



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

| UK Technical Assessment                                                                                                                   | UKTA-0836-22/6381 of 24/10/2022                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| Technical Assessment Body issuing the UK Technical Assessment:                                                                            | British Board of Agrément                                                                          |
| Trade name of the construction product:                                                                                                   | RHÉATHERM 600                                                                                      |
| Product family to which the construction product belongs:                                                                                 | Product Code 04 - External Thermal Insulation Composite System (ETICS) with renderings             |
| Manufacturer:                                                                                                                             | VPI Products UK Ltd<br>Russet Grey<br>Durham<br>DH1 3PR                                            |
| Manufacturing plant(s):                                                                                                                   | VPI S.A.S<br>70 Rue de la Résistance<br>28700 Auneau-Bleury-Saint-Symphorien,<br>France            |
| This UK Technical Assessment contains:                                                                                                    | 23 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 based on: | UKAD 040083-00-0404<br><i>External Thermal Insulation Composite System (ETICS) with renderings</i> |

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## 1 Technical description of the product

The External Wall Insulation System RHÉATHERM 600, subject to this United Kingdom Technical Assessment (hereinafter UKTA) and referred to as EWIS in the following text, is a kit designed and installed in accordance with the Manufacturer's instructions, deposited with the CSTB. The EWIS comprises the components listed in the following table, which are factory produced by the Manufacturer or a supplier. The EWIS is made up on site from these components.

The EWIS also includes ancillary materials which are defined in clause 1.3.13 of UKAD 040083-00-0404. They shall be used in accordance with the Manufacturer's instructions.

The EWIS is described according to its method of fixing, as defined in clause 1.1 of UKAD 040083-00-0404.

**Table 1 System Components**

| Method of fixing                                                        | Component                                                                                                                                                                                                    | Coverage (kg·m <sup>-2</sup> ) | Thickness (mm) |
|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------|
| <b>Bonded EWIS (purely bonded or bonded with supplementary anchors)</b> | <b>Insulation product</b>                                                                                                                                                                                    |                                |                |
|                                                                         | Expanded polystyrene (EPS) boards, see Annex 1 (1/2)                                                                                                                                                         |                                | 20 to 300      |
|                                                                         | <b>Adhesives</b>                                                                                                                                                                                             |                                |                |
|                                                                         | <b>RHÉACOL PSE:</b> grey powder requiring addition of about 20% in weight water, consisting of cement binder, vinylic copolymer, calcium carbonate and silica as particles and specific additives.           | 3.0 to 3.5 [powder]            | -              |
|                                                                         | <b>RHÉAMIX MONO:</b> grey or white powder requiring addition of 21 to 25% in weight water, consisting of cement binder, vinylic copolymer, calcium carbonate and silica as particles and specific additives. | 3.0 to 3.5 [powder]            | -              |
|                                                                         | <b>Supplementary anchors for insulation product</b>                                                                                                                                                          |                                |                |
| <b>Mechanically fixed EWIS with anchors and supplementary adhesive</b>  | Plastic anchors, see Annex 2 (1/2)                                                                                                                                                                           |                                |                |
|                                                                         | <b>Insulation product</b>                                                                                                                                                                                    |                                |                |
|                                                                         | Expanded polystyrene (EPS) boards, see Annex 1 (1/2)                                                                                                                                                         |                                | 60 to 300      |
|                                                                         | <b>Supplementary adhesives</b>                                                                                                                                                                               |                                |                |
|                                                                         | <b>RHÉACOL PSE:</b> grey powder requiring addition of about 20% in weight water, consisting of cement binder, vinylic copolymer, calcium carbonate and silica as particles and specific additives.           | 3.0 to 3.5 [powder]            | -              |
|                                                                         | <b>RHÉAMIX MONO:</b> grey or white powder requiring addition of 21 to 25% in weight water, consisting of cement binder, vinylic copolymer, calcium carbonate and silica as particles and specific additives. | 3.0 to 3.5 [powder]            | -              |

| Method of fixing                                                | Component                                                                                                                                                                                                                        | Coverage (kg·m <sup>-2</sup> )  | Thickness (mm)                        |
|-----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|---------------------------------------|
| Mechanically fixed EWIS with anchors and supplementary adhesive | <b>Anchors for insulation product</b>                                                                                                                                                                                            |                                 |                                       |
|                                                                 | Plastic anchors, see Annex 2 (1/2)                                                                                                                                                                                               |                                 |                                       |
| Mechanically fixed EWIS with profiles                           | <b>Insulation product</b>                                                                                                                                                                                                        |                                 |                                       |
|                                                                 | Expanded polystyrene (EPS) boards, see Annex 1 (2/2)                                                                                                                                                                             |                                 | 60 to 200                             |
|                                                                 | <b>Profiles for insulation product</b>                                                                                                                                                                                           |                                 |                                       |
|                                                                 | Polyvinyl chloride (PVC) profiles, see Annex 4                                                                                                                                                                                   |                                 |                                       |
|                                                                 | <b>Anchors for profiles</b>                                                                                                                                                                                                      |                                 |                                       |
|                                                                 | Plastic anchors, see Annex 2 (2/2)                                                                                                                                                                                               |                                 |                                       |
| Every method of fixing                                          | <b>Base coat</b>                                                                                                                                                                                                                 |                                 |                                       |
|                                                                 | <b>RHÉAMIX MONO</b> : grey or white powder requiring addition of 21 to 25% in weight water, consisting of cement binder, vinylic copolymer, calcium carbonate and silica as particles and specific additives.                    | Approx 4.5 [powder]             | Mean (dry): 3.5<br>Minimal (dry): 3.0 |
|                                                                 | <b>Meshes</b>                                                                                                                                                                                                                    |                                 |                                       |
|                                                                 | Glass fibre meshes (standard and reinforced), see Annex 3                                                                                                                                                                        |                                 |                                       |
|                                                                 | <b>Key coats</b>                                                                                                                                                                                                                 |                                 |                                       |
|                                                                 | <b>SOLOFOND</b> : pigmented liquid to be diluted with 100% in weight water, acrylic binder (mandatory application before the finishing coats CRÉPILANE and LITHOCOLOR, optional application before the finishing coat CRÉPILOR). | 0.10 to 0.20 [prepared product] | -                                     |
|                                                                 | <b>CRÉALANE FOND</b> : pigmented liquid (to be diluted with 10% in weight water maximum) acrylic binder, to apply mandatory before finishing coats CRÉALANE T, CRÉALANE TM and CRÉALANE SYSTEME FIN.                             | Approx 0.20                     | -                                     |
|                                                                 | <b>Finishing coats</b>                                                                                                                                                                                                           |                                 |                                       |
|                                                                 | Ready-to-use pastes - vinylic binder:                                                                                                                                                                                            |                                 |                                       |
|                                                                 | - <b>CRÉPILOR GF</b> (particles size 1.6 mm)                                                                                                                                                                                     | 2.0 to 2.5                      | Regulated by particles size           |
|                                                                 | - <b>CRÉPILOR GT</b> (particles size 2.0 mm)                                                                                                                                                                                     | 2.5 to 3.0                      |                                       |
|                                                                 | - <b>CRÉPILOR T</b> (particles size 1.2 mm)                                                                                                                                                                                      | 2.0 to 2.5                      |                                       |
|                                                                 | - <b>CRÉPILOR TM</b> (particles size 1.6 mm)                                                                                                                                                                                     | 2.5 to 3.0                      |                                       |
| Every method of fixing                                          | Ready-to-use pastes – organo-siloxane and vinylic binder:                                                                                                                                                                        |                                 |                                       |
|                                                                 | - <b>CRÉPILANE GF</b> (particles size 1.6 mm)                                                                                                                                                                                    | 2.0 to 2.5                      | Regulated by particles size           |
|                                                                 | - <b>CRÉPILANE T</b> (particles size 1.2 mm)                                                                                                                                                                                     | 2.0 to 2.5                      |                                       |
|                                                                 | - <b>CRÉPILANE TM</b> (particles size 1.6 mm)                                                                                                                                                                                    | 2.5 to 3.0                      |                                       |
|                                                                 | Ready-to-use pastes – siloxane and acrylic binder:                                                                                                                                                                               |                                 |                                       |
|                                                                 | - <b>LITHOCOLOR F</b> (particles size 1.6 mm)                                                                                                                                                                                    | 2.0 to 2.5                      | Regulated by particles size           |
|                                                                 | - <b>LITHOCOLOR G</b> (particles size 2.5 mm)                                                                                                                                                                                    | 2.5 to 3.0                      |                                       |
|                                                                 | - <b>LITHOCOLOR T</b> (particles size 1.2 mm)                                                                                                                                                                                    | 2.0 to 2.5                      |                                       |
|                                                                 | <b>RHÉAMIX MONO</b> : grey or white cement based powder requiring addition of about 23% wt. water associated with the following paint:                                                                                           | Approx 1.5 [powder]             |                                       |
|                                                                 | - <b>FLEXODERM</b> : ready-to-use pigmented liquid – acrylic binder (two layers application)                                                                                                                                     | 0.5 to 0.8 (in two layers)      |                                       |
|                                                                 | Cement based powders requiring addition of 18% wt. water:                                                                                                                                                                        |                                 |                                       |
|                                                                 | - <b>RHÉAJET</b> brushed (fine) (particles size 2.0 mm)                                                                                                                                                                          | Approx 14.0 [powder]            | 7.0 to 8.0                            |
|                                                                 | - <b>RHÉAJET</b> rough (particles size 2.0 mm)                                                                                                                                                                                   | Approx 12.0 [powder]            |                                       |

