Wall Cavity Barrier (Red Edition)

Fire and Smoke Barrier for masonry cavity walls.

AIM
ACOUSTIC AND
INSULATION MANUFACTURING

Installation Guidelines | Issue 5 - 07 2025

PRODUCT

AIM Wall Cavity Barrier is made from foil faced high density, compressible, Rockwool stone wool and is suitable for use in all masonry cavity walls. The barrier prevents the passage of heat, flame and smoke within the cavity it fills for 30, 60 or 120 minutes.

PHYSICAL INFORMATION

AIM Wall Cavity Fire Barrier cut to size

- Length: 1000mm
- Thicknesses: 75mm, 100mm, 125mm
- Foil Facing (with AIM logo in red print)
- Cavity widths: 50 - 600mm (barrier to be compressed by 5%)
- Pre-compressed for ease of installation
- Faced with reinforced aluminium foil for enhanced smoke resistance
- Available polythene sleeved when supplied pre-cut to size*

AIM Wall Cavity Fire Barrier Slab

- Slab thickness: performance (Integrity and insulation)
  - 75mm: 30 minutes
  - 100mm: 60 minutes
  - 125mm: 120 minutes
- Slab size: 1000 x 600mm and 1000 x 1200mm
- Foil Facing (with AIM logo in red print)
- Available polythene sleeved when supplied pre-cut to size*

*This product variant is available but has not been fire tested. Its use would be subject to the approval of the project fire engineer or consultant.

STORAGE

Cut product is supplied in cartons on pallets, slab products are supplied on wooden pallets with edge protection and a shower proof hood. Products should be stored away from the elements until ready for installation.

HEALTH & SAFETY

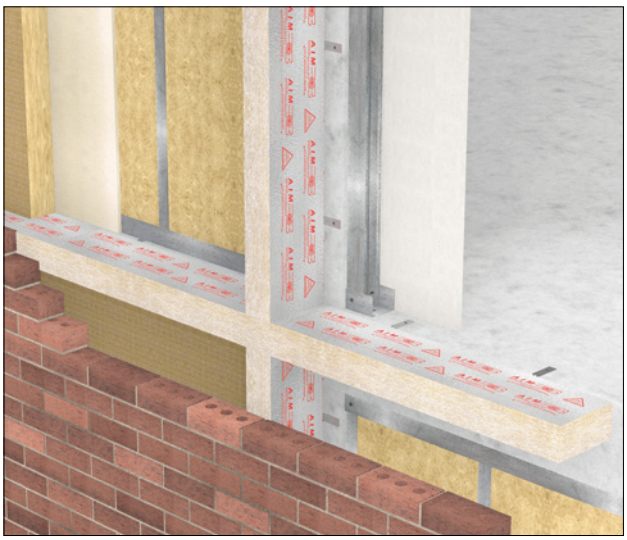
Insulation products supplied by AIM are considered to be inert articles and as such are exempt from requirements to provide a Safety Data Sheet.

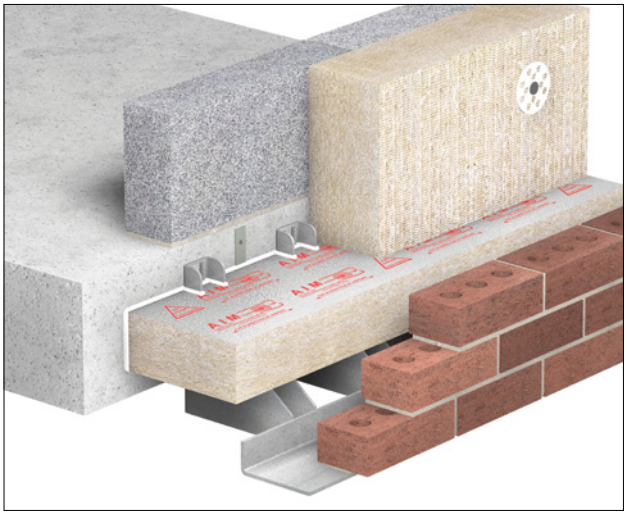
A Product Safety and Handling Information Sheet is available upon request.

ENVIRONMENT

Global warming potential = zero

The stonewool element of the products originate from Rockwool UK. It may be possible to recycle clean and uncontaminated material under Rockwool UK's Rockcycle® service. Please contact Rockwool on 01656 868400 for further details.





