

Horizontal Fire Closer

A barrier that prevents the vertical passage of fire and sound in external wall cavities.

Technical Guide

PRODUCT

The AIM Horizontal Fire Closer is a semi rigid Rockwool stone wool insulation laminated to a polythene DPC. It has been designed to provide up to two hours resistance to the spread of fire within a cavity that is adjacent separating floors within multi story buildings. It also significantly reduces flanking sound transmission within external wall cavities.

APPLICATIONS

The AIM Horizontal Fire Closer has been designed to provide up to two hours resistance to the spread of fire within a cavity that is adjacent to separating floors within multi story buildings. It also significantly reduces flanking sound transmission within external wall cavities.

The Horizontal Fire Closer is supported with test evidence to show its performance in cavity walls constructed from a variety of different substrates including masonry, timber frame structures and SFS / through wall systems.



Example product installation schematic using materials by others

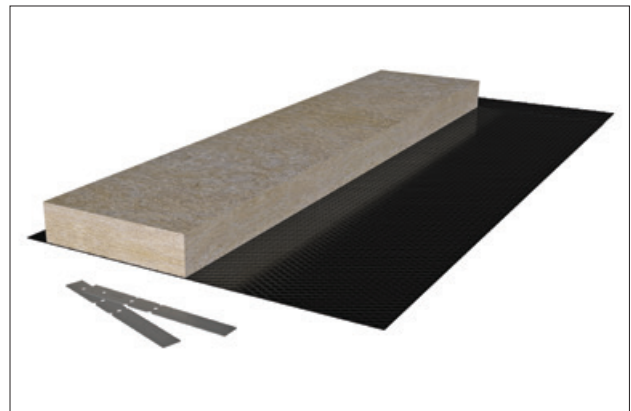
FEATURES

- A section of Rockwool Stone Wool insulation laminated to a Polythene DPC.
- DPC Polythene conforming to BS 6515
- Stone wool and DPC dimensions to suit most external wall cavity sizes.

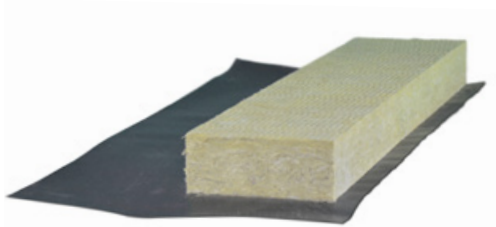
BENEFITS

- Up to 2 hours fire resistance.
- Prevents spread of fire past separating floors.
- Reduces flanking sound transmission within external wall cavities adjacent to separating floors.
- Test evidence that supports the use within a wider range of substrates.

* For cavities in excess of 100mm, please use the AIM Wall Cavity Barrier complete with Polythene DPC.



