



KNAUFINSULATION

Rocksilk® RainScreen FireStop Slab

Installation guide

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What you need to know

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Performance table

Rocksilk® RainScreen FireStop Slab is used as a vertical open state cavity barrier in buildings with ventilated cavities or as a horizontal and vertical 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.

Rocksilk® RainScreen FireStop Slab is recommended for use against a steel, timber, masonry inner or reinforced concrete inner leaf where the construction has a ventilated cavity.

Rocksilk® RainScreen FireStop Slab should be partnered with Rocksilk® RainScreen OSCB which is installed horizontally, and Rocksilk® RainScreen Slabs for a complete rainscreen cavity system for open state cavities.

Rocksilk® RainScreen FireStop Slab should be partnered with Rocksilk® RainScreen Slab for a complete rainscreen cavity system for closed state cavities.

The outer wall must be concrete or masonry units (concrete blocks/bricks) or other non-combustible substrate that does not deform or deflect in such a way that would adversely affect the performance of the cavity barrier. If concrete is not used, then the performance of the cavity barrier will be dependent on the outer wall remaining in place and not deforming or deflecting for the same period of time as the cavity barrier. Use of substrates other than those tested will require an assessment from a competent fire engineer.

Rocksilk® RainScreen FireStop Slab has been tested to BS EN 1366-4 and is third party certified by IFC Certification Ltd (KIWA) under certificate number IFCC 1940.

	Substrates	Overall Cavity Width	Integrity (E) (mins)	Insulation (I) (mins)
Vertical	CP Board	50-450mm	120	45
	Masonry	50-300mm	180	45
Horizontal	CP Board	50-450mm	120	45
	Masonry	50-300mm	180	45

Safety considerations

STORAGE

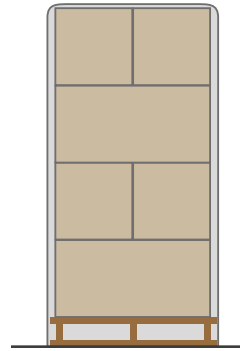
Rocksilk® RainScreen FireStop Slab should be stored properly and handled in such a way as to ensure that it is clean and undamaged.

Rocksilk® RainScreen FireStop Slab is supplied in cardboard boxes on a pallet, which 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® RainScreen FireStop Slab should not be left permanently exposed to the elements.

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



Slabs protected from weathering potential



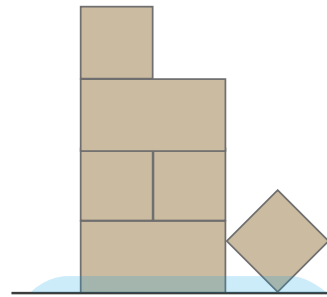
HANDLING

Rocksilk® RainScreen FireStop Slab is easy to handle; care should be exercised to avoid crushing the edges or corners or damaging the shrink wrap or intumescent strip. If damaged, the product should be discarded. Damaged, contaminated or wet product must not be used.

During construction exposed areas of construction 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.



Slabs exposed to the elements

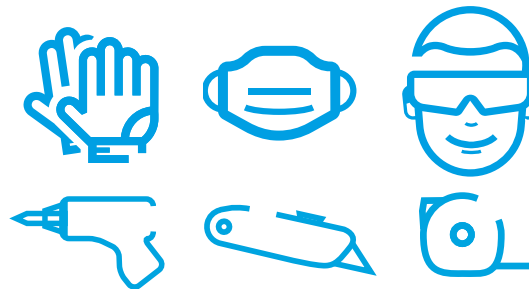


SAFETY EQUIPMENT AND TOOLS

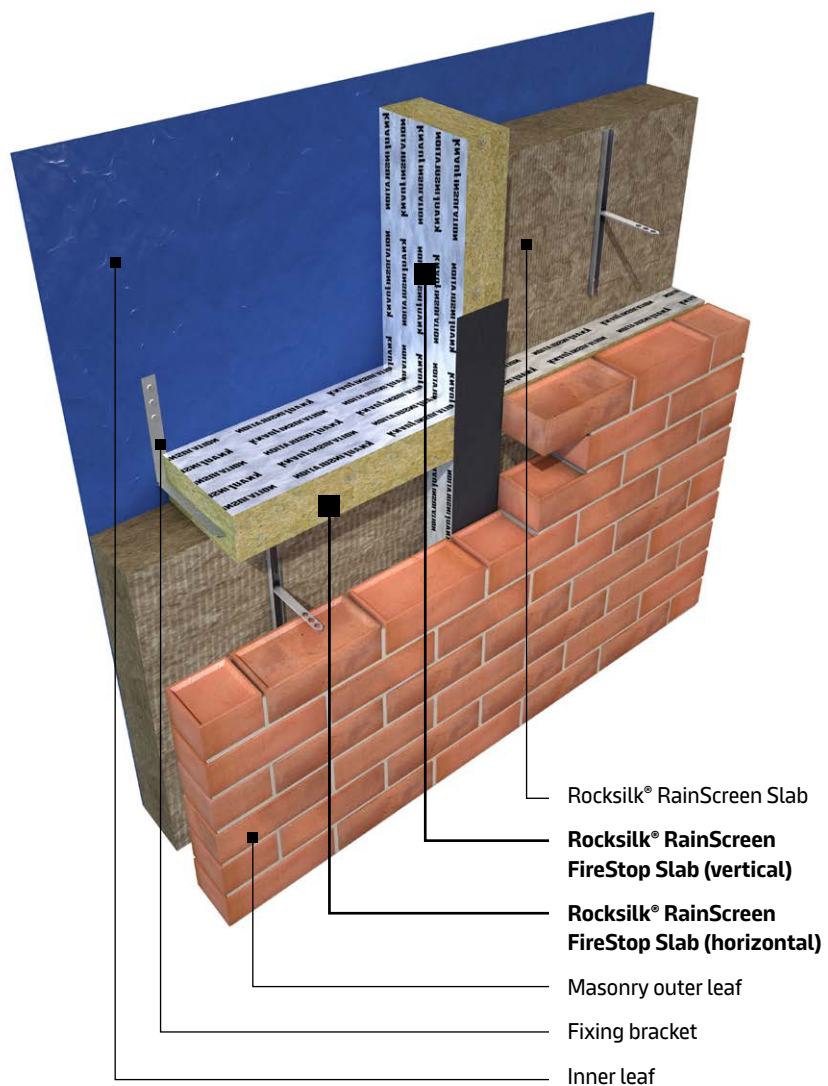
It is recommended that the following Personal Protective Equipment and tools should be used while handling the product:

PPE: Gloves, dust mask (FFP1 minimum), safety glasses

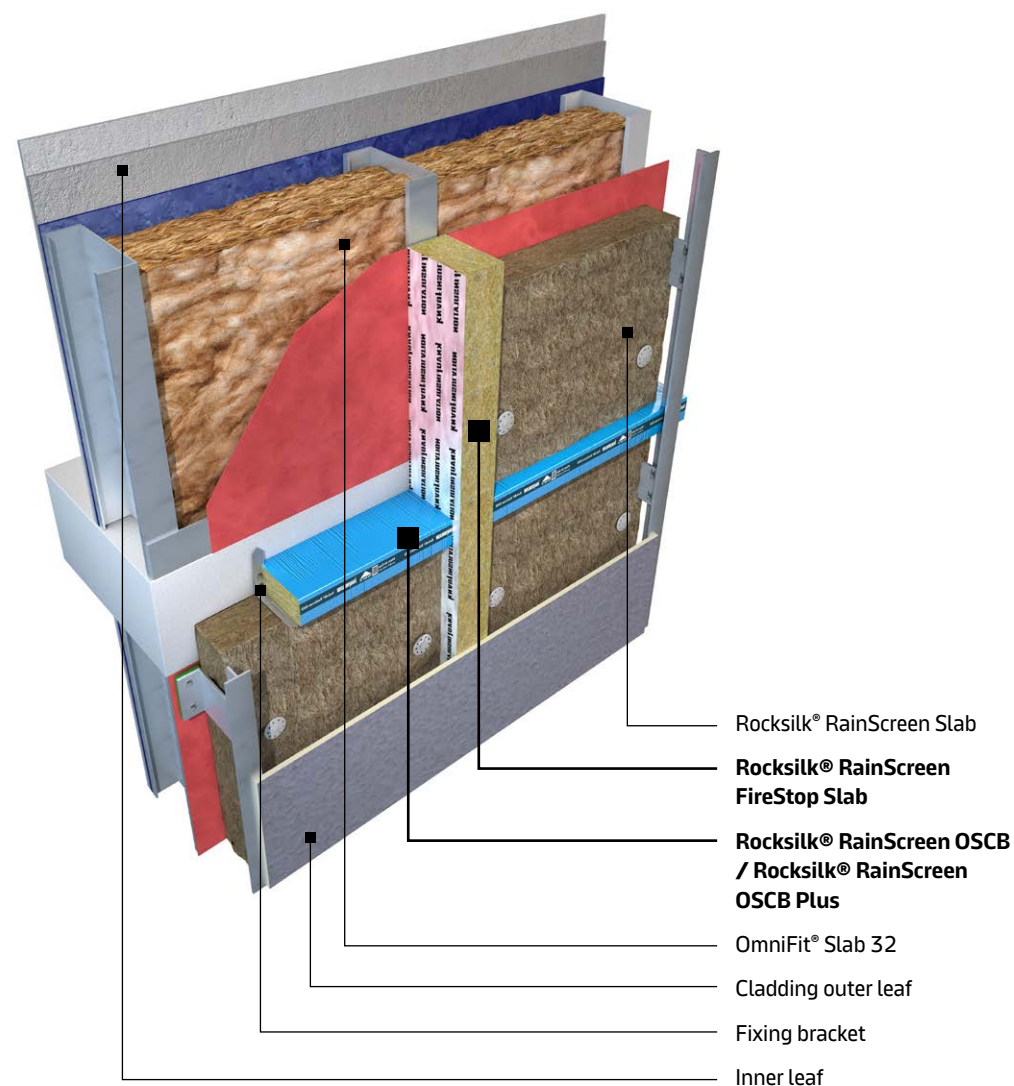
Tools: Drill, knife or fine-toothed saw, tape measure