| Method of fixing                                                                                                          | Component                                                         | Coverage<br>(kg·m <sup>-2</sup> )                   | Thickness (mm) |
|---------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-----------------------------------------------------|----------------|
|                                                                                                                           | - <b>RHÉAJET</b> crushed rough (particles size 2.0 mm)            | Approx 12.0<br>[powder]                             | 5.0 to 6.0     |
|                                                                                                                           | Cement based powders requiring addition of 19% wt. water:         |                                                     |                |
|                                                                                                                           | - <b>RÉNOPASS CHAUX GF</b> brushed (fine) (particles size 1.5 mm) | Approx 10.0<br>[powder]                             |                |
|                                                                                                                           | - <b>RÉNOPASS CHAUX GF</b> floated (particles size 1.5 mm)        | Approx 9.0<br>[powder]                              |                |
|                                                                                                                           | - <b>RÉNOPASS CHAUX GF</b> rough (particles size 1.5 mm)          | Approx 9.0<br>[powder]                              |                |
|                                                                                                                           | - <b>RÉNOPASS CHAUX GF</b> crushed rough (particles size 1.5 mm)  | Approx 9.0<br>[powder]                              |                |
|                                                                                                                           | - <b>RÉNOPASS CHAUX GM</b> brushed (fine) (particles size 2.0 mm) | Approx 10.0<br>[powder]                             |                |
|                                                                                                                           | - <b>RÉNOPASS CHAUX GM</b> rough (particles size 2.0 mm)          | Approx 9.0<br>[powder]                              |                |
|                                                                                                                           | - <b>RÉNOPASS CHAUX GM</b> crushed rough (particles size 2.0 mm)  | Approx 9.0<br>[powder]                              |                |
|                                                                                                                           | Every method of fixing                                            | Ready-to-use pastes – acrylic binder with siloxane: |                |
| - <b>CRÉALANE T</b> (particles size 1.0 mm)                                                                               |                                                                   | Approx 2.0                                          |                |
| - <b>CRÉALANE TM</b> (particles size 1.5 mm)                                                                              |                                                                   | Approx 2.5                                          |                |
| Ready-to-use pastes – acrylic binder with siloxane:                                                                       |                                                                   |                                                     |                |
| - <b>CRÉALANE SYSTEME FIN</b>                                                                                             |                                                                   |                                                     |                |
| - <b>CRÉALANE T</b> (to be applied before CRÉALANE MODELABLE)                                                             |                                                                   | Approx 2.0                                          |                |
|                                                                                                                           | - <b>CRÉALANE MODELABLE</b> (particles size 0.7 mm)               | Approx 1.5                                          |                |
|                                                                                                                           | Ancillary materials                                               |                                                     |                |
| Descriptions in accordance with section 1.3.13 of UKAD 040083-00-0404 remain under the UKTA-Manufacturer responsibilities |                                                                   |                                                     |                |

The EWIS is designed to give the walls to which it is applied satisfactory thermal insulation. The minimum thermal resistance of the EWIS shall be higher than 1.0 m<sup>2</sup>·K·W<sup>-1</sup>.

The components are protected from moisture during transport and storage by means of appropriate packaging unless other measures are foreseen by the Manufacturer for this purpose.

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

This EWIS is intended to be used as thermal insulation of buildings' external walls constructed of masonry (bricks, blocks, stones, *etc.*) or concrete (cast on site or as prefabricated panels).

The EWIS can be installed on new or existing (retrofit) vertical walls. It can also be installed on horizontal or inclined surfaces which are not exposed to precipitation.

The EWIS consists of non-load bearing construction elements. It does not contribute directly to the stability of the walls 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 walls.

The provisions made in this UKTA are based on an assumed working life of at least 25 years, provided that the construction works are subject to appropriate design, execution, maintenance, and repair. The indications given as to the working life cannot be interpreted as a guarantee given by the Manufacturer or the Technical Assessment Body but should only be regarded as a means for choosing the appropriate products in relation to the expected economically reasonable working life of the works.

Design, execution, maintenance, and repair of the construction works shall consider principles given in section 1.2 of UKAD 040083-00-0404 and shall be done in accordance with national instructions.

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

Performances of the EWIS, related to the basic requirements for construction works (hereinafter BWR), were determined according to section 2 of UKAD 040083-00-0404.

These performances, given in the following paragraphs, are valid if the components are the ones described in section 1 and Annexes 1 to 4 of this UKTA.

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

Not relevant.

