

## **MANUFACTURERS LITERATURE**

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### **MANUFACTURER**

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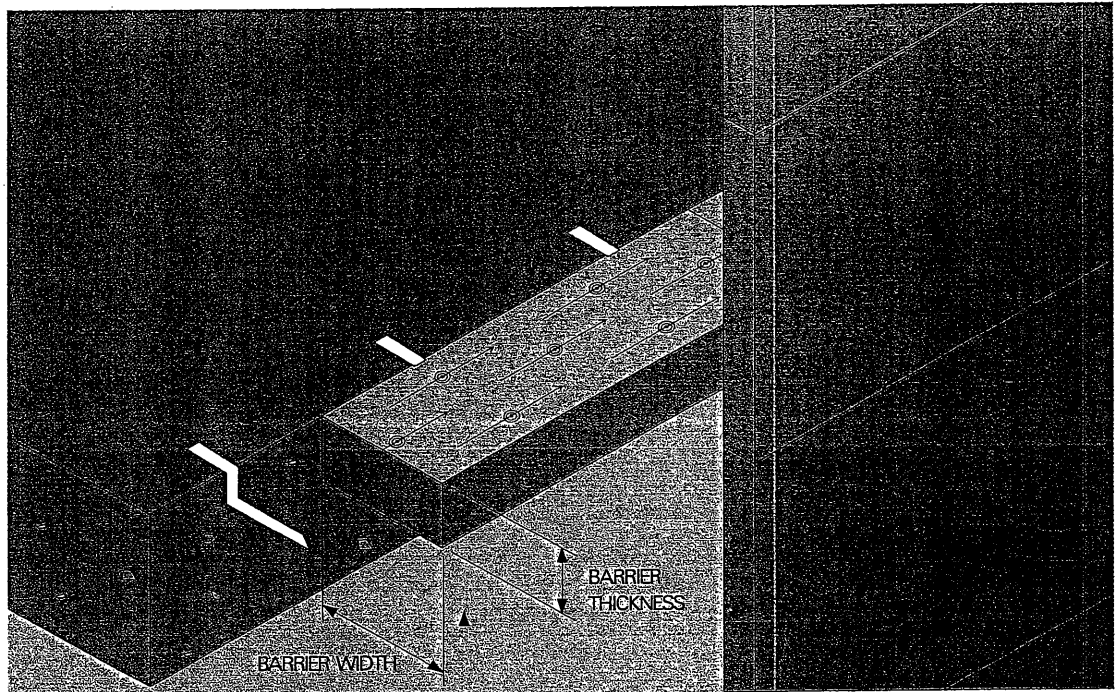
<b>ITEM</b>	<b>LITERATURE PROVIDED</b>
Fire Stop Strip	Data Sheets

### **ADOBE ACROBAT FILENAME**

AIM-FireStopStrip-DataSheets.pdf

## AIM WALL CAVITY BARRIER & FIRE BARRIER SLAB

December 2000



**Foil Faced Mineral Wool Fire and Smoke Barrier for all cavity walls and curtain walls, horizontal and vertical use**

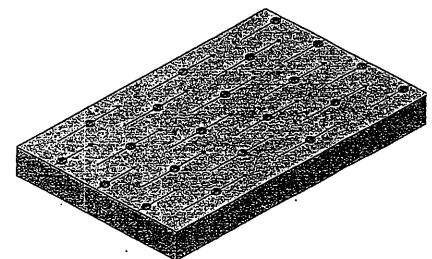
- ~ Lengths: 1200mm
- ~ Foil Facing (with AIM logo)
- ~ Void widths: 15 - 600mm

- ~ Clips available for horizontal use
- ~ No intumescent mastic required
- ~ Up to 4 hours fire rating

AIM Wall Cavity Barrier is made from foil faced high density rock wool and is suitable for use in all cavity walls, as well as for fire stopping between a curtain wall system and a concrete floor slab. The barrier prevents the passage of flame and smoke for the period of fire rating, specified overleaf.

Wall Cavity Barrier is offered cut to size, or supplied as Fire Barrier Slab for cutting to size on site. The foil facing is imprinted with the AIM logo and arrows which ensures authenticity of the product and assists with the cutting procedure, when slab is used. The Barrier is supplied unfaced when less than 50mm wide.

### AIM FIRE BARRIER SLAB



- Foil facing imprinted with AIM logo  
Cut in the direction of the arrow
- Slab thickness: 1 hour-75mm, 2 hour-100mm
- Slab size: 1200 x 600mm or 1200 x 1200mm

**Curtain Wall Systems**

AIM Wall Cavity Barrier is suitable for use in curtain wall cladding systems. However the performance of the fire barrier is dependent upon the integrity and stability of the cladding system in the region of the barrier, for the duration of fire rating required.

In addition to this consideration, should the curtain wall cladding bow or distort significantly in a fire, the gap that the fire barrier is filling may widen and integrity will be lost. If this is a possibility, the

cladding system must be attached to the structural floor, close to the fire barrier, with steel brackets to ensure that the distance of separation cannot increase.

