

FIREZERO

Open State Cavity Barrier Series 1025 / 1044

Cavity Barriers for Masonry AND Framed Constructions

MDL Firezero Open State Cavity Barrier (OSCB) consists of a high-density stone wool with an integral intumescent layer, wrapped in reinforced class 'O' foil.

Open State Cavity Barriers are designed to provide an air gap of up to 25mm or 44mm. In the event of a fire the intumescent layer is heat activated and rapidly expands to close the cavity and restrict the spread of fire.

- ✓ Tested in accordance with ASFP TGD-19.
- ✓ Up to 2 hours fire integrity & insulation.
- ✓ Satisfies NHBC and CWCT guidance for ventilated cavities.
- ✓ Provides 25mm or 44mm ventilation.
- ✓ Expanding intumescent face.
- ✓ Available for cavity widths 25 - 300mm.
- ✓ Suitable for horizontal application.
- ✓ Used in conjunction with Series 1000 vertically.
- ✓ Wrapped in reinforced Class 'O' foil.
- ✓ Supplied complete with fixing brackets.
- ✓ Zero ODP and GWP.



Product Description / Selection

Open State Cavity Barriers are specifically designed to maintain cavity ventilation and drainage under normal service conditions. In the event of a fire the intumescent face of the OSCB quickly expands, sealing the cavity and restricting the spread of fire.

MDL have designed two products in this range:

- **Series 1025/90/60** offers a 25mm air gap and 90/60 fire rating.
- **Series 1025/120/120** offers a 25mm air gap and 120/120 fire rating.
- **Series 1044/120/60** offers a 44mm air gap and 120/60 fire rating.

These products have been independently tested at Warringtonfire following the general principles of BS EN1363-1 and in accordance with ASFP TGD19 (Fire Resistance Test for ‘Open State Cavity Barriers’)

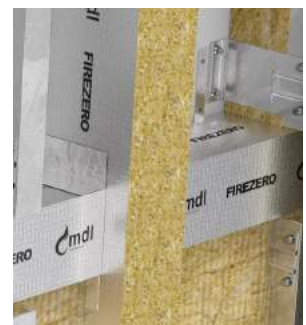
Both series 1025 and 1044 are used horizontally and are installed in conjunction with Series 1000 Vertical Full Fill Cavity Barrier offering a complete barrier solution where horizontal ventilation is required.

Product Code	Dimensions	Fire Rating		Max Air Gap	Cavity Range
		Integrity	Insulation		
1025/90/60	... x 75 x 1000mm	90	60	25mm	25 - 300mm
1025/120/120	... x 75 x 1000mm	120	120	25mm	25 - 300mm
1044/120/60	... x 75 x 1000mm	120	60	44mm	25 - 300mm
FIREZERO OSCB's are supplied pre-cut to suit exact cavity widths minus 25mm or 44mm					

FIREZERO Ancillary Products



- FIREZERO Fixing Brackets.
- FIREZERO Intumescent & Acoustic Mastic.
- FIREZERO Class ‘O’ Foil Tape.
- FIREZERO Series 1000 Vertical Full Fill Cavity Barrier.



Product Installation

FIREZERO OSCBs should be installed in a continuous run. Adjacent lengths must be tightly butt jointed to ensure no gaps are present. Where the vertical full fill barrier (Series 1000) passes through the horizontal barrier the OSCB must be cut to length and tightly abutted to the vertical barrier. Please note that the vertical barrier should be installed before the OSCB.

The intumescent face of the OSCB must be clear of any obstruction in order to allow it to expand in the event of a fire. Our product labels are located on the front of the barrier to ensure they are installed with the intumescent face towards the outer leaf of the construction.

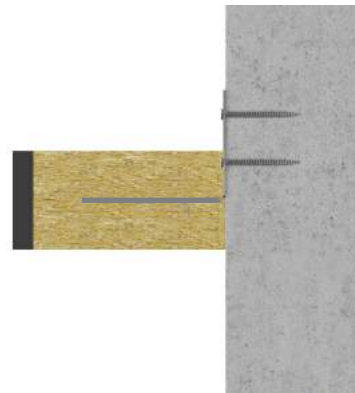
FIREZERO Class 'O' Foil Tape is used to tape the joints on adjacent lengths and where the OSCB meets the vertical barrier. The foil tape should not be applied to the intumescent facing of the barrier.

The OSCB should exceed the thickness of adjacent insulation and protrude into the cavity.

The OSCB must not be penetrated by any mechanical or electrical services.

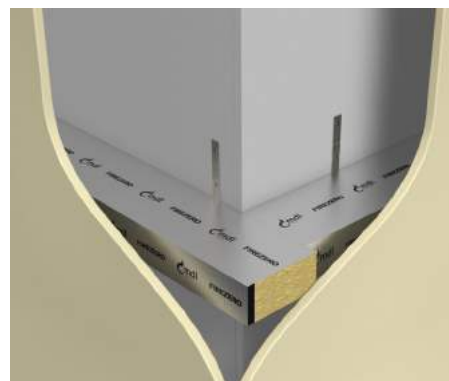
Fixing Notes

- Where used, the vertical leg of the fixing bracket should extend above the OSCB.
- The fixing brackets should be fitted on the centre line and embedded at least 75% into the OSCB.
- The rear face of the OSCB should be tightly fitted against the inner substrate with no gaps.



