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|-------------------|---------------|
| Application type | Thermal, fire |
| Construction type | Cavity walls |



Rockwool fire rated cavity closers

Rockwool cavity closer systems have been developed to minimise thermal bridging at door and window reveals in cavity wall constructions. Rockwool Ltd can now offer a solution for both first-fix built-in (**Rockclose**) and second fix (**RockReveal**) applications. Both systems are fire rated and exceed the minimum requirements of Thermal Robust Details.

Rockclose®

Rockclose provides the user with a fire rated cavity closer for masonry walls with a returning inside leaf.

Advantages

- integral DPC
- built in as construction proceeds (First Fix)
- one-hour fire integrity
- one width covers most applications
- easy to handle
- self supporting



RockReveal™

RockReveal is a fire rated cavity closer, which can be used in timber, metal and masonry cavity walls without the need to return the blockwork.

Advantages

- no need to return block
- one-hour fire integrity
- easy to install
- second fix application
- no additional dpc required



The following NBS Plus clauses include
 Rockclose and RockReveal: F30: 18, F30:180



Certificate No EMS 70301



Certificate No FM 02262



Thermal bridging at junction openings

Cold bridging has been a long recognized problem, which has been given even greater significance under the new Part L Building Regulation (2006 edition). Cold bridging can result in problems of condensation, staining and mould growth at window and door reveals. In a typical building as much as 20% heat loss can occur around door and window reveals if not correctly addressed. Prolonged exposure to such factors will lead to a deterioration of the internal plaster and paint work. Rockwool cavity closers systems have been developed to minimise the occurrence of such factors.

Rockwool have developed two cavity closer systems Rockclose and RockReveal that will exceed the minimum requirement of $0.45 \text{ m}^2 \text{ K/W}$ for thermal resistance. When for example the window is set back at 30 mm, the thermal resistance will in fact exceed $0.75 \text{ m}^2 \text{ K/W}$ (as indicated in the Part L Robust Detail version 2001 for walls).

Rockclose is to be used in masonry walls when the internal block is being returned to close the void between the external skin and the returning block work. RockReveal is a second fix application and has been developed to deal with closing cavities without the traditional need of returning the block work, it can also be used on timber, metal and PVCU frames.

Rockclose

Rockclose is an insulated damp proof course. It consists of a strip of glass-tissue-faced semi-rigid Rockwool insulation bonded to a black polyethylene dpc. The product is designed to be installed as work proceeds, between the facing brickwork and closer blockwork prior to fitting of window and door frames. It is self-supporting for ease of installation, yet resilient enough to allow for cut irregularities in closers.

Dimensions

Rockwool insulation – white glass-tissue-faced

Length: 1200 mm

Widths: 100, 150 and 190 mm (to suit closer width)

Thicknesses: 30, 50, 65, 75 and 100 mm

Other thicknesses available to special order

DPC – Black polyethylene to BS 6515

Length: 1300 mm

Side lap: 40 mm

Bottom lap: 100 mm (minimum)

Standards and approvals

Rockwool Rockclose complies with the requirements of BS EN 13162: 2001 Thermal insulation products for buildings - Factory made mineral wool (MW) products specification.

Rockclose is protected by UK Patent No. 2289433

Fire

Rockwool Rockclose has been assessed by WFRC (Report No C114334) to give 60 mins integrity and 30 mins insulation.

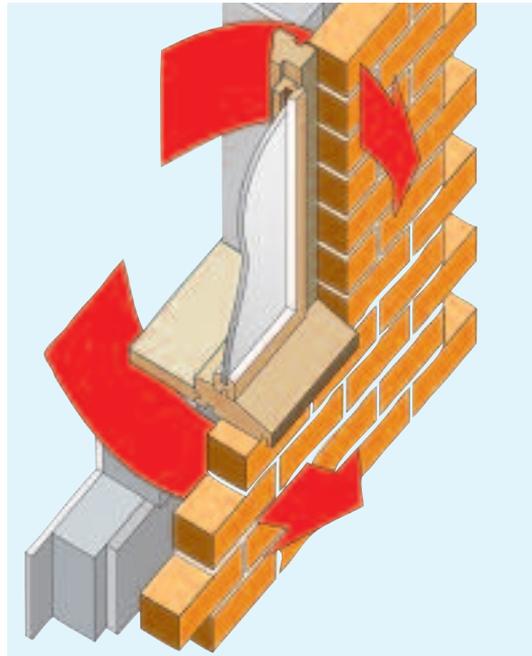


Figure 1 Heat loss from a building which is the cause of cold bridging around window reveal without an insulated cavity closer.

