

Rocksilk® RainScreen Fixings

October 2024

Build on us.

Description

Rocksilk® RainScreen Fixings are a range of mechanical fixings designed for installing Rocksilk® RainScreen Slab and Rocksilk® RainScreen Slab EE onto steel or timber framed constructions.

The plastic and metal washers are available in black to match the colour of the facings on Rocksilk® RainScreen Slab EE.

Benefits

- › Washers available in black to match the facing on Rocksilk® RainScreen Slab EE.
- › Screws suitable for timber or steel frame substrates.
- › Wind fatigue tested with Rocksilk® RainScreen Slabs to 3.6kPa.
- › Supported by 3D U-value calculation service (BS EN 10211 compliant) to accurately ensure the façade performs as specified.



Rocksilk® RainScreen Fixings

TECHNICAL SPECIFICATIONS

ROCKSILK® RAINSCREEN SCREWS

Product code	Pack quantity	Length (mm)	Nominal diameter (mm)
809395	100	110	5.5
809392	100	130	5.5
809393	100	150	5.5
809394	100	180	5.5
809396	100	225	5.5
809397	100	275	5.5
809398	100	330	5.5

ROCKSILK® RAINSCREEN BLACK STAINLESS WASHER

Product code	Pack quantity	Length (mm)	Nominal diameter (mm)
809214	100	n/a	70

ROCKSILK® RAINSCREEN BLACK PLASTIC WASHER

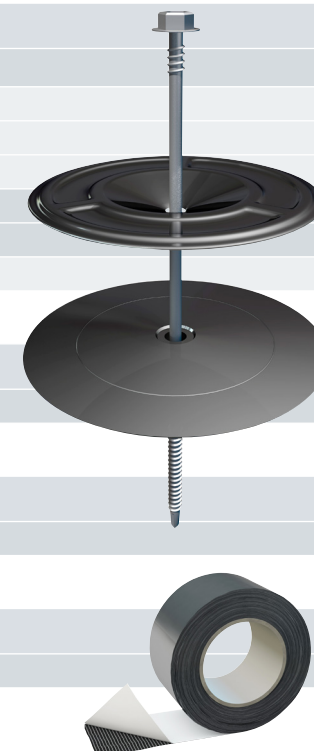
Product code	Pack quantity	Length (mm)	Nominal diameter (mm)
809213	1000	n/a	75

ROCKSILK® RAINSCREEN SLAB EE TAPE

Product code	Pack quantity	Length (mm)	Nominal diameter (mm)
808599	1	25000	60

All dimensions are nominal

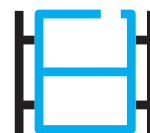
Standard thickness.
All dimensions are nominal.



Certification, accreditations and industry standards



Applications



Rainscreen façade
systems with light steel
frame construction

Rocksilk® RainScreen Fixings

FIXING PATTERNS

ROCKSILK® RAINSCREEN SCREWS

Insulation thickness (mm)	Thickness plus sheathing board (mm)	Screw length (mm)	Centre washer	Perimeter washer
50mm	62	110	Stainless steel	Polypropylene
60mm	72	110	Stainless steel	Polypropylene
70mm	82	110	Stainless steel	Polypropylene
75mm	87	110	Stainless steel	Polypropylene
80mm	92	130	Stainless steel	Polypropylene
90mm	102	130	Stainless steel	Polypropylene
100mm	112	150	Stainless steel	Polypropylene
110mm	122	150	Stainless steel	Polypropylene
120mm	132	180	Stainless steel	Polypropylene
125mm	137	180	Stainless steel	Polypropylene
130mm	142	180	Stainless steel	Polypropylene
140mm	152	180	Stainless steel	Polypropylene
150mm	162	225	Stainless steel	Polypropylene
155mm	167	225	Stainless steel	Polypropylene
160mm	172	225	Stainless steel	Polypropylene
165mm	177	225	Stainless steel	Polypropylene
170mm	182	225	Stainless steel	Polypropylene
180mm	192	225	Stainless steel	Polypropylene
190mm	202	225	Stainless steel	Polypropylene
200mm	212	275	Stainless steel	Polypropylene
210mm	222	275	Stainless steel	Polypropylene
220mm	232	275	Stainless steel	Polypropylene
230mm	242	275	Stainless steel	Polypropylene
240mm	252	275	Stainless steel	Polypropylene
250mm	262	330	Stainless steel	Polypropylene
260mm	272	330	Stainless steel	Polypropylene
270mm	282	330	Stainless steel	Polypropylene
280mm	292	330	Stainless steel	Polypropylene
290mm	302	330	Stainless steel	Polypropylene