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

#### Reaction to fire

| Configuration                                                                                                                                                                                               | Declared organic content<br>(1) | Declared flame retardant content (1) | Class according to BS EN 13501-1 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|--------------------------------------|----------------------------------|
| Adhesives/supplementary adhesives:<br><b>RHÉACOL PSE</b><br><b>RHÉAMIX MONO</b>                                                                                                                             |                                 |                                      |                                  |
| Insulation product:<br>White or grey EPS boards, reaction to fire<br>Class E, thickness ≤ 300 mm, density ≤ 20 kg·m <sup>-3</sup>                                                                           |                                 |                                      |                                  |
| Base coats:<br><b>RHÉAMIX MONO (grey or white version)</b>                                                                                                                                                  |                                 |                                      |                                  |
| Meshes:                                                                                                                                                                                                     | Base coats:                     | Base coats:                          | B-s2, d0                         |
| R 131 A 101 C+                                                                                                                                                                                              | 4.5 %                           | 0.0 %                                |                                  |
| R 131 A 102 C+                                                                                                                                                                                              | Key coat:                       | Key coat:                            |                                  |
| 0161-CA                                                                                                                                                                                                     | 28.2 %                          | 0.0 %                                |                                  |
| 0161RA20                                                                                                                                                                                                    |                                 |                                      |                                  |
| SSA-1363 F+                                                                                                                                                                                                 | Finishing coats:                | Finishing coats:                     |                                  |
| 03-1 C+                                                                                                                                                                                                     | 5.3 to 33.0 %                   | 0.0 %                                |                                  |
| ES-049/F Key coat:                                                                                                                                                                                          |                                 |                                      |                                  |
| <b>SOLOFOND</b>                                                                                                                                                                                             |                                 |                                      |                                  |
| Finishing coats:<br><b>CRÉPILOR GF/T/GT/TM</b><br><b>CRÉPILANE GF/T/TM</b><br><b>LITHOCOLOR G/T/F</b><br><b>FLEXODERM</b>                                                                                   |                                 |                                      |                                  |
| Adhesives/supplementary adhesives<br><b>RHÉACOL PSE</b><br><b>RHÉAMIX MONO</b>                                                                                                                              |                                 |                                      |                                  |
| Insulation product:<br>White or grey EPS boards, reaction to fire<br>Class E, thickness ≤ 300 mm, density ≤ 20 kg·m <sup>-3</sup>                                                                           |                                 |                                      |                                  |
| Base coats:<br><b>RHÉAMIX MONO (grey or white version)</b>                                                                                                                                                  |                                 |                                      |                                  |
| Meshes:                                                                                                                                                                                                     | Base coats:                     | Base coats:                          | B-s1, d0                         |
| R 131 A 101 C+                                                                                                                                                                                              | 4.5 %                           | 0.0 %                                |                                  |
| R 131 A 102 C+                                                                                                                                                                                              | Finishing coats:                | Finishing coats:                     |                                  |
| 0161-CA                                                                                                                                                                                                     | 0.4 to 2.0 %                    | 0.0 %                                |                                  |
| 0161RA20                                                                                                                                                                                                    |                                 |                                      |                                  |
| SSA-1363 F+                                                                                                                                                                                                 |                                 |                                      |                                  |
| 03-1 C+                                                                                                                                                                                                     |                                 |                                      |                                  |
| ES-049/F                                                                                                                                                                                                    |                                 |                                      |                                  |
| Finishing coats:<br><b>RHÉAJET</b> (brushed, rough and crushed rough) - <b>RÉNOPASS CHAUX GF</b> (brushed, floated, rough and crushed rough)<br><b>RÉNOPASS CHAUX GM</b> (brushed, rough and crushed rough) |                                 |                                      |                                  |

(1) Percentage declared by the Manufacturer, relative to the dried weight of the component as delivered.

| Configuration                                                                                                                     | Declared organic content <sup>(1)</sup> | Declared flame retardant content <sup>(1)</sup> | Class according to EN 13501-1 |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-------------------------------------------------|-------------------------------|
| Adhesives/supplementary adhesives<br><b>RHÉACOL PSE - RHÉAMIX MONO</b>                                                            |                                         |                                                 |                               |
| Insulation product:<br>White or grey EPS boards, reaction to fire<br>Class E, thickness ≤ 300 mm, density ≤ 17 kg·m <sup>-3</sup> |                                         |                                                 |                               |
| Base coats:<br><b>RHÉAMIX MONO (grey or white version)</b>                                                                        | Base coats:<br>4.5 %                    | Base coats:<br>0.0 %                            | B-s2, d0                      |
| Meshes:<br>R 131 A 101 C+<br>R 131 A 102 C+<br>0161-CA<br>0161RA20<br>SSA-1363 F+<br>03-1 C+                                      | Key coat:<br>28.2 %                     | Key coat:<br>0.0 %                              |                               |
| Key coat:<br><b>CRÉALANE FOND</b>                                                                                                 | Finishing coats:<br>7.5 %               | Finishing coats:<br>23.2 %                      |                               |
| Finishing coats:<br><b>CRÉALANE T/TM</b><br><b>CRÉALANE SYSTEME FIN</b>                                                           |                                         |                                                 |                               |
| Other configurations                                                                                                              | -                                       | -                                               | NPD <sup>(2)</sup>            |

(1) Percentage declared by the Manufacturer, relative to the dried weight of the component as delivered.

(2) No Performance Determined

Note: The classification of EWIS according to BS EN 13501-1 might not be sufficient for the use in façades. An additional assessment of EWIS according to national provisions (e.g., on the basis of a large-scale test) might be necessary to comply.

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

#### 3.3.1 Water absorption – capillarity test

##### 3.3.1.1 Water absorption of the base coat

- After 1 hour: water absorption < 1 kg·m<sup>-2</sup>
- After 24 hours: water absorption < 0.5 kg·m<sup>-2</sup>

### 3.3.1.2 Water absorption of the rendering system

| Rendering system:<br>Base coat + finishing coats<br>indicated below | Water absorption after 24 hours |                          |
|---------------------------------------------------------------------|---------------------------------|--------------------------|
|                                                                     | < 0.5 kg·m <sup>-2</sup>        | ≥ 0.5 kg·m <sup>-2</sup> |
| With SOLOFOND:                                                      |                                 |                          |
| CRÉPILOR GF                                                         | X                               |                          |
| CRÉPILOR T                                                          |                                 |                          |
| CRÉPILOR GT                                                         |                                 |                          |
| CRÉPILOR TM                                                         |                                 |                          |
| CRÉPILOR GF                                                         |                                 | X                        |
| CRÉPILOR T                                                          |                                 |                          |
| CRÉPILOR GT                                                         |                                 |                          |
| CRÉPILOR TM                                                         |                                 |                          |
| With SOLOFOND:                                                      |                                 |                          |
| CRÉPILANE GF                                                        |                                 | X                        |
| CRÉPILANE T                                                         |                                 |                          |
| CRÉPILANE TM                                                        |                                 |                          |
| With SOLOFOND:                                                      |                                 |                          |
| LITHOCOLOR G                                                        | X                               |                          |
| LITHOCOLOR T                                                        |                                 |                          |
| LITHOCOLOR F                                                        |                                 |                          |
| RHÉAMIX MONO with<br>FLEXODERM                                      | X                               |                          |
| RHÉAJET                                                             | X                               |                          |
| RÉNOPASS CHAUX GF<br>RÉNOPASS CHAUX GM                              |                                 | X                        |
| With CRÉALANE FOND:                                                 |                                 |                          |
| CRÉALANE T                                                          | X                               |                          |
| CRÉALANE TM                                                         |                                 |                          |
| With CRÉALANE FOND: -<br>CRÉALANE SYSTEME FIN                       | X                               |                          |

### 3.3.2 Watertightness

#### 3.3.2.1 Hygrothermal behaviour

Heat-rain and heat-cold cycles have been performed on a rig. The EWIS is assessed as resistant to hygrothermal cycles.

