

# ROCKSILK® RAINSCREEN SLABS





## PRODUCT DESCRIPTION

Rocksilk® RainScreen Slabs are rock mineral wool slabs with an Agrément certificate by the BBA, designed for use as sheathing insulation in rainscreen façade systems on any building of any height.

They are non-combustible and are manufactured using our unique bio-based binder, ECOSE® Technology. Rocksilk® RainScreen Slabs are available either unfaced, or faced with a black tissue facing.

#### **BENEFITS**

- Made with a water-repellent additive to resist moisture ingress.
- Rocksilk® RainScreen Slab holds an Agrément certificate by the BBA (certificate 19/5609) for use with the broadest range of build-ups in the widest range of thicknesses on the market.
- Slabs are engineered to adapt to minor imperfections in the substrates.
- Supported by 3D U-value calculation service (BS EN 10211 compliant) to ensure accurate design performance.
- Suitable for any building of any height.

## **CERTIFICATIONS, CLASSIFICATIONS AND INDUSTRY STANDARDS**

















## **APPLICATIONS**



Rainscreen façade systems
With light steel frame
construction



Rainscreen façade systems
With masonry outer leaf



Timber frame walls Built-in partally filled



External masonry cavity walls Partially filled



# **SPECIFICATIONS**







## **PERFORMANCE**

## THERMAL (W/mK)

0.032 0.034 0.044

## FIRE CLASSIFICATION

A1 A2 s1,d0 B C
D E F

### GENERIC BRE GREEN GUIDE RATING



**VAPOUR RESISTIVITY** 

5.00 MNs/g.m

#### WIND LOAD

3.6kPa / (76m/s)

Standard thickness.

All dimensions are nominal.

# **ROCKSILK® RAINSCREEN SLAB 600mm**

Thickness (mm)	<b>Thermal conductivity</b> (W/mK)	Thermal resistance (m²K/W)	<b>Length</b> (mm)	Width (mm)	Pieces per pack	Packs per pallet	Area per pack (m²)	Area per pallet (m²)	Pallet product code
250	0.034	7.35	1200	600	2	10	1.440	14.400	656411
240	0.034	7.05	1200	600	2	10	1.440	14.400	656410
230	0.034	6.75	1200	600	2	12	1.440	17.280	656409
220	0.034	6.45	1200	600	2	12	1.440	17.280	656408
210	0.034	6.15	1200	600	2	12	1.440	17.280	640933
200	0.034	5.85	1200	600	2	12	1.440	17.280	640930
190	0.034	5.55	1200	600	2	12	1.440	17.280	652477
180	0.034	5.25	1200	600	3	10	2.160	21.600	640927
170	0.034	5.00	1200	600	3	10	2.160	21.600	651506
165	0.034	4.85	1200	600	3	10	2.160	21.600	658742
160	0.034	4.70	1200	600	3	10	2.160	21.600	651512
155	0.034	4.55	1200	600	3	12	2.160	25.920	658741
150	0.034	4.40	1200	600	3	12	2.160	25.920	640921
140	0.034	4.10	1200	600	3	12	2.160	25.920	651513
130	0.034	3.80	1200	600	3	12	2.160	25.920	651499
125	0.034	3.65	1200	600	4	10	2.880	28.800	658740
120	0.034	3.50	1200	600	4	10	2.880	28.800	640916
110	0.034	3.20	1200	600	4	12	2.880	34.560	650811
100	0.034	2.90	1200	600	4	12	2.880	34.560	640914
90	0.034	2.60	1200	600	5	12	3.600	43.200	650810
80	0.034	2.35	1200	600	5	12	3.600	43.200	650809
75	0.034	2.2	1200	600	6	12	4.320	51.840	640911
70	0.034	2.05	1200	600	6	12	4.320	51.840	650808
60	0.034	1.75	1200	600	7	12	5.040	60.480	650807
50	0.034	1.45	1200	600	8	12	5.760	69.120	640909



# SPECIFICATIONS







## **PERFORMANCE**

## THERMAL (W/mK)

0.034

## FIRE CLASSIFICATION

A1		

### GENERIC BRE GREEN GUIDE RATING



**VAPOUR RESISTIVITY** 

5.00 MNs/g.m

### WIND LOAD

3.6kPa / (76m/s)

Standard thickness. All dimensions are nominal.

