



Eaves Fire Barrier on a roll Mark 2

Product Description

Tenmat's Eaves Fire Barrier Mark 2, (EFB-M2) has been manufactured from low smoke zero halogen highly expansive intumescent material and is designed to provide fire resisting performance to ventilated eaves openings, that are required to be ventilated in non-fire conditions.

The EFB-M2 is manufactured from a flexible highly expansive intumescent material allowing it to be provided in a roll format, it is also covered with a protective layer of blue polythene for ease of handling and to protect it from water.

The EFB-M2 may be used with a non-combustible insect mesh, which depending upon the position of the mesh, acts to enhance the level of fire protection with regards to flame arresting, and prevents the passage of insects, in every day use.

In the event of a fire the EFB-M2 intumescent material (swelling band) will expand to close the ventilated eaves opening, providing effective fire resistance for 30 or 60 minutes Fire Resistance depending upon the construction of the roof and the position of the insect mesh to the eaves opening. The Eaves Fire Barrier is designed to close a free air ventilated eaves opening of 50mm.

Product Details

Technical

- A fire rated product, providing fire resistance performance within ventilated eaves openings, for periods up to 60 minutes
- Ventilated design – developed to allow maximum ventilation of ventilated eaves openings
- Suitable for ventilated eaves openings up to 50mm wide
- Provided in rolls of 6.3m long, 75mm wide and 4mm thick
- Provided with Insect mesh, maximum mesh size 1.3 x 1.1mm, 0.25mm wire diameter

Installation and maintenance

- Flexible and lightweight - designed to be easily and quickly installed
- No maintenance required after installation

Approved Applications

Eaves Fire Barrier Mark 2 “open state ventilation”

European Testing to the general principles of prEN 1364-6:201X and BS EN 1363-1:2012

Warringtonfire Test report-WF428669 (2020) Fire resistance rating 60 minutes

Warringtonfire Test report-WF406433-D issue 3 (2019) Fire resistance rating 60 minutes

Warringtonfire Test Report-WF376150 A (2016) Fire resistance rating 60 minutes

Tenmat internal test data

Tenmat test report number FPD0006 (2020) including insect mesh to non-fire side. Fire resistance rating 60 minutes

Tenmat test report number FPD0006 (2020) including insect mesh to fire side. Fire resistance rating 30 minutes

Fire Engineer report

Brandtekniskt Utlåtande (BTU). Dated 25/1-2021. Assignment no 21012. Document name: BTU Tenmat Ventilerade Brandstopp (MK 2) FIRE.

Tools

PPE AND TOOLS REQUIRED FOR INSTALLATION

PPE as required by installers employer, but likely to include, hand and eye protection, to protect from staples or nails and wire mesh. Staple, nail or screw gun and fixings when fixing to timber. Sharp scissors or stanley knife for cutting Mark 2 product and wire cutters for mesh. Measuring tape. Access equipment as required.

Intended Use

Within roof spaces to ventilated eaves openings, to reinstate fire resistance performance, for up to 60 minutes for eaves openings of up to 50mm, in fire conditions and to prevent the entry of insects in every day use.

Maintenance

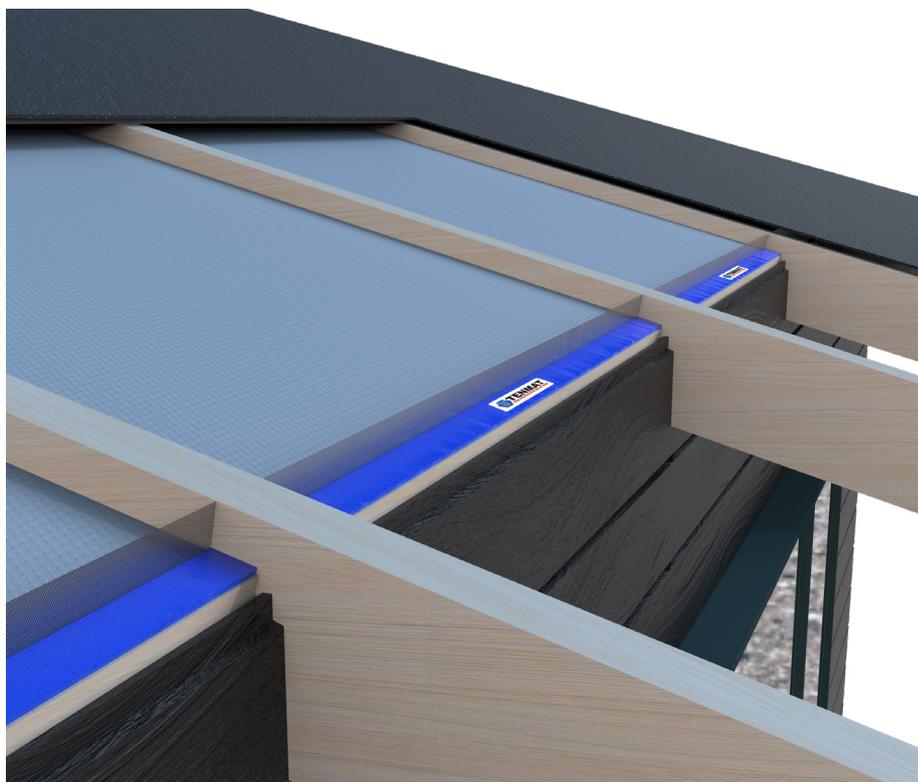
No active maintenance required following installation, where alterations are made around the products they should be checked visually to ensure that the products are still installed as per the approved original design and fittings instructions at the time of the original installation.