#### 3.3.2.2 Freeze-thaw behaviour

Water absorption of rendering system with the finishing coat CRÉPILOR without key coat SOLOFOND is more than 0.5 kg·m<sup>-2</sup> after 24 hours. The EWIS has been assessed as freeze/thaw resistant.

Water absorption of rendering systems with the finishing coats CRÉPILANE and RÉNOPASS CHAUX GF/GM is more than 0.5 kg·m<sup>-2</sup> after 24 hours. The EWIS has not been assessed as freeze/thaw resistant.

Water absorptions of both the base coat and the other rendering systems are less than 0.5 kg·m<sup>-2</sup> after 24 hours. The EWIS is therefore assessed as resistant to freeze-thaw for these configurations.

### 3.3.3 Impact resistance

The resistances to hard body impacts (3 Joules and 10 Joules) lead to the following categories:

| Rendering system:<br>Base coat + finishing coat<br>indicated below        | Use category            |                           |                                       |
|---------------------------------------------------------------------------|-------------------------|---------------------------|---------------------------------------|
|                                                                           | Single standard<br>mesh | Double standard<br>meshes | Reinforced<br>mesh +<br>standard mesh |
| With SOLOFOND:<br>CRÉPILOR GF<br>CRÉPILOR GT<br>CRÉPILOR T<br>CRÉPILOR TM | Category III            | Category II               |                                       |
| With SOLOFOND:<br>CRÉPILANE GF<br>CRÉPILANE T<br>CRÉPILANE TM             |                         | Category III              |                                       |
| With SOLOFOND:<br>LITHOCOLOR G<br>LITHOCOLOR T<br>LITHOCOLOR F            | Category III            | Category II               |                                       |
| RHÉAMIX MONO with<br>FLEXODERM                                            |                         | Category I                |                                       |
| RHÉAJET                                                                   | Category II             | Category I                |                                       |
| RÉNOPASS CHAUX GF<br>RÉNOPASS CHAUX GM                                    |                         | Category II               |                                       |
| With CRÉALANE FOND:<br>CRÉALANE T<br>CRÉALANE TM                          | Category III            | Category II               |                                       |
| With CRÉALANE FOND: -<br>CRÉALANE SYSTEME FIN                             |                         | Category III              |                                       |

### 3.3.4 Water vapour permeability – resistance to water vapour diffusion

| Rendering system:<br>Base coat +<br>finishing coat indicated below:       | Equivalent air thickness $s_d$ (m)                                    |  |
|---------------------------------------------------------------------------|-----------------------------------------------------------------------|--|
|                                                                           |                                                                       |  |
| With SOLOFOND:<br>CRÉPILOR GF<br>CRÉPILOR T<br>CRÉPILOR GT<br>CRÉPILOR TM | $\leq 1.0$<br>(Test result obtained with CRÉPILOR GT 2.0<br>mm: 0.5)  |  |
| CRÉPILOR GF<br>CRÉPILOR T<br>CRÉPILOR GT<br>CRÉPILOR TM                   | $\leq 1.0$<br>(Test result obtained with CRÉPILOR GT: 0.2)            |  |
| With SOLOFOND:<br>CRÉPILANE GF<br>CRÉPILANE T<br>CRÉPILANE TM             | $\leq 1.0$<br>(Test result obtained with CRÉPILANE TM 1.6<br>mm: 0.4) |  |

| <b>Rendering system:</b>                                       |                                                                            |
|----------------------------------------------------------------|----------------------------------------------------------------------------|
| <b>Base coat + finishing coat indicated below:</b>             | <b>Equivalent air thickness <math>s_d</math> (m)</b>                       |
| With SOLOFOND:<br>LITHOCOLOR G<br>LITHOCOLOR T<br>LITHOCOLOR F | $\leq 1.0$<br>(Test result obtained with<br>LITHOCOLOR T 1.2 mm: 0.3)      |
| RHÉAMIX MONO with FLEXODERM                                    | $\leq 2.0$<br>(Test result obtained: 1.6)                                  |
| RHÉAJET                                                        | $\leq 1.0$<br>(Test result obtained: 0.2)                                  |
| RÉNOPASS CHAUX GF<br>RÉNOPASS CHAUX GM                         | $\leq 1.0$<br>(Test result obtained<br>with RÉNOPASS CHAUX GF 1.5 mm: 0.2) |
| With CRÉALANE FOND:<br>CRÉALANE T<br>CRÉALANE TM               | $\leq 1.0$<br>(Test result obtained with particles size 2.0<br>mm: 0.5)    |
| With CRÉALANE FOND:<br>CRÉALANE SYSTEME FIN                    | $\leq 2.0$<br>(Test result obtained: 1.1)                                  |

### 3.3.5 Release of dangerous substances

Regarding dangerous substances, there may be additional legislative requirements falling outside of the scope of this document. These requirements must be complied with as appropriate.

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

### 3.4.1 Bond strength

#### 3.4.1.1 Bond strength of the base coat onto insulation product

- Initial state: bond strength  $\geq 0.08$  MPa
- After ageing: bond strength  $\geq 0.08$  MPa
- After freeze-thaw cycles: test not performed (see section 3.3.2.2 of this UKTA)

#### 3.4.1.2 Bond strength of adhesives onto substrate and insulation product

#### RHÉACOL PSE and RHÉAMIX MONO:

|                    | <b>Bond strength (MPa) after:</b> |                                                  |                                                     |
|--------------------|-----------------------------------|--------------------------------------------------|-----------------------------------------------------|
|                    | <b>Initial state</b>              | <b>48 h immersion water + 2 h at 23°C-50% RH</b> | <b>48 h immersion water + 7 days at 23°C-50% RH</b> |
| Concrete           | $\geq 0.25$                       | $\geq 0.08$                                      | $\geq 0.25$                                         |
| Insulation product | $\geq 0.08$                       | $\geq 0.03$                                      | $\geq 0.08$                                         |

The EWIS can so be installed on the substrate with application of the adhesive on the following minimal surfaces:

|              | <b>Tensile strength perpendicular to the faces of EPS</b> |                |                |
|--------------|-----------------------------------------------------------|----------------|----------------|
|              | $\geq 100$ kPa                                            | $\geq 120$ kPa | $\geq 150$ kPa |
| RHÉACOL PSE  | 30%                                                       | 25%            | 20%            |
| RHÉAMIX MONO | 30%                                                       | 25%            | 25%            |

### 3.4.2 Fixing strength (transverse displacement)

Test not required as the EWIS fulfils the following criteria:

$$E \cdot d < 50,000 \text{ N/mm}$$

$E$  modulus of elasticity of the base coat without mesh (MPa)  
 $d$  mean dried thickness of the base coat (mm)