COMPONENTS available from AIM

- Wall Cavity Fire Barrier Fixing Brackets
- AIM acrylic fire rated intumescent mastic (optional extra)
- Barrier either cut to size or in slab format

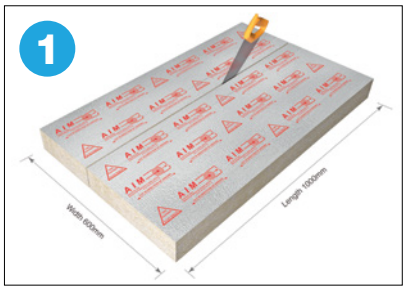
ITEMS REQUIRED FOR INSTALLATION

- PPE abrasion resistant gloves
- PPE impact resistant goggles
- RPE dust mask
- Tape measure
- Sharp knife
- Insulation Saw
- AIM Acrylic fire rated intumescent mastic (optional extra)

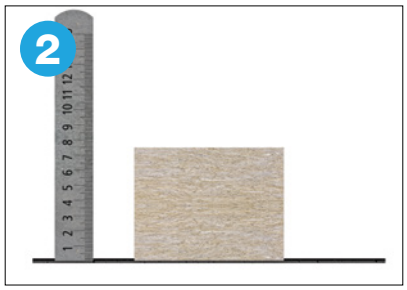
IFC Certification

Certificate number: IFCC 1897

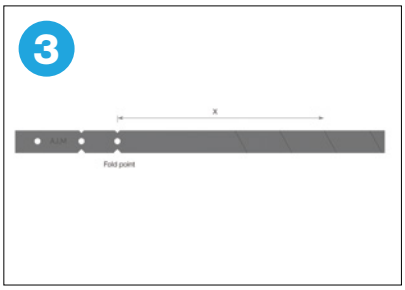
INSTALLATION GUIDELINES: FITTING UNDER COMPRESSION



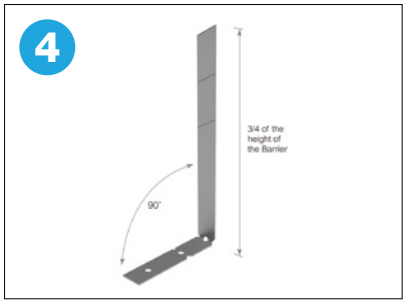
Measure the cavity depth and add 5%. Mark the slab and carefully cut using an insulation saw or hand saw. Please cut in the direction of the arrows printed on the foil facing. Note: This step is not required if installing Wall Cavity Fire Barrier cut to size.



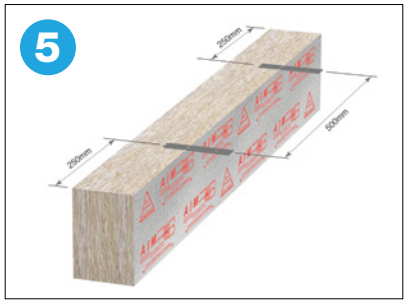
Check that the Wall Cavity Barrier is the correct thickness for the cavity. The barrier should be 5% larger than the cavity.



Snap the fixing clips to the correct length. Dimension X should be three quarters of the barrier's width.



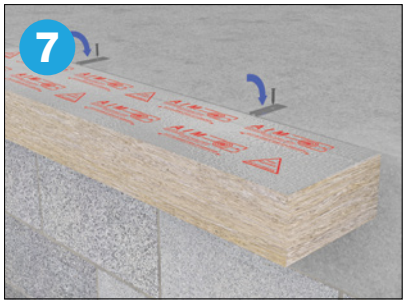
Form two fixing clips to 90° to form an L shape (three clips if the cavity is over 400mm).



Insert two fixing clips into the barrier at 500mm centres approximately 250mm from each end.

Note: for cavities over 400mm, clips should be approximately 166mm from each end using three per metre.

Hold the section of barrier tightly against the abutting section and secure the barrier to the substrate.



If the barrier is being used at the perimeter of a concrete floor slab, fit the barrier so it sits level with the top of the floor slab. Fold the clips over and secure them to the top of the slab.

Check for any gaps between the barrier and substrates. All gaps should be fully sealed with AIM intumescent mastic.

