.137               |       |
|                                                                       |                          |                                                     |                            | In the insulation product | 0.126               |       |
|                                                                       |                          |                                                     |                            | In the insulation product | 0.133               |       |

**Table 34**

| Bond strength of finishing coat after freeze-thaw cycles |                          |                                                  |                            |                           |                     |       |
|----------------------------------------------------------|--------------------------|--------------------------------------------------|----------------------------|---------------------------|---------------------|-------|
| EWIS configuration requirements:                         |                          |                                                  |                            | Rupture type              | Bond strength [MPa] |       |
| Insulation product                                       | Base coat                | Finishing coat                                   | Reinforcement and key coat |                           | Individual          | Mean  |
| Insulation product 1                                     | EWI-225 Premium Basecoat | EWI Pro Dash Receiver with pebble dash aggregate | In accordance with Table 1 | In the insulation product | 0.124               | 0.118 |
|                                                          |                          |                                                  |                            | In the insulation product | 0.103               |       |
|                                                          |                          |                                                  |                            | In the insulation product | 0.122               |       |
|                                                          |                          |                                                  |                            | In the insulation product | 0.128               |       |
|                                                          |                          |                                                  |                            | In the insulation product | 0.112               |       |

### 3.4.8 Pull-out strength of mechanical fixings

Table 35

| Pull-out strength of screws                                   |                                     |                            |                                       |
|---------------------------------------------------------------|-------------------------------------|----------------------------|---------------------------------------|
| Type of board substrate                                       | Type of screw                       | Maximum pull-out force [N] | Pull-out parameter (by EN 1382) [MPa] |
|                                                               |                                     | Mean                       | Mean                                  |
| Plywood according to EN 636 (≥ 21 mm)                         | RAWLPLUG R-WW-50T90 5.0 × 90 mm     | 4737                       | 45.1                                  |
|                                                               | Wkret-met Klimas KMH 6.0 × 100 mm   | 4919                       | 39.0                                  |
|                                                               | RAWLPLUG WX-48T 4.8 × 140 mm        | 3218                       | 33.5                                  |
|                                                               | Wkret-met Klimas KMWHT 6.0 × 140 mm | 2763                       | 23.0                                  |
|                                                               | Ejot TKR 4.8 × 120 mm               | 3043                       | 31.7                                  |
|                                                               | Ejotherm STR H 6.0 × 140 mm         | 2776                       | 23.1                                  |
| Fiber-cement flat sheets according to EN 12467+A2 (≥ 12 mm)   | RAWLPLUG R-WW-50T90 5.0 × 90 mm     | 945                        | 15.8                                  |
|                                                               | Wkret-met Klimas KMH 6.0 × 100 mm   | 957                        | 13.3                                  |
| Fiber-cement flat sheets according to EN 12467+A2 (≥ 12.5 mm) | RAWLPLUG WX-48T 4.8 × 140 mm        | 669                        | 11.2                                  |
|                                                               | Wkret-met Klimas KMWHT 6.0 × 140 mm | 574                        | 7.7                                   |
|                                                               | Ejot TKR 4.8 × 120 mm               | 685                        | 11.4                                  |
|                                                               | Ejotherm STR H 6.0 × 140 mm         | 818                        | 10.9                                  |

**Table 35 (continued)**

| Pull-out strength of screws                |                                        |                            |                                       |
|--------------------------------------------|----------------------------------------|----------------------------|---------------------------------------|
| Type of board substrate                    | Type of screw                          | Maximum pull-out force [N] | Pull-out parameter (by EN 1382) [MPa] |
|                                            |                                        | Mean                       | Mean                                  |
| OSB boards according to EN 300 (≥ 12.5 mm) | RAWLPLUG R-WW-50T90<br>5.0 × 90 mm     | No performance assessed    |                                       |
|                                            | Wkret-met Klimas KMH<br>6.0 × 100 mm   | No performance assessed    |                                       |
|                                            | RAWLPLUG WX-48T<br>4.8 × 140 mm        | 985                        | 16.4                                  |
|                                            | Wkret-met Klimas KMWHT<br>6.0 × 140 mm | 700                        | 9.3                                   |
|                                            | Ejot TKR<br>4.8 × 120 mm               | 1013                       | 16.9                                  |
|                                            | Ejotharm STR H<br>6.0 × 140 mm         | 1091                       | 14.6                                  |

