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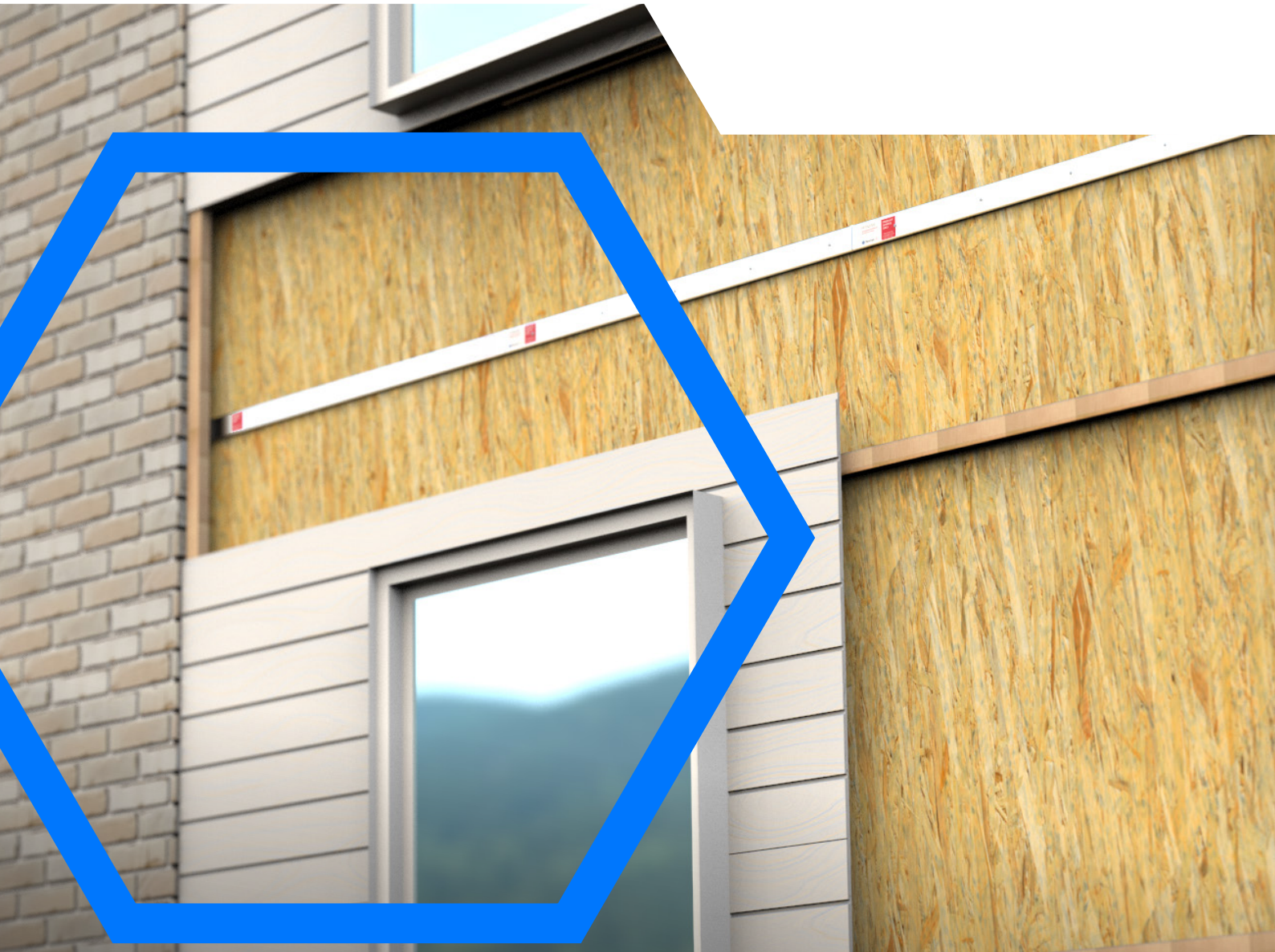

FF102/25

FF102/25 Ventilated Cavity Fire Barrier

Tenmat's FF102/25 Ventilated Cavity Fire Barriers are designed to reinstate fire resistance performance within external wall cavities that require permanent (open-state) ventilation in non-fire conditions.

