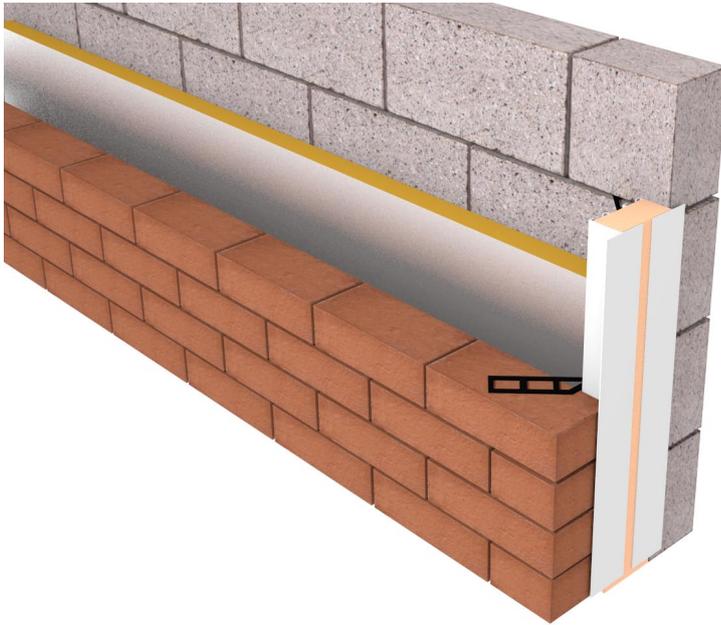




# Solcourse Cavity Closer



## Key Features

- Closes off cavities around window and door reveals
- Available in cavity widths 50 to 300mm
- Supplied in 2.4m lengths
- Prevents cold bridging
- Available single flange for check reveal details
- Extruded polystyrene insulation



## Description

The Solcourse Cavity Closer is designed to close off the cavity around window and door reveals without the need for a return block, preventing cold bridging and eliminating moisture, mould and staining from around windows and doors. The 2.4m lengths are manufactured from a rigid PVCu profile that is insulated with extruded polystyrene. The Solcourse Cavity Closer is manufactured to the specific cavity size required and can be made to suit cavities from 50mm up to 300mm.

## Installation

The Solcourse Cavity Closer is easily installed. Simply cut the jamb profile to the height of the window or door opening plus 75mm to allow the bottom edges to drop into the cavity below the sill. Once the jamb sections are installed, measure the required width for the sill section and cut a length to butt tightly to the jamb sections. If a longer length than 2.4m is required, see jointing method on the next page.

**Option 1 (First Fix):** As above and build in the jamb sections as the brickwork progresses using Solcourse Brick Ties (1 every 225mm). Ties are not required on the sill section, simply hold in place with an adhesive or nail to block.

**Option 2 (Second Fix):** Cut sections to required size as above and simply push fit once the openings are formed. Sections can be secured by nailing to block or using a suitable adhesive.

## Fire Properties

Solcourse's extruded polystyrene insulation is classified as Euroclass F. When installed as a cavity closer and when protected by plasterboard and screed, a Euroclass B classification can be achieved.

## Thermal Properties: Cold Bridging

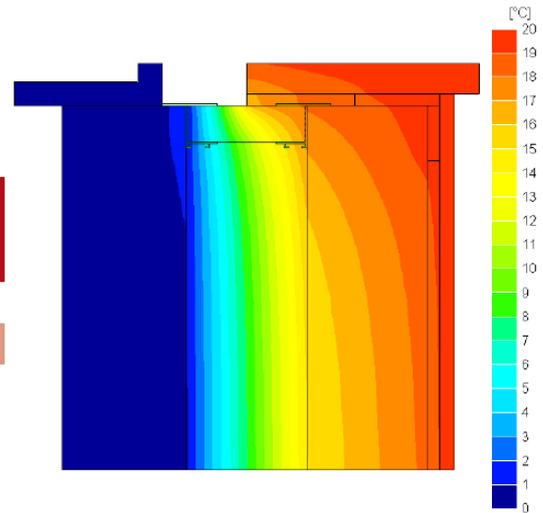
Cold bridges are sections through the fabric of significantly lower thermal resistance than the rest of the construction. It is most commonly found around window and door openings and usually shows itself through so called pattern staining. A cold bridge through an external frame attracts moisture in 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.

## Solution

Solcourse insulated cavity closers will significantly reduce the risk of cold bridging around window and door openings when fitted in accordance with the manufacturer's recommendations.

| Detail              | Default F-value | F-value with Solcourse Cavity Closer | Default Ψ-value | Ψ-value with Solcourse Cavity Closer |
|---------------------|-----------------|--------------------------------------|-----------------|--------------------------------------|
| Jamb (100mm cavity) | 0.75            | 0.933                                | 0.05            | 0.012                                |
| Sill (100mm cavity) | 0.75            | 0.950                                | 0.04            | 0.009                                |

As can be seen in the above table, the F-values with a Solcourse Cavity Closer fitted far exceed the value of 0.75 specified in IP1/06 to avoid mould growth, and likewise the Ψ-values are well below the default values specified. Solcourse products 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.



Above: Temperature distribution illustrating heat loss at a window opening where Solcourse Cavity Closer is fitted.

Solcourse's extruded polystyrene insulation has a thermal conductivity of 0.033W/mK.

