

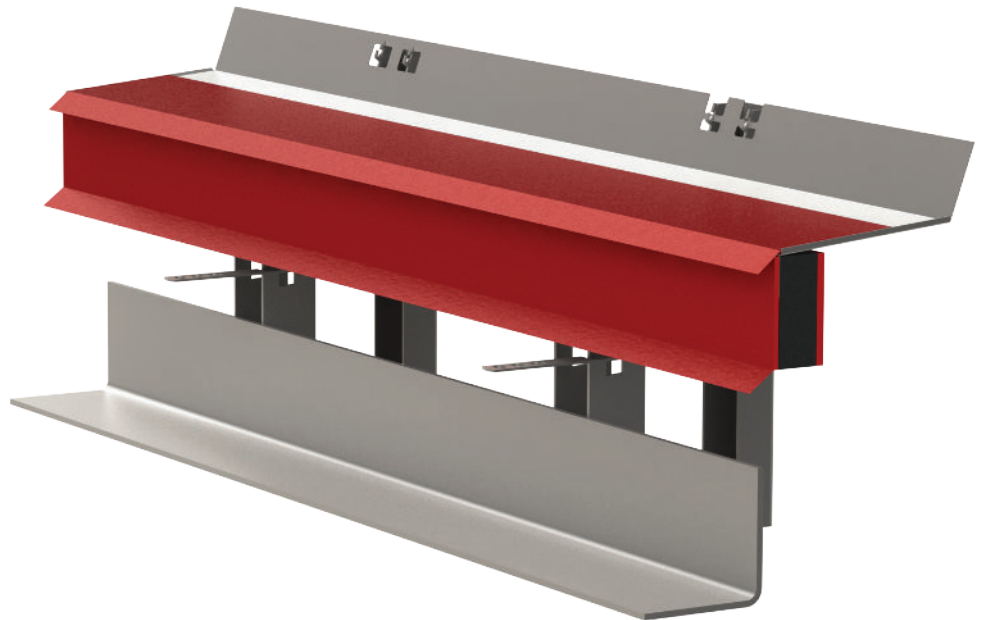
Intex™ Fire Protect 4-in-1 Masonry Support



Product summary

Intex™ Fire Protect is a first of its kind combined masonry support system combining four critical components into one easy-to-fit design. The product combines masonry support, cavity tray, wall ties, and an open state cavity barrier into a single product, giving a large number of benefits to all involved parties.

The product seeks to address a key issue in modern masonry facades, regarding cavity congestion around concrete floor slabs.



Masonry support element

The masonry support element of Intex™ Fire Protect is designed in the same manner as traditional masonry support, with improvements made to ensure it is fully fit for purpose. The system utilises the Alpha II adjustment method, giving the system $\pm 25\text{mm}$ vertical tolerance during installation.

The masonry support is covered by the ACS BS EN 1090 factory production control and BS EN 1090 welding certificate, in terms of production. As each piece of support is designed to each individual scenario, the system itself is designed using a bespoke calculation for each iteration, following the guidance of relevant structural standards.

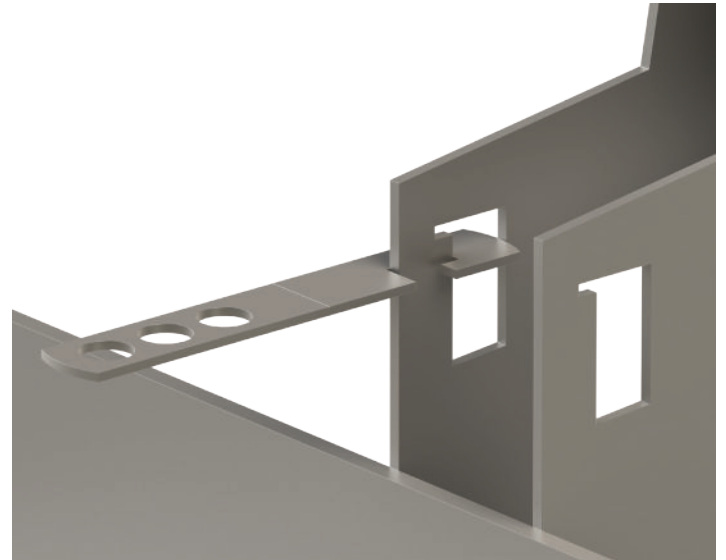


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Wall tie

The system includes integrated wall tie slots which allow specially designed wall ties to be simply clipped into the bracket, before being embedded into the brickwork mortar joint. The slot includes vertical adjustment to allow both standard and pistol bricks to be utilised upon the masonry support angle.