Passive Fire Protection - Cavity Barriers

Product Description

The FF102/25 Ventilated Cavity Fire Barrier, is manufactured from low smoke zero halogen high expansion intumescent material and is designed to reinstate fire resisting performance to external wall cavities that are required to be ventilated (open-state) in non-fire conditions.

The FF102/25 is manufactured from a rigid intumescent material allowing it to be provided in a strip format, it is also covered with a protective layer of aluminium foil for ease of handling and increased durability. In the event of a fire the FF102/25 intumescent material will expand to close the external wall cavity, providing effective fire resistance, for integrity and insulation for up to 60 minutes depending upon the construction of the external walls.

The FF102/25 is designed for use within a designed 25mm cavity, and once installed will close the remaining free air gap (in front of the 4mm cavity barrier) of 21mm.

Product Details

- CCPI Verified
- A fire rated product designed to act as an external wall cavity barrier at the junction of compartment floors, within uninsulated cavities
- Tested and proven to reinstate the fire resistance performance within “open-state” external wall cavities for periods up to 60 minutes, for both integrity and insulation to the principles of EN 1363-1 and in accordance with ASFP TGD 19 guidance
- Ventilated design – developed to allow maximum ventilation of cavities reducing the need for cavity trays or weepholes
- Suitable for “open-state” ventilated cavities up to 25mm wide
- Provided in strips of 1m long, 35mm wide and 4mm thick
- Lightweight - designed to be easily and quickly installed
- No maintenance required after installation

CCPi PRODUCT VERIFICATION NUMBER: 002300002/0925

NBS

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Approved Applications

FF102/25 “open state ventilation”								
United Kingdom and European Fire Test Performance - Tested to the principles of BS EN 1363-1 and in accordance with ASFP TGD19 guidance								
Inner Leaf Substrate Type (facing cavity) with Appropriate minutes Fire Rating	Outer leaf Substrate Type (facing cavity) With Appropriate Fire Resistance	Orientation	Insulation Type Within Cavity	Maximum Cavity Width (in mm)	Maximum Open State Air Gap (in mm)	Product Dimensions (thickness x height x length in mm)	Product Fire Resistance Rating	
							Integrity	Insulation
OSB/Timber Frame	Masonry	Horizontal	None	25	21	4 x 35 x 1000	60*	60*
SFS Frame with Calcium Silicate Board	Aerated Concrete Slab	Horizontal	None	25	21	4 x 35 x 1000	60	60
SFS Frame with Cement Particle Board	Aerated Concrete Slab	Horizontal	None	25	21	4 x 35 x 1000	60	60
SFS Frame with Gypsum External Weather Board	Aerated Concrete Slab	Horizontal	None	25	21	4 x 35 x 1000	60	60
SFS Frame with Calcium Silicate Board Aerated Concrete Slab	Aerated Concrete Slab	Horizontal	None	25	21	4 x 35 x 1000	60	60
Masonry Aerated Concrete Slab	Aerated Concrete Slab	Horizontal	None	25	21	4 x 35 x 1000	60	60
Blockwork Aerated Concrete Slab	Aerated Concrete Slab	Horizontal	None	25	21	4 x 35 x 1000	60	60
Fire Test Evidence: Field of Application Report - PAR23492/01								

For further details and guidance on the tested applications please refer to the Field of Application Report, which is available from Tenmat on request.

*The fire rating required on Timber Frame projects would typically be expected to be 30 minutes only. The fire ratings and information provided in this document and supporting fire test evidence is not intended to be a complete specification for the proposed cavity barrier and it is the responsibility of others (the Principal Designer) to ensure that the product/assembly is suitable for the intended purpose.

Physical Properties

Property	FF102/25
Free Expansion	26:1
Colour	Silver
Finish	Aluminium Foil
Cuttability	Can be cut to length
Working Life	60 years (see below)
Storage	Dry, ambient
Transportation Storage Temperature	-20°C to +70°C
Durability	Type X intended for use in conditions exposed to weather (UV, rain, frost)
Smoke/Halogen Content	Low Smoke / Zero Halogen
Minimum Total Working Life (Years)	Based on typical climatic conditions UK 60 years Australia 45 years France 60 years New Zealand 60 years Germany 60 years Hong Kong 40 years The Netherlands 60 years

Sizes

4mm (thick) x 35mm (wide) x 1000mm (long)

Pre Installation

The principal designer must approve the use of any cavity barrier, in conjunction with the products fire test reports, taking full account of the whole construction of the external wall systems and components, including any requirements of Building Regulations and or NHBC Standards.

