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Roof Tile Firestop Roof Ridge Firestop

Roof Tile Firestops and Roof Ridge Firestops are designed to provide fire resistance performance between roof/ridge tiles and the party walls/compartment walls below, which separate properties within roof spaces.

Product Description

Tenmat's RTF and RRF Roof Tile/Ridge Firestops are manufactured from low smoke zero halogen intumescent material and are designed to provide fire resisting performance between roof/ridge tiles and the party walls or spandrel panels below the roof covering, which separate different properties within roof spaces or provide lines of compartmentation.

The RTF and RRF are manufactured from a flexible highly intumescent material allowing it to be provided in a roll format, they are also covered with a protective layer of polythene for ease of handling and to protect from water. In the event of a fire the RTF and RRF intumescent material will expand to close the gap between the top of the wall/spandrel panel and the roof/ridge tiles, whilst also separating the roof batten and ridge tile timbers, providing effective fire resistance for 60 minutes, depending upon the non-combustibility of the roof covering (tiles) and the construction of the compartment/party wall.

Product Advantages	Technical		
	 A fire rated product, providing fire resistance performance up to 60 minutes Ideal for multi-home compartments/shared roof space buildings Fire resistance test utilising the general principles of BS EN 1363-1:2020 with additional guidelines from TDG 19: (Nov 2017) Use category X, tested to ETAG 026-2, suitable for use in conditions of exposed weathering Suitable for a maximum tested under-tile to head of wall gap of 96mm Suitable for masonry walls and spandrel panels (stud wall construction), tested in conjunction with combustible breather membrane, timber battens and mechanical fixed ridge tiles (dry method no mortar) Low profile design to ensure no interference with wide range of tile fit/profiles Patent pending design 		
	Installation and maintenance		
	 Flexible and lightweight - designed to be easily and quickly installed with no special tools required Compact design - 6.3m roll, easy for storage and handling Compatible with new and refurb solutions No maintenance required after installation 		



Approved Applications

RTF and RRF

Fire Performance in accordance with the principles of BS 1363-1:2020 with additional guidelines from ASFP TGD19:2017							
Party wall/ spandrel panel with Appropriate Fire Rating	Roof covering (tiles) with Appropriate Fire Rating	Orientation	Maximum Gap between head of wall	RTF Product Dimensions (thickness x width x	RRF Product Dimensions (thickness x width x	Product Fire Resistance Rating	Tested System Reports
Rating			and underside of roof (tiles) covering (in mm)	mm)	mm)	Integrity	
100mm Timber stud and plaster- board *spandrel panel	Concrete tiles 20mm thick profiled	Following the line of compart- mentation.	96mm	Horizontal 6 x 100 x 6300 Vertical 4 x 25 x 6300	4 x 100 x 200 4 x 100 x 150 4 x 25 x 50	60	Warringtonfire WF431787B/R

*Timber / Steel stud spandrel panels may be replaced with masonry construction of at least the same width.

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Sizes

RTF 6.3m roll with 6mm thick x 100mm wide base & 4mm thick x 25mm high upstand

RRF 200mm long x 100mm wide x 4mm thick, 150mm long x 100mm wide x 4mm thick and 25mm deep x 50mm long x 4mm thick ridge protector

Packaging

BOX QTY	Pallet QTY	Container QTY	
40	160	3,840	Roof Tile Firestop
100	8,000	160,000	Roof Ridge Firestop
Box dimensions - 1188 x 788 x 310mm	Pallet dimensions - 1140 x 1140 x 1900mm		

Transportation & Storage

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

Physical Properties

Properties	RTF	RRF		
Item Numbers	I107MT01000100630000	I107MT01200100020000		
Material Properties				
Colour	Orange	Orange		
Finish	PE	PE		
Overall Nominal Thickness	10mm	12mm		
Length	6.3 m	200mm		
Width	100mm	100mm		
Nominal Weight	2.8kg	145g		
Sleeve Material	PE	PE		
Storage	Dry, ambient	Dry, ambient		
Transportation storage temperature	-20°C to +70°C	-20°C to +70°C		
Cuttability	Cut to length using scissors or knife	Do not cut		
Compress ability	do not compress	do not compress		
Working Life	60 years	60 years		

Construction Type		
Substrate / Base material	Spandrel panel OR masonry	Spandrel panel OR masonry
Maximum Air Gap	96mm	

Physical Properties (for both RTF and RRF)	Value (RTF & RRF)	Units
Density	615	kg/m³
Fungal Resistance	Protected by polythene sleeve	n/a
Smoke/Halogen Content	Low Smoke / Zero Halogen	n/a
Density	630	kg/m³
Free Expansion	30:1	ratio
Activation Temperature	180-200	°C
Reaction to Fire Classification	E	n/a
Resistance to Fire	BS EN 1363-1 2012 & ASFP TGD 19	60



General Preparation

The RTF, Roof Tile Firestop, **must** be installed in a continuous band across the roof, following the party wall (compartmentation) line. The correct positioning should be confirmed with the persons responsible for the design of the project. Any joints that need to be formed between rolls must be overlapped, see Step 2 of the fitting instructions. The party wall/spandrel panel/compartment wall should be constructed with the appropriate fire resistance rating required and the head of the wall should be completed in a flat plane in line with the timber truss/rafters either side of the wall.