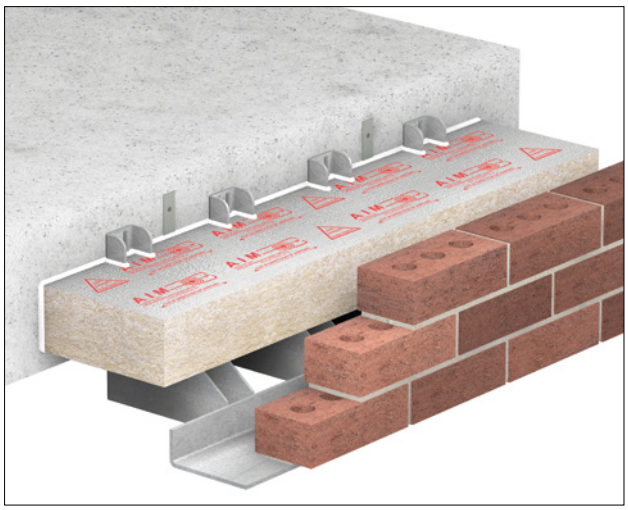
The cavity barrier should be predominantly fitted under compression; all gaps and voids must be fully sealed with AIM intumescent mastic.

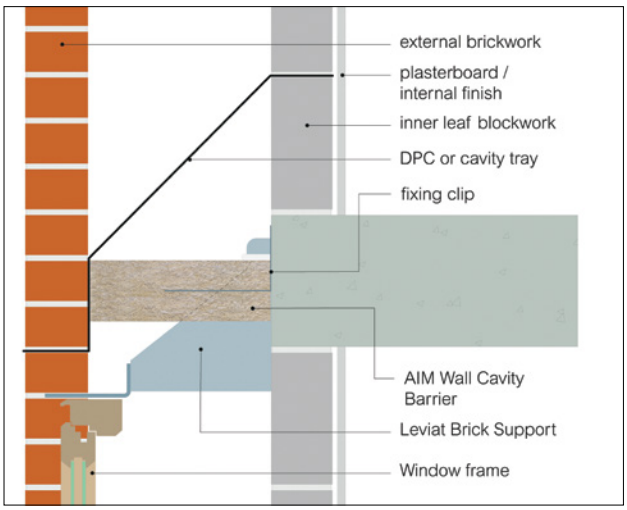
Where vertical barriers could cause "brick push" a push off post or bricklayer profile can be secured to the outside of the building as a preventative measure.

AIM WALL CAVITY BARRIER MASONRY SUPPORT - ADDENDUM

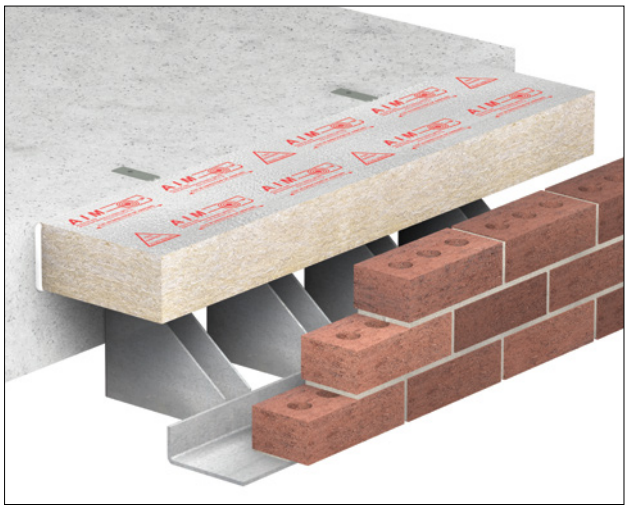
The AIM Wall Cavity Barrier has been tested in conjunction with Leviat brick support shelfs where the location of the barrier and brick support shelf coincides. The AIM Wall Cavity Barrier has been tested with and without thermal insulation and with the fins fully exposed. The drawings below show the relative position of the brackets and the fire resistance that is achieved with the respective barrier thickness.

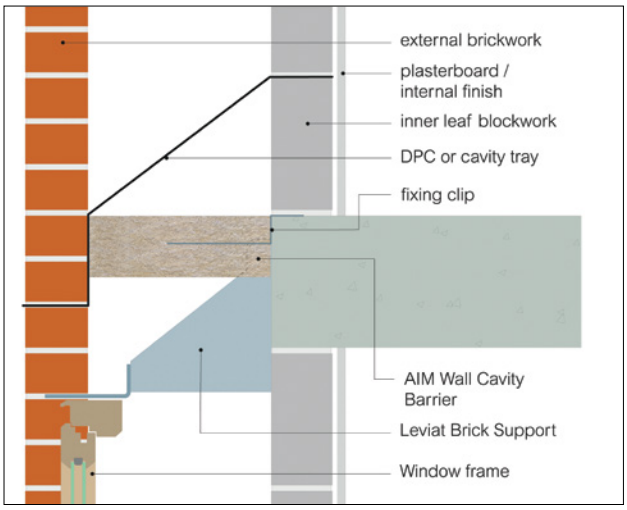
100% PENETRATION WITH NO THERMAL INSULATION*