### 3.4.3 Resistance to wind load

#### 3.4.3.1 Resistance to wind load of mechanically-fixed EWIS using anchors

|                                         |                                                                                  |              |              |              |
|-----------------------------------------|----------------------------------------------------------------------------------|--------------|--------------|--------------|
| <b>Anchors</b>                          | <b>Plate diameter (mm)</b>                                                       | $\geq 60$    |              |              |
|                                         | <b>Plate stiffness (kN.mm<sup>-1</sup>)</b>                                      | $\geq 0.3$   |              |              |
| <b>Insulation product</b>               | <b>Type</b>                                                                      | EPS boards   |              |              |
|                                         | <b>Tensile strength perpendicular to the face (kPa)</b>                          | $\geq 120$   |              |              |
|                                         | <b>Thickness (mm)</b>                                                            | $\geq 60$    | $\geq 80$    | $\geq 100$   |
| <b>Maximum load (Pull-through test)</b> | <b>Anchors not placed at the panel joints: <math>R_{\text{panel}}</math> (N)</b> | Minimal: 506 | Minimal: 649 | Minimal: 658 |
|                                         |                                                                                  | Average: 512 | Average: 657 | Average: 688 |
|                                         | <b>Anchors placed at the panel joints: <math>R_{\text{joint}}</math> (N)</b>     | Minimal: 429 | Minimal: 554 | Minimal: 611 |
|                                         |                                                                                  | Average: 455 | Average: 570 | Average: 616 |

|                                         |                                                                                  |              |              |              |
|-----------------------------------------|----------------------------------------------------------------------------------|--------------|--------------|--------------|
| <b>Anchors</b>                          | <b>Plate diameter (mm)</b>                                                       | $\geq 60$    |              |              |
|                                         | <b>Plate stiffness (kN.mm<sup>-1</sup>)</b>                                      | $\geq 0.6$   |              |              |
| <b>Insulation product</b>               | <b>Type</b>                                                                      | EPS boards   |              |              |
|                                         | <b>Tensile strength perpendicular to the face (kPa)</b>                          | $\geq 120$   |              |              |
|                                         | <b>Thickness (mm)</b>                                                            | $\geq 60$    | $\geq 80$    | $\geq 100$   |
| <b>Maximum load (Pull-through test)</b> | <b>Anchors not placed at the panel joints: <math>R_{\text{panel}}</math> (N)</b> | Minimal: 509 | Minimal: 707 | Minimal: 949 |
|                                         |                                                                                  | Average: 520 | Average: 720 | Average: 968 |
|                                         | <b>Anchors placed at the panel joints: <math>R_{\text{joint}}</math> (N)</b>     | Minimal: 433 | Minimal: 610 | Minimal: 806 |
|                                         |                                                                                  | Average: 464 | Average: 617 | Average: 821 |

For the use of anchors mounted countersunk, the above indicated values apply for insulation thickness greater or equal to 80 mm and plate diameter equal to 60 mm.

Anchors which can be used are described in Annex 2 (1/2) of this UKTA.

|                                         |                                                                                  |                       |
|-----------------------------------------|----------------------------------------------------------------------------------|-----------------------|
| <b>Anchor</b>                           | <b>Trade name</b>                                                                | termoz SV II ecotwist |
|                                         | <b>Helix dimensions (mm)</b>                                                     | Diameter: 66          |
|                                         |                                                                                  | Height: 27            |
| <b>Insulation product</b>               | <b>Type</b>                                                                      | EPS boards            |
|                                         | <b>Tensile strength perpendicular to the face (kPa)</b>                          | $\geq 100$            |
|                                         | <b>Thickness (mm)</b>                                                            | $\geq 100$            |
| <b>Maximum load (Pull-through test)</b> | <b>Anchors not placed at the panel joints: <math>R_{\text{panel}}</math> (N)</b> | Minimal: 510          |
|                                         |                                                                                  | Average: 520          |
|                                         | <b>Anchors placed at the panel joints: <math>R_{\text{joint}}</math> (N)</b>     | Minimal: 390          |
|                                         |                                                                                  | Average: 430          |

Anchor termoz SV II ecotwist can only be used as mounted countersunk.

|                                         |                                                                                  |                              |
|-----------------------------------------|----------------------------------------------------------------------------------|------------------------------|
| <b>Anchor</b>                           | <b>Trade name</b>                                                                | ThermoScrew TS U8 Gecko      |
|                                         | <b>Helix dimensions (mm)</b>                                                     | Diameter: 67<br>Height: 30   |
|                                         | <b>Type</b>                                                                      | EPS boards                   |
| <b>Insulation product</b>               | <b>Tensile strength perpendicular to the face (kPa)</b>                          | ≥ 100                        |
|                                         | <b>Thickness (mm)</b>                                                            | ≥ 100                        |
| <b>Maximum load (Pull-through test)</b> | <b>Anchors not placed at the panel joints: <math>R_{\text{panel}}</math> (N)</b> | Minimal: 633<br>Average: 656 |

Anchor ThermoScrew TS U8 Gecko can only be used as mounted countersunk.

The design wind load resistance of the EWIS fixed with anchors is determined as follows:

$$R_d = \frac{R_{\text{panel}} \cdot n_{\text{panel}} + R_{\text{joint}} \cdot n_{\text{joint}}}{\gamma}$$

$n_{\text{panel}}$  number of anchors not placed at the panel joints, per m<sup>2</sup>

$n_{\text{joint}}$  number of anchors placed at the panel joints, per m<sup>2</sup>

$\gamma$  national safety factor

#### 3.4.3.2 Resistance to wind load of mechanically fixed EWIS using profiles

|                                                   | Type                                             | EPS boards           |                                |                                |
|---------------------------------------------------|--------------------------------------------------|----------------------|--------------------------------|--------------------------------|
|                                                   | Thickness (mm)                                   | ≥ 60                 |                                |                                |
| Insulation product                                | Tensile strength perpendicular to the face (kPa) | ≥ 150                | ≥ 180                          |                                |
|                                                   | Shear strength (N/mm <sup>2</sup> )              | ≥ 0.02               | ≥ 0.05                         |                                |
|                                                   | Shear modulus (N/mm <sup>2</sup> )               | ≥ 1.0                | ≥ 1.5                          |                                |
|                                                   |                                                  |                      |                                |                                |
| Maximum load<br>( <i>Static Foam Block Test</i> ) | 500 × 500 mm boards:<br><i>R</i> (N/panel)       | a + b <sup>(1)</sup> | Minimal: 950<br>Average: 1010  | Minimal: 1250<br>Average: 1320 |
|                                                   |                                                  | a + c <sup>(1)</sup> | Minimal: 1060<br>Average: 1260 | Minimal: 1440<br>Average: 1710 |
|                                                   |                                                  | a + d <sup>(1)</sup> | Minimal: 1430<br>Average: 1470 | Minimal: 1850<br>Average: 1890 |
|                                                   |                                                  |                      |                                |                                |
|                                                   |                                                  |                      |                                |                                |
|                                                   |                                                  |                      |                                |                                |

(1)a: horizontal profiles fixed every 300 mm;

b: 430 to 470 mm-long connection profiles;

c: 200 mm-long vertical profiles fixed with one anchor in the middle;

d: 400 to 430 mm-long vertical profiles fixed with two anchors at 300 mm interval.

Profiles and anchors which can be used are described respectively in Annex 4 and Annex 2 (2/2) of this UKTA.

#### 3.4.4 Width of crack – Render Strip Tensile Test

Not relevant.

### 3.5 Protection against noise (BWR 5)

Not relevant.

