

FV144

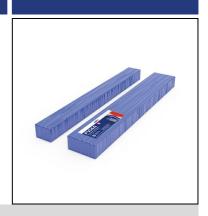
Large Ventilated Cavity Barrier

25-02-2025 / V 1

Description

FV144 Large Ventilated Cavity Barrier is a specially formulated fire rated rock mineral fibre section with an integral high expansion intumescent seal attached to the leading edge, suited to an open state cavity with a maximum air gap of 44 mm.





Features and Benefits

- Up to 180 minutes fire resistance tested in accordance with ASFP TGD19 Guidance.
- Maintains a 44 mm air gap.
- Up to 450 mm cavities tested.
- Fixing brackets included as standard.

- Allows ventilation of cavities reducing the need for cavity trays or weepholes.
- Lightweight for easy and quick installations.
- No maintenance required after installation.

Usage Purpose

FV144 is a fire rated product designed to act as an external wall cavity barrier at the required locations such as compartment floors, around windows, doors, etc. and within uninsulated cavities requiring permanent (open-state) ventilation. In the event of a fire FV144 will expand to close the final gap between its leading edge and the internal face of the cladding. It provides effective fire resistance, for integrity and insulation for up to 180 minutes depending upon the construction of the external walls. FV144 is designed for use within a designed cavity of up to 450 mm, and once installed will close the remaining free air gap (in front of the 6 mm thick cavity barrier) of 44 mm.

Packaging

Polythene Wrap

Available Colour

Blue

Certificates & Approvals

Kiwa 23997/04



FV144

Large Ventilated Cavity Barrier

Technical Characteristics

Dimensions	Length: 1000 mm Height: 75 mm Thickness: 6 mm
Durability	Type X: intended for use at conditions exposed to weathering (also covers types Y1, Y2, Z1, Z2)
Working Life	60 years
Service Temperature	-20°C to +70°C
Storage	Store in dry shaded conditions between -10°C and +70°C.
Shelf Life	Unlimited when stored as recommended.

Substrate Preparation

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

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

Necessary Tools

Masonry drill Screwdriver

Saw/knife for cutting product

Measuring tape

Stainless steel fixings suited to the substrate

Preparation

Double check for any obstructions, ensure that if there are any that could allow fire to pass vertically, they are fire stopped separately using an approved and applicable Fire Stopping product.

Application

FV144 from 60 mm up to 120 mm cavity no brackets, screw fixed

- 1. Use stainless steel countersunk head screws, with a maximum head diameter of 11.5 mm and with a length suitable for the size of cavity barrier and sufficient fixing depth into the substrate.
- 2. Fixings must have an appropriate fixing depth into the substrate.
- 3. Ensure that the countersunk screw head does not fully penetrate the face of the cavity barrier, the screw head should sit flush or slightly proud. See figure below.
- 4. Care should be taken not to over tighten as this may affect the performance of the intumescent seal.
- 5. Position the first screw fixing through the centre line of the face of the cavity barrier at a maximum 125 mm from one end, continue to face fix through at maximum 250 mm centres (4 screws per linear meter), ensuring that the final fixing is a maximum 125 mm from the opposite end of the cavity barrier. This will ensure that face fixings are positioned at 250 mm maximum centres across the continuous run of cavity barrier.

NOTES:

Where sections of cavity barrier are less than 1 linear meter in length, ensure that the brackets are positioned at a maximum





FV144

Large Ventilated Cavity Barrier

125 mm from each end with

additional fixing being positioned at maximum 250 mm centres between the end fixings.

For cut sections of cavity barrier less than or equal to 250 mm in length a minimum of 2 fixings are required.

Brackets Fixing

FV144 is supplied with 2 fixing spikes, FO306 Small Steel Brackets, dependent on requirement.

The central section is pre-dilled to secure the bracket to the substrate. Option A will protrude 65 mm

or Option B will protrude 160 mm from the face of the substrate. If the bracket protrusion is greater than 75% of the product width, the bracket shall be cut down in length. The bracket should never be less than 50% of the product width.

NOTES: FV144 above 120 mm are required to be mounted on Stainless Steel brackets (FO306 Small Steel Brackets 65 mm).