There is a great variety of Curtain Wall Cladding Systems available. The system manufacturer must confirm suitability of its use with fire barrier for the fire resistance period required

**Installation**

AIM Wall Cavity Barrier is push fitted into place; it must fit tightly and completely. The barrier must be compressed by about 5% when installed.

**Clips**

Clips are required when the barrier is installed horizontally. They may be omitted when the barrier is installed vertically into cavities less than 250mm, provided the barrier is supported at its base.

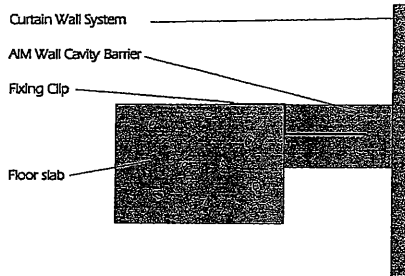
Two clips per length are required for cavities up to 400mm, three clips per length are required for cavities over 400mm (see table).

**Fitting**

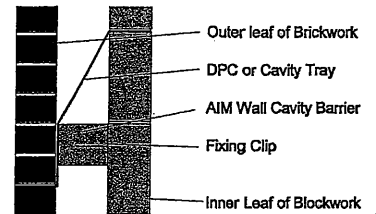
For horizontal barrier, the zed clips should be embedded in the barrier prior to fitting so that the top leg of the clip is level with the top of the barrier. The barrier is pushed into the cavity until the top leg of the clips touches the floor slab, so that the top surface of the cavity barrier is flush with the slab.

For vertical barrier, where clips are used these may have to be fixed to the inner wall, before the barrier is installed. When the barrier has to be installed before the outer wall layer, the barrier may require retaining straps to prevent it falling off prior to completion of the wall.

FLOOR SLAB TO CURTAIN WALL

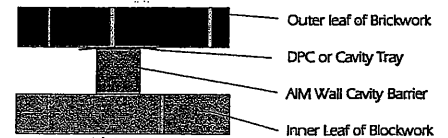


CAVITY WITHIN MASONRY WALL (barrier running horizontal)



Clip Selection Table		
Maximum Cavity	No. of Clips per Length of Barrier	Clip Gauge
400mm	2	0.9mm
500mm	3	1.2mm
600mm	3	1.6mm

CAVITY WITHIN MASONRY WALL (barrier running vertical)

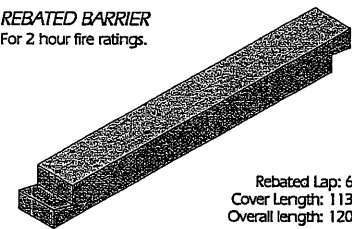


**Fire Resistance**

The performance of AIM Wall Cavity Barrier has been tested to BS 476 part 20 and assessed by the Loss Prevention Council to achieve the values as stated in the Fire Resistance Chart below.

Fire Resistance	Thickness of Fire Barrier
1 hour	75mm up to 300mm cavity 100mm up to 600mm cavity
2 hour	100mm with lap joints
4 hour	100mm EHD with lap joint
EHD = Extra High Density Barrier	

REBATED BARRIER For 2 hour fire ratings.



**SAFETY NOTE - CLIPS**  
Clips must not be installed with the sharp points left exposed at any time, due to risk of serious injury.

Where AIM Wall Cavity Barrier has butt end joints, these must be tight. Make sure that the ends of adjoining barriers are fitted closely together.

**Masonry Cavity Walls**

**Horizontal Barrier.** Bed the fixing clips into the joints in the internal leaf. A damp proof membrane or cavity tray must be installed into the cavity wall immediately above, and to the outside of, the fire barrier. Clips may be omitted in masonry cavity walls, provided the barrier is installed immediately above a row of metal wall ties where these are spaced at no more than 600mm centres.

Thickness is measured as the distance between one compartment and the next, which the fire stop or barrier is separating. The one hour barrier has butt end joints; barrier with a fire rating longer than 1 hour has lap end joints.

AIM Wall Cavity Barrier is incombustible to BS 476 part 4, rated Class 1 Surface Spread of Flame to BS 476 part 7 and complies with the performance requirements of Class O of the Building Regulations

**Handling & Storage**

AIM rock wool products are easy to handle, but should be treated with relative care to ensure their integrity and shape is maintained.

They should be stored in fairly dry conditions. Should indoor storage be impossible the product should be stacked clear of the ground and covered with a stout tarpaulin.

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## Introduction

AIM Fire Stop Strip is made from high density rock wool and is permanently held in place by compression without the need for adhesive or intumescent mastic. It prevents the passage of flame and smoke through the void being fire stopped. The barrier dimensions must be at least 5% greater than the void to be filled.