Storage

- Store in a cool dry place
- Take care not to exceed safe working loads and heights for storage shelves and racks

Physical Properties

Material Properties		
Colour	Blue	
Overall Nominal Thickness	4mm	
Length	6.3 m	
Width	75mm	
Weight	1.8kg typical	
Sleeve Material	PE	
Transportation and storage conditions	Dry, ambient conditions	
Cuttability	Cut to length using scissors or knife	
Working Life	>50 years	
Physical Properties		
	Value	units
Density	630	kg/m ³
Fungal Resistance	Protected by polythene sleeve	
Halogen	Low	
Free Expansion	30:1	Ratio:1
Activation Temperature	180-200	°C



Standard installation example for timber frame.

General Preparation

Each Tenmat Eaves Fire Barrier Mark 2 on a Roll is 6.3 metres long by 75mm wide and 4mm thick. Suitable for maximum 50mm cavities providing a maximum free air cavity of 46mm.

Positioning, Obstructions and Insulation

The face of the eaves barrier should freely face into the cavity, labels are attached to the polythene indicating the face of the barrier.

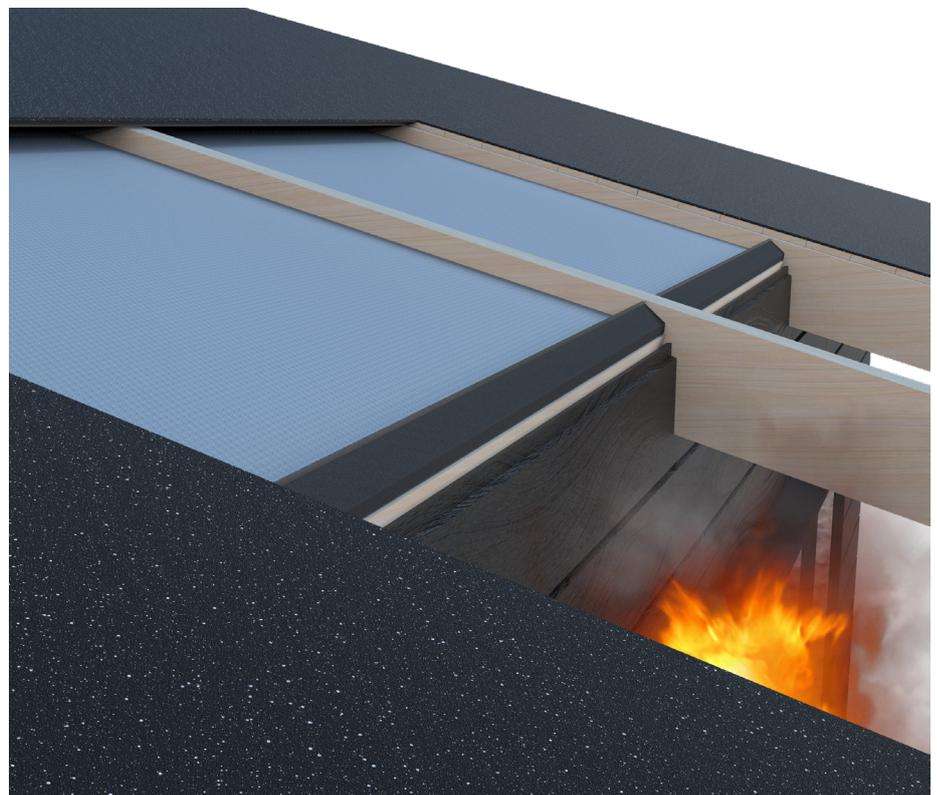
Option 1

The eaves barrier must be installed horizontally and parallel with the roof angle in a continuous band between the roof trusses/rafter, positioned 60mm back from the face of the eaves timber, as shown in diagram 1 (60 minutes fire resistance) or 30mm back from the face of the eaves timber as shown in diagram 3 (30 minutes fire resistance). The timber that the Mark 2 is mounted on should also have a minimum depth of 45mm and a density of 290kg/m³. The correct positioning should be confirmed with the persons responsible for the design of the project.

