



### PRODUCT DESCRIPTION

Rocksilk® Flexible Slab is a rock mineral wool slab, designed for use in multiple thermal and acoustic applications as well as the fire protection of a loft conversion floor.

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

### BENEFITS

- Single slab can be used for multiple applications.
- Tested to achieve up to 60 minutes fire resistance when used in the floor of a loft conversion.
- Engineered to adapt to minor imperfections in the substrates and friction fits between studs, joists and rafters.
- Enables existing ceilings to be retained on a loft upgrade whilst meeting building regulations.
- Manufactured from mineral wool which provides the best levels of sound absorption and reduction compared to other mainstream insulants.

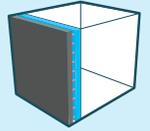
### CERTIFICATION, ACCREDITATIONS AND INDUSTRY STANDARDS



### APPLICATIONS



Pitched roofs rafter level



Rainscreen façade system\*



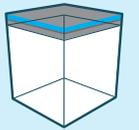
Suspended timber ground floors



Internal walls



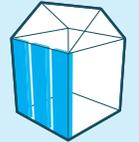
Internal floors



Cold flat roof



Loft conversion floors



Timber frame walls



Separating Floors

\*Between steel studs



NON-COMBUSTIBLE  
INSULATION



### PERFORMANCE

#### THERMAL (W/mK)

0.032	0.035 - 0.037	0.044
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#### FIRE CLASSIFICATION

A1	A2 s1, d0	B	C
D	E	F	

Euroclass reaction to fire classification

#### GENERIC BRE GREEN GUIDE RATING

A+	A	B	C
D	E		

#### VAPOUR RESISTIVITY

5.00 MNs/g.m
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### ROCKSILK® FLEXIBLE SLAB

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
140	0.035	4.00	1200	600	3	2.160	12	2411335
100	0.037	2.70	1200	600	6	4.320	12	457994
90	0.037	2.40	1200	600	6	4.320	12	457997
70	0.037	1.85	1200	600	8	5.760	12	2411408
60	0.037	1.60	1200	600	10	7.200	12	457996
50	0.037	1.35	1200	600	12	8.640	12	457995
40	0.037	1.05	1200	600	14	10.080	12	531594

All dimensions are nominal.

### Application

Rocksilk® Flexible Slab is typically used for the thermal and acoustic insulation of a wide variety of constructions such as timber and metal stud partitions, timber frame walls and suspended timber floors.

100mm Rocksilk® Flexible Slab has been tested to provide up to 60 minutes fire protection when a floor is upgraded to a fire resistant floor in line with Approved Document B, for example when an unused loft is converted into habitable accommodation during a loft conversion.

Rocksilk® Flexible Slab is non-combustible with the best possible Euroclass A1 Reaction to fire classification.

### Standards and certification

Rocksilk® Flexible Slab has 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 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.

### Durability

Rocksilk® Flexible 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 structures in which it is incorporated.

### Sustainability

Rocksilk® Flexible Slab is 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 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® Flexible Slab contains 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 and Storage

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

The polyethylene packs / shrink-wrapped pallets used for the supply of Rocksilk® Flexible Slab 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® Flexible Slab 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® Flexible Slab is 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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