Open State Cavity Barrier (oscb 44)

An open state cavity barrier for ventilated façade systems and timber frame construction.



Installation Guidelines - OSCB 44 Range

Issue 2 - 12 2025

PRODUCT

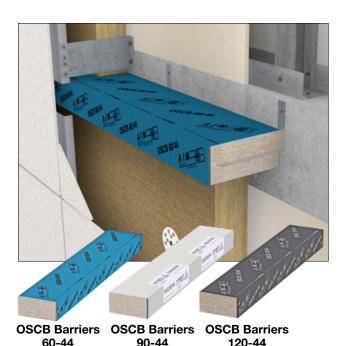
AIM Open State Cavity Barriers (OSCB's) are manufactured from high density Rockwool stone wool and faced with an intumescent strip and colour coded for ease of identification.

Open State Cavity Barriers offer an effective fire barrier for ventilated voids up to 425mm in width. Having been tested to TGD 19 & the general principles of BS EN 1363-1, they offer a superior fire rating of up to 120 minutes insulation & integrity with ventilated air spaces within the cavity.

The AIM OSCB range is available to provide either a 25 or 44mm air gap. For simplicity the range also offers either a 60, 90 and 120 minute rating for both Integrity and Insulation.

PHYSICAL INFORMATION

- Thickness 90mm
- Width Total cavity size up to 425mm less 44mm (for the air gap).
- Length 1000mm
- Max Air Gap 44mm (these installation instructions cover the OSCB 44 range)





TECHNICAL INFORMATION

Product	Sleeve Colour	Integrity/Insulation (Minutes)	Air Space (mm)	Max Cavity (mm)
AIM OSCB 60/44	Blue	60/60	44	425
AIM OSCB 90/44	Clear with Purple label	90/90	44	425
AIM OSCB 120/44	Black	120/120	44	425

GENERAL STORAGE AND HANDLING

- Suitable handling equipment will be required for bulky products or pallets.
- 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.
- Store on flat ground stacked no more than two pallets high.

HEALTH & SAFETY

- as an article there is no requirement for a Safety Data Sheet.
- follow appropriate material handling methods using suitable PPE for site hazards.
- · dry working by cutting or drilling of:
 - non-encapsulated rock or mineral wool may release fibre dust (MMMF).
- "MMMF" has workplace exposure limits listed in HSE EH40.
- where possible use on tool dust extraction with HEPA filter.

COMPONENTS available from AIM

- OSCB Fixing Brackets see table
- · AIM acrylic fire rated intumescent mastic

Barrier Size	Fixing Clip Size	Quantity per mtr
Up to 160mm	Small 0.9mm	2
161 to 300mm	Large 1.2mm	2
301 to 600mm	HD Large 1.6mm	3

NB: Galvanised and stainless steel fixing clips available.

ITEMS REQUIRED FOR INSTALLATION

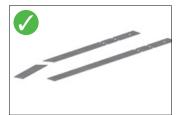
- PPE abrasion resistant gloves
- Sharp knife
- PPE impact resistant goggles
- Insulation saw

RPE dust mask

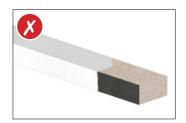
- Tape measure
- AIM Acrylic fire rated intumescent mastic (optional extra)

INSTALLATION GUIDELINES

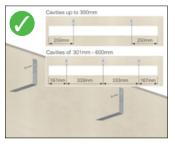
Form the clips to an L shape and snap the clip to length. It must penetrate at least 50% of the barriers width but should not pass through the intumescent layer.



Do not remove the weatherproofing polythene layer.

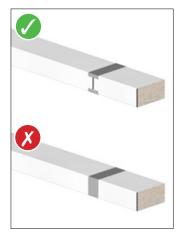


Fit the clips to the substrate at 333 or 500mm centres (according to the cavity size – see table on page 1) ensuring that non-combustible and corrosion resistant fixings are used. One screw is required per clip.



Ensure that the product is installed with the intumescent material facing towards the cladding panel.

Do not apply tape over the face of the barrier. (The top and bottom surface may be taped if necessary – as shown.)



Impale the barrier onto the fixing clips, mid depth, ensuring the intumescent faces the open airspace. Ensure a tight butt joint between sections of barrier.