# **ROCKSILK® RAINSCREEN SLAB 455mm**

Thickness (mm)	<b>Thermal conductivity</b> (W/mK)	<b>Thermal resistance</b> (m <sup>2</sup> K/W)	<b>Length</b> (mm)	Width (mm)	Pieces per pack	Packs per pallet	Area per pack (m²)	Area per pallet (m²)	Pallet product code
220	0.034	6.45	1200	455	2	15	1.092	16.380	756635
210	0.034	6.15	1200	455	2	15	1.092	16.380	756633
200	0.034	5.85	1200	455	2	15	1.092	16.380	756631
150	0.034	4.40	1200	455	3	15	1.638	24.570	756630
140	0.034	4.20	1200	455	3	15	1.638	24.570	756629
110	0.034	3.20	1200	455	4	15	2.184	32.760	756628
100	0.034	2.90	1200	455	4	15	2.184	32.760	756627
90	0.034	2.60	1200	455	5	15	2.730	40.950	756626
80	0.034	2.35	1200	455	5	15	2.730	40.950	756625
75	0.034	2.20	1200	455	6	15	3.276	49.140	756503
60	0.034	1.75	1200	455	7	15	3.822	57.330	756528
50	0.034	1.45	1200	455	8	15	4.368	65.520	756500

# **ROCKSILK® RAINSCREEN SLAB BGV**

Thickness (mm)	<b>Thermal conductivity</b> (W/mK)	Thermal resistance $(m^2K/W)$	<b>Length</b> (mm)	Width (mm)	Pieces per pack	Packs per pallet	Area per pack (m²)	Area per pallet (m²)	Pallet product code
150	0.034	4.40	1200	600	3	12	2.160	25.920	640959
120	0.034	3.50	1200	600	4	10	2.880	28.800	640949
100	0.034	2.90	1200	600	4	12	2.880	34.560	640935



# ADDITIONAL INFORMATION

## **Application**

Rocksilk® RainScreen Slabs are used for the thermal insulation of rainscreen façade systems and partially filled masonry cavities. Rocksilk® RainScreen Slabs are lightweight but rigid enough to resist the compression forces generated when fixing the insulation slab to the building's substrate. The water-repellent additive in Rocksilk® RainScreen Slabs provides a further line of defence against moisture ingress in construction, Rocksilk® RainScreen Slabs are recommended for use in rainscreen façade systems using a timber, SFS, masonry or reinforced concrete substrate.

Rocksilk® RainScreen Slabs are also recommended for use in partialfill applications, against a steel, timber or masonry inner leaf with a masonry facade.

Rocksilk® RainScreen Slabs are non-combustible and can be used for any buildings of any height.

#### **Aesthetics**

Rocksilk® RainScreen Slabs are available:

- Unfaced as standard
- With a black tissue facing (Rocksilk® RainScreen Slab BGV)

Alternate facings are available as a bespoke product upon request and subject to a minimum order quantity.

#### Standards and certification

Rocksilk® RainScreen Slabs have an Agrément certificate by the BBA under the following certificates for thicknesses from 50mm to 250mm:

- 19/5609 PS1 for use in rainscreen façade systems on new and existing timber, steel frame, reinforced concrete or masonry walls.
- 19/5609 PS2 for use in new and existing partially filled steel frame or timber frame walls with a masonry façade.
- 19/5609 PS3 for use as partial-fill insulation on new external masonry or reinforced concrete cavity walls.

The certification offers contractors and specifiers confidence that Rocksilk® RainScreen Slabs are fit for intended use and will have a life equivalent to that of the wall structure in which they are incorporated, provided that they are stored and installed correctly.

Rocksilk® RainScreen Slabs are approved to be used in situations where they bridge the DPCs of the inner and outer leaf.

Rocksilk® RainScreen Slabs have a product declaration made in conformity with the requirements of BS EN 13162 and are manufactured in accordance with ISO 50001 Energy Management Systems, ISO 14001 Environmental Management Systems, ISO 45001 Occupational Health and Safety Management Systems and ISO 9001 Quality Management Systems.

All of our mineral wool products are made of non-classified fibres and are certified by EUCEB. EUCEB (European Certification Board of Mineral Wool Products - www.euceb.org) is a voluntary initiative by the mineral wool industry. It is an independent certification authority that guarantees that products are made of fibres, which comply with the exoneration criteria for carcinogenicity (Note Q) of the Regulation (EC) 1272/2008.

### **Thermal Modelling**

The U-value of a proprietary built element (rainscreen façade/ masonry cavity wall/agrage soffit etc.) or system is dependent on the material properties and 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 6946 or BS EN ISO 10211 and using guidance from BR443.