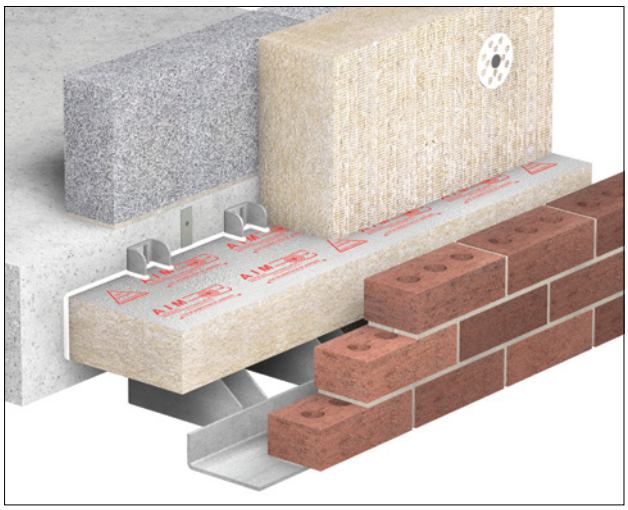


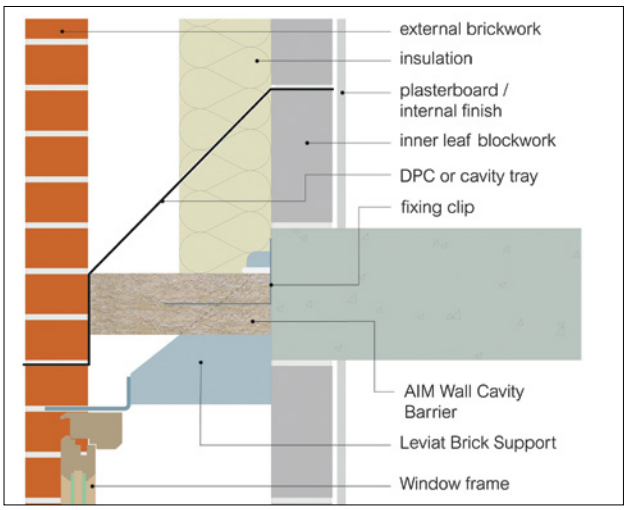
50% PENETRATION WITH NO THERMAL INSULATION*





100% PENETRATION WITH NON-COMBUSTIBLE THERMAL INSULATION*

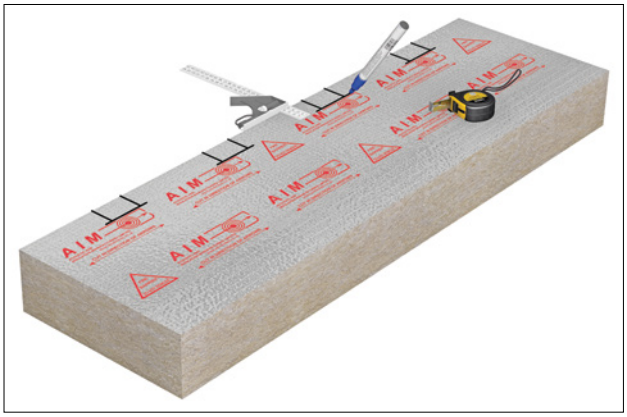




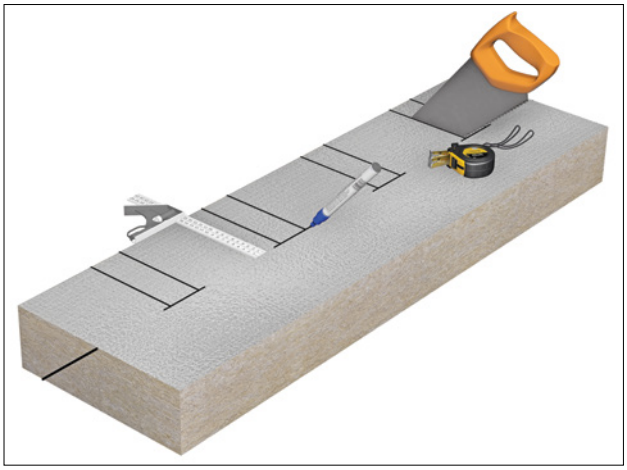
* Mastic used to seal any gaps or imperfections between the barrier and the substrate.