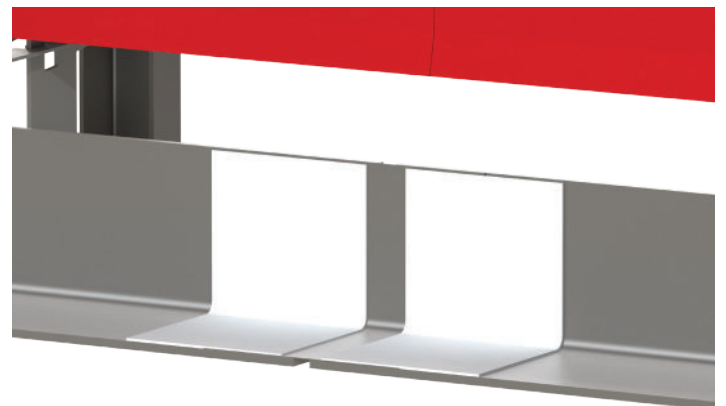


Cavity tray

The principles of the product follow the guidance from the ACS G-Tray™ non-combustible cavity tray offering. This can be split into two independent areas. Firstly, the masonry support angle doubles in purpose as the bottom tray of the cavity tray. To keep to these same principles, the angle has a minimum height of 100mm to ensure the system continues to function, even if mortar snots fall upon the angle during construction.

Secondly, the top tray element is attached to the bracket and follows the same minimum overlap of 50mm between components as the ACS cavity tray products. Each individual tray has upstand lips at its extremities to ensure there is zero risk of moisture penetration.

Between each masonry support angle is located a circa 10mm gap to allow for building tolerances. To counter this from a moisture perspective, a separate Intex™ jointing piece is used to bridge the gap. This is attached in the same manner as the ACS cavity tray products, with both a double sided butyl tape between the angle and jointing piece, as well as a single sided butyl tape over the top of the joint.



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Cavity barrier

Tested at Warrington Fire, the incorporated open state barrier has achieved test results in scenarios, allowing for building tolerances in both the internal primary structure, as well as the external brickwork.

The system was tested as a full assembly, with a maximum cavity size of 350mm. The testing can be split into two areas, the front closure and the rear closure which can be seen clearly in figure 1.

The product achieved the following test results:

**≤15mm front closure
and ≤34.5mm rear closure**

120 minutes integrity,
90 minutes insulation

**≤20mm front closure
and ≤39.5mm rear closure**

60 minutes integrity,
30 minutes insulation

**≤20mm front closure
and 0mm rear closure**

90 minutes integrity,
60 minutes insulation

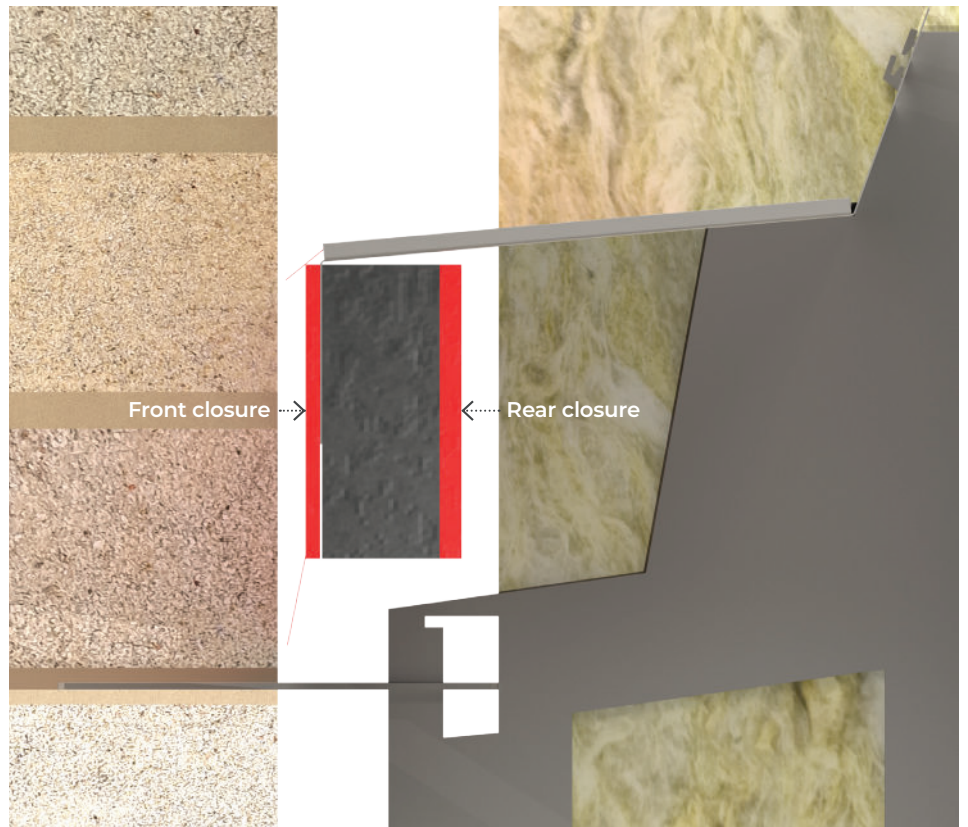


Figure 1

Weep vents

Product specific weep vents are available with the Intex™ Fire Protect system. The weep vents are manufactured from stainless steel, giving a number of benefits. Firstly, stainless steel is A1 non combustible and is suitable for use in the external wall build up. Secondly, as the product is to be used on a stainless steel angle and in the presence of moisture, there is no risk of bimetallic corrosion which can occur with dissimilar materials.