The RRF, Roof Ridge Firestop, **must** be installed in a continuous line across the ridge, following the party wall and or compartmentation line. The correct positioning should be confirmed with the persons responsible for the design of the project.



Fitting Instructions

BEFORE ORDERING RTF or RRF, Roof Tile Firestop or Roof Ridge Firestop.

The RTF and RRF are designed to be used in conjunction with appropriately fire rated spandrel panels / masonry walls and non combustible roof tiles only.

The system selected should be confirmed as being approved with the persons responsible for design, for example the architect and or the fire engineer.

Each Tenmat RTF, Roof Tile Firestop, on a Roll, is 6.3m long by 100mm wide by 6mm thick with an upstand (forming an inverted T shape) of 6.3m long by 25 high by 4mm thick. Suitable for maximum 96mm gaps between wall head (above the breather membrane) and the highest point of roof tile profile (to the underside of the tile).

Each Tenmat RRF, Roof Ridge Firestop, is formed with a T shaped profile, similar to the RTF above, typically measuring 150mm long by 100mm wide by 4mm thick and 50mm long by 25mm wide by 4mm thick, the RRF is also provided with an additional flat section measuring 200mm long by 100mm wide by 4mm thick.





Fixing Details

FIXING TO TIMBER

Staples - When fixing directly into timber substrates with T50 staples, a minimum 12mm and maximum 14mm long stainless-steel staples should be used.

Screws - 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 25mm.

Nails - Nail guns may be used, however the firing pressure should be careful controlled to ensure that the stainless steel nail, head minimum diameter 10mm and maximum 11.5mm does not push through the 6mm fire barrier, the nail should be a minimum of 25mm long.

FIXING TO MASONRY

When fixing into masonry self-tapping 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 25mm.



Fitting Instructions



FIXING, POSITIONING and OBSTRUCTIONS

STEP 1

Fix the breather membrane into position as required. The top of the spandrel panel or brick / block wall should be completed in a flat plane in line with the top of the roof truss / rafters.

STEP 2

The RTF should be placed over the breather membrane, freely facing upwards, with the 100mm flat side positioned centrally on the centre line of the party/ compartment wall/spandrel panel (forming the line of compartmentation) separating the properties or compartments. Any joints made must be overlapped by a minimum of 25mm so that the intumescent material is continuous across the roof compartmentation line. This can be achieved by cutting the plastic sleeve between the flat section and the inverted T upstand, taking care not to damage the intumescent strip. Cut at least 25mm of the intersection of the plastic sleeve and fold the upstand back, overlap the flat section of RTF with the adjoining section of RTF, fold the inverted T section back into its central position and staple the upstands to each other. The sleeve covering the RTF may be left open ended where it may have been cut to suit the installation.

STEP 3

The 25mm vertical upright of the fire barrier should stand upright and be positioned on the centre line between where the roof tile battens will be fixed, again on the centre line of the party wall/spandrel panel separating the line of compartmentation. The RTF will sit between and beneath the roof tile battens. Note - The RTF, Roof Tile Firestop, should be installed in such a way that ensures the fire barrier is not interrupted, roof tile battens should not interrupt the fire barrier, roof tile battens must be cut either side of the fire barrier.



STEP 4

Where the RTF passes over the ridge the 25mm upstand will require cutting at the apex of the ridge to allow the RTF to continue down the other side of the roof.



STEP 5

The RTF may be fixed permanently into position prior to the fixing of the roof tile battens, the barrier should as a minimum be fixed within 500mm of the ridge and 500mm from the lower edge of the roof, with a maximum of 1metre distance between all intermediate fixing points. Fit and fix roof tile battens, either side of the RTF fire barrier, as per required roof fixing details, all battens can be fixed through the RTF if required.



STEP 6 Fit roof tiles as per required details, not ridge tiles (see next page).



Fitting Instructions



Roof Ridge Firestop (RRF)

STEP 7

Fit ridge timbers as per manufacturer's instructions ensuring that a 5mm gap is left between the ridge batten associated with the ridge details. Alternatively fit one side of the ridge timbers, to one side of the compartment line and attach the shorter part of the T (25mm by 4mm thick) section of the RRF to the end of the ridge timber, ensuring that the RRF is positioned centrally to the ridge batten. Fit the adjoining ridge batten as required.

STEP 8



Wrap the remaining part of the RRF (100mm wide by 150 long by 4mm thick) down the sides of the ridge battens and fix to the ridge battens. Ensure that the second flat layer of RRF is freely moving, not fixed down to the ridge timbers or battens and is only fixed at the centre to the wide/flat part of the inverted T strip below, this should be as it was supplied.



STEP 9

Fit ventilated ridge kit breather membrane as per manufacturer's instructions and make a 100mm incision longitudinally in the breather membrane (to the line of the ridge tiles) in line with the RTF below, ensuring that the RTF below is not cut. Lift one side of the breather membrane and fold the two halves of the upper RRF pad together and gently insert these two halves of the pad through the incision and then fold the RRF down over the ridge kit breather membrane, the upper strip of RRF should now be sitting over the breather kit membrane in a position that will be beneath the ridge tile.



STEP 10

Fit the roof ridge tiles as per the manufacturer's instructions.

Notes



Notes

RTF + RRF

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