

Rocksilk® RainScreen FFCB

July 2024

Build on us.

Description

Rocksilk® RainScreen FFCB is a patented cavity barrier made from rock mineral wool, that is designed to be face-fixed to Rocksilk® RainScreen Slab as the masonry façade is constructed.

It is part of our rainscreen cavity system with Rocksilk® RainScreen Slabs and Rocksilk® RainScreen Slab Fixings that provide fire resistance for up to 90 minutes insulation and integrity (EI90).

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.

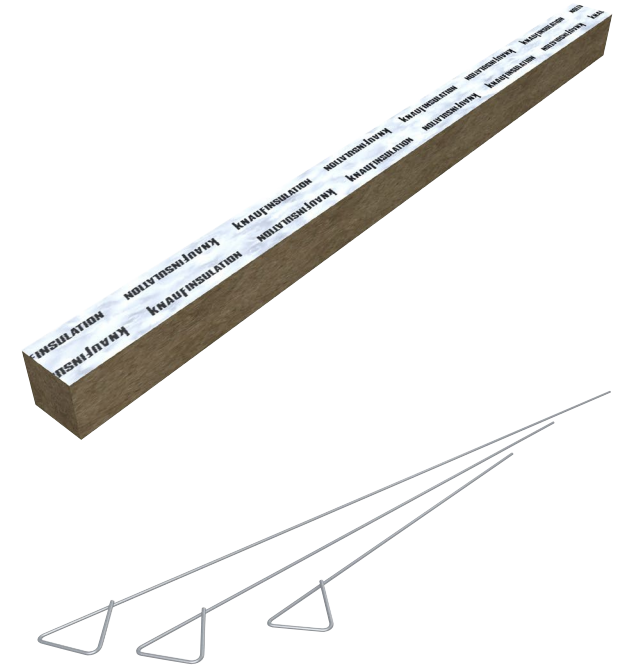
Benefits

- › Part of our tested rainscreen cavity system providing fire resistance for up to 90 minutes insulation and integrity.
- › Is installed after Rocksilk® RainScreen Slabs are in place, meaning that the slabs do not need to be cut away, reducing waste and increasing efficiency on-site.
- › Barrier thickness does not change, no matter the thickness of Rocksilk® RainScreen Slab, and ties can be cut to suit.
- › Foil-faced to ensure correct orientation of barrier.
- › Suitable for vertical and horizontal applications.



NON-COMBUSTIBLE
INSULATION

with **ECOSE**
TECHNOLOGY



Rocksilk® RainScreen FFCB

Technical Specifications

ROCKSILK® RAINSCREEN FFCB

Length (mm)	Width (mm)	Thickness (mm)	Tie Length (mm)	Quantity per box	Ties per box	Product code
1200	52	100	200	28	84	794378
1200	52	100	300	28	84	795371
1200	52	100	400	28	84	795419
1200	52	200	200	14	42	795616
1200	52	200	300	14	42	795614
1200	52	200	400	14	42	795613
1200	102	200	300	6	18	795615
1200	102	200	400	6	18	795617
1200	600	100	n/a	6	n/a	801370
1200	600	200	n/a	3	n/a	801372

ROCKSILK® RAINSCREEN FFCB TIE

Length (mm)	Width (mm)	Thickness (mm)	Tie Length (mm)	Quantity per box	Ties per box	Product code
n/a	n/a	n/a	200	n/a	100	795618
n/a	n/a	n/a	300	n/a	100	795619
n/a	n/a	n/a	400	n/a	100	795620

All dimensions are nominal

Rocksilk® RainScreen FFCB

Performance

FIRE CLASSIFICATION

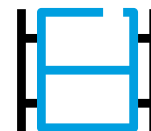
A1	A2 s1,d0	B	C	D	E	F
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Euroclass reaction to fire classification

FIRE PERFORMANCE

Residual Cavity Width (mm)	Orientation	Classification		Rocksilk® RainScreen Slab thickness (mm)	Rocksilk® RainScreen FFCB depth (mm)
		Integrity (E)	Insulation (I)		
Max. 50	Vertical & Horizontal	60	30	Min. 50	Min. 100
Max. 50	Vertical & Horizontal	60	60	50	Min. 100
Max. 110	Vertical & Horizontal	90	90	Min. 100	Min. 200

Applications



Rainscreen façade systems



Frame construction
With masonry outer

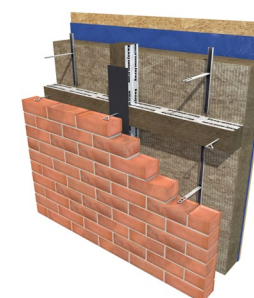
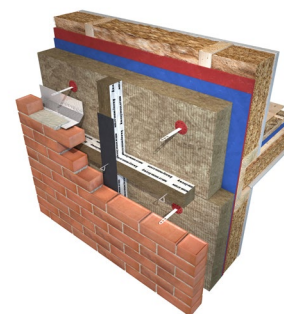


Timber frame walls
Built-in insulation
between studs with
partially filled cavity

Certification, accreditations and industry standards



Typical Build-Ups



Rocksilk® RainScreen FFCB

Application

Rocksilk® RainScreen FFCB is used as a cavity barrier in closed state cavities to provide fire resistance between compartments, floor levels and cavity openings such as windows or doors. It is suitable for use in partially filled masonry cavities where the inner leaf is concrete/masonry/steel or timber frame.

A 100mm Rocksilk® RainScreen FFCB will provide fire resistance of 30 minutes insulation and 90 minutes integrity, while a 200mm Rocksilk® RainScreen FFCB will provide fire resistance of 90 minutes insulation and integrity.

When factory finished to suit cavity dimensions, Rocksilk® RainScreen FFCB comes with three ties per barrier included in the box.

When ordered as a full slab, ties should be ordered separately.

They should be a suitable depth such that they sit in contact with the sheathing board when installed. The ties can be easily trimmed to size.

Rocksilk® RainScreen FFCB can only be used in conjunction with Rocksilk® RainScreen Slab.

Standards and certification

Rocksilk® RainScreen FFCB has been assessed by Underwriters Laboratories (UL) under assessment report 4790643767-1 to provide fire resistance to partially filled cavities with a masonry façade.

All of our rock mineral wool products are made of non-classified fibres and are certified by EUCB. EUCB (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.

Rocksilk® RainScreen FFCB is manufactured in accordance with ISO 50001 Energy Management Systems, OHSAS 18001 Occupational Health and Safety Management Systems, ISO 14001 Environmental Management Systems, and ISO 9001 Quality Management Systems.

Knauf Insulation Ltd

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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.

Moisture

The physical and chemical characteristics of the fibres are unaltered by wetting. Therefore, the thermal properties of Rocksilk® RainScreen FFCB are not affected by exposure to moisture and the product will perform as expected once dry and undamaged.

Durability

Rocksilk® RainScreen FFCB 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.

Sustainability

Rocksilk® RainScreen FFCB 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.

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 FFCB 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.