ROCKFIBRE INSULATED DPC

Fire rated cavity closer for window and door reveals

- Up to four hours fire integrity
- Closes cavity around window and door reveals
- Prevents cold bridging
- Insulated with non-combustible rockfibre mineral wool
- Use in conjunction with a return block
- 15mm compression fit

NBS Source PARTNER

IFC Certification

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Application

ARC Rockfibre Insulated DPC is a fire rated cavity closer designed to close the cavity around window and door reveals in conjunction with a return block, fitting between the return block and inner edge of the outer skin of brickwork. The rockfibre insulation will help prevent cold bridging and eliminate moisture, mould and staining from around windows and doors, while the DPC is embossed to assist mortar adhesion. It must be installed with a minimum of 5mm compression to achieve 2 hrs fire integrity, or a minimum of 15mm compression to achieve 4 hrs fire integrity.

Installation

The person installing the Rockfibre Insulated DPC should first familiar themselves with this datasheet, ensuring the correct product is being fitted into the cavity.

ARC Insulated DPC is easily installed as the brickwork progresses and before the window or door is fitted. The DPC should sit against the inner side of the outer brickwork to prevent moisture pentration. When joining it is recommended to lap the DPC by at least 100mm and to ensure the insulation is tightly butted with no breaks.

Fire Properties

ARC Rockfibre Insulated DPC has been fire tested at Warrington Fire Research, achieving up to four hours fire integrity with traditional masonry brick and block construction. These tests comply with EN1366-4. IFC certificate number: IFCC 1730

Where usage falls outside of this scope, for example when used with external cladding, or with an internal metal frame system, performance of the fire barrier will depend upon the structural integrity and fire performance of the surrounding construction.

Specifiers must ensure any part of the construction that makes up the internal or external leaf of the wall, including support systems, are suitable for use with a fire barrier for the length of fire integrity and insulation required. Particular attention must be paid to any possible deflection or distortion which could cause gaps to form between the material and a fire barrier.

ARC Rockfibre Insulated DPC is insulated with rockfibre mineral wool which conforms to the BS EN 13162: 2001 Thermal Insulation Products for Buildings, Factory Made Mineral Wool Products specification, and has a thermal conductivity of 0.037W/mK.

Standards

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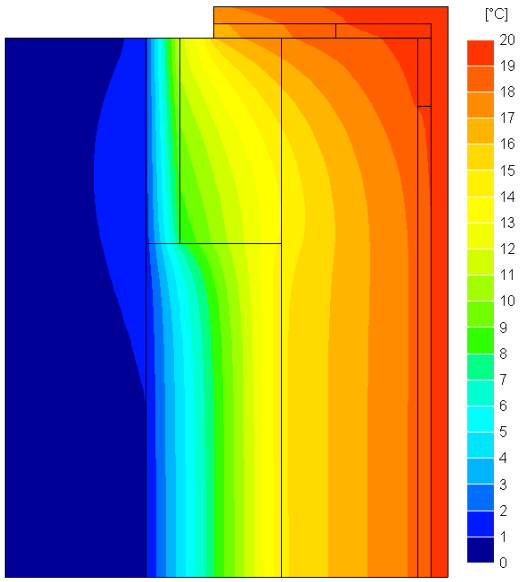

Above: Temperature distribution illustrating heat loss at a window opening where ARC Rockfibre Insulated DPC is fitted.

Cold Bridging

Cold bridges are sections through the fabric of significantly lower thermal resistance than the rest of the construction. It is most commonly found around window and door openings and usually shows itself through so called pattern staining. A cold bridge through an external frame attracts moisture in the form of surface condensation which attracts dirt and dust. This surface condensation can also lead to mould growth and damage to internal plaster and paint work.

Storage and Packaging

ARC Rockfibre Insulated DPCs are supplied in branded polythene packs which offer protection during transport as well as providing ease of identification on-site.

It is not recommended that the packs are stored in direct sunlight. When storing the barriers for longer periods of time it is recommended that the product should be stored indoors, or under cover especially during inclement weather or overnight.

Environment

No CFCs or HCFCs are involved in the manufacturing process of ARC's rockfibre mineral wool insulation.

ARC Rockfibre Insulated DPC has a Green Guide rating of A+. This product can be disposed of via landfill; preferably, the product should be returned to ARC Building Solutions so that the waste can be separated and recycled accordingly.