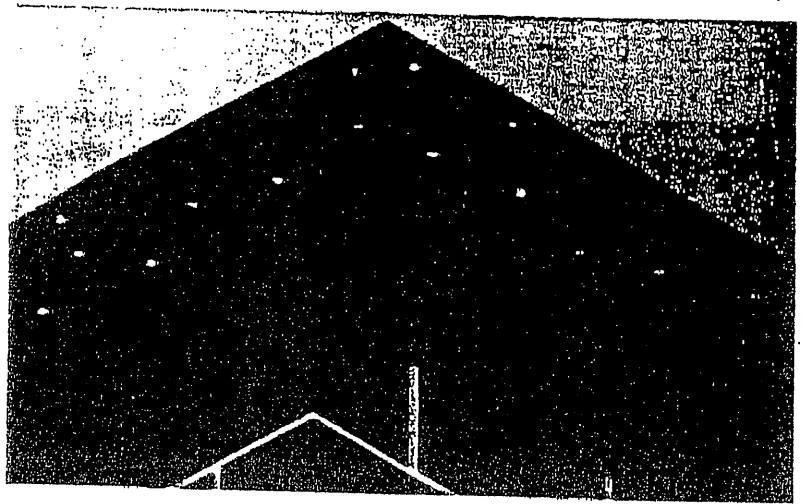
## Installation

AIM Fire Stop Strip is push fitted into place and it must fit tightly and completely; all butt joints also must be tight. A small piece of metal or plastic sheet may be temporarily inserted as a slip plate, if rough masonry surfaces cause problems. If the gap to be filled is between two components which might separate in a fire, the two components must be connected with steel brackets to ensure that the distance of separation cannot increase. When Fire Stop Strip is fitted to the top of a wall and the gap to the soffit exceeds 250mm, the wall must be attached to the soffit by steel brackets at 600mm centres.

## Acoustic Rating

AIM Fire Stop Strip will reduce flanking transmission of sound through the void it fills by at least 9dB. When installed in a 50mm gap above a partition and where an imperforate 12.5mm plasterboard ceiling is installed to abut the partition below on both sides, the room to room sound reduction, on the path of the Fire Stop Strip, will be at least 47dB - average sound reduction index.

## AIM High Density Mineral Wool Fire and Smoke Stop for medium size linear gaps in buildings



- Lengths: 1200mm
- Void thickness: 10 - 300mm  
(barrier to be 5% thicker than void)
- No Intumescent mastic required
- Up to 4 hours fire rating
- Takes up tolerances

## Applications

- Top of masonry wall under soffit.
- Expansion joint in masonry wall.
- Within metal cladding systems.
- Between ceilings and walls.

## Fire Resistance

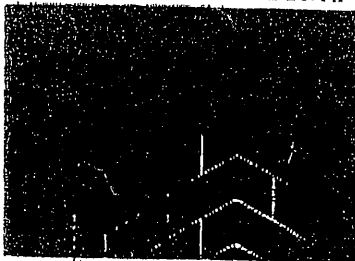
The performance of AIM Fire Stop Strip has been tested to BS 476 part 20 and assessed by the Loss Prevention Council to achieve the values as stated in the Fire Resistance Chart below. (Width is measured as the distance between one compartment and the next, which the fire stop or barrier is separating).

Fire Resistance	Minimum Width of Fire Stop		
	Gaps <76mm	Gaps <151mm	Gaps <301mm
1 hour	60mm	75mm	100mm
2 hour	75mm	100mm	150mm
4 hour	100mm EHD*	100mm EHD*	150mm EHD*

\*EHD = Extra High Density Material with lap joints

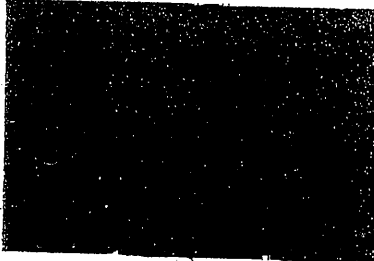
AIM Fire Stop Strip is incombustible to BS 476 part 4, rated Class 1 Surface Spread of Flame to BS 476 part 7 and complies with the performance requirements of Class O of the Building Regulations

P OF WALL TO SUPER SOFFIT



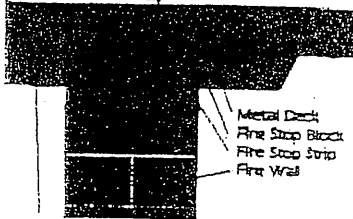
AIM Fire Stop Block AIM Fire Stop Strip

EXPANSION JOINT IN MASONRY WALL



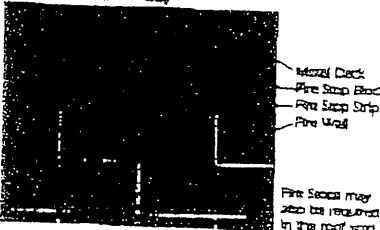
AIM Fire Stop Strip

TOP OF WALL TO METAL DECK (RUNNING PARALLEL)



Where opening exceeds 50% of block size, fit block to deck with steel bridge or 100mm mastic, central.

TOP OF WALL TO METAL DECK (CROSSING WALL)



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