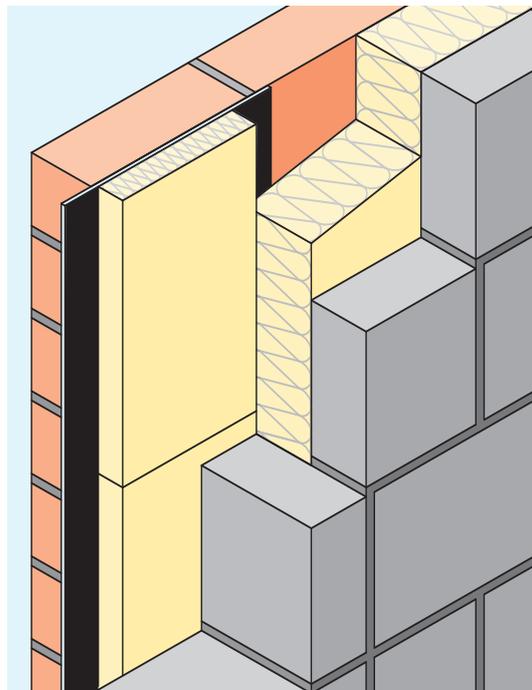


Figure 2 Rockclose junction with cavity insulation

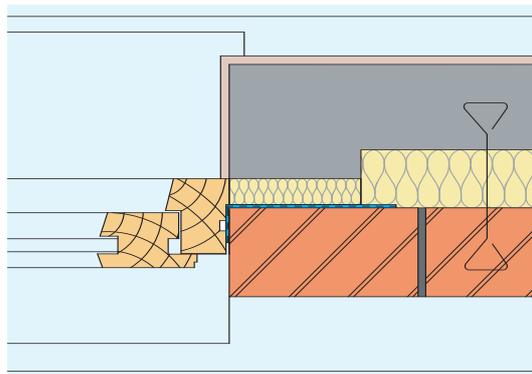


Figure 3 Plan view at jamb
Rockclose with Timber frame set to cover vertical joint/dpc

Applications and installation

Rockwool Rockclose is suitable for a wide range of dpc applications including:

- closures at jamb positions
- at localised reductions in cavity widths

Rockclose should be built in as brickwork proceeds and prior to fitting of the window or door frame. Installation must follow good practice for the detailing of damp-proof courses as set out in the relevant clauses of BS 5628: Part 3, BS 8215 and BS 8000: Part 3. Supplied in 1200 mm lengths of insulation, Rockclose may be easily cut on site as required. Due to the flexible nature of Rockwool, some local delamination of the Rockwool insulation may occur during site handling or installation. This does not detract from the performance of the product, either in its installation or in its long term durability. Full fitting recommendations for the bricklayer are supplied with Rockclose insulated dpc.

Typical specification clause

The insulated cavity closer to window and door jambs¹ is to be Rockwool Rockclose insulated cavity closer mm wide and mm thick, supplied by Rockwool Limited, Pencoed, Bridgend CF35 6NY, and installed in accordance with the manufacturer's recommendations.

¹ Insert other applications as appropriate.

² Insert insulation width to coincide with closer width, and thickness as required.

RockReveal

RockReveal is an insulated non-combustible cavity closer. It consists of a strip of Rockwool encapsulated in weather-resistant polythene enclosed within a rigid PVCu profile.

The product is designed to be installed to close cavities around windows and doors in second-fix installations without the need to return the blockwork.

Dimensions

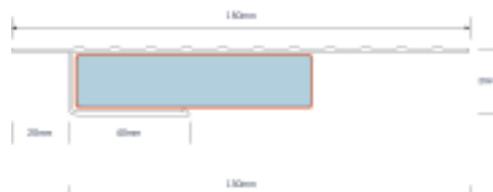
Rockwool Insulation encapsulated in polythene.

Length: 2 x 1.4 m

Widths: 50, 80, 90 and 100 mm (to suit close width)

PVCu carrier

Length: 2.4 m



Fire

RockReveal was tested at Warrington Fire research and was found to be in accordance with BS476 Cert 20 1987. RockReveal provides a minimum of 60 minutes fire integrity and up to 60 minutes fire insulation.