MASONRY OUTER LEAF



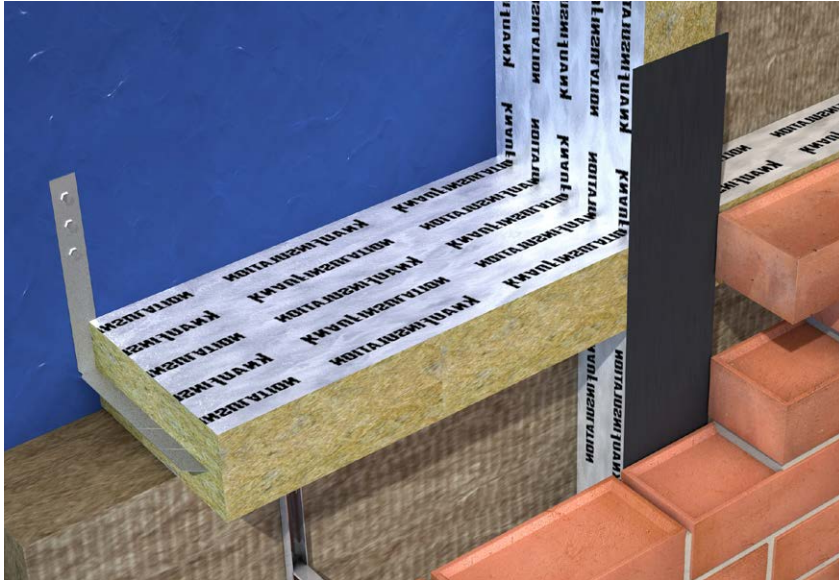
CLADDING OUTER LEAF



Pre-installation considerations

INSTALLED WITH FOIL FACING INTO THE CAVITY

Rocksilk® RainScreen FireStop Slab can be installed either side up, with the foil facing into the cavity.

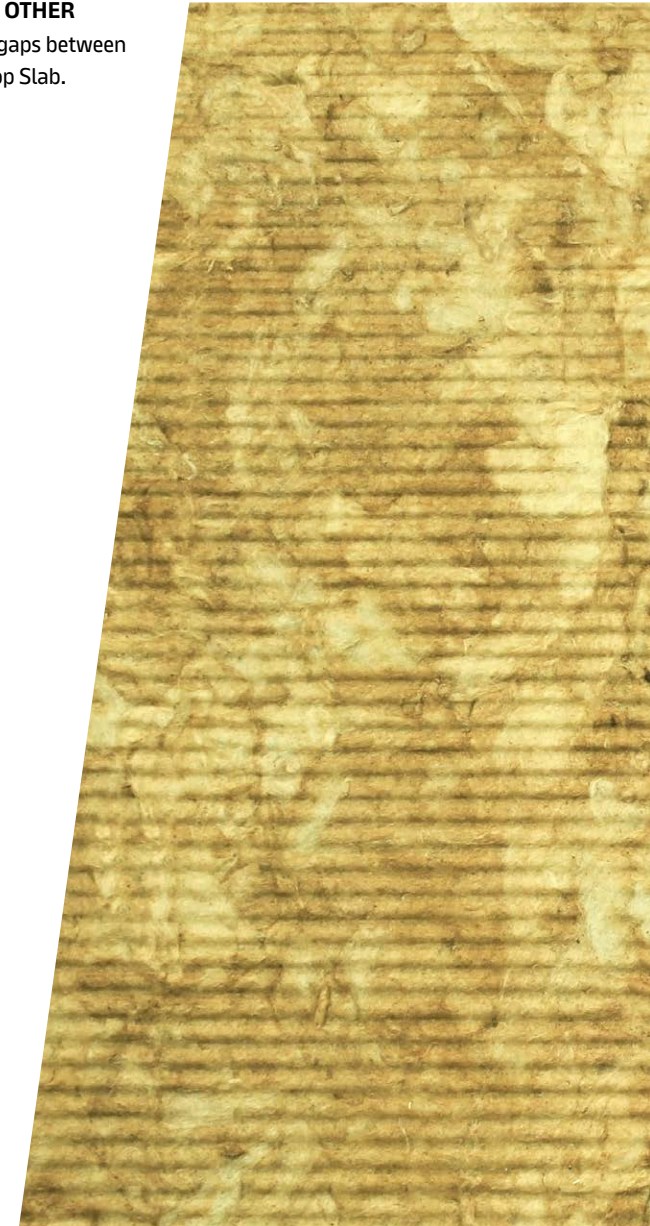
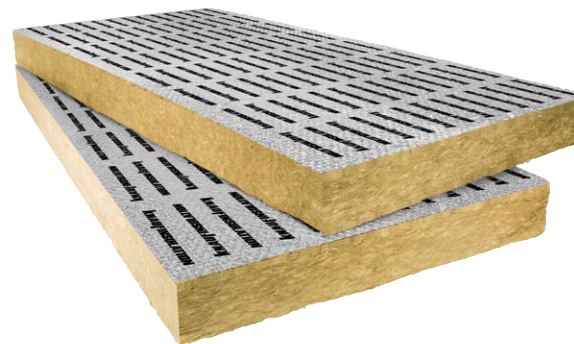
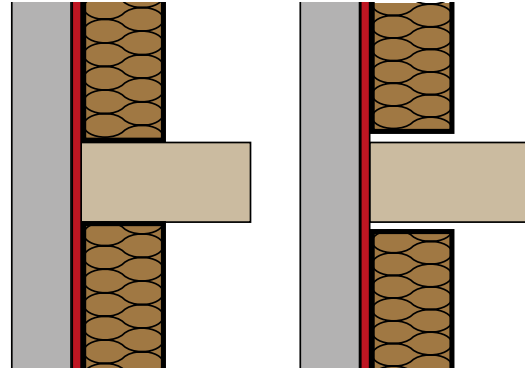


DO NOT REMOVE THE FOIL

The foil facing on Rocksilk® RainScreen FireStop Slab is designed to make the product more robust to handle, ensure correct orientation of the barrier, provide a smoke barrier, and provide a water-resistant layer to the product to protect against the elements when exposed on site. Removing this foil will compromise the product performance and the entire slab should be disposed of if this occurs.

INSULATION AND BARRIERS TO BE IN CONTACT WITH EACH OTHER

Install such that they are tightly butted together so there are no gaps between the Rocksilk® RainScreen Slab and Rocksilk® RainScreen FireStop Slab.