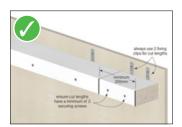
Make sure that the airspace doesn't exceed 44mm.



Make sure that the barrier is sitting flush back to the substrate and no gaps are present. Seal any gaps or voids with AIM Intumescent Mastic.



Ensure cut lengths have a minimum of two fixing clips and two securing screws.



Make sure there are no gaps between adjoining sections of barrier. Any minor voids should be addressed with AIM Intumescent Mastic.



Make sure that the intumescent strip is clear to expand freely to the rear of the façade without obstruction. i.e. Vertical Cladding Rails or the returns of cassette panels, preventing free expansion.



INSTALLATION GUIDELINES: AD-HOC DETAILS

OSCB WITH CLADDING RAIL INTERSECTION (CONFIGURATION 1)



- Fit the OSCB, helping hand brackets and thermal insulation to the substrate following the standard guidelines.
- Fit the vertical rail into the helping hand braket above the cavity barrier line. Line the bottom of the rail with the bracket below and mark where the rail will intersect the OSCB.
- Cut a vertical slit in the OSCB using a serrated knife or hand saw.
- Fit the vertical rail into the OSCB. Check for any gaps or voids which mist be fully sealed with AIM Acrylic Intumescnt Mastic.

OSCB WITH OSCB CASSETTE INSERT



- Fit the OSCB and support system in the usual manner.
- Offer the cassette panel into position, mark the cavity barrier line on the inside of the panel.
- Fit the OSCB Cassette insert and adhere it in situ using a suitable adhesive.
- Colour matching securing screws (matching to the cladding panel) can be added through the sides of the cassette panel, into the ends of the OSCB Cassette Insert to provide mechanical support.

OSCB WITH PROFILED METAL SHEETING



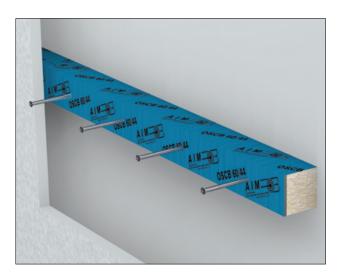
- Fit the OSCB and support system in the usual manner.
- Fit the D32 profiled sheet ensuring the distance between the face of the OSCB 44 and the furthest point of the D32 sheet does not exceed 44mm.

OSCB WITH OSCB PACKER



- Measure and make sure that the width of the OSCB and OSCB Packer bring the airspace to within 25 / 44mm.
- Apply two small continious beads of AIM Acrylic Intumescent Mastic along the rear of the OSCB approximately 30mm from the top and 30mm from the bottom of the OSCB.
- Adhere the OSCB Packer to the rear of the main OSCB and push the two together.
- Fit the assembly onto the fixing clips. The OSCB Packer must be facing the internal leaf of the construction.

OSCB DIRECT FIXING (VOIDS LESS THAN 76MM)



- For voids 75mm and below fixing clips and pigtail screws are not suitable.
- Steel screws must be installed through the barrier into the substrate.
- The screws must be fitted at a maximum of 250mm centres, four per metre length of barrier.
 Best practice is to ensure that the screw head is flush with the surface of the barrier.
- The screws head must be between 8mm to 11mm in diameter.
- The screws must be stainless steel or galvanised.
- AIM OSCBs should be fixed to the substrate by using suitable steel fasteners; the fixings supplier should be contacted for advice prior to installation, especially if a hard concrete has been specified.
- The intumescent strip must face the open airspace
- Each length of fire barrier must tightly abutt adjoining fire barriers & vertical inferfaces.
- Please contact the AIM Technical department for more information.

PACKAGING & PRODUCT DISPOSAL

- · Pallets can be readily re-used.
- Pallet wrap / covers should be placed in an appropriate waste stream.
- The product remains in the construction until refurbishment or demolition as such the project lead should apply the contemporary national and local regulations for waste bearing in mind site and installation contaminants.
- For product recycling of Rockwool materials, please contact:
 - Rockwool T: 01656 868400 E: recycling@rockwool.co.uk.

ENVIRONMENT

Global warming potential = zero

AIM Open State Cavity Barriers are manufactured from a variety of materials.

OPERATION & MAINTENANCE This product does not contain moving parts and, if undisturbed requires no routine inspections or maintenance.

VERSION CONTROL

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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