Corner Detail (recommended)

- Corners should be tightly butt jointed. The overlapping length should be used with the intumescent face intact.



Product Installation (continued)

Barrier width up to 75mm

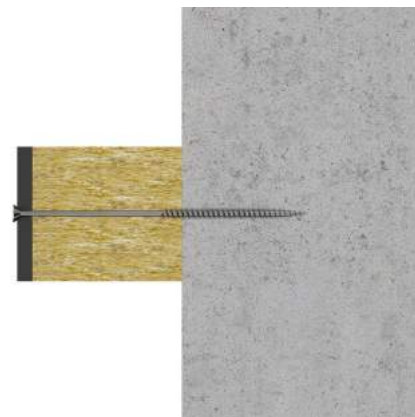
Use countersunk stainless-steel screws suitable for the substrate with a maximum head diameter of 16mm. The length of the fixing is determined by the barrier width plus the embedment required.

Care must be taken to ensure the fixing head finishes flush or slightly proud of the intumescent face of the OSCB. It is important that the screw head does not penetrate the face. Overtightening may affect the performance of the barrier.

Position the first screw 125mm from one end of the barrier, continue to fix at 250mm centres (4 fixings per length). The fixing closest to each end of the barrier should be 125mm from each end.

Where cut sections of OSCB are used, continue to fix 125mm from each end with additional fixings at equal centres (max 250mm). They require a minimum of 2 fixings per length.

Where small gaps or imperfections are present, we recommend the use of FIREZERO Intumescent & Acoustic Mastic.



Product Installation (continued)

Barrier width over 75mm

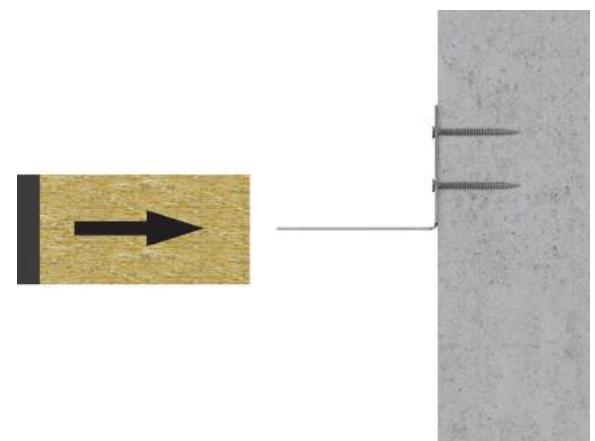
MDL OSCBs are supplied with 2 fixing brackets per length. Bend the fixing brackets to 90 degrees and cut to required length (minimum 75% of the barrier width).

Secure the brackets to the inner leaf using non-combustible fixings suitable for the substrate. Brackets should be fixed no more than 250mm from each end of the barrier and the maximum fixing centres are 500mm. The vertical leg of the bracket should extend above the barrier.

Push the OSCB onto the fixing brackets ensuring they are embedded centrally into the 75mm thick stonewool, and to 75% of the barrier's depth. The bracket must not penetrate through the intumescent face.

The rear face of the barrier should be tight against the inner substrate with no gaps.

Where small gaps or imperfections are present, we recommend the use of FIREZERO Intumescent & Acoustic Mastic.





Technical Data

The stone wool used to produce FIREZERO Open State Cavity Barriers is classified non-combustible to BS476: Part 4 (1984). The FIREZERO printed reinforced aluminum foil is classified as Class 'O'.

FIREZERO Open State Cavity Barriers are tested utilizing the general principles of ASFP TGD-19 to provide up to 120-minute fire integrity.

When used in external cladding, or internal metal frame systems performance of the barrier will depend on the integrity and fire performance of the surrounding construction which must be suitable for use with a fire barrier. Where a barrier is installed in a non-fire resisting external wall the performance of the barrier will be limited to that of the wall itself. Suitability should be confirmed by the Design Team or Architect for the project.

Environmental

Manufactured using stonewool slab which is 97% recyclable and classified as ZERO ODP and GWP. All barriers are packed in polythene bags and cardboard sleeves for protection and stability during transit. Both the polythene bags and cardboard sleeves are widely recyclable.

Storage

FIREZERO Open State Cavity Barriers should be stored dry and out of direct sunlight.

COSHH

MDL are committed to supplying products which are both safe to install and manufactured in a safety conscious environment. We continue to assess all components used in our products to meet all the requirements of the Substances Hazardous to Health Regulations (COSHH). COSHH datasheets are available upon request for all MDL products and components used in our manufacturing processes.

Disclaimer:

The information provided in this datasheet is intended for general guidance purposes only and does not constitute professional advice. Users are advised to conduct their own tests and evaluations to determine the suitability of the product for their specific application to meet relevant fire safety standards. Use of all products should be approved by the appropriate designer under CDM 2015 regulations.

MDL Insulations Ltd. shall not be liable for any loss or damage, including but not limited to indirect or consequential loss or damage, or any loss or damage whatsoever arising from the use of this product or reliance on the information provided in this datasheet.

It is the responsibility of the user to ensure proper installation, maintenance, and compliance with relevant guidelines. By using this product, the user agrees to accept all risks associated with its use and releases the manufacturer from any liability whatsoever.



T: 01543 450311

F: 01543 450885

E: sales@mdlinsulations.co.uk

W: www.mdlinsulations.co.uk

Villa Works, 1 Plant Lane Business Park, Burntwood, Staffs, WS7 3GN