Option 2

The eaves barrier must be installed horizontally and parallel with the roof angle in a continuous band between the roof trusses/rafter, positioned at the face of the eaves timber, with a non combustible outer surface as shown in diagram 2 (60 minutes fire resistance) or diagram 4 (30 minutes fire resistance). The timber that the Mark 2 is mounted on should also have a minimum depth of 45mm and a density of 290kg/m³. The correct positioning should be confirmed with the persons responsible for the design of the project.

Note - The Tenmat Eaves Fire Barrier should be installed in such a way that ensures the cavity is left open, allowing the barrier to expand freely in a fire situation.



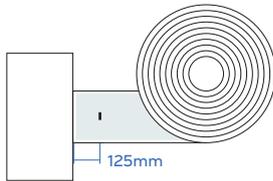
Intumescent material expands when exposed to external heat, sealing the roof cavity and preventing the spread of the flames.

Fixing Details

TIMBER

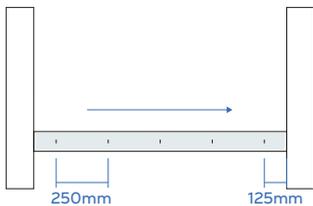
When fixing directly into timber substrates with T50 staples, a minimum 12mm and maximum 14mm long stainless steel staples should be used. When fixing directly into timber substrates with screws stainless steel screws should be used, the diameter of the screw head should be a minimum of 10mm and a maximum width of 11.5mm, the length of the screw should be a minimum of 32mm. Nail guns may be used, however the firing pressure should be carefully controlled to ensure that the stainless steel nail, head minimum diameter 10mm and maximum 11.5mm does not push through the 4mm fire barrier, the nail should be a minimum of 22mm long.

Fitting Instructions



STEP 1

Once in position, ensure that the end of the roll is tightly butted up to the correct construction detail, then apply the first fixing within 125mm of the beginning of the roll on the centre line of the roll.



STEP 2

Continue along the centre line of the roll applying fixings at maximum 250mm centres and within 125mm of the end of the required section.