Health and Safety

ARC Building Solutions has an approved Health and Safety Policy and is committed to working and supplying products safely. We have assessed products as required by Substances Hazardous to Health Regulations (COSHH). An ARC Material Safety Datasheet (MSDS) is available upon request.

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The Solution

ARC Rockfibre Insulated DPC will significantly reduce the risk of cold bridging around window and door openings when fitted in accordance with the manufacturer's recommendations.

ARC cavity closers have been assessed using software that complies with the Standard for Thermal Bridge Calculations BS EN ISO 10211-2007. The conventions for calculations specified in the BRE document BR497 were also followed. The results are compared with the criteria set in the BRE Information Paper IP1/06 'Assessing the Effects of Thermal Bridging at Junctions and Around Openings' which is referenced in Building Regulations as shown below.

Detail	Default F-value	F-value with ARC Rockfibre Insulated DPC	Default Ψ-value	Ψ-value with ARC Rockfibre Insulated DPC
Jamb (100mm cavity)	0.75	0.890	0.05	0.04
Sill (100mm cavity)	0.75	0.890	0.04	0.04

Product Code	Maximum Gap Width	Block Width	Fire Performance at 5mm compression		Fire Performance at 15mm compression		Dimensions
			Integrity	Insulation	Integrity	Insulation	
RFDPC165-15	10mm	100mm	2 hrs	30 mins	-	-	15x100/165x1200mm
RFDPC165-20	15mm	100mm	2 hrs	30 mins	-	-	20x100/165x1200mm
RFDPC165-25	20mm	100mm	2 hrs	30 mins	-	-	25x100/165x1200mm
RFDPC165-30	25mm	100mm	2 hrs	30 mins	-	-	30x100/165x1200mm
RFDPC165-35	30mm	100mm	2 hrs	30 mins	4 hrs	2 hrs	35x100/165x1200mm
RFDPC165-40	35mm	100mm	2 hrs	30 mins	4 hrs	2 hrs	40x100/165x1200mm
RFDPC165-45	40mm	100mm	2 hrs	30 mins	4 hrs	2 hrs	45x100/165x1200mm
RFDPC165-50	45mm	100mm	2 hrs	30 mins	4 hrs	2 hrs	50x100/165x1200mm
RFDPC165-55	50mm	100mm	2 hrs	30 mins	4 hrs	2 hrs	55x100/165x1200mm
RFDPC165-60	50mm	100mm	-	-	4 hrs	2 hrs	60x100/165x1200mm
RFDPC165-65	50mm	100mm	-	-	4 hrs	2 hrs	65x100/165x1200mm
RFDPC225-15	10mm	140mm	2 hrs	30 mins	-	-	15x140/225x1200mm
RFDPC225-20	15mm	140mm	2 hrs	30 mins	-	-	20x140/225x1200mm
RFDPC225-25	20mm	140mm	2 hrs	30 mins	-	-	25x140/225x1200mm
RFDPC225-30	25mm	140mm	2 hrs	30 mins	-	-	30x140/225x1200mm
RFDPC225-35	30mm	140mm	2 hrs	30 mins	4 hrs	2 hrs	35x140/225x1200mm
RFDPC225-40	35mm	140mm	2 hrs	30 mins	4 hrs	2 hrs	40x140/225x1200mm
RFDPC225-45	40mm	140mm	2 hrs	30 mins	4 hrs	2 hrs	45x140/225x1200mm
RFDPC225-50	45mm	140mm	2 hrs	30 mins	4 hrs	2 hrs	50x140/225x1200mm
RFDPC225-55	50mm	140mm	2 hrs	30 mins	4 hrs	2 hrs	55x140/225x1200mm
RFDPC225-60	50mm	140mm	-	-	4 hrs	2 hrs	60x140/225x1200mm
RFDPC225-65	50mm	140mm	-	-	4 hrs	2 hrs	65x140/225x1200mm

All performance claims can be evidenced on IFC certificate IFCC 1730.

Can't find your size? ARC Rockfibre Insulated DPC can be manufactured to suit any cavity width up to 150mm, including any intermediary sizes not listed above. **Call our technical experts on 0113 252 9428 to discuss your requirements.**

Certificate Number 19310
ISO 9001, ISO 14001
ISO 45001