COMPONENTS available from AIM



Barrier



Fixing Clip
Two fixing clips per length of barrier

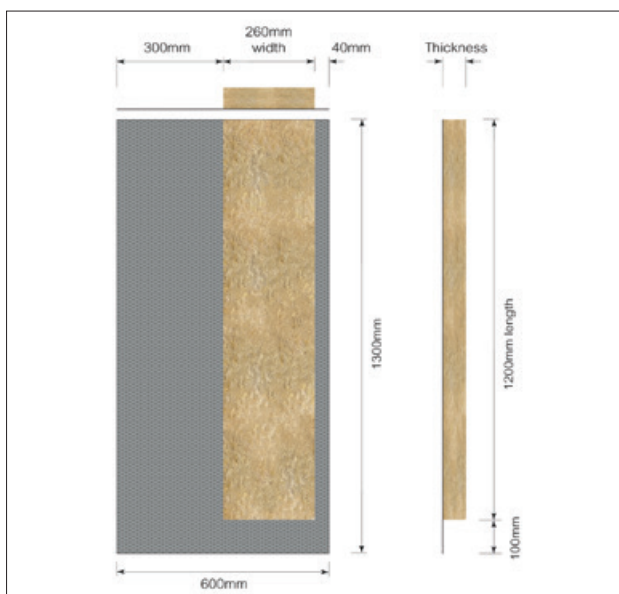
PHYSICAL INFORMATION

- Thermal Conductivity: $\lambda = 0.034\text{W/mK}$
- Complies with Part E of the Building Regulations
- Fire resistance performance of up to 2 hours' insulation and integrity when installed with clips
- Rockwool stone wool insulation
- Length: 1200mm
- Width: 260mm – bespoke widths available upon request.
- Thickness (mm): 50, 65, 75, 90, 100 – bespoke thicknesses available on request.
- DPC Polythene
- DPC Length: 1300mm
- DPC Width: 600mm
- DPC Overlaps: Top – 300mm, Bottom – 40mm, End – 100mm
- The Rockwool insulation used for the Horizontal Fire Closer, is pre-compressed to enable it to take up any minor irregularities in the substrates.
- Packaging: AIM Horizontal Fire Closers are generally packed into cartons and stretch wrapped onto wooden pallets with a showerproof polythene pallet cover and high quality edge protectors.

AS STANDARD

AIM Horizontal Fire Closer is supplied pre-cut in 1200mm lengths, 260mm wide and thicknesses depending on the fire rating required. The product supplied is as required to fill the void.

The pre-cut product is supplied with the required fixing clips



TECHNICAL INFORMATION

Fire Performance

The product has been tested to BS EN 1366-4 to provide up to 120 minutes integrity and insulation.

Fire Rating (Integrity / Insulation) - all horizontal and vertical use

Cavity width 100mm

Application	Integrity / Insulation
Masonry to Masonry	120/120 minutes
Masonry to Softwood	60/30 minutes
Masonry to OSB	60/60 minutes
Masonry to CP Board / SFS	60/60 minutes

Acoustic Performance

AIM Horizontal Fire Closer may be used to reduce the passage of flanking sound through external wall cavities.

It complies with Approved Document E to the Building Regulations and provides at least 23db Rw (minimum 140mm bearing). It also helps in meeting the requirements of Robust Details..

TEST REPORTS

WF 432745 = Masonry

WF 399452 = Timber & SFS

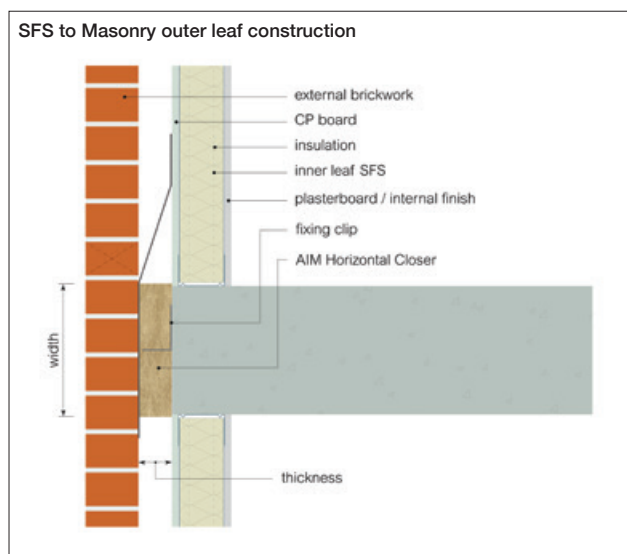
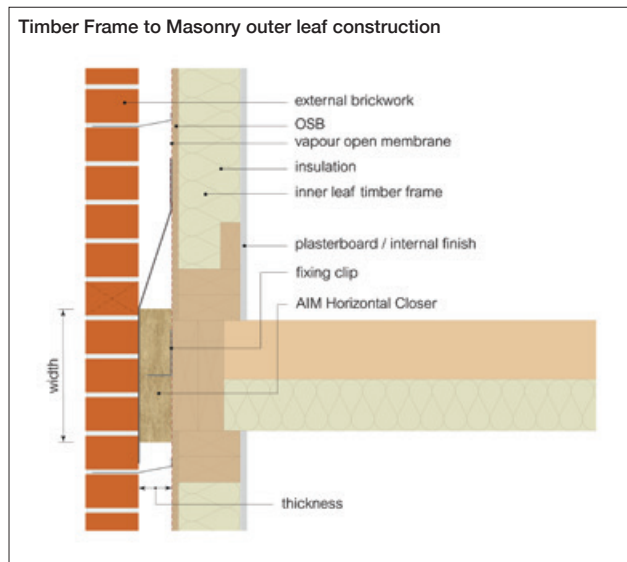
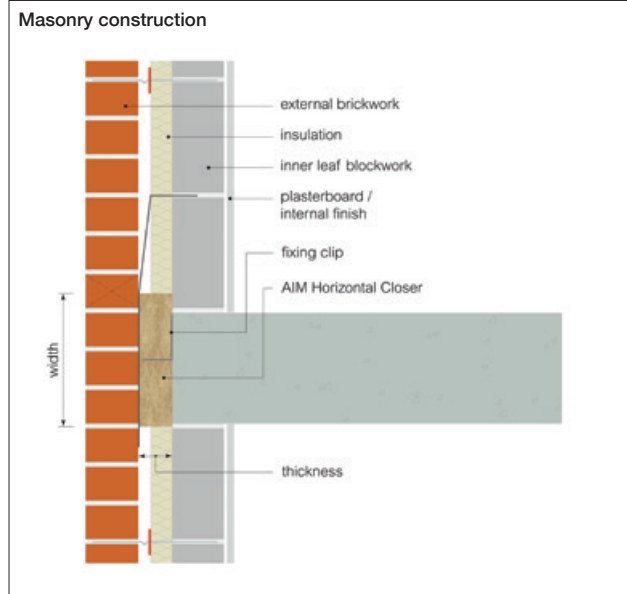
WF 414885 = Timber & SFS

