

## Rocksilk® Building Slabs

June 2024

Build on us.



### Description

Rocksilk® Building Slabs are rock mineral wool slabs manufactured in a range of densities, designed for use in multiple applications or fabrication where density or mechanical characteristics are critical for thermal, fire safety or acoustic performance.

They are non-combustible with the best possible Euroclass A1 reaction to fire classification, and are manufactured using our unique bio-based binder, ECOSE® Technology.

### Benefits

- › Single slab can be used for multiple applications.
- › Can be manufactured with a factory-applied foil or tissue facing, offering solutions for a wide variety of applications.
- › Manufactured from mineral wool which provides higher levels of sound absorption and reduction than other mainstream insulants.
- › Manufactured from rock mineral wool which has a melting temperature of over 1000°C to provide longer periods of fire resistance than other mainstream insulants.



NON-COMBUSTIBLE  
INSULATION

with ECOSE®  
TECHNOLOGY

# Rocksilk® Building Slabs

## Technical Specifications

### ROCKSILK® RS45

Thickness (mm)	Thermal conductivity (W/mK)	Thermal resistance (m <sup>2</sup> K/W)	Length (mm)	Width (mm)	Pieces per pack	Area per pack (m <sup>2</sup> )	Packs per pallet	Pallet product code
150	0.035	4.25	1200	600	3	2.160	12	531096
100	0.035	2.85	1200	600	5	3.600	12	2411339
75	0.035	2.10	1200	600	6	4.320	12	2411328
60	0.035	1.70	1200	600	8	5.760	12	2411425
50	0.035	1.40	1200	600	10	7.200	12	2411327
40	0.035	1.10	1200	600	12	8.640	12	2411326
30	0.035	0.85	1200	600	16	11.520	12	2411424
25	0.035	0.70	1200	600	20	14.400	12	2411325

### ROCKSILK® RS60

Thickness (mm)	Thermal conductivity (W/mK)	Thermal resistance (m <sup>2</sup> K/W)	Length (mm)	Width (mm)	Pieces per pack	Area per pack (m <sup>2</sup> )	Packs per pallet	Pallet product code
100	0.034	2.90	1200	600	4	2.880	12	2411331
75	0.034	2.20	1200	600	6	4.320	12	2411330
60	0.034	1.75	1200	600	7	5.040	12	2411433
50	0.034	1.45	1200	600	9	6.480	12	2411329
40	0.034	1.15	1200	600	12	8.640	12	2411432
25	0.034	0.70	1200	600	18	12.960	12	2411430

### ROCKSILK® RS80

Thickness (mm)	Thermal conductivity (W/mK)	Thermal resistance (m <sup>2</sup> K/W)	Length (mm)	Width (mm)	Pieces per pack	Area per pack (m <sup>2</sup> )	Packs per pallet	Pallet product code
100	0.034	2.90	1200	600	3	2.160	16	2411332
75	0.034	2.20	1200	600	4	2.880	16	2411437
50	0.034	1.45	1200	600	6	4.320	16	2411435

All dimensions are nominal

# Rocksilk® Building Slabs

## Technical Specifications

### ROCKSILK® RS100

Thickness (mm)	Thermal conductivity (W/mK)	Thermal resistance (m <sup>2</sup> K/W)	Length (mm)	Width (mm)	Pieces per pack	Area per pack (m <sup>2</sup> )	Packs per pallet	Pallet product code
100	0.034	2.90	1200	600	3	2.160	16	2411334
75	0.034	2.20	1200	600	4	2.880	16	2411333
50	0.034	1.45	1200	600	6	4.320	16	2411441
40	0.034	1.15	1200	600	7	5.040	16	2411440
30	0.034	0.85	1200	600	10	7.200	16	2411439
25	0.034	0.70	1200	600	12	8.640	16	2411438

### ROCKSILK® RS100 WHITE TISSUE FACING

Thickness (mm)	Thermal conductivity (W/mK)	Thermal resistance (m <sup>2</sup> K/W)	Length (mm)	Width (mm)	Pieces per pack	Area per pack (m <sup>2</sup> )	Packs per pallet	Pallet product code
30	0.034	0.85	1200	600	10	7.200	16	528143

