

EARTHWOOL RAINSCREEN SLAB

March 2020



APPLICATIONS



DESCRIPTION

Earthwool RainScreen Slab is a semi-rigid, lightweight, non combustible Rock Mineral Wool slab containing a water repellent additive, specifically designed for use in rainscreen cladding systems both below and above 18m in height.

PERFORMANCE

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Thermal conductivity: 0.034 W/mK

Fire

Classification: Euroclass A1 to BS EN 13501-1

Vapour resistivity

5.00MNs/g.m Water vapour resistivity:

Wind Load

Wind fatigue testing 3.6kPa / 76m/s

BENEFITS

- Non-combustible Euroclass A1 Reaction to Fire rating
- Excellent water resistance
- Rigid and robust
- Designed to adapt to minor imperfections in substrates

SPECIFICATIONS

| Thickness (mm) | Thermal conductivity (W/mK) | Thermal resistance (m ² K/W) | Length (mm) | Width (mm) | Pieces per pack | Area per pack (m²) | Packs per pallet |
|-------------------|-----------------------------|--|----------------|---------------|------------------------|---------------------------|---------------------|
| 250 | 0.034 | 7.35 | 1200 | 600 | 2 | 1.440 | 10 |
| 210 | 0.034 | 6.15 | 1200 | 600 | 2 | 1.440 | 12 |
| 200 | 0.034 | 5.85 | 1200 | 600 | 2 | 1.440 | 12 |
| 180 | 0.034 | 5.25 | 1200 | 600 | 3 | 2.160 | 10 |
| 150 | 0.034 | 4.40 | 1200 | 600 | 3 | 2.160 | 12 |
| 120 | 0.034 | 3.50 | 1200 | 600 | 4 | 2.880 | 10 |
| 100 | 0.034 | 2.90 | 1200 | 600 | 4 | 2.880 | 12 |
| 75 | 0.034 | 2.20 | 1200 | 600 | 6 | 4.320 | 12 |
| 50 | 0.034 | 1.45 | 1200 | 600 | 8 | 5.760 | 12 |
| 150 (BGV) | 0.034 | 4.40 | 1200 | 600 | 3 | 2.16 | 12 |
| 120 (BGV) | 0.034 | 3.50 | 1200 | 600 | 4 | 2.88 | 10 |
| 100 (BGV) | 0.034 | 2.90 | 1200 | 600 | 4 | 2.88 | 12 |

All dimensions are nominal. Other thicknesses between 50-250mm are available on request.

CERTIFICATION



















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ADDITIONAL INFORMATION

Durability

Earthwool RainScreen Slab is odourless, rot proof, non-hygroscopic, does not sustain vermin and will not encourage the growth of fungi, mould or bacteria. The product will have a life equivalent to that of the wall structure in which it is incorporated

Application

Earthwool RainScreen Slab is used for the thermal insulation of rainscreen cladding systems. Earthwool RainScreen Slab is lightweight but rigid enough to resist the compression forces generated when fixing the insulation slabs to the buildings substrate. The water repellent additive in Earthwool RainScreen Slab provides a further line of defence against rain penetration.

Earthwool RainScreen Slab is also recommended for use in partial fill applications, behind a steel frame with a brick outer facade.

Standards and Certification

Earthwool RainScreen Slab has been assessed by the British Board of Agrément (BBA) under Certificate 19/5609 for use in Rainscreen Cladding Systems on new and existing timber, steel-frame or masonry walls.

The certification offers contractors and specifiers utmost confidence that Earthwool RainScreen Slab is fit for its intended use and will have a life equivalent to that of the wall structure in which it is incorporated, provided that it is stored and installed correctly

Earthwool RainScreen Slab is manufactured in accordance with BS EN 13162, ISO 50001 Energy Management Systems, OHSAS 18001 Occupational Health and Safety Management Systems, ISO 14001 Environmental Management Systems, and ISO 9001 Quality Management Systems, as certified by Bureau Veritas.

Environmental

Earthwool RainScreen Slab contains no ozone-depleting substances or greenhouse gases. For further environmental information consult the relevant Environmental Product Declaration, available on our website.

Vapour resistivity

Earthwool RainScreen Slab offers negligible resistance to the passage of water vapour and has a water vapour resistivity of 5.00MNs/g.m.

Moisture

The physical and chemical characteristics of the fibres are unaltered by wetting. Therefore we can state that the thermal properties of Earthwool RainScreen insulation slab are not affected by exposure to moisture and the product will perform as expected once dry.

Thermal performance

The U-value of a proprietary rainscreen cladding system is dependent on the degree of thermal bridging in the system. Calculations should be created using 2D or 3D modelling programs which comply with the methodologies detailed in BS EN ISO 10211.

Knauf Insulation offer 3D numerically modelled U-value calculations compliant with BS EN ISO 10211 under the BBA/TIMSA U-value and Condensation Risk Analysis Competence Scheme.

Handling and storage

Earthwool RainScreen Slab is easy to handle and install, being lightweight and easily cut to size, where necessary. Earthwool RainScreen Slab is supplied in polythene packs which are designed for short term protection only. For longer term protection on site, the product should either be stored indoors, or under cover and off the ground. Earthwool RainScreen Slab should not be left permanently exposed to the elements.



Knauf Insulation mineral wool products made with ECOSE Technology® benefit from a no added formaldehyde binder, which is up to 70% less energy intensive than traditional binders and is made from rapidly renewable bio-based materials instead of petroleum-based chemicals. The technology has been developed for Knauf Insulation's glass and rock mineral wool products, enhancing their environmental credentials without affecting the thermal, acoustic or fire performance. Insulation products made with ECOSE Technology® contain no dye or artificial colours.

Knauf Insulation Ltd

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