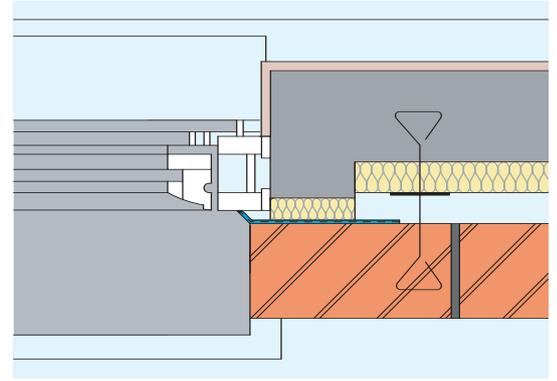


Figure 4 Plan view at jamb
Rockclose with Aluminium frame in rebated 'check' reveal

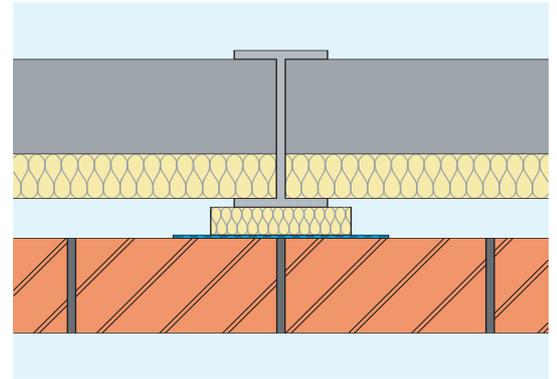
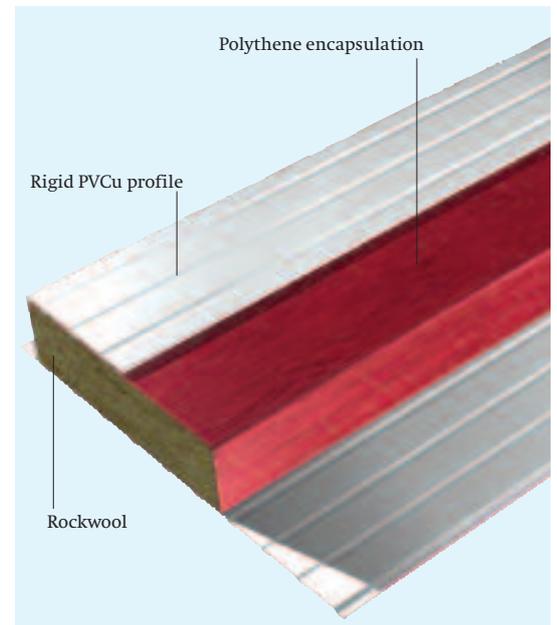


Figure 5 Plan view of steel frame construction with Rockclose
Protection where stanchion protrudes into cavity



Application

RockReveal is simple to install and is primarily used for second-fix applications. It can be cut to the height or width of the cavity opening, then push-fitted into the cavity, thus eliminating the need for cut blocks, bricks or special reveal blocks. To fix in place use standard flat head galvanised nails, approximately one per block course. RockReveal is available in a range of sizes to fit cavity widths from 50 to 100 mm, with sufficient design flexibility to tolerate rogue cavity widths, thus reducing time and cost on site. Slight cavity width variations can be overcome by applying small pressure. For this purpose a margin of insulating material projects from the PVCu encasement to allow a firm friction fit. In cases of extreme cavity width variation, this projecting insulation can be trimmed on site with a knife to allow insertion into the cavity.

Typical specification clause

The insulated cavity closer to window and door jambs¹ is to be Rockwool RockReveal mm wide, supplied by Rockwool Limited, Pencoed, Bridgend CF35 6NY, and installed in accordance with the manufacturer's recommendations.

¹ Insert other applications as appropriate.

² Insert insulation width to coincide with closer width.

Health and safety

Current HSE 'CHIP' Regulations and EU directive 97/69/EC confirm the safety of Rockwool mineral wool; Rockwool fibres are not classified as a possible human carcinogen.

The maximum exposure limit for mineral wool is 5mg/m³, 8 hour time-weighted average.