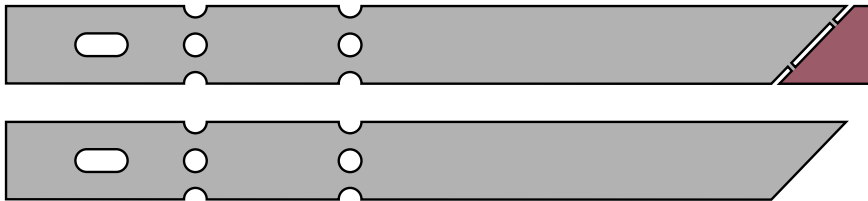


1

Ensure you have the correct brackets for the cavity barrier dimensions – small brackets are used for cavities up to 160mm and large brackets for cavities from 161mm up to 450mm.

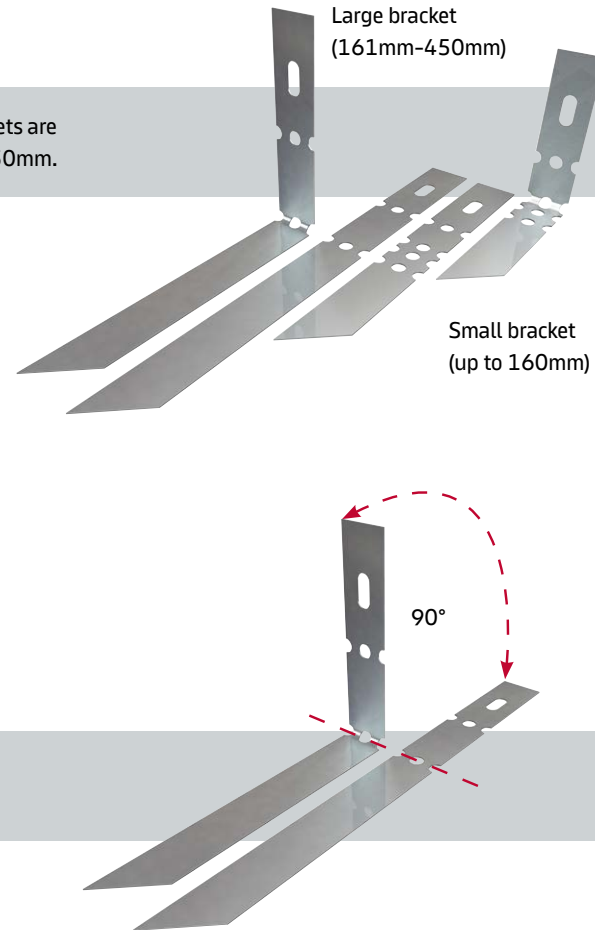
2

Snap the end of the fixing off so that the spike is accessible – this will pierce the cavity barrier.



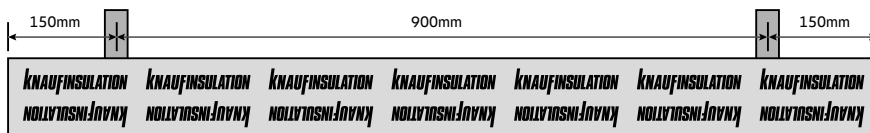
3

Now bend the fixing at the bend point so that it is bent to 90 degrees.



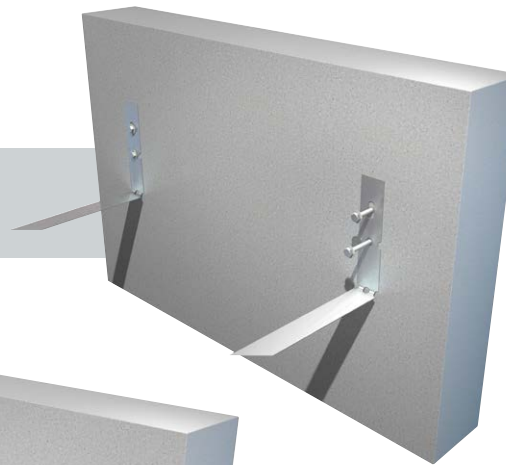
4

A minimum of two fixings should be used per slab, at approximately 150mm in from the edge of the slab.



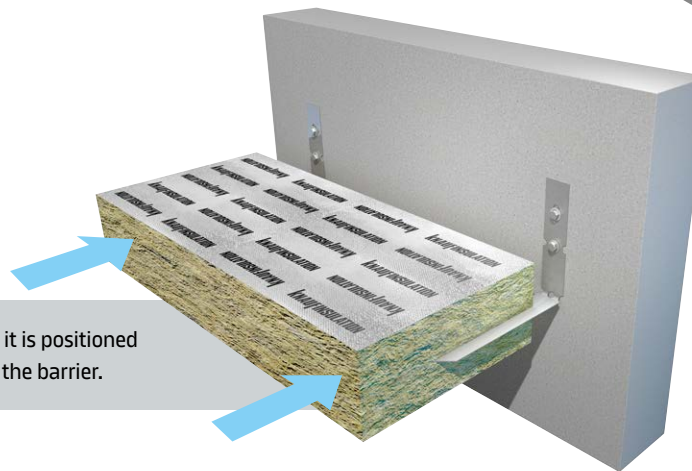
5

Once bent, the bracket can be fixed back to the inner leaf, using at least two bolts to provide a secure fixing. Ensure non-combustible fixings suitable for the substrate are used. For more information please consult fixing manufacturers.



