

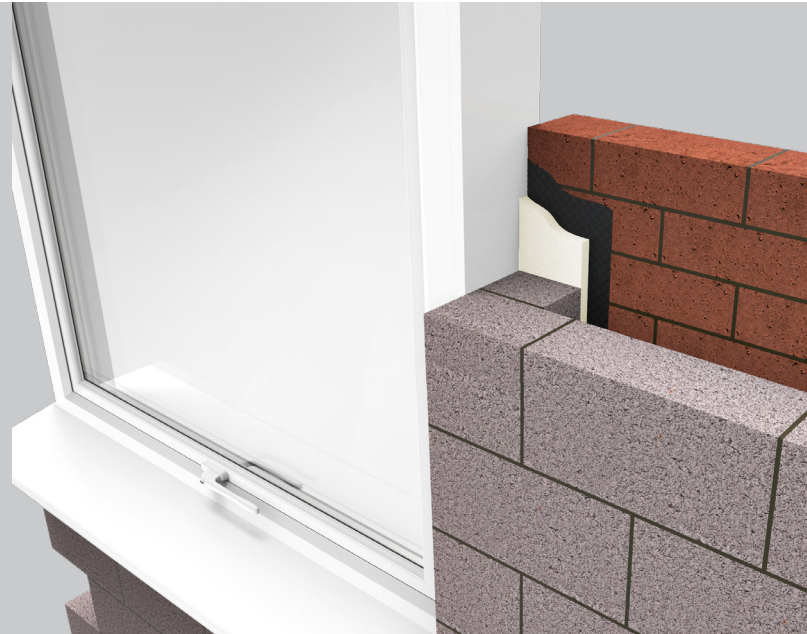
Insulated DPC

thermal cavity closer
for window and door reveals



key features

- » 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



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

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.

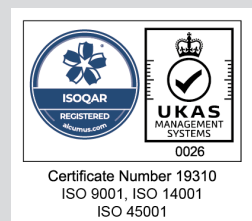
Thermal Properties

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

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.

Don't take our
word for it, see our
accreditation...



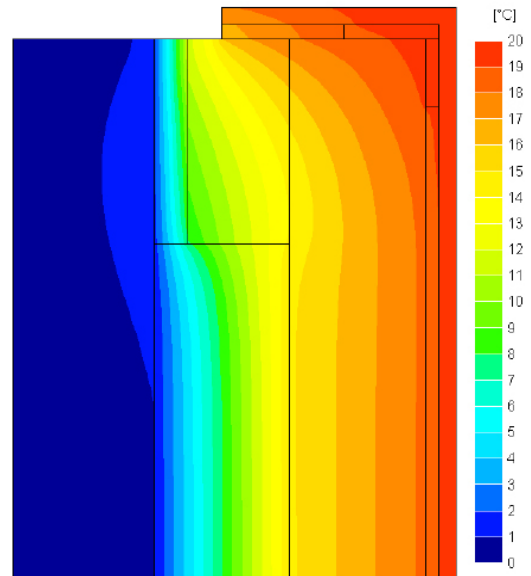
Cold Bridging

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.

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.



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

| 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 |

Environment

No CFCs or HCFCs are involved in the manufacturing process of ARC's polyethylene foam insulation. The material presents no known threat to the environment and is classed as ODP and GWP zero.

ARC Insulated DPCs have a Green Guide rating of A+.

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 COSHH data sheet is available and can be downloaded from ARC's website.

Please note the colour of insulation supplied may vary. This will not affect the performance of the product. Any information provided within this document is intended for guidance only. Expert technical advice should be sought before specification or installation of any product. © 2024 ARC Building Solutions Ltd. ARC and T-Barrier are registered trademarks of ARC Building Solutions Ltd.