A Material Safety Data Sheet is available from the Rockwool Marketing Services Department to assist in the preparation of risk assessments, as required by the Control of Substances Hazardous to Health Regulations (COSHH).

Environment

Rockwool products rely on trapped air for their thermal properties, which has neither ozone depleting nor global warming potential.

Technical Information

i For further details visit our website at www.rockwool.co.uk or phone the Technical Hotline on 0871 222 1780

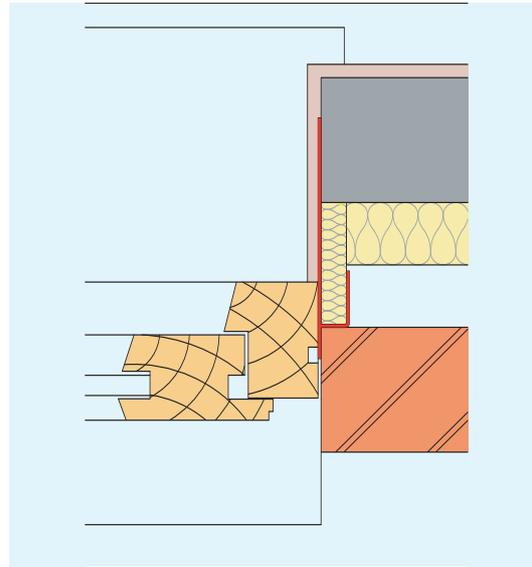


Figure 6 RockReveal Cavity Closer At Window & Door Reveals (Masonry Wall)

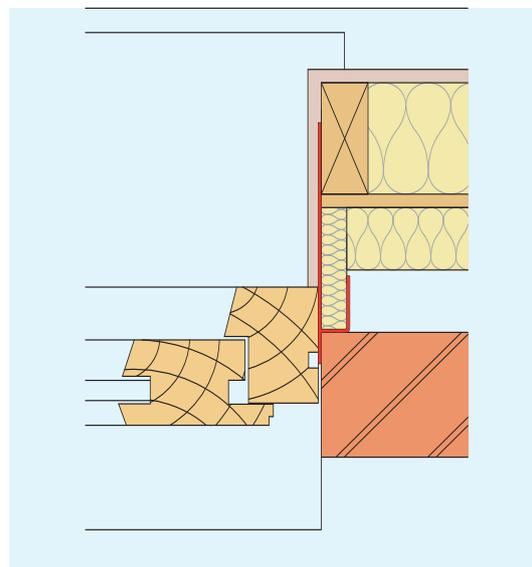


Figure 7 RockReveal Cavity Closer At Window & Door Reveals (Timber Frame)

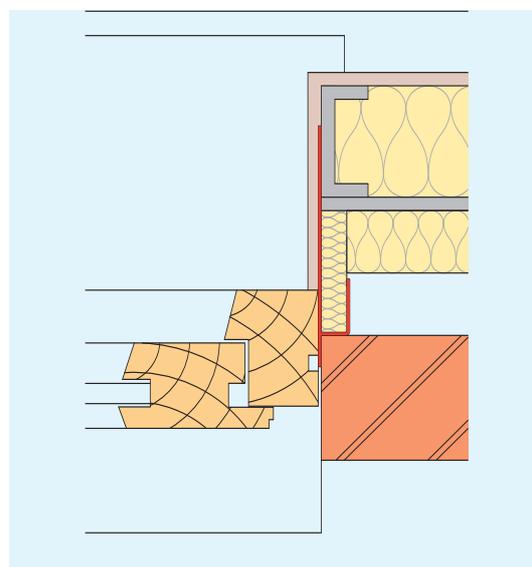


Figure 8 RockReveal Cavity Closer At Window & Door Reveals (Metal Frame)

Rockwool Limited reserves the right to alter or amend the specification of products without notice as our policy is one of constant improvement.

The information contained in this data sheet is believed to be correct at the date of publication. Whilst Rockwool will endeavour to keep its publications up to date, readers will appreciate that between publications there may be pertinent changes in the law, or other developments affecting the accuracy of the information contained in this data sheet.

The above applications do not necessarily represent an exhaustive list of applications for Rockclose or RockReveal. Rockwool Limited does not accept responsibility for the consequences of using Rockclose or RockReveal in applications different from those described above. Expert advice should be sought where such different applications are contemplated, or where the extent of any listed application is in doubt.

ROCKWOOL

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