KNAUFINSULATION

Rocksilk® Flat Roof Slabs

May 2024





Description

Rocksilk® Flat Roof Slab is a rock mineral wool slab with an Agrément certificate by the BBA, designed for use in flat roof build-ups onto all types of roof deck using all types of mechanically-fixed membranes.

Rocksilk® Flat Roof Slab Extra has a higher mechanical performance, designed to take increased loads.

They are non-combustible with the best possible Euroclass A1 reaction to fire classification, and are manufactured using our Krimpact® Technology.

Benefits

- Rocksilk® Flat Roof Slab holds an Agrément certificate by the BBA (certificate 08/4526) for use in multiple build-ups.
- > Compatible with a wide range of mechanically-fixed single-ply membranes.
- Manufactured from mineral wool which provides higher levels of sound absorption and reduction than other mainstream insulants to reduce the drumming effects of rainfall.
- Manufactured using Knauf Insulation's Krimpact® Technology giving improved compressive strength and durability.
- Manufactured with a water-repellent additive to resist moisture ingress.







Rocksilk® Flat Roof Slabs

Technical Specifications

ROCKSILK® FLAT ROOF SLAB

Thickness (mm)	Thermal conductivity (W/mK)	Thermal resistance (m ² K/W)	Compressive Strength (kPa)	Length (mm)	Width (mm)	Area per pallet (m²)	Pieces per pack	Pallet product code
180	0.039	4.60	70	1200	1000	16.800	14	606059
160	0.039	4.10	70	1200	1000	16.800	14	691052
145	0.039	3.70	70	1200	1000	19.200	16	606057
120	0.039	3.05	70	1200	1000	24.000	20	606055
105	0.039	2.65	70	1200	1000	28.800	24	686424
100	0.039	2.55	70	1200	1000	28.800	24	606052
80	0.039	2.05	70	1200	1000	36.000	30	691296

ROCKSILK® FLAT ROOF SLAB EXTRA

Thickness (mm)	Thermal conductivity (W/mK)	Thermal resistance (m²K/W)	Compressive Strength (kPa)	Length (mm)	Width (mm)	Area per pallet (m²)	Pieces per pack	Pallet product code
150	0.040	3.75	90	1200	1000	19.200	16	606067
125	0.040	3.10	90	1200	1000	24.000	20	606065
105	0.040	2.60	90	1200	1000	28.800	24	606064
95	0.040	2.35	90	1200	1000	28.800	24	606061

All dimensions are nominal

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Performance

THERMAL (W/mK)

0.032 0.039-0.040 0.044

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

COMPRESSIVE STRENGTH

70 kPa & 90 kPa

Certification, accreditations and industry standards













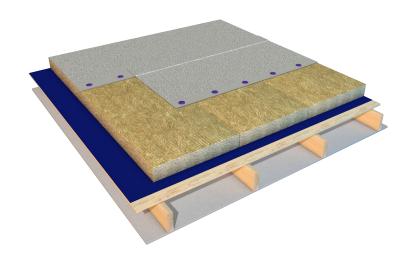


Applications



Flat roof - warm roof

Typical Build-Up



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Application

Rocksilk® Flat Roof Slabs are used for the thermal insulation of flat roofs. Rocksilk® Flat Roof Slabs are suitable for use under all types of mechanically-fixed membranes. Rocksilk® Flat Roof Slabs are suitable for use as upstand boards in warm roof applications when installed with the fixings and waterproof layer as detailed by the membrane manufacturer.

Rocksilk® Flat Roof Slabs are non-combustible with the best possible Euroclass A1 reaction to fire classification.

Standards and certification

Rocksilk® Flat Roof Slab (standard only) has an Agrément certificate by the BBA under Certificate 08/4526 for use as thermal insulation layers on limited access flat roofs with concrete, timber or metal decks in new or existing domestic and non-domestic buildings. The certification offers contractors and specifiers utmost confidence that Rocksilk® Flat Roof Slab is fit for intended use and will have a life equivalent to that of the roof structure in which they are incorporated, provided that they are stored and installed correctly.

Rocksilk® Flat Roof Slab is FM Approved (certificate no 3063483).

Rocksilk® Flat Roof Slabs have a compressive strength of 70 kPa and 90 kPa (Extra), in line with SPRA's Component Quality Standard 04 - Stone Mineral Wool Insulation Boards for Flat Roofing.

Rocksilk® Flat Roof 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/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 Services 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® Flat Roof Slabs are odourless, rot proof, non-hygroscopic, don't 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.

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Sustainability

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

Rocksilk® Flat Roof 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.

The pallets the products 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® Flat Roof 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® Flat Roof Slabs 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. Rocksilk® Flat Roof Slabs should not be left permanently exposed to the elements.

If the main hood is removed or damaged, the remaining slabs 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 product must be protected from prolonged exposure to sunlight, and stored dry and flat.

Rocksilk® Flat Roof Slabs are light and easy to handle; care should be exercised to avoid crushing its edges or corners. If damaged, the product 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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