### 3.4.9 Base coat: performances

**Table 36**

| Hardened base coat: Static modulus of elasticity, tensile strength and elongation at break |                               |                                    |                        |                         |
|--------------------------------------------------------------------------------------------|-------------------------------|------------------------------------|------------------------|-------------------------|
| EWIS configuration requirements:                                                           | Conditioning before the test  | Static modulus of elasticity [MPa] | Tensile strength [MPa] | Elongation at break [%] |
| Base coat                                                                                  |                               | Mean                               | Mean                   | Mean                    |
| EWI-225 Premium Basecoat                                                                   | Initial state (dry condition) | 1584                               | 1.15                   | 0.07                    |
|                                                                                            | After hygrothermal cycles     | 2310                               | 2.35                   | 0.10                    |

### 3.4.10 Rendering system: tensile strength

**Table 37**

| Render strip tensile test        |                                                          |                                                                          |                |                                                                     |                |
|----------------------------------|----------------------------------------------------------|--------------------------------------------------------------------------|----------------|---------------------------------------------------------------------|----------------|
| EWIS configuration requirements: |                                                          | W <sub>rk</sub><br>of the patterned side<br>of the test specimen<br>[mm] |                | W <sub>rk</sub><br>of the flat side<br>of the test specimen<br>[mm] |                |
| Base coat                        | Reinforcement                                            | Warp direction                                                           | Weft direction | Warp direction                                                      | Weft direction |
| EWI-225 Premium Basecoat         | 1 × EWI Pro Fibreglass Mesh FGM-165                      | 0.14                                                                     | 0.18           | 0.18                                                                | 0.19           |
|                                  | 1 × MASTERNET CLASSIC 160                                | 0.08                                                                     | 0.05           | 0.12                                                                | 0.12           |
|                                  | 1 × EWI Pro Fibreglass Mesh – (165g) Masternet Pro (965) | 0.05                                                                     | 0.10           | 0.11                                                                | 0.13           |

### 3.5. Protection against noise (BWR 5)

Not applicable

### 3.6. Energy economy and heat retention (BWR 6)

See Annex 1

### 3.7. Sustainable use of natural resources (BWR 7)

No performance declared

#### 4. Assessment and verification of constancy of performance (hereinafter AVCP) system applied

##### 4.1. System of assessment and verification of constancy of performance

According to UKAD No. 040089-00-0404 and Annex V of the Construction Products (Amendment etc.) (EU Exit) Regulations 2020 (as amended 2022) 305/2011 as brought into UK law and amended, the system of assessment and verification of constancy of performance (AVCP) 2+ applies 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 1**

| Product                                                                                                             | Intended uses                                          | Class(es)<br>(reaction to fire)                                                            | Systems of<br>assessment and<br>verification of<br>constancy of<br>performance |
|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| External thermal<br>insulation composite<br>system/kits with<br>rendering (EWIS)                                    | in external wall subject<br>to fire regulations        | A <sup>(1)</sup> – B <sup>(1)</sup> – C <sup>(1)</sup>                                     | 1                                                                              |
|                                                                                                                     |                                                        | A <sup>(2)</sup> – B <sup>(2)</sup> – C <sup>(2)</sup><br>A (without testing)<br>D – E – F | 2+                                                                             |
|                                                                                                                     | in external wall not<br>subject to fire<br>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 UKAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited with the British Board of Agrément and made available to the UK Approved Bodies involved in the conformity attestation process.

##### 5.1. UKCA marking for the product/ system must contain the following information:

- Identification number of the Approved Body
- Name/ registered address of the manufacturer of the product/ system
- Marking including date of Marking and the intended use as stated in the Designated technical specification
- Unique identification code of the product type
- The reference number of the Declaration of Performance
- The level or class of the performance declared
- The reference to the Designated technical specification applied
- UKTA number.