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

Thermal resistance and thermal transmittance are defined in clause 2.2.23 of the UKAD 040083-00-0404.

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

No performance assessed.

### 3.8 Aspects of durability and serviceability

Bond strength after ageing:

| Rendering system:<br>Base coat + finishing coat indicated below                                                                                                                                                                      | Bond strength (MPa) |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| With SOLOFOND: <ul style="list-style-type: none"><li>- CRÉPILOR GF</li><li>- CRÉPILOR GT</li><li>- CRÉPILOR T</li><li>- CRÉPILOR TM</li><li>- CRÉPILOR GF</li><li>- CRÉPILOR GT</li><li>- CRÉPILOR T</li><li>- CRÉPILOR TM</li></ul> |                     |
| With SOLOFOND: <ul style="list-style-type: none"><li>- CRÉPILANE GF</li><li>- CRÉPILANE T</li><li>- CRÉPILANE TM</li></ul>                                                                                                           |                     |
| With SOLOFOND: <ul style="list-style-type: none"><li>- LITHOCOLOR F</li><li>- LITHOCOLOR T</li><li>- LITHOCOLOR G</li></ul>                                                                                                          |                     |
| RHÉAMIX MONO with FLEXODERM                                                                                                                                                                                                          |                     |
| RHÉAJET <ul style="list-style-type: none"><li>- RÉNOPASS CHAUX GF</li><li>- RÉNOPASS CHAUX GM</li></ul>                                                                                                                              |                     |
| With CRÉALANE FOND: <ul style="list-style-type: none"><li>- CRÉALANE T</li><li>- CRÉALANE TM</li></ul>                                                                                                                               |                     |
| With CRÉALANE FOND: -<br>CRÉALANE SYSTEME FIN                                                                                                                                                                                        |                     |

≥ 0.08

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

| Product                                                               | Intended use                                        | Levels or classes<br>(Reaction to fire)                               | System |
|-----------------------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------------------------|--------|
| External Thermal<br>Insulation<br>Composite Systems<br>with rendering | In external walls subject<br>to fire regulation     | A1(1), A2(1), B(1) or C(1)                                            | 1      |
|                                                                       |                                                     | - A1(2), A2(2), B(2), C(2)<br>- D, E, F<br>- (A1 to E) <sup>(3)</sup> | 2+     |
|                                                                       | in external walls not<br>subject to fire regulation | any                                                                   | 2+     |

(1) Products/materials for which as clearly identifiable stage in the production process results in an improvement of the reaction to fire classification (e.g., an addition of fire retardants or a limiting of organic material).

(2) Products/materials not covered by footnote 1.

(3) Products/materials that do not require to be tested for reaction to fire (e.g., Products/materials of Classes A1 according to European Commission Decision 96/603/EC).

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

According to UKAD 040083-00-0404 and Annex V of the Construction Products Regulation (Regulation (EU) 305/2011 as brought into UK law and amended, the system of assessment and verification of constancy of performance (AVCP) System 1 applies.

#### 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 given in Annex 5. As the control plan contains confidential information, Annex 5 is not included in the published parts of this UKTA.

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

- Identification number of the Approved Body
- Name/address of the manufacturer of the product/ system
- Marking with intention of clarification of intended use
- Date of marking
- Number of Certificate of Constancy of Performance
- UKTA number.

On behalf of the British Board of Agrément



Date of Issue: 24 October 2022

**Hardy Giesler**  
Chief Executive Officer



**British Board of Agrément,**  
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WD18 8YG

## ANNEXES

Those annexes apply to the product described in the main body of the UK Technical Assessment.

|                   |                                                                                                 |
|-------------------|-------------------------------------------------------------------------------------------------|
| Annex No. 1 (1/2) | Insulation product for bonded EWIS or mechanically fixed EWIS with anchors – EWIS RHÉATHERM 600 |
| Annex No. 1 (2/2) | Insulation product for mechanically fixed EWIS with profiles – EWIS RHÉATHERM 600               |
| Annex No. 2 (1/2) | Anchors for insulation product – EWIS RHÉATHERM 600                                             |
| Annex No. 2 (2/2) | Anchors for profiles – EWIS RHÉATHERM 600                                                       |
| Annex No. 3       | Glass fibre meshes – EWIS RHÉATHERM 600                                                         |
| Annex No. 4       | PVC profiles for insulation product (dimensions in mm) – EWIS RHÉATHERM 600                     |

Factory-prefabricated, uncoated boards made of expanded polystyrene (EPS) according to BS EN 13163: 2012 + A2: 2016 and having characteristics described in the following table. The surface of the boards is homogeneous and without “skin”. Mass per unit area (kg/m<sup>2</sup>) depends on both thickness of the board and density of EPS.

|                                                                                         |                                                                                             |                                    |
|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------------------------------------|
| <b>Reaction to fire / BS EN 13501-1: 2018</b>                                           |                                                                                             | Class E                            |
| <b>Thermal resistance / BS EN 13163: 2012 + A2: 2016</b>                                |                                                                                             | Defined in the UKCA marking        |
| <b>Dimensional tolerances</b>                                                           | <b>Thickness / BS EN 823: 2013</b>                                                          | T(1) [± 1.0 mm]                    |
|                                                                                         | <b>Length / BS EN 822: 2013</b>                                                             | L(2) [± 2.0 mm]                    |
|                                                                                         | <b>Width / BS EN 822: 2013</b>                                                              | W(2) [± 2.0 mm]                    |
|                                                                                         | <b>Squareness / BS EN 824: 2013</b>                                                         | S(2) [± 2 mm/m]                    |
|                                                                                         | <b>Deviation from squareness on thickness / BS EN 824: 2013</b>                             | ≤ 2 mm/m                           |
|                                                                                         | <b>Flatness / BS EN 825: 2013</b>                                                           | P(5) [≤ 5 mm]                      |
| <b>Dimensional stability</b>                                                            | <b>Under specified temperature and humidity / BS EN 1604: 2013, 48 h at 70°C</b>            | DS (70,-)1 [≤ 1%]                  |
|                                                                                         | <b>Under specified temperature and humidity / BS EN 1604: 2013, 48 h at 70°C and 90% RH</b> | DS(70,90)1 [≤ 1%]                  |
|                                                                                         | <b>Under laboratory condition / BS EN 1603: 2013</b>                                        | DS(N)2 [± 0.2%]                    |
| <b>Water absorption (partial immersion) / BS EN ISO 29767: 2019 – method A</b>          |                                                                                             | < 1 kg/m <sup>2</sup>              |
| <b>Water vapour diffusion resistance factor (μ) / BS EN 12086: 2013</b>                 |                                                                                             | 20 to 60                           |
| <b>Tensile strength perpendicular to the faces in dry conditions / BS EN 1607: 2013</b> |                                                                                             | TR 100 [≥ 100 kPa]                 |
| <b>Shear strength / BS EN 12090: 2013</b>                                               |                                                                                             | SS20 [≥ 0.02 N/mm <sup>2</sup> ]   |
| <b>Shear modulus / BS EN 12090: 2013</b>                                                |                                                                                             | GM 1000 [≥ 1.0 N/mm <sup>2</sup> ] |
| <b>Dynamic stiffness / BS EN 29052-1: 1992, ISO 9052-1: 1989</b>                        |                                                                                             | No performance determined          |
| <b>Air flow resistance / BS EN ISO 9053-1: 2018</b>                                     |                                                                                             | No performance determined          |

|                                                                                   |                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------|
| <b>EWIS RHÉATHERM 600</b>                                                         | <b>ANNEX 1 (1/2)</b><br>of UKTA-12/0133 – version 3 |
| <b>Insulation product for bonded EWIS or mechanically fixed EWIS with anchors</b> |                                                     |

Factory-prefabricated, uncoated boards with grooved edges, made of expanded polystyrene (EPS) according to BS EN 13163: 2012 + A2: 2016 and having characteristics described in the following table.