## Standards

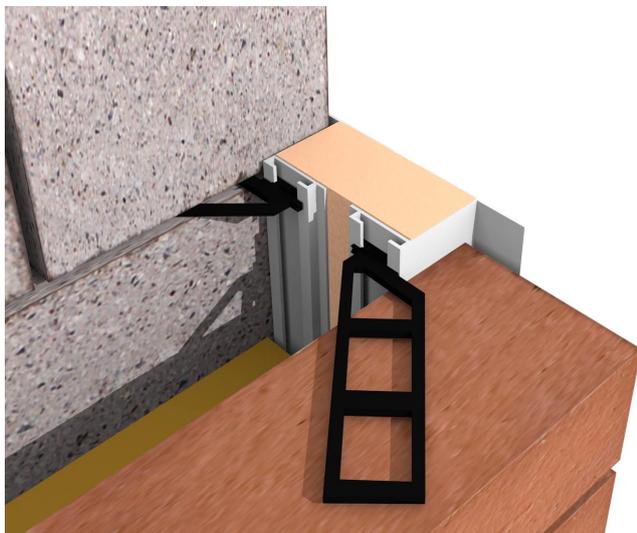
Solcourse Cavity Closers use extruded polystyrene which conforms to BS EN 13163: 2001 Thermal Insulation Products for Buildings, Factory Made Products of Expanded Polystyrene (EPS-specification).

## Storage and Packaging

Solcourse Cavity Closers are supplied in branded polythene packs which offer protection during transport as well as providing ease of identification on-site.

## Environment

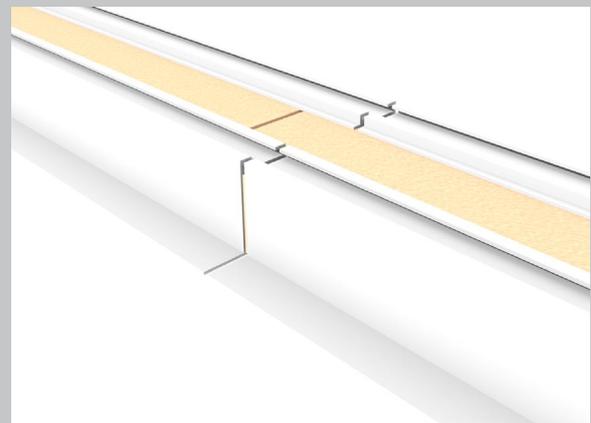
Extruded polystyrene insulation relies upon trapped air for its thermal properties, which has neither ozone depleting nor global warming potential.



Above: Brick Ties enable quick and easy installation as the brick and blockwork progresses.

## Jointing Method

Where a longer length than the supplied 2.4m is required, the following jointing method should be used. Using an appropriate saw, remove 150mm of the plastic profile only, then push the exposed insulation into the next length of plastic profile.



## Solcourse Cavity Closer

By specifying Solcourse Cavity Closer with extruded polystyrene you are playing a big part in helping to protect the environment by reducing heat loss from buildings and therefore reducing green house gasses.

Solcourse Cavity Closer has a Green Guide rating of A+.

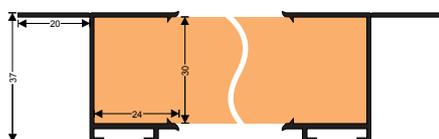
### Standard Dimensions

| Product Code       | Suitable for Cavity Width | Dimensions                                  | Lengths Per Pack |
|--------------------|---------------------------|---|------------------|
| CC50               | 50mm                      | 50 x 2400mm                                 | 8                |
| CC65               | 65mm                      | 65 x 2400mm                                 | 8                |
| CC75               | 75mm                      | 75 x 2400mm                                 | 8                |
| CC85               | 85mm                      | 85 x 2400mm                                 | 8                |
| CC90               | 90mm                      | 90 x 2400mm                                 | 8                |
| CC95               | 95mm                      | 95 x 2400mm                                 | 8                |
| CC100              | 100mm                     | 100 x 2400mm                                | 8                |
| CC110              | 110mm                     | 110 x 2400mm                                | 6                |
| CC125              | 125mm                     | 125 x 2400mm                                | 6                |
| CC135              | 135mm                     | 135 x 2400mm                                | 6                |
| CC150              | 150mm                     | 150 x 2400mm                                | 6                |
| CC180              | 180mm                     | 180 x 2400mm                                | 5                |
| CC50CR-<br>CC180CR | 50 - 180mm                | As above but single flange for check reveal | As above         |

Solcourse Cavity Closer is supplied with different plastic profiles to suit larger cavity widths as illustrated below. This ensures the product maintains its rigidity right up to a 300mm cavity width.

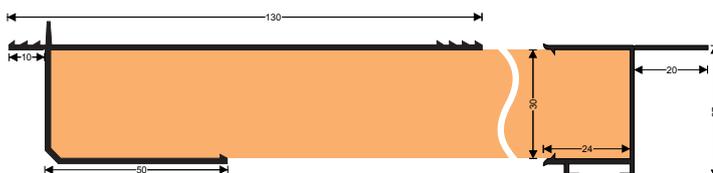
#### 50 - 180mm cavity

(2x Standard Profile)



#### 185-230mm cavity

(1x Medium Profile + 1x Standard)



#### 235 - 300mm cavity

(1x Large Profile + 1x Standard)