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Performance

Rocksilk® RainScreen Screw 110-275mm

Material	A2/304 stainless steel
Head type	Hex 8mm
Drilling capacity	1.2-3.0mm steel
Pull-out strength	1.2mm steel – 1.30kN 2.0mm steel – 2.62kN 3.0mm steel – 4.76kN C16 softwood (44mm embedment) – 2.68kN

Rocksilk® RainScreen Screw 330mm

Material	A4/316 stainless steel
Head type	Hex 8mm
Drilling capacity	1.2-5.0mm steel
Pull-out strength	1.2mm steel – 1.44kN 2.0mm steel – 2.13kN 3.0mm steel – 5.92kN 5.0mm steel – 10.98kN

Rocksilk® RainScreen Black Stainless Washer

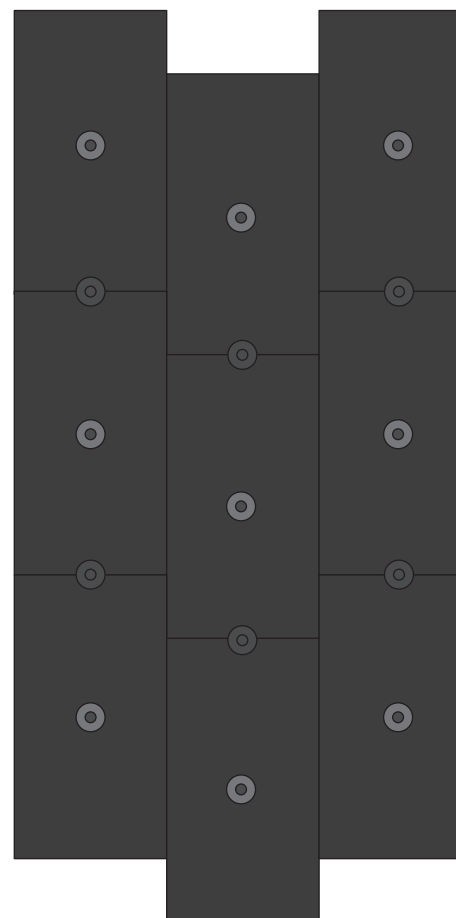
Material	A2 stainless steel
Head diameter	70mm
Hole size	6.5mm
European Technical Assessment	ETA_15/0406


Rocksilk® RainScreen Black Plastic Washer

Material	Polypropylene
Head diameter	75mm
Hole size	9.6mm
Pull-over (tube washer to screw)	1.55kN
European Technical Assessment	ETA_15/0406

Rocksilk® RainScreen Slab EE Tape

Thickness	270µm
Roll length	25m
Width	60mm
Service temperature	-40°C to +80°C



WASHER:  Stainless steel  Polypropylene

Rocksilk® RainScreen Fixings

Application

Rocksilk® RainScreen Fixings are used as mechanical fixings to fasten Rocksilk® RainScreen Slabs back to the superstructure of the building. They are suitable for use in open and closed state cavities and are black in colour to match the black tissue face on Rocksilk® RainScreen Slab EE.

In accordance with BR135, one stainless steel washer should be used on each slab, with supplementary fixings made up of polypropylene washers.

Thermal Modelling

The U-value of a proprietary rainscreen façade system is dependent on 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 10211.

We offer 3D numerically modelled U-value calculations 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 and Fitness for Use

Rocksilk® RainScreen Fixings are odourless, rot proof, non-hygroscopic, do 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 roof structure in which it is incorporated.

Handling and Storage

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

The boxes used for the supply of Rocksilk® RainScreen Fixings 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 Fixings should not be left permanently exposed to the elements.

During construction exposed areas 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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