On behalf of the British Board of Agrément



Date of Issue: 24 October 2025

**Hardy Giesler**  
Chief Executive Officer



**British Board of Agrément,**  
1<sup>st</sup> Floor Building 3,  
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## ANNEX 1

### Thermal transmittance of EWIS

$$U_c = U + \Delta U \text{ [W/m}^2 \cdot \text{K]}$$

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

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

$\Delta U$  is correction term of the thermal transmittance for mechanical fixing devices.

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

$$R_{EWIS} = R_{insulation} + R_{render} \text{ [m}^2 \cdot \text{K/W]}$$

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

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

$R_{substrate}$  thermal resistance of the substrate wall [ $\text{m}^2 \cdot \text{K/W}$ ].

$R_{se}$  external surface thermal resistance [ $\text{m}^2 \cdot \text{K/W}$ ].

$R_{si}$  internal surface thermal resistance [ $\text{m}^2 \cdot \text{K/W}$ ].

$$\Delta U = \chi_P \times n + \sum \Psi_i \times l_i \text{ [m}^2 \cdot \text{K/W]}$$

Where:  $\chi_P$  is point thermal transmittance value of the anchor [ $\text{W/K}$ ]. Specified by the ETA for anchors or as follows:

0.002 [ $\text{W/K}$ ] 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 [ $\text{W/K}$ ] 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 [ $\text{W/K}$ ] For all other anchors (the worst case).

$n$  is number of anchors per  $\text{m}^2$ . In case  $n$  is more than 16, the  $U_c$  calculation does not apply.

$\Psi_i$  is linear thermal transmittance value of the profile [ $\text{W/m} \cdot \text{K}$ ].

$l_i$  is length of the profile per  $\text{m}^2$ .

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  $\text{m}^2$  the declared  $\chi_P$  must not be used. The EN ISO 10211 calculation must be used in such cases.

**ANNEX 2****Thermal insulation product 1 – expanded polystyrene (EPS)**

| <b>Factory made expanded polystyrene (EPS)</b>                                                   |                                                               |
|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| <b>Generic type</b>                                                                              |                                                               |
| <b>Requirements:</b>                                                                             |                                                               |
| Harmonised technical specification:                                                              | EN 13163                                                      |
| Content of graphite:                                                                             | Allowed                                                       |
| Composite insulation product:                                                                    | No                                                            |
| Multi-layered insulation product                                                                 | No                                                            |
| Facing:                                                                                          | No                                                            |
| Coating:                                                                                         | No                                                            |
| Maximum thermal conductivity coefficient $\lambda_D$ :                                           | Maximum $0.065 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ |
| Short-term water absorption:                                                                     | Maximum $1.0 \text{ kg}\cdot\text{m}^{-2}$                    |
| Length:                                                                                          | L(2)                                                          |
| Width:                                                                                           | W(1)                                                          |
| Thickness:                                                                                       | T(1)                                                          |
| Squareness in the direction of length and width:                                                 | S(2)                                                          |
| Flatness:                                                                                        | P(3)                                                          |
| Dimensional stability:                                                                           | DS(70,-)1<br>DS(N)2                                           |
| Reaction to fire of thermal insulation material:                                                 | E                                                             |
| Water vapour permeability of thermal insulation product (water-vapour resistance factor) $\mu$ : | 20 – 70 [-]                                                   |
| Tensile test perpendicular to the faces of the thermal insulation product – in dry conditions:   | Minimum 110 kPa                                               |
| Shear strength:                                                                                  | Minimum 20 kPa                                                |
| Shear modulus:                                                                                   | Minimum 1000 kPa                                              |