Fitting Dimensions

Diagram 1

60 Minutes Fire Resistance

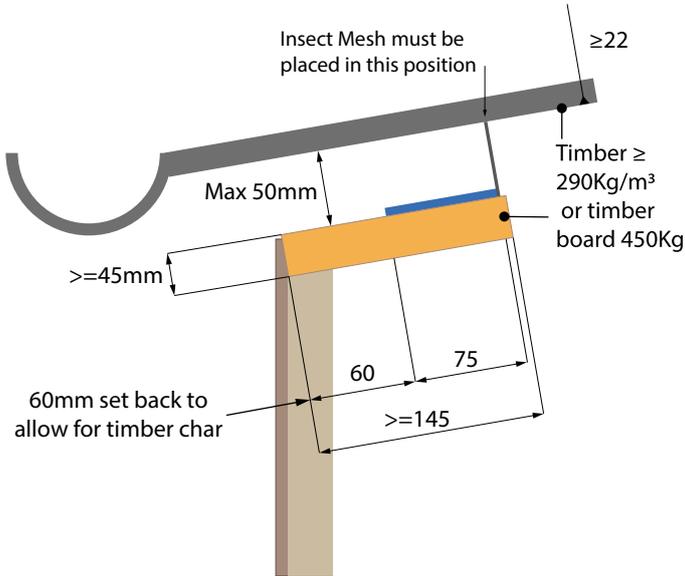


Diagram 2

60 Minutes Fire Resistance

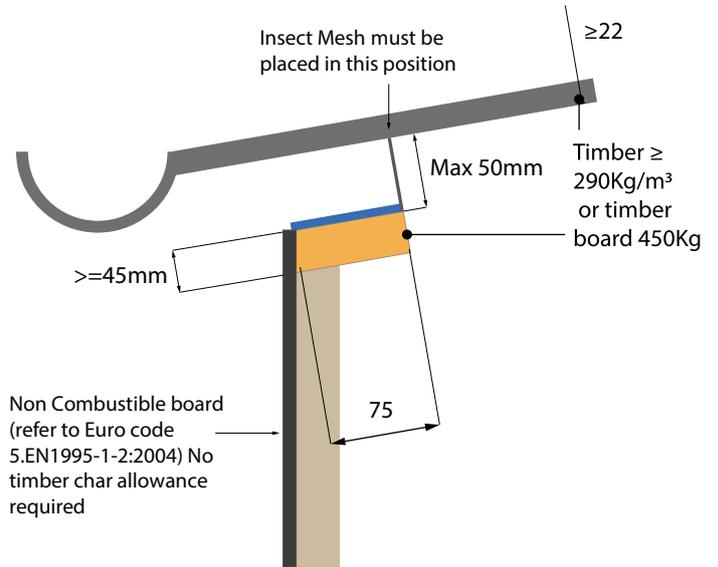


Diagram 3

30 Minutes Fire Resistance

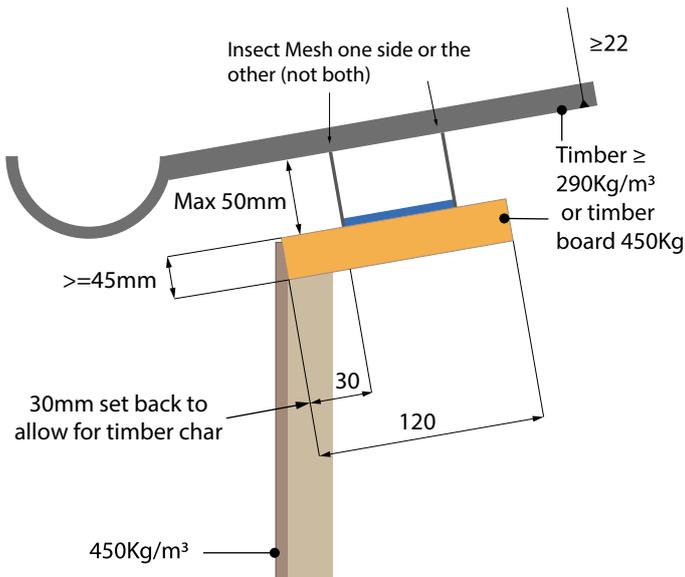
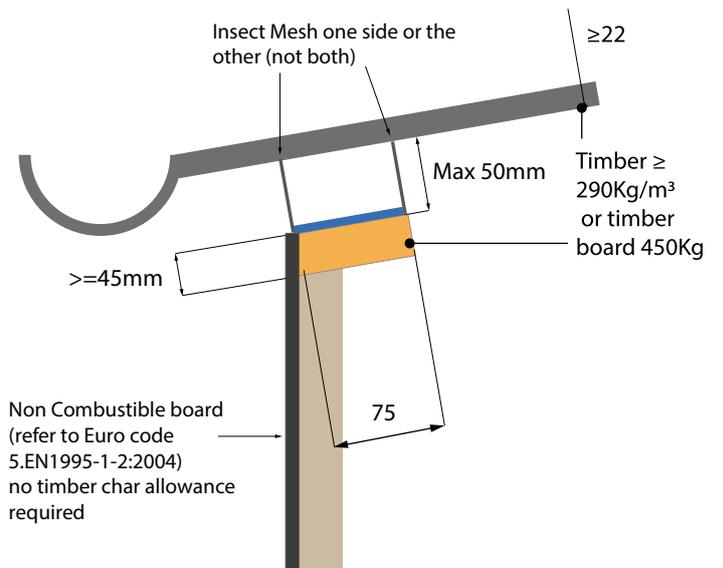


Diagram 4

30 Minutes Fire Resistance



Eaves Barrier

Tenmat Ltd
Ashburton Rd West, Manchester
M17 1TD United Kingdom

+44 161 872 2181
info@tenmat.com

tenmat.com



Advanced materials.
tenmat.com

Tenmat warrants the materials it produces will conform to Tenmat specifications and approved drawings where applicable. It is entirely the customer's responsibility to make the final product choice and satisfy themselves of the suitability of the product for the intended application, carrying out testing where required. For construction projects, all products which the customer is intending to use on a particular project must be approved in writing by the customer's building designer, system designer or design control professional, to ensure compliance with the latest regulations.

The information contained in Tenmat data sheets is presented in good faith. Tenmat Limited makes passive fire protection product suggestions based solely upon and limited to the information made available to Tenmat. Tenmat possesses knowledge of fire test data and offers manufacturers installation advice. Within reason, Tenmat is skilled at offering opinion concerning the installations in question, and can comment on interfaces with other construction materials, but this is not a recommendation or decision. Decisions on overall building fire strategy are not made by Tenmat. Tenmat products have been tested for a wide range of construction types, and they must be only used in accordance with Tenmat test evidence. Each specific Tenmat product must be installed into a construction that matches the corresponding test report. Tenmat product performance requires safe and proper handling and correct installation. For construction projects, all products which the customer is intending to use on a particular project must be approved in writing by the customer's building designer, system designer or design control professional, to ensure compliance with the latest regulations. Tenmat can provide the relevant fire test evidence on request.