



INSULATED DPC

Thermal cavity closer for window and door reveals

- » Closes cavity around window and door reveals
- » Prevents cold bridging
- » Insulated with polyethylene foam
- » Use in conjunction with a return block
- » Conforms to BRE guidelines for thermal insulation



INSULATED DPC

Application

ARC Insulated DPC is a thermal 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 polyethylene foam 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.

Installation

The person installing the 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 penetration. When joining it is recommended to lap the DPC by at least 100mm and to ensure the insulation is tightly butted with no breaks.

Standards

The polyethylene DPC used in the manufacture of ARC Insulated DPC conforms to the requirements of BS6515.

Thermal Properties

The polyethylene foam insulation used in ARC Insulated DPC has a thermal conductivity of 0.039W/mK.

The Solution

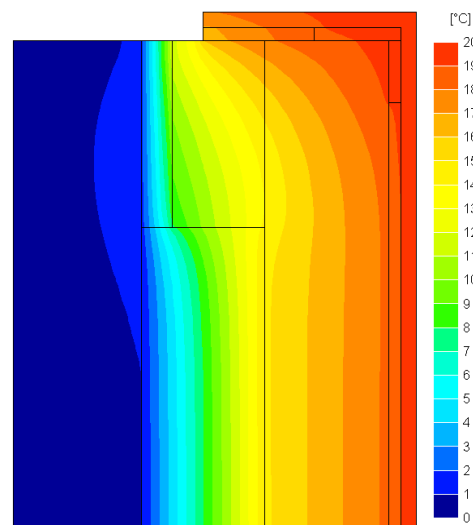
ARC Insulated DPC will significantly reduce the risk of cold bridging around window and door openings when fitted in accordance with the manufacturer's recommendations.

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 Insulated DPC	Default Ψ -Value	Ψ -Value with ARC Insulated DPC
Jamb (100mm cavity)	0.75	0.899	0.05	0.04
Sill (100mm cavity)	0.75	0.890	0.04	0.04

Standard Dimensions

Product Code	Insulation Dimensions	DPC: Polyethylene to BS6515	Pack Qty
INSDPC165	100mm x 17mm x 10m coil	165mm x 10m coil	6
INSDPC225	140mm x 17mm x 10m coil	225mm x 10m coil	5



Above: Temperature distribution illustrating heat loss at a window opening where ARC 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.



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Storage and Packaging

ARC 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 polyethylene foam insulation.

ARC Insulated DPCs have 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.

Any information provided within this document is intended for guidance only. Expert technical advice should be sought before specification or installation of any product. It is of particular importance to ensure that any fire barrier or fire stopping product is tested for use with the exact application intended. ARC Building Solutions Ltd cannot accept liability for failure where usage is outside of the standard application, including but not limited to, where deflection or distortion has allowed gaps to form around the barrier, or where the barrier is not fitted in accordance with the manufacturer's guidelines.

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Certificate Number 19310
ISO 9001, ISO 14001
ISO 45001