Fitting around the masonry support shelf

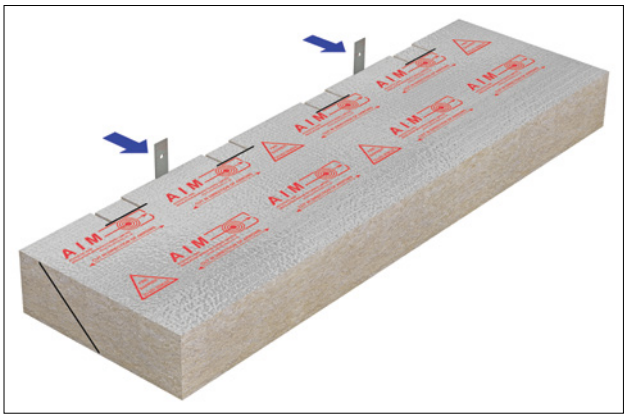
1. Using a barrier cut and pre-compressed for installation with 5% compression, mark where you need to cut. Hold the section of cavity barrier against the support shelf and mark where the fins will penetrate; ideally on both sides of the section of barrier.
   Mark how far you need to cut. Mark onto the face how far through you need to cut.



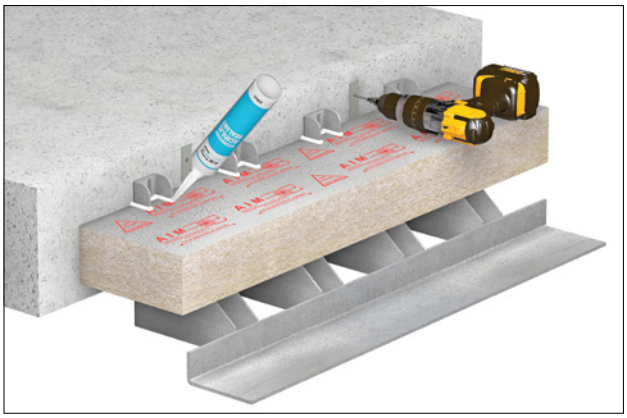
2. The barrier is easily cut with a hand woodworking saw.



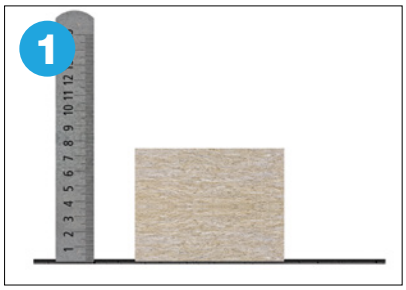
3. Fit two fixing clips per length of barrier. These should be at roughly 500mm centres. whilst the brick support shelf does provide some support, Approved Document B states that all cavity barriers must be mechanically secured in place.



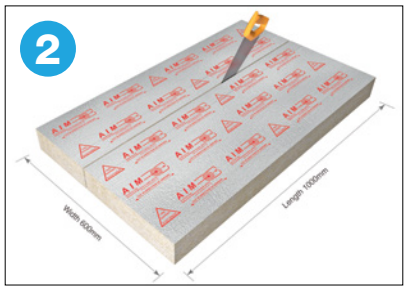
4. Carefully fit the Wall cavity Barrier over the fins. When fitting the barrier make sure that the cut sections doesn't snag on the sides of the fins.
   Secure the fixing clips back to the slab edge. Remember that all of the fixings need to be non-combustible and corrosion resistant.



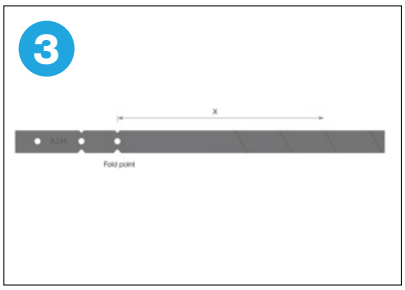
INSTALLATION GUIDELINES: ZERO COMPRESSION FITTING



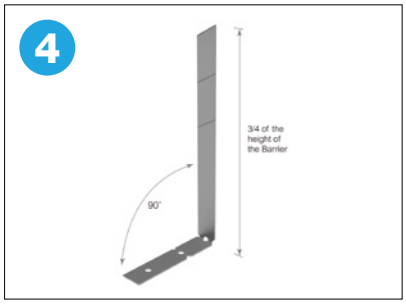
Check that the Wall Cavity Barrier is the correct thickness for the cavity. The barrier should be the same width as the cavity.