Before a Tenmat FF102/25 cavity barrier is recommended by Tenmat, the following information is required to ensure that the suggested product is considered suitable for the intended application, by Tenmat, within the construction as indicated by the client.

- Project name, location and postcode.
- Building height and use (as per ADB V1/2 2020).
- Fire resistance period/rating required. Integrity and Insulation.
- Composition and construction of external walls, both inner and outer substrates.
- Total external wall cavity size. (Maximum distance from outer face of inner substrate to inner face of inner substrate including tolerances/profiles).
- Type and thickness of cavity insulation if present.
- What ventilation gap is required horizontally?
- Are non-vented cavity barriers required vertically?
- Quantity required to complete project?
- When will materials be required?
- Name and role of person completing form.

When the above information is obtained then this can be cross referenced with the full range of Tenmat cavity barriers to ensure that the product recommended, by Tenmat, is considered suitable for consideration by the principal designer.

General considerations for the principal designer

Ideally the cavity barrier should be installed uninterrupted in a continuous line, the product is tested without interruptions.

The principal designer must sanction any interruptions, which may include items such as brackets, rails or battens, that may affect the continuous line of the cavity barrier. The principal designer must consider the combustibility, melting points and the shape of any interruptions, that are likely to prevent the cavity barrier performing as tested or as expected in the projects design.

If there are interruptions/obstructions that prevent the cavity barrier being fitted in a continuous line, and with sanction from the principal designer, the product may be cut with a sharp knife and tightly butted up against any obstructions and then restarted on the opposite side of the obstruction. The obstruction must not create a void which the cavity barrier can not expand into.

Intumescent cavity barriers are tested and designed to expand outwards, from the face of the intumescent material only, additional design details will be required to account for external corners.

The cavity barrier should not be penetrated by anything other than the mechanical fixings which are used to fix the cavity barrier to the building.

The cavity barrier should be installed onto a flat surface, with no gaps behind the cavity barrier, the maximum space in front of the cavity barrier should not be greater than 21mm

The Tenmat technical team should be consulted in any instance where the principal designer is uncertain as to any issues which may impede the ability of the cavity barrier to perform as expected.

Ensure the installation area is free from dust, oil and any corrosive material

Check the mounting substrate is solid and free from cracks and degradation before beginning.

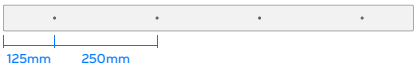
Tools Required

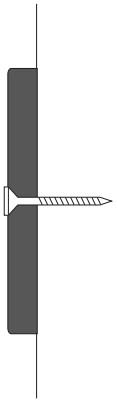
- Sharp Knife
- Measuring Tape
- Stainless Steel screws or nails - which ever fastening is used must have a head diameter smaller than 11.5mm
- Appropriate drill for fixing type if using screws

PPE Required

- Hand protection
- Eye protection

Installation Instructions





- Double check for any obstructions, ensure that if there are any that could allow fire to pass vertically, they are firestopped separately using an approved and applicable firestop product
- Affix the product using stainless steel screws or nails at a maximum spacing of 250mm using a maximum countersunk screw head size of 11.5mm
- Tighten any fastenings until the head is just touching the product, it should not be overtightened as this may damage the strip
- When attaching a solid substrate ensure that the fixings are along the centre line of the fire barrier and the labelled side is facing out into the cavity. (So that you can read the label once the fire barrier is installed)
- If adding additional lengths, ensure they are tightly butted up against each other

Intended Use

As a cavity barrier, within external wall cavities requiring permanent (open-state) ventilation, to reinstate fire resistance performance of uninsulated cavities of up to 25mm, in fire conditions.

Maintenance

No active maintenance required, where alterations are made around the product it should be checked visually to ensure that the product is still installed as per the approved original design and fitting instructions at the time of original installation.

Storage

- Take care not to exceed safe working loads and heights for storage shelves and racks

FF102/25

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