Z11012 – Acoustic Performance – Testing on mineral fibre insulation. To BS EN ISO 10140-2



AIM are partners with NBS. Our products can be found on NBS Source and have been authored to NBS specification standards and have both CAWS and Uniclass 2015 classifications.

APPLICATION DETAILS



INSTALLATION GUIDELINES

The AIM Horizontal Fire Closer should be installed in the external wall cavity at the level of the separating floor. The closer is installed with the wide DPC overlap uppermost, as indicated in the illustrations with the DPC embedded into the inner blockwork in the mortar layer above the closer, so as to form a cavity tray. When used with a sheathing board, the DPC should be dressed behind the breather membrane.

Horizontal Fire Closer are designed for use in cavities up to 100mm (for 100mm+ use WCB with DPC).

They have been tested vertically and horizontally to BS EN 1366-4.

They are installed under compression (minimum 5% compression required).

They should be installed with fixing clips

Non-standard sizes and DPC offsets are available

Items required for installation



PPE abrasion resistant gloves



PPE impact resistant goggles



RPE dust mask



Drill



Screwdriver

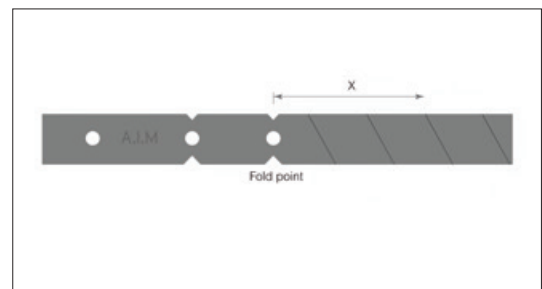


Tape measure

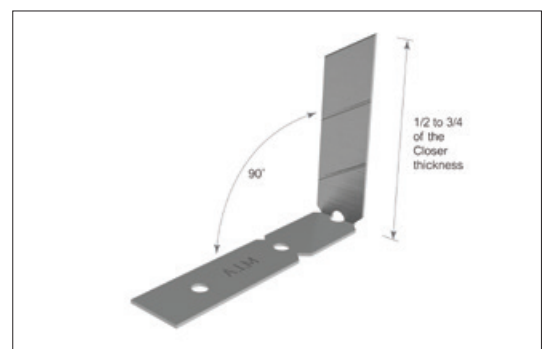
- 1 Check that the Horizontal Fire Closer is the correct thickness for the cavity. The Closer should be 5% larger than the cavity.