|                                                                                                  |                                |
|--------------------------------------------------------------------------------------------------|--------------------------------|
| <b>Factory made expanded polystyrene (EPS)</b>                                                   |                                |
| <b>Specific type:<br/>EWI 70E HP</b>                                                             |                                |
| <b>Requirements:</b>                                                                             |                                |
| Harmonised technical specification:                                                              | EN 13163                       |
| Content of graphite:                                                                             | Allowed                        |
| Composite insulation product:                                                                    | No                             |
| Multi-layered insulation product                                                                 | No                             |
| Facing:                                                                                          | No                             |
| Coating:                                                                                         | No                             |
| Maximum thermal conductivity coefficient $\lambda_D$ :                                           | Maximum 0.065 W/(m·K)          |
| Short-term water absorption:                                                                     | Maximum 1.0 kg.m <sup>-2</sup> |
| Length:                                                                                          | L(2)                           |
| Width:                                                                                           | W(2)                           |
| Thickness:                                                                                       | T(2)                           |
| Squareness in the direction of length and width:                                                 | S(1)                           |
| Flatness:                                                                                        | P(1)                           |
| Dimensional stability:                                                                           | DS(N)5                         |
| Reaction to fire of thermal insulation material:                                                 | E                              |
| Water vapour permeability of thermal insulation product (water-vapour resistance factor) $\mu$ : | 20 – 40 [-]                    |
| Tensile test perpendicular to the faces of the thermal insulation product – in dry conditions:   | Minimum 110 kPa                |
| Shear strength:                                                                                  | Minimum 20 kPa                 |
| Shear modulus:                                                                                   | Minimum 1000 kPa               |

|                                                                                                  |                                |
|--------------------------------------------------------------------------------------------------|--------------------------------|
| <b>Factory made expanded polystyrene (EPS)</b>                                                   |                                |
| <b>Specific type:<br/>Stylite Plustherm70</b>                                                    |                                |
| <b>Requirements:</b>                                                                             |                                |
| Harmonised technical specification:                                                              | EN 13163                       |
| Content of graphite:                                                                             | Allowed                        |
| Composite insulation product:                                                                    | No                             |
| Multi-layered insulation product                                                                 | No                             |
| Facing:                                                                                          | No                             |
| Coating:                                                                                         | No                             |
| Maximum thermal conductivity coefficient $\lambda_D$ :                                           | Maximum 0.065 W/(m·K)          |
| Short-term water absorption:                                                                     | Maximum 1.0 kg.m <sup>-2</sup> |
| Length:                                                                                          | L(2)                           |
| Width:                                                                                           | W(2)                           |
| Thickness:                                                                                       | T(2)                           |
| Squareness in the direction of length and width:                                                 | S(2)                           |
| Flatness:                                                                                        | P(5)                           |
| Dimensional stability:                                                                           | DS(70,90)1<br>DS(N)5           |
| Reaction to fire of thermal insulation material:                                                 | E                              |
| Water vapour permeability of thermal insulation product (water-vapour resistance factor) $\mu$ : | 20 – 40 [-]                    |
| Tensile test perpendicular to the faces of the thermal insulation product – in dry conditions:   | Minimum 110 kPa                |
| Shear strength:                                                                                  | Minimum 20 kPa                 |
| Shear modulus:                                                                                   | Minimum 1000 kPa               |

**ANNEX 3**  
**Mechanical fixing device – screws**

| Metal screws for fixing external thermal insulation composite systems with rendering |                      |                     |                  |                  |                    |                   |                    |                                 |
|--------------------------------------------------------------------------------------|----------------------|---------------------|------------------|------------------|--------------------|-------------------|--------------------|---------------------------------|
| Specific type(s)                                                                     |                      |                     |                  |                  |                    |                   |                    |                                 |
| Specification                                                                        | Name                 | Screw diameter [mm] | $M_{y,k}$ [N.mm] | $f_{ax,k}$ [MPa] | $f_{head,k}$ [MPa] | $f_{tens,k}$ [kN] | $f_{tor,k}$ [N.mm] | Additional plate                |
| EN 14592 : 2008 + A1 : 2012                                                          | Wkret-met Klimas KMH | $\geq 6$            | 14815            | 12.54            | 21.06              | 10.12             | 9.57               | Klimas TD-060 or Klimas TDP-060 |

| Metal screws for fixing external thermal insulation composite systems with rendering |                        |                     |                                                     |
|--------------------------------------------------------------------------------------|------------------------|---------------------|-----------------------------------------------------|
| Specific type(s)                                                                     |                        |                     |                                                     |
| Specification                                                                        | Name                   | Screw diameter [mm] | Additional plate                                    |
| ETA-09/0346<br>29/06/2018                                                            | RAWLPLUG R-WW-T        | $\geq 5$            | RAWLPLUG KC                                         |
|                                                                                      | RAWLPLUG WX-T          | $\geq 5$            | RAWLPLUG KC or RAWLPLUG KCX-105                     |
| ETA-18/0817<br>07/06/2023                                                            | Wkret-met Klimas KMWHT | $\geq 6$            | Klimas TD-060 or Klimas TDP-060                     |
| ETA-07/0013<br>04/04/2022                                                            | Ejot TKR 4.8           | $\geq 5$            | Ejot SBH-T 65/25                                    |
| ETA-20/0670<br>21/03/2024                                                            | Ejothrm STR H          | $\geq 6$            | Not to be used (plate is already part of the screw) |