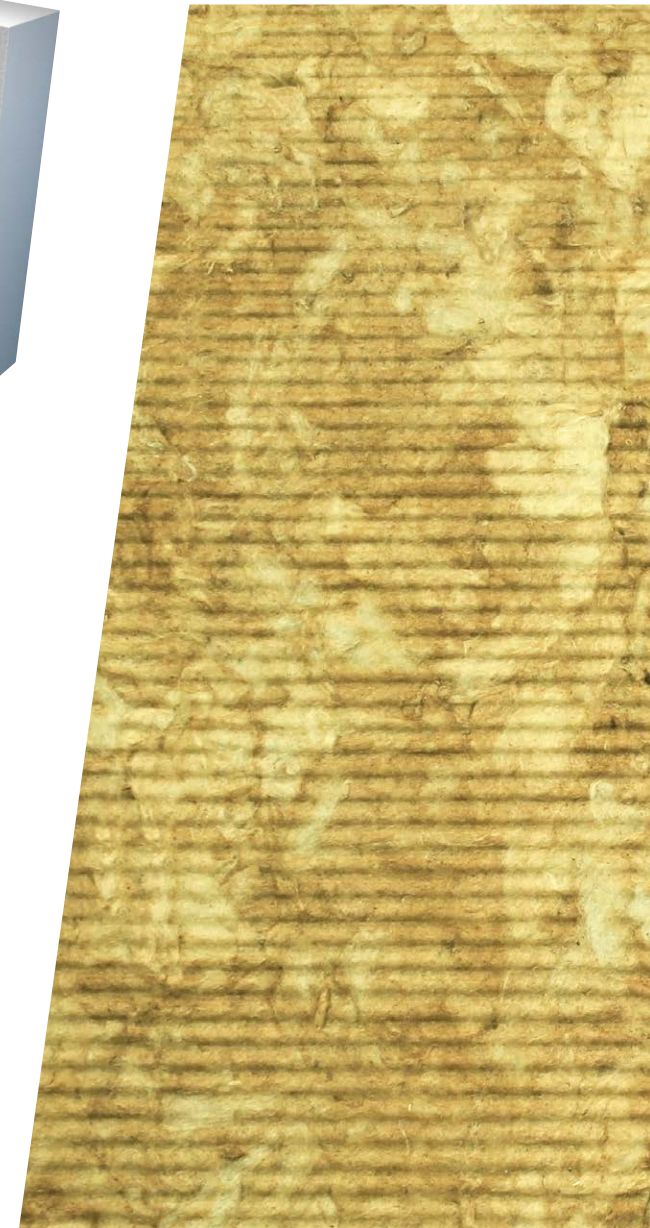
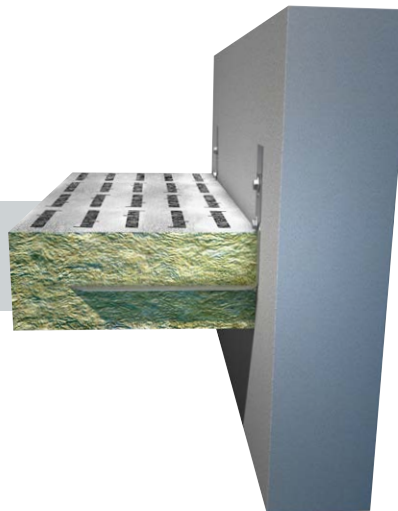
6

Push the cavity barrier into position, ensuring it is positioned level with the bracket roughly in the centre of the barrier.



7

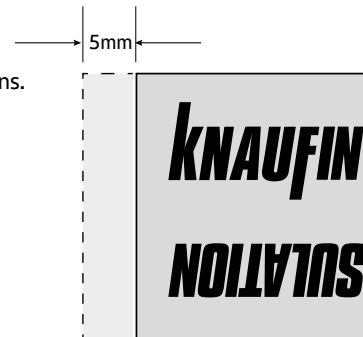
Ensure the back face of the barrier is tightly fitted against the inner leaf with no gaps running between them.



Cutting

CUT OVERSIZE AND COMPRESS

Barriers should be cut oversize by approximately 5mm to allow for compression between joints and at the end of runs.



To avoid gaps between slabs that could compromise the fire safety performance

CUT NEATLY WITH A SHARP INSULATION SAW/KNIFE OR CIRCULAR SAW

Cut neatly with a fine serrated saw, large bladed knife or circular saw.



Gives a factory quality cut and prevents tearing



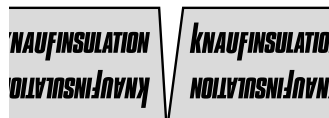
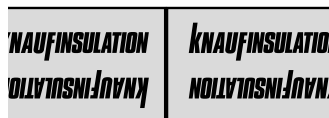
Use insulation saw or knife



Rip using coarse blade

ENSURE A SQUARE CUT

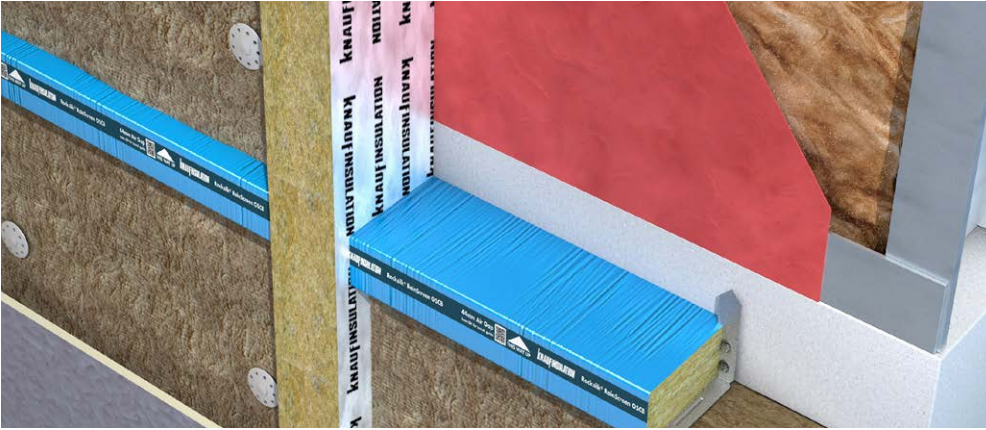
Ensure Rocksilk® RainScreen FireStop Slab is cut with edges that are square when butted together. Gaps between barriers can reduce performance and risk impacting the integrity of the barriers during a fire.