The surface of the boards is homogeneous and without “skin”. Coverage (kg/m<sup>2</sup>) depends on both thickness of the board and density of EPS.

|                                                                                         |                                                                                                      |                                         |
|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-----------------------------------------|
| <b>Reaction to fire / BS EN 13501-1: 2018</b>                                           |                                                                                                      | Class E                                 |
| <b>Thermal resistance / BS EN 13163: 2012 + A2: 2016</b>                                |                                                                                                      | Defined in the UKCA marking             |
| <b>Dimensional tolerances</b>                                                           | <b>Thickness / BS EN 823: 2013</b>                                                                   | ± 1.5 mm                                |
|                                                                                         | <b>Length / BS EN 822: 2013</b>                                                                      | ± 1.0 mm                                |
|                                                                                         | <b>Width / BS EN 822: 2013</b>                                                                       | W(1) [± 1.0 mm]                         |
|                                                                                         | <b>Squareness / BS EN 824: 2013</b>                                                                  | S(2) [± 2%]                             |
|                                                                                         | <b>Flatness / BS EN 825: 2013</b>                                                                    | P(5) [≤ 5 mm]                           |
| <b>Dimensional stability</b>                                                            | <b>Under specified temperature and humidity / BS EN 1604: 2013, 48 h at 70°C 500 × 500 mm panels</b> | ≤ 0.30% and no individual value > 0.35% |
|                                                                                         | <b>Under laboratory condition / BS EN 1603: 2013</b>                                                 | ≤ 0.15%                                 |
| <b>Water absorption (partial immersion) / BS EN ISO 29767: 2019 – method A</b>          |                                                                                                      | < 1 kg/m <sup>2</sup>                   |
| <b>Water vapour diffusion resistance factor (μ) / BS EN 12086: 2013</b>                 |                                                                                                      | 20 to 60                                |
| <b>Tensile strength perpendicular to the faces in dry conditions / BS EN 1607: 2013</b> |                                                                                                      | TR 150 [≥ 150 kPa]                      |
| <b>Shear strength / BS EN 12090: 2013</b>                                               |                                                                                                      | SS 20 [≥ 0.02 N/mm <sup>2</sup> ]       |
| <b>Shear modulus / BS EN 12090: 2013</b>                                                |                                                                                                      | GM 1000 [≥ 1.0 N/mm <sup>2</sup> ]      |
| <b>Dynamic stiffness / BS EN 29052-1: 1992, ISO 9052-1: 1989</b>                        |                                                                                                      | No performance determined               |
| <b>Air flow resistance / BS EN ISO 9053-1: 2018</b>                                     |                                                                                                      | No performance determined               |

|                                                                     |                                                     |
|---------------------------------------------------------------------|-----------------------------------------------------|
| <b>EWIS RHÉATHERM 600</b>                                           | <b>ANNEX 1 (2/2)</b><br>of UKTA-12/0133 – version 3 |
| <b>Insulation product for mechanically fixed EWIS with profiles</b> |                                                     |

Anchors with UKTA according to United Kingdom Assessment Document 330196-00-0604 and TR051 (here in after EAD anchors). The anchors are composed of a plastic expansion sleeve with a plate having diameter of 60 mm and a plastic or metallic nail or screw. Use categories and characteristic resistances in the substrate are given in each anchor's ETA. Validity of the anchor's ETA shall be checked before using the anchor.

| Trade name                                  | ETA reference | Mounting <sup>(1)</sup> | Plate stiffness (kN/mm) |
|---------------------------------------------|---------------|-------------------------|-------------------------|
| Ejotharm NTK-U                              | ETA-07/0026   | a                       | ≥ 0.3                   |
| UKTanco Super Iso II Long Ø10, Ø10mt        | ETA-13/0744   | a                       |                         |
| UKTanco Super Iso II Ø10, Ø10mt             | ETA-11/0280   | a                       |                         |
| Fischer TERMOZ CN 8                         | ETA-09/0394   | a                       |                         |
| Fischer TERMOZ PN 8                         | ETA-09/0171   | a                       |                         |
| Hilti SD-FV 8                               | ETA-03/0028   | a                       |                         |
| Hilti SDK-FV 8                              | ETA-07/0302   | a                       |                         |
| Koelner KI-10, KI-10 M, KI-10 PA            | ETA-07/0291   | a                       |                         |
| Koelner KI-10N, KI-10 NS                    | ETA-07/0221   | a                       |                         |
| Spit ISO-60                                 | ETA-04/0076   | a                       |                         |
| BRAVOLL® PTH-EX                             | ETA-13/0951   | a                       | ≥ 0.6                   |
| BRAVOLL® PTH-KZ                             | ETA-05/0055   | a                       |                         |
| BRAVOLL® PTH-S                              | ETA-08/0267   | a, b                    |                         |
| BRAVOLL® PTH-SX                             | ETA-10/0028   | a, b                    |                         |
| BRAVOLL® PTH-X                              | ETA-13/0951   | a                       |                         |
| Ejotharm STR-U, STR U 2G                    | ETA-04/0023   | a, b                    |                         |
| Ejot H1 eco                                 | ETA-11/0192   | a                       |                         |
| Ejot H3                                     | ETA-14/0130   | a                       |                         |
| Fischer TERMOZ CS 8                         | ETA-14/0372   | a, b                    |                         |
| FM-ISOMAX                                   | ETA-08/0094   | a                       |                         |
| Hilti SX-FV                                 | ETA-03/0005   | a                       |                         |
| Koelner TFIX-8M                             | ETA-07/0336   | a                       |                         |
| Koelner TFIX-8S                             | ETA-11/0144   | a                       |                         |
| Koelner TFIX-8ST                            | ETA-11/0144   | b                       |                         |
| RAWLPLUG Insulation System R-TFIX-8S        | ETA-17/0161   | a, b                    |                         |
| RAWLPLUG Façade Insulation Fixing R-TFIX-8M | ETA-17/0592   | a                       |                         |
| Spit ISO N                                  | ETA-13/0994   | a                       |                         |
| Spit ISO S                                  | ETA-13/0560   | a, b                    |                         |
| termoz SV II ecotwist                       | ETA-12/0208   | b                       | -                       |
| ThermoScrew TS U8 Gecko                     | ETA-16/0100   | b                       | -                       |

<sup>(1)</sup> a: surface mounting; b: countersunk mounting.

Additionally, every anchor with an ETA according to UKAD 330196-00-0604, TR051 and EAD anchors and having the following characteristics can be used:

- plate diameter ≥ 60 mm;
- plate stiffness ≥ 0.3 kN/mm according to EOTA Technical Report No 026;
- load resistance of the plate ≥ 1.0 kN according to EOTA Technical Report No 026.