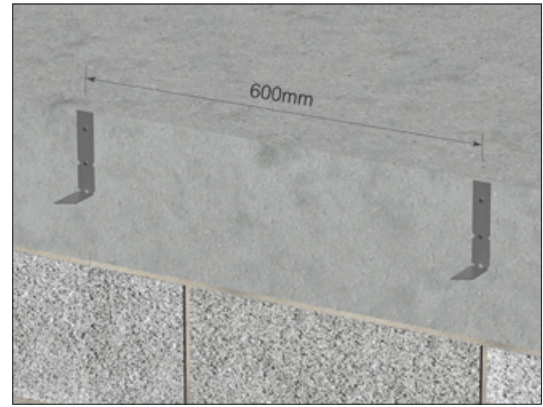
- 2 Snap the clips to the correct length. Dimension 'X' should be 50% to 75% of the Horizontal Closer's thickness.



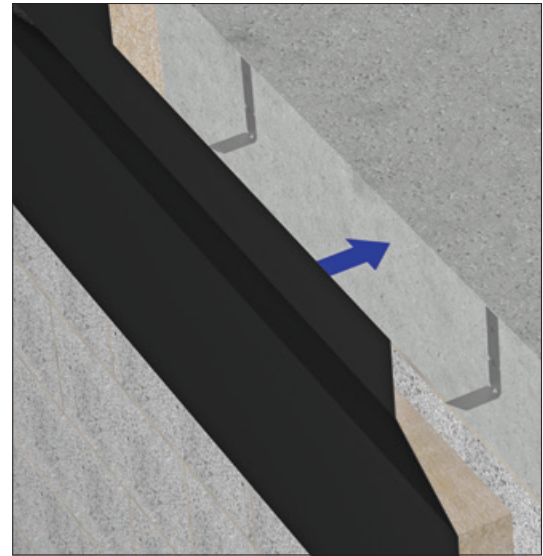
- 3 Fold the fixing clips at 90° to form an 'L' shape.



- 4** Fasten the clips to the substrate using non-combustible and corrosion resistant fixings at 600mm centres



- 5** Impail the Horizontal Fire Closer onto the fixing clips ensuring the DPC faces away from the internal structure. Ensure the 300mm DPC overlap is above the line of the closer.



- 6** If the Horizontal Fire Closer is being fitted against a sheathing board, dress the 300mm DPC overlap behind the breather membrane.



- 7** If the Horizontal Fire Closer is being used in a traditional brick cavity the 300mm tail can be dressed into a mortar joint.



STORAGE

Products are supplied in cartons on wooden pallets with edge protection and a shower proof hood. Orders can be supplied without cartons on request.

Products should be stored away from the elements until ready for installation.

MAINTENANCE

This product does not contain moving parts and, if undisturbed in the cavity, requires no routine inspections or maintenance.

It is recommended that the integrity of the barrier is rechecked if further works are carried out, which may involve disturbing the product.

DURABILITY

AIM fire barriers are chemically inert, will not sustain vermin and do not encourage the growth of rot, fungi, moulds or bacteria. They are compatible with all normal building materials. Rockwool stone wool has been proven in service for over 60 years, in a wide range of climates and degrees of exposure. It will generally perform effectively for the lifetime of the building, plant or structure.

HEALTH & SAFETY

Insulation products supplied by AIM are considered to be inert articles and as such are exempt from requirements to provide a Safety Data Sheet.

A Product Safety and Handling Information Sheet is available upon request.

ENVIRONMENT

Global warming potential = zero

For product recycling please contact: Rockwool
T: 01656 868400 E: recycling@rockwool.co.uk

ORDERING

To order this product the following information will be required:

- Cavity depth in mm
- Fire Performance required
- Approximate quantity
- Delivery location

All AIM fire barriers are made to order. Products are typically supplied in seven to ten working days but lead times may vary depending on existing factory commitments.

There is no minimum order quantity or value although small orders may attract transport surcharges.

TECHNICAL SUPPORT

Technical Support is available from our experienced sales team on 01293 582 400 or sales@aimlimited.co.uk

ABOUT AIM

AIM are a quality insulation convertor with over 30 years experience in the design, testing & manufacturing of high quality fire barriers for customers worldwide.

AIM are members of



AIM working in partnership with



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