**ANNEX 4**  
**Reinforcement – glass fibre mesh**

| <b>Specific type: EWI Pro Fibreglass Mesh FGM – 165</b>         |                                                                                    |
|-----------------------------------------------------------------|------------------------------------------------------------------------------------|
| <b>Requirements:</b>                                            |                                                                                    |
| Harmonised technical specification:                             | 040016-00-0404 or 040016-01-0404 or superseding harmonised technical specification |
| Mass per unit area                                              | 0.152 to 0.168 kg.m <sup>-2</sup>                                                  |
| Mesh size:                                                      | in warp direction: 3.5 to 5.5 mm<br>in weft direction: 3.5 to 5.5 mm               |
| Residual tensile strength retained after alkaline conditioning: | in warp direction: minimum 20 N/mm<br>in weft direction: minimum 20 N/mm           |
| Residual tensile strength after alkaline ageing                 | in warp direction: minimum 50 %<br>in weft direction: minimum 50 %                 |

| <b>Specific type: MASTERNET CLASSIC 145</b>                     |                                                                                    |
|-----------------------------------------------------------------|------------------------------------------------------------------------------------|
| <b>Requirements:</b>                                            |                                                                                    |
| Harmonised technical specification:                             | 040016-00-0404 or 040016-01-0404 or superseding harmonised technical specification |
| Mass per unit area                                              | 0.138 to 0.152 kg.m <sup>-2</sup>                                                  |
| Mesh size:                                                      | in warp direction: 5.4 to 6.4 mm<br>in weft direction: 3.9 to 4.9 mm               |
| Residual tensile strength retained after alkaline conditioning: | in warp direction: minimum 20 N/mm<br>in weft direction: minimum 20 N/mm           |
| Residual tensile strength after alkaline ageing                 | in warp direction: minimum 50 %<br>in weft direction: minimum 50 %                 |

| <b>Specific type: MASTERNET CLASSIC 160</b>                     |                                                                                    |
|-----------------------------------------------------------------|------------------------------------------------------------------------------------|
| <b>Requirements:</b>                                            |                                                                                    |
| Harmonised technical specification:                             | 040016-00-0404 or 040016-01-0404 or superseding harmonised technical specification |
| Mass per unit area                                              | 0.152 to 0.168 kg.m <sup>-2</sup>                                                  |
| Mesh size:                                                      | in warp direction: 4.6 to 5.6 mm<br>in weft direction: 3.7 to 4.7 mm               |
| Residual tensile strength retained after alkaline conditioning: | in warp direction: minimum 20 N/mm<br>in weft direction: minimum 20 N/mm           |
| Residual tensile strength after alkaline ageing                 | in warp direction: minimum 50 %<br>in weft direction: minimum 50 %                 |

| <b>Specific type: EWI Pro Fibreglass Mesh – (165g) Masternet Pro (965)</b> |                                                                                    |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| <b>Requirements:</b>                                                       |                                                                                    |
| Harmonised technical specification:                                        | 040016-00-0404 or 040016-01-0404 or superseding harmonised technical specification |
| Mass per unit area                                                         | 0.160 to 0.170 kg.m <sup>-2</sup>                                                  |
| Mesh size:                                                                 | in warp direction: 4.2 to 5.2 mm<br>in weft direction: 4.2 to 5.2 mm               |
| Residual tensile strength retained after alkaline conditioning:            | in warp direction: minimum 20 N/mm<br>in weft direction: minimum 20 N/mm           |
| Residual tensile strength after alkaline ageing                            | in warp direction: minimum 50 %<br>in weft direction: minimum 50 %                 |



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