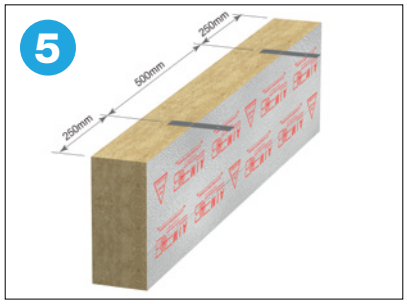
Measure the cavity depth and mark the slab. Carefully cut using an insulation saw or hand saw. Please cut in the direction of the arrows printed on the foil facing.



Snap the fixing clips to the correct length. Dimension X should be three quarters of the barrier's width.



Form two fixing clips to 90º to form an L shape (3 clips if the cavity is more than 400mm).



Insert two fixing clips into the barrier at 500mm centres approximately 250mm from each end.

Note: for cavities over 400mm, clips should be approximately 166mm from each end using three per metre.

Hold the section of barrier tightly against the abutting section and secure the barrier to the substrate.

Build the brickwork up against the side of the barrier ensuring the bricks are in full and faithfull contact with the cavity barrier.

No compression is required.

Installation can be simplified by selecting bricks of a similar width along cavity barrier lines.

Once the mortar has cured, using an angled mastic nozzle, run a bead of mastic between the barrier and the internal and external leaf.

If the barrier is being installed with a DPC, apply the bead of mastic between the DPC and external leaf.

One 310ml cartridge is adequate to seal 6 linear metres of Wall Cavity Barrier against the internal and external leaf.

INSTALLATION GUIDELINES: AD-HOC DETAILS

CLADDING RAIL INTERSECTIONS

- Fit the vertical cavity barrier following the instructions on pages 2 and 5.
- Offer the horizontal rail into position and tightly notch the Wall Cavity Barrier to accept the rail.
- Use the off-cut of material to pack into the rail; seal this in situ using AIM Intumescent Mastic to at least the same width as the cavity barrier.
- Check around the back of the rail for any gaps or voids; all gaps and voids must be fully sealed with AIM Intumescent mastic.

FITTING TO CASSETTE PANELS (USING AN OSCB CASSETTE INSERT)

- OSCB Cassette Inserts are factory cut to suit the thickness of the cassette panel in 1000mm or 1200mm lengths.
- Cut the inserts length so that it completely fills the height of the cassette panel.
- Adhere the insert in situ using a suitable adhesive or intumescent mastic.
- If mechanical support is required, a colour coded screw can be inserted through the top and bottom of the cassette panel, into the ends of the cassette insert.

PROFILED METAL CLADDING CLOSING TO A D32 PROFILED SHEET

- Fit the vertical cavity barrier following the instructions on pages 2 and 5.
- Fit the profiled metal sheet ensuring the ribs of the sheet line up with the profile cut into the front edge of the Wall Cavity Barrier.
- Check that the profiled sheet closes all gaps and voids; all gaps and voids must be fully sealed with AIM Intumescent Mastic.

PRE-CUT WALL CAVITY BARRIER APPLICATIONS WHERE THE CAVITY IS LARGER THAN EXPECTED

- Wall Cavity Barrier Packers are factory cut to suit the width of the Wall Cavity Barrier in 1000mm lengths. The thickness is cut to increase the width of the cavity barrier as necessary.
- Adhere the insert to the rear of the Wall Cavity Barrier using two beads of mastic approximately 1/3 and 2/3 of the seals thickness.
- Impale the cavity barrier and packer onto the fixing clips ensuring the fixing clips penetrate through the packer and extend approximately three quarters of the cavity width.
- Check for any gaps and voids; all gaps and voids must be fully sealed with AIM Intumescent Mastic.

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.

VERSION CONTROL

Issue 5 - 07 2025

This document replaces and supersedes all previous versions.

The current version number can be verified at
https://www.aimlimited.co.uk/downloads/
or call AIM on 01293 582400

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ACOUSTIC AND INSULATION MANUFACTURING

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