### ROCKSILK® RS140

Thickness (mm)	Thermal conductivity (W/mK)	Thermal resistance (m <sup>2</sup> K/W)	Length (mm)	Width (mm)	Pieces per pack	Area per pack (m <sup>2</sup> )	Packs per pallet	Pallet product code
100	0.034	2.90	1200	600	2	1.440	12	2432553
75	0.034	2.20	1200	600	3	2.160	10	2411447
50	0.034	1.45	1200	600	4	2.880	12	2411446
40	0.034	1.15	1200	600	5	3.600	12	2411445
30	0.034	0.85	1200	600	7	5.040	10	2411444

All dimensions are nominal

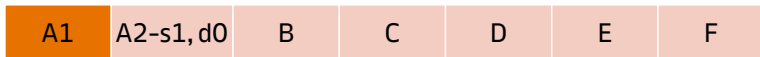
# Rocksilk® Building Slabs

## Performance

THERMAL (W/mK)



FIRE CLASSIFICATION

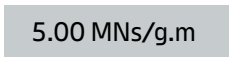


Euroclass reaction to fire classification

GENERIC BRE GREEN GUIDE RATING



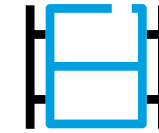
VAPOUR RESISTIVITY



## Applications



Pitched roofs rafter level



Rainscreen façade system



Suspended timber ground floors



Cold flat roof



Internal walls



Separating floors timber



Internal floors

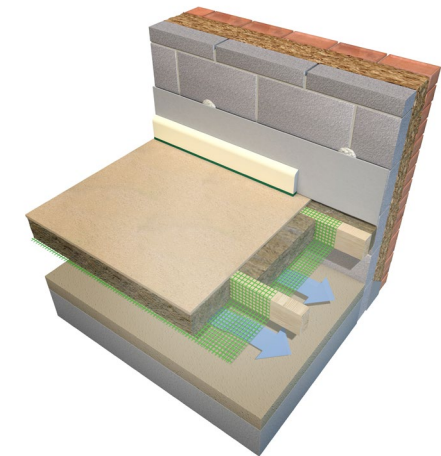
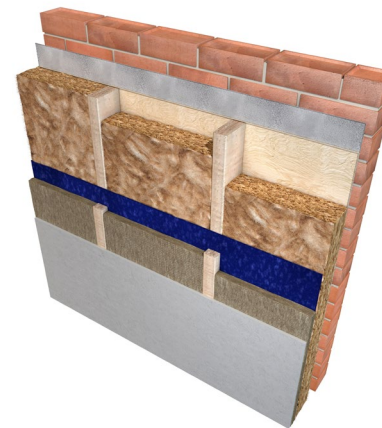


Timber frame walls  
Built-in partially filled



Frame construction  
With masonry outer

## Typical Build-Ups



## Certification, accreditations and industry standards



# Rocksilk® Building Slabs

## Application

Rocksilk® Building Slabs are multi-application products for use in pitched roof constructions between rafters, intermediate floors, separating floors, internal stud partitions and light steel frame infill. Rocksilk® Building Slabs are used extensively in OEM applications for fabrication of thermal, acoustic and fire products. Rocksilk® Building Slabs are non-combustible and available in a number of densities, ranging from 45kg/m<sup>3</sup> up to 140kg/m<sup>3</sup> to suit a variety of applications.

## Standards and certification

Rocksilk® Building 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](http://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/garage 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 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.

## Durability

Rocksilk® Building Slabs are odourless, rot proof, non-hygroscopic, do not sustain vermin and will not encourage the growth of fungi, mould or bacteria. The products will have a life equivalent to that of the structure in which they are incorporated.

# Rocksilk® Building Slabs

## Sustainability

Rocksilk® Building Slabs are manufactured with ECOSE® Technology, our unique bio-based binder which contains no added formaldehyde or phenol. It is made from natural raw materials that are rapidly renewable and is 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® Building 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® Building 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® Building 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® Building 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® Building 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

Stafford Road, St.Helens, Merseyside, WA10 3LZ Customer Service: 01744 766 766

*All rights reserved, including those of photomechanical reproduction and storage in electronic media. Extreme caution was observed when putting together and processing the information, text and illustrations in this document. Nevertheless, errors cannot be completely ruled out. The publisher and editors cannot assume legal responsibility or any liability for incorrect information and consequences thereof. The publisher and editors will be grateful for improvement suggestions and details of possible errors pointed out. For the most up-to-date document versions and product information, please always refer to our website.*