Detailing considerations

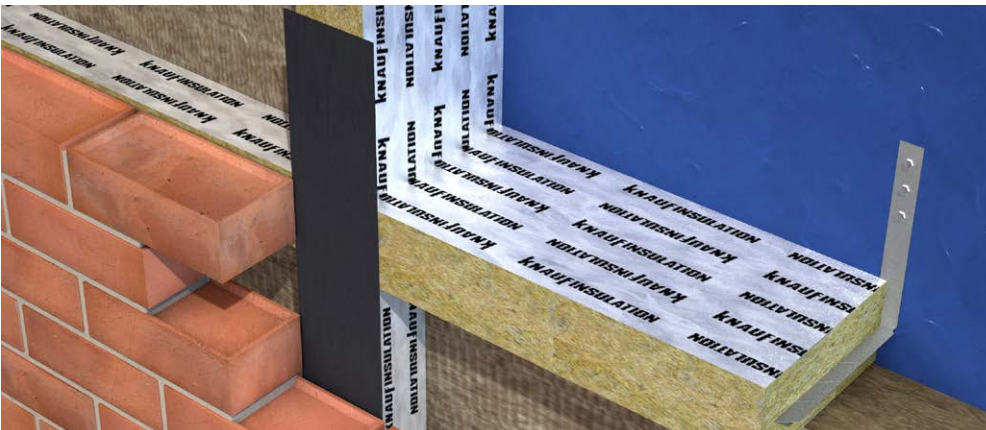
INTERACTION WITH ROCKSILK® RAINSCREEN OSCB

When Rocksilk® RainScreen OSCB and Rocksilk® RainScreen FireStop Slab meet at junctions, the Rocksilk® RainScreen FireStop Slab should remain uninterrupted, with the Rocksilk® RainScreen OSCB tightly abutting it.



VERTICAL/HORIZONTAL ROCKSILK® RAINSCREEN FIRESTOP SLAB INTERACTIONS

When Rocksilk® RainScreen FireStop Slab meets at vertical and horizontal junctions, the vertical barrier should remain uninterrupted, with the horizontal barrier tightly abutting it.



CAVITY TRAYS

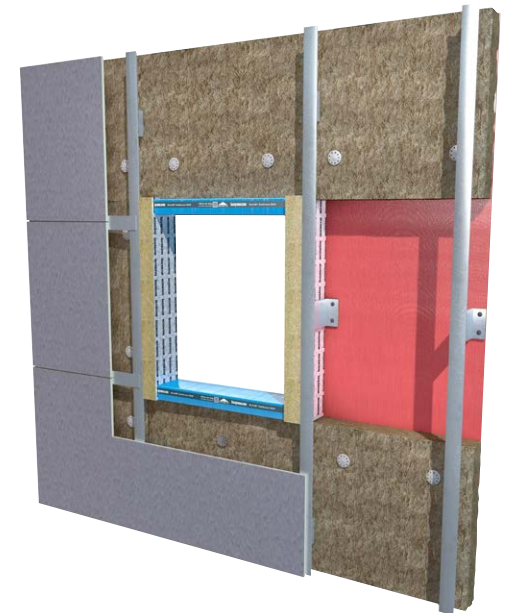
Rocksilk® RainScreen FireStop Slab does not act as a cavity tray. Cavity trays should be installed above the barriers in the course of brickwork, directly above the barriers so that moisture does not accumulate on the top of the barrier.



WINDOWS

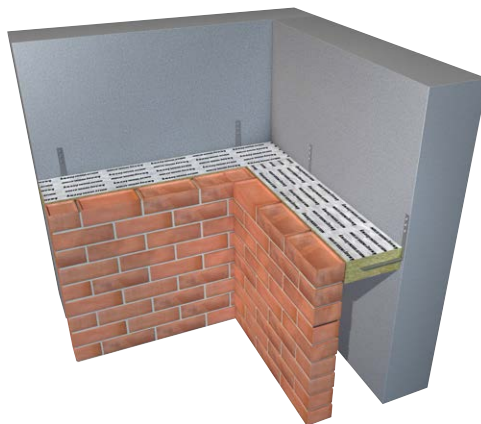
Around window details, Rocksilk® RainScreen OSCB should be used horizontally at the top and bottom of the window. Rocksilk® RainScreen FireStop Slab should be used vertically at either side of the window.

The ends of the Rocksilk® RainScreen FireStop Slab should always meet the Rocksilk® RainScreen Slab above and below the window. The horizontal barrier should always be contained within the vertical barriers.