We offer simplified calculations to BS EN ISO 6946 and where required numerically modelled U-value calculations using software that is compliant with BS EN ISO 10211.

## **System Testing**

Knauf Insulation maintains declared product characteristics and qualities which are defined in detail in its Declaration of Performances (DoPs) and product literature. The product literature also includes information relating to Knauf Insulation's requirements and recommendations for installation of its products when being used as part of a system.

Any party using, or planning to use, our products in a system (with or without system testing) where performance may be dependent on product characteristics not declared on our DoPs or our product literature, must contact our Technical Service Team.

Knauf Insulation will not accept liability for any failure in system performance due to product characteristics not declared on DoPs or product literature, or not agreed in a Service Level Agreement. In such an event, any warranty given in relation to those products will be invalidated.

#### **Real Performance**

Glass and rock mineral wool are easier to install correctly than other insulants, such as rigid boards, because they adapt to any slight imperfections in the substrate and knit together, eliminating any air gaps. Mineral wool is engineered to adapt to any imperfections, and any settlement/movement over time, so it maintains close contact and preserves thermal performance for the life of the building.

Evidence shows the absence of air gaps is crucial to achieving real performance in the relevant application. Any insulation material that doesn't deliver `as-built' thermal performance is failing in its primary purpose, and therefore presents an unnecessary risk as the construction industry seeks to close the performance gap.

## **Moisture**

Rocksilk® RainScreen Slabs are manufactured with a water-repellent additive meaning they will not transmit water to the external wall structure. The physical and chemical characteristics of the fibres are unaltered by wetting. Therefore, the thermal properties of Rocksilk® RainScreen Slabs are not affected by exposure to moisture and the product will perform as expected once dry and undamaged.

#### **Durability**

Rocksilk® RainScreen Slabs are odourless, rot proof, non-hygroscopic, do not sustain vermin and will not encourage the growth of fungi, mould or bacteria



# ADDITIONAL INFORMATION

## Sustainability

Rocksilk® RainScreen Slabs are manufactured with ECOSE® Technology, our unique bio-based binder which contains no added formaldehyde or phenol. They are made from natural raw materials that are rapidly renewable and is 70% less energy-intensive to manufacture than traditional binders. Products made with ECOSE® Technology are soft to touch and easy to handle. They generate low levels of dust and VOCs, and have been awarded the Eurofins Gold Certificate for Indoor Air Comfort.

All our unfaced rock mineral wool products made with ECOSE® Technology have been awarded the DECLARE 'Red List Free' label. The Declare label is a third-party accreditation and is similar to a food nutrition label but for building products; it is a straightforward ingredient list and allows product transparency disclosure because it identifies where a product comes from and what it is made of. Declare 'Red List Free' certifies that there is no harmful chemical from the red list in these products.

Our rock mineral wool is manufactured using around 35% recycled content (recycled material mostly from the steel industry along with customer production waste).

Rocksilk® RainScreen Slabs contain no ozone-depleting substances or greenhouse gases. The overall environmental performance of our products is reported in their EPDs (Environmental Product Declarations) which are available on our website. EPDs are available for all our products in accordance with ISO 14025, ISO 21930 and EN 15804+A2.

We have received the BES6001 'Very Good' rating for all our mineral wool in our three plants, which proves that our products are made with constituent materials that are responsibly sourced.

Our individual products and the pallets they sit on are wrapped in low-density polyethylene (LDPE4) plastic, which is made of 30-50% (depending on the supplier) recycled plastic content and is fully recyclable.

#### **Handling & Storage**

Rocksilk® RainScreen Slabs should be stored properly and handled in such a way as to ensure that the product remains clean and undamaged.

The shrink-wrapped pallets used for the supply of Rocksilk® RainScreen Slabs are designed for short-term protection only. For longer term protection on site, the products should either be stored indoors or under cover and off the ground. Rocksilk® RainScreen Slabs should not be left permanently exposed to the elements.

If the main hood is removed or damaged, the remaining packs should be kept under cover indoors or protected from the elements by a weatherproof cover. In coastal locations where weather is more extreme and bird damage is more common, use additional covering or store indoors.

The products must be protected from prolonged exposure to sunlight, and stored dry and flat.

Rocksilk® RainScreen Slabs are light and easy to handle; care should be exercised to avoid crushing their edges or corners. If damaged, the products should be discarded. Damaged, contaminated or wet products must not be used.

During construction exposed areas of slabs should always be covered at the end of a day's work or in heavy rain. Polyethylene covers should be used to provide protection and prevent work from becoming saturated.

## **Knauf Insulation Ltd**

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