The number of brackets required is dependent upon the width of the overall cavity.

Application Instructions with Brackets

1. To secure the bracket use nom. 5 mm \emptyset stainless steel screws/fixings, with a maximum head diameter of 13 mm and with a length and type suitable for the substrate. See Performance Data Table.

NOTES:

Ensure that the screw head sits as flush as possible with the substrate.

Fix through both of the fixing holes.

Fixings must have an appropriate fixing depth for the substrate (with a minimum of 50 mm for masonry and minimum 25 mm for timber unless otherwise specified by the fixing manufacturers guidance for their fixing type).

- 2. Fix the required number of brackets, per linear meter, to the substrate at maximum 250 mm from the end of the cavity barrier, with a maximum spacing between brackets of 500 mm. NOTES:
- Excluding cavity width 241 mm to 425 mm which requires 3 brackets.
- Where sections of cavity barrier are less than 1 linear meter in length, ensure that the brackets are positioned at a maximum 250 mm from each end. For cut sections of cavity barrier less than or equal to 500 mm in length two brackets are required.
- 3. Push the cavity barrier onto the bracket spike, the brackets should impale FV144 to mid barrier depth and must not protrude through the intumescent element.
- 4. Ensure the cavity barrier should be pushed fully onto the bracket spike and sit flush with the substrate at the rear of the cavity barrier, ensuring that there are no gaps behind the cavity barrier.
- 5. Ensure that the spike does not pierce through the face of the intumescing material.

Please Note

Maximum free air gap for this cavity barrier is 44 mm, the space in front of the intumescing strip on the face of the cavity barrier to the rear of the external wall surface.

Ventilated cavity barriers should be installed in a continuous run (with the exception of abutting up to full fill vertical cavity barriers). Where this is not possible, details should be agreed with the projects principal designer and or fire engineer. Horizontal cavity barriers should be installed adjacent and tightly abutted to any vertical cavity barriers, the vertical cavity barriers should be installed first.

An identification label is attached to the intumescing face of the cavity barrier, ensure this faces out into the open cavity. Also ensure the label is visible and legible and reads the right way up. If the identification label is not legible please contact our Technical Support, the label is important in terms of identifying the product in the future, for example during fire risk assessments or fire safety inspections.

Cavity barrier fixing brackets, both Small (FO306) or Large Steel Brackets (FO307) must not penetrate through the face of the



FV144

Large Ventilated Cavity Barrier

cavity barrier. Screws for direct fixing and fixings to secure brackets are not supplied by Tremco CPG Europe.

The brackets used to fix the horizontal cavity barrier must be installed with the spike inserted centrally (horizontally) to the rock mineral wool section of the cavity barrier with the bracket fixed above and not below the cavity barrier.

The use of tape is not required over the joints between the lengths of cavity barrier, and if used should not be applied over the face of intumescent material.

The cavity barrier must be installed following the installation methods. The cavity barrier must not be penetrated by any other mechanical or electrical services.

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.

Guarantee / Warranty

Tremco CPG UK Limited products are manufactured to rigid standards of quality. Any product which has been applied (a) in accordance with Tremco CPG UK Limited written instructions and (b) in any application recommended by Tremco CPG UK Limited, but which is proved to be defective, will be replaced free of charge.

No liability can be accepted for the information provided in this leaflet although it is published in good faith and believed to be correct.

Tremco CPG UK Limited reserves the right to alter product specifications without prior notice, in line with Company policy of continuous development and improvement.

It is a requirement of the installer to ensure suitability and compatibility of all elements before installation commences and that compliance can be achieved as required.

Health And Safety Precautions

Safety data sheet must be read and understood before use.

Technical Service

Tremco CPG UK Limited has a team of experienced Technical Sales Representatives who provide assistance in the selection and specification of products. For more detailed information, service and advice, please call Customer Services on 01942 251400.



FV144

Large Ventilated Cavity Barrier



Tremco CPG UK Limited Coupland Road, Hindley Green Wigan, WN2 4HT United Kingdom +44 (0)1942 251400 hello@tremcocpg.com