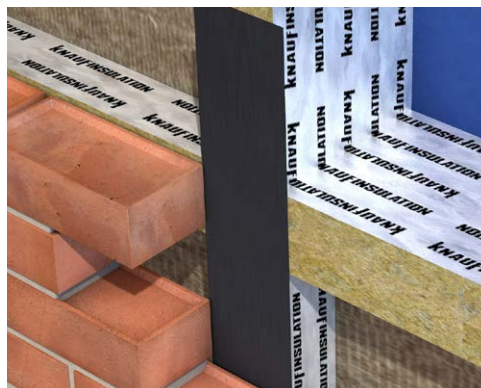
CORNERS

At internal and external corner details, one run of Rocksilk® RainScreen FireStop Slab should run completely up to the external leaf, ensuring a tight seal that has fully closed the cavity.



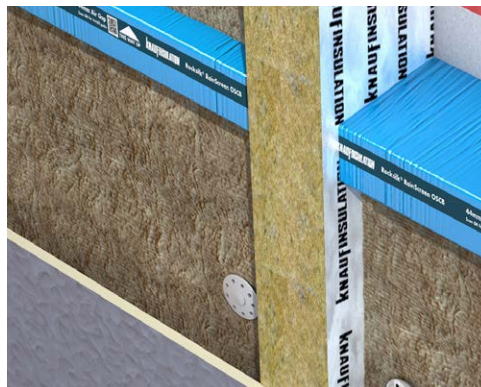
DPC's

A vertical damp proof course should be installed between the face of the vertical Rocksilk® RainScreen FireStop Slab and the outer leaf of masonry so that moisture cannot pass from the outer to inner leaf.



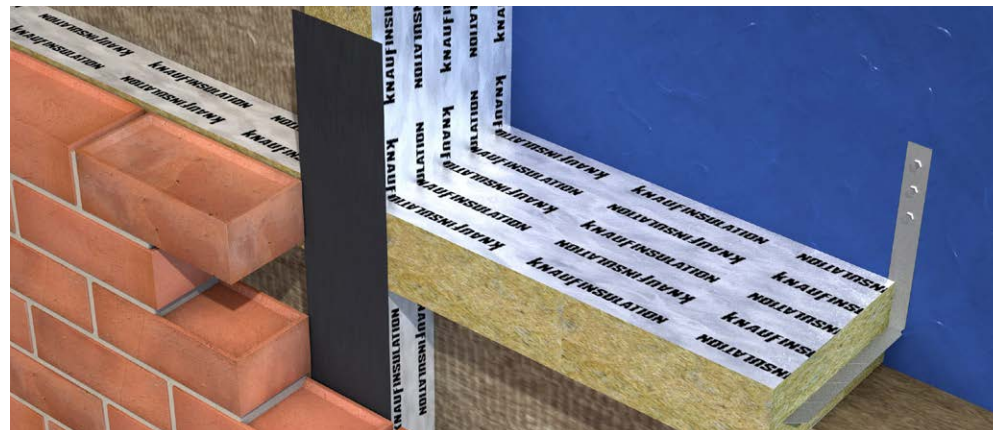
RESIDUAL CAVITIES

When installed alongside Rocksilk® RainScreen OSCB as a vertical cavity barrier in open state cavities, Rocksilk® RainScreen FireStop Slab should butt up to the external cladding and fully close the cavity. The ventilated cavity is maintained by the Rocksilk® RainScreen OSCB which allows moisture within the cavity to drain.



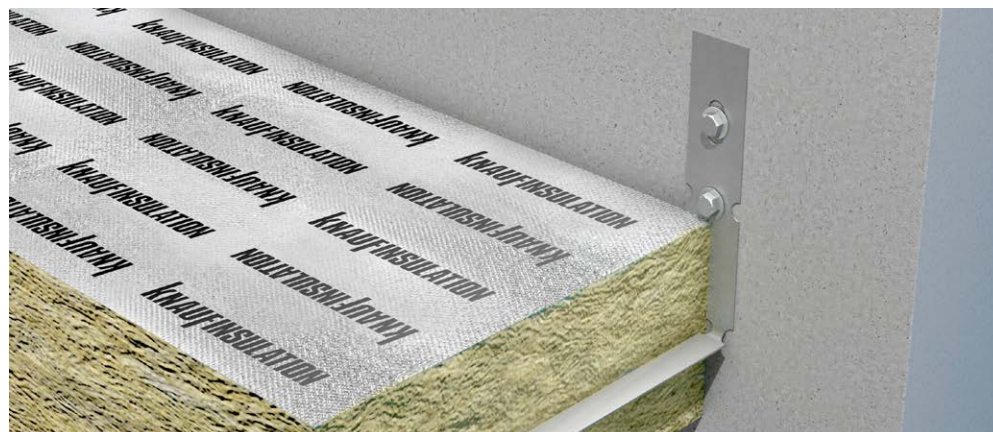
SHEATHING INSULATION

Rocksilk® RainScreen FireStop Slab has been specifically tested and certified with Rocksilk® RainScreen Slabs. It cannot be installed with any other types of sheathing insulation. The Rocksilk® RainScreen FireStop Slab should remain unbroken, with the Rocksilk® RainScreen Slabs butting up to it.



SUBSTRATES

Rocksilk® RainScreen FireStop Slab is suitable for use with concrete / masonry inner or CP board inner leaves.