These characteristics, the use categories and the characteristic resistances in the substrate shall be taken from the corresponding anchor's ETA.

|                                       |                                                     |
|---------------------------------------|-----------------------------------------------------|
| <b>EWIS RHÉATHERM 600</b>             | <b>ANNEX 2 (1/2)</b><br>of UKTA-12/0133 – version 3 |
| <b>Anchors for insulation product</b> |                                                     |

Anchors with ETA according to 330196-00-0604, EOTA TR051 and to EAD anchors. The anchors are composed of a plastic expansion sleeve with a collar and a metallic nail or screw with flat head having dimensions adapted to the diameter of the profile's perforation (see Annex 4). Use categories and characteristic resistances in the substrate are given in each anchor's ETA. Validity of the anchor's ETA shall be checked before using the anchor.

| Trade name     | ETA reference |
|----------------|---------------|
| Ejotharm NK U  | ETA-05/0009   |
| Ejotharm SDK U | ETA-04/0023   |
| Spit Hit M     | ETA-06/0032   |

**EWIS RHÉATHERM 600**

**Anchors for profiles**

**ANNEX 2 (2/2)**  
of UKTA-12/0133 – version 3

Glass fibre meshes:

- standard meshes: with mesh size between 3 and 6 mm;
- reinforced meshes: implemented in addition to the standard mesh, to improve the impact resistance.

| Trade name                    | Mass per unit area (g/m <sup>2</sup> ) | Residual strength after ageing (N/mm) |      | Relative residual strength after ageing (%) <sup>(1)</sup> |      |
|-------------------------------|----------------------------------------|---------------------------------------|------|------------------------------------------------------------|------|
|                               |                                        | Warp                                  | Weft | Warp                                                       | Weft |
| Standard meshes               |                                        |                                       |      |                                                            |      |
| R 131 A 101 C+                | 167                                    | ≥ 20                                  | ≥ 20 | ≥ 50                                                       | ≥ 50 |
| R 131 A 102 C+                | 161                                    | ≥ 20                                  | ≥ 20 | ≥ 50                                                       | ≥ 50 |
| 0161-CA                       | 156                                    | ≥ 20                                  | ≥ 20 | ≥ 50                                                       | ≥ 50 |
| 0161RA20                      | 160                                    | ≥ 20                                  | ≥ 20 | ≥ 50                                                       | ≥ 50 |
| SSA-1363 F+                   | 167                                    | ≥ 20                                  | ≥ 20 | ≥ 50                                                       | ≥ 50 |
| 03-1 C+                       | 160                                    | ≥ 20                                  | ≥ 20 | ≥ 50                                                       | ≥ 50 |
| ES-049/F                      | 166                                    | ≥ 20                                  | ≥ 20 | ≥ 50                                                       | ≥ 50 |
| Reinforced meshes             |                                        |                                       |      |                                                            |      |
| G-WEAVE 660L<br>55AB X 100 CM | 710                                    | ≥ 20                                  | ≥ 20 | ≥ 40                                                       | ≥ 40 |
| R 585 A 101                   | 696                                    | ≥ 20                                  | ≥ 20 | ≥ 40                                                       | ≥ 40 |

<sup>(1)</sup> Percentage of the strength in the as-delivered state.

**EWIS RHÉATHERM 600**

**Glass fibre meshes**

**ANNEX 3**

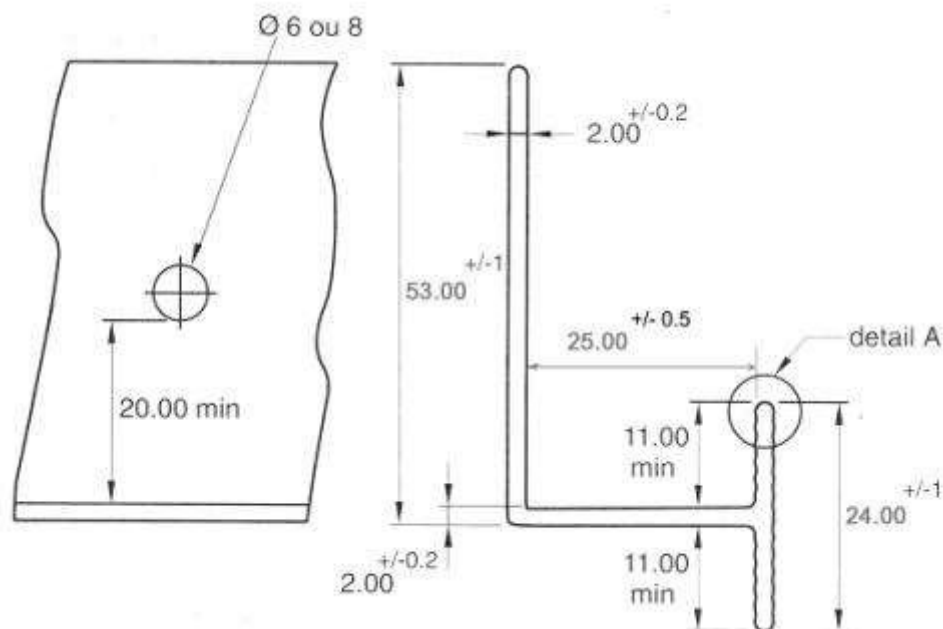
of UKTA-12/0133 – version 3

Polyvinyl chloride (PVC) profiles:

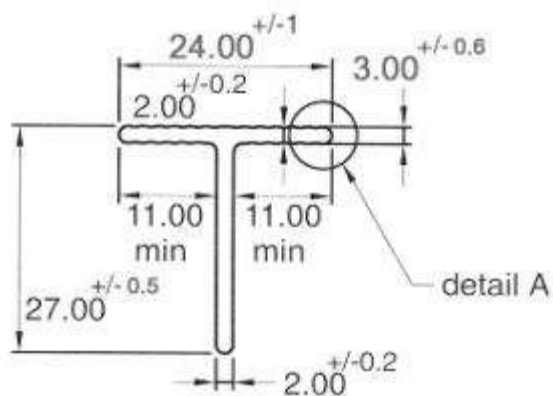
- horizontal fixed profiles;
- vertical fixed profiles: length 0.20 m or 0.40 to 0.43 m;
- connection profiles: length 0.43 to 0.47 m.

Pull-through resistance of fixings from profile  $\geq 500$  N.

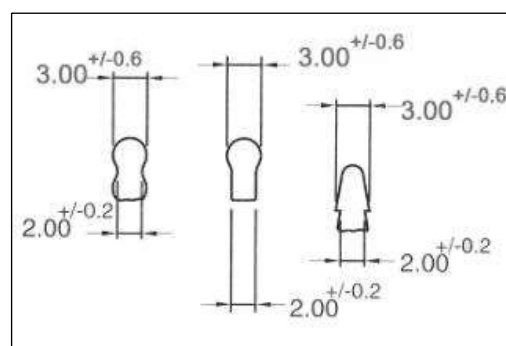
#### Dimensions in millimetres



#### Horizontal and vertical fixed profiles



#### Vertical connection profiles



#### Detail A

**EWIS RHÉATHERM 600**

**PVC profiles for insulation product  
(dimensions in mm)**

#### **ANNEX 4**

of UKTA-12/0133 – version  
3



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