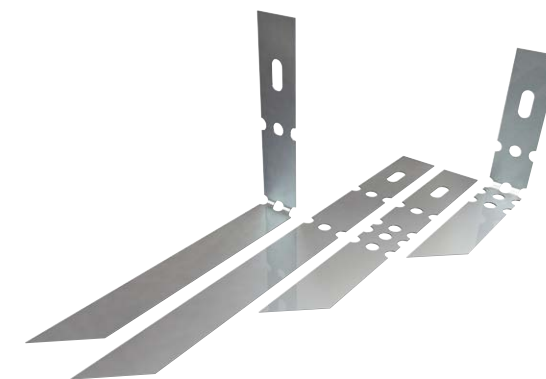


Fixings

BRACKETS

Rocksilk® RainScreen FireStop Slab is supplied with complimentary fixing brackets when supplied as a factory finished product. When supplied as a full slab, fixings must be ordered separately to ensure the correct number of fixings are supplied to suit the cavity dimensions. They should be installed following the table below:

Product	Barrier Width (mm)	Cavity Width (mm)	Bracket Type	Bracket orientation	Spacings
Rocksilk® RainScreen FireStop Slab	55 to 165	50 to 160	Small	65mm leg outwards	- Maximum 900mm centres - Maximum 150mm from end of barriers - Cut barriers under 200mm use 1 bracket - Cut barriers above 200mm use 2 brackets
	166-455	161-450	Large	160mm leg outwards	



SMALL BRACKETS

Cavity size (mm)	Bend locations
50 to 110	
111 to 120	
121 to 130	
131 to 160	

LARGE BRACKETS

Cavity size (mm)	Bend locations
161 to 300	
301 to 450	

BRACKET FASTENERS

Brackets should be fixed back to the inner leaf using suitable non-combustible fasteners such as Fixfast HFT-SS6.3. Please consult fixing manufacturers for more information.



CONSTRUCTION REPAIRS

In the event of small repairs being needed on site, always replace the full barrier. This reduces the number of joints between the barriers, reducing the chances of unwanted air gaps.



To avoid gaps between slabs that could compromise the fire safety performance

Contacts

Technical Services Team

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For more information please visit

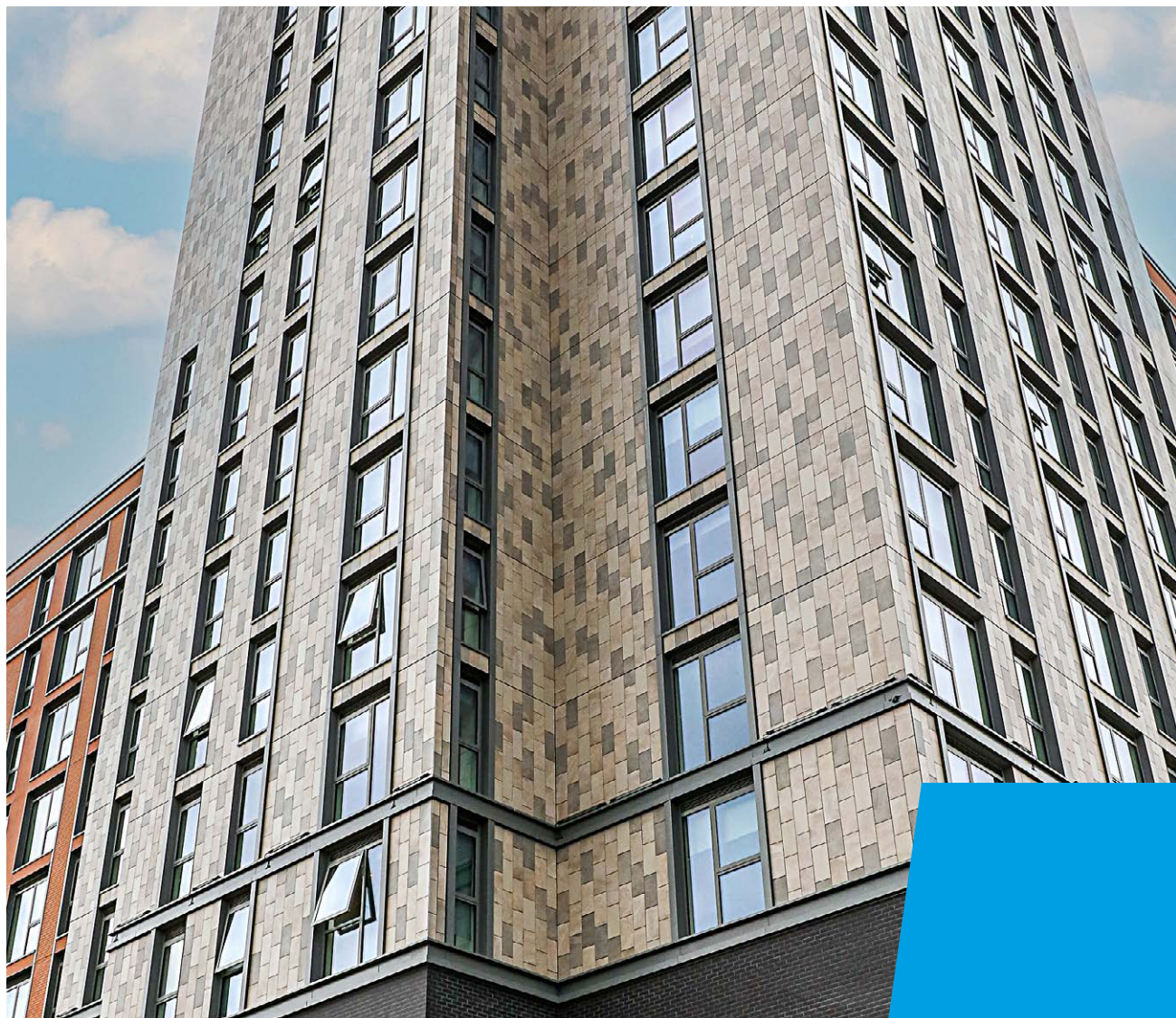
knauf.com/en-GB/applications/walls/external-walls/rainscreen-cavity-systems

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Knauf Insulation Ltd

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