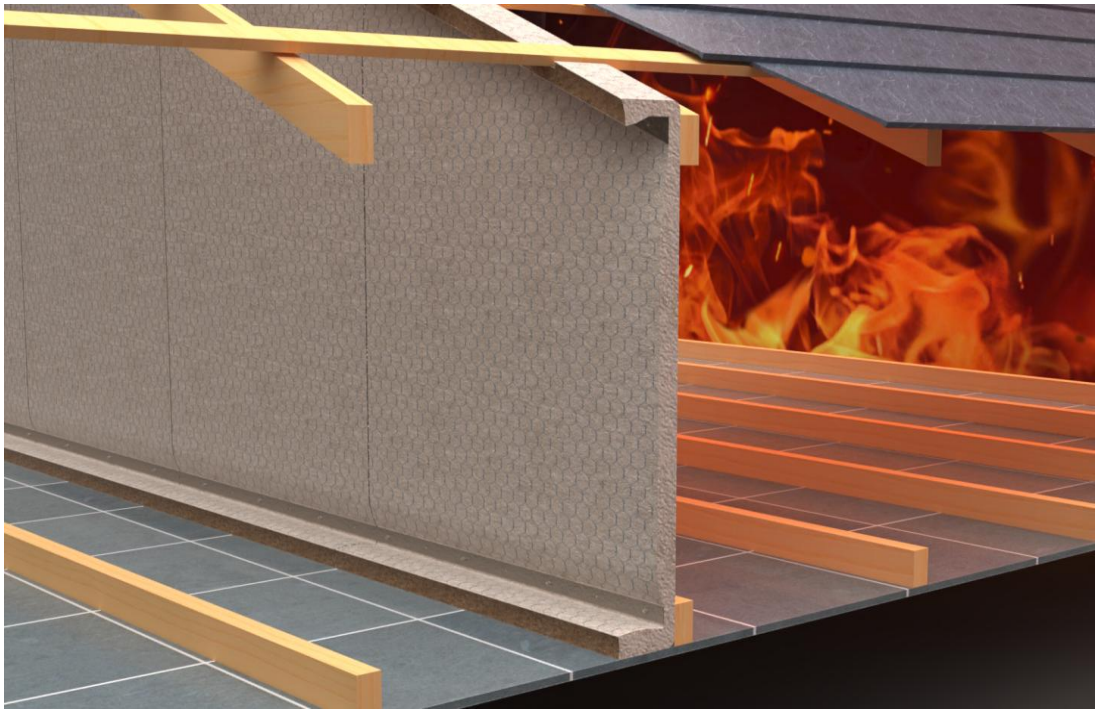
STONESHIELD FIRE PROTECTION

Stoneshield Total Comfort EN

Fire and Cavity Barrier



Overview

Stoneshield Total Comfort provides a 120-minute fire and cavity barrier with a single 60 mm blanket, and up to 120 minutes fire integrity and 30 minute insulation when two 50mm blankets are used.

- ***Test Standards: Current***
- BS EN 1364-1: 2015 (report WF 521289/R / report WF541581 / report WF544490R)

- ***Test standards: Historic***

- BS 476: Part 4 – Non-Combustibility of Building Materials
- BS 476: Part 6 – Fire Propagation of Building Materials
- BS 479: Part 7 – Surface Spread of Flame
- BS 476: Part 22 – Fire Test for Building Materials in Non-Loadbearing Elements

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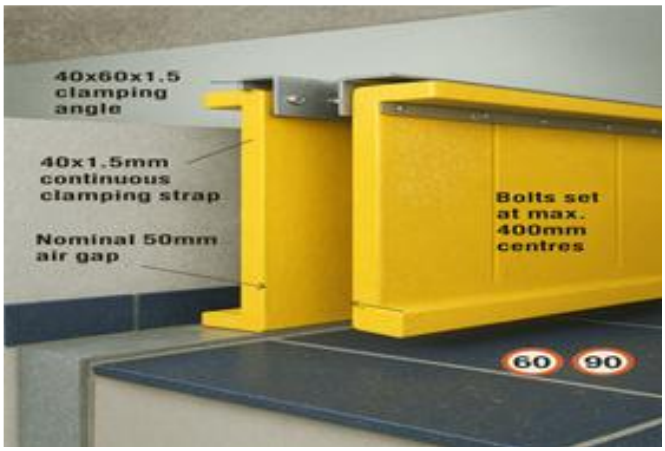
Fixing Details

Metal & Concrete Soffit Fixing

Attach 40×60×1.5 mm or 50×50×1.5 mm clamping angle with M6 expanding bolts at 740 mm centres. Use 5 mm bolts & nuts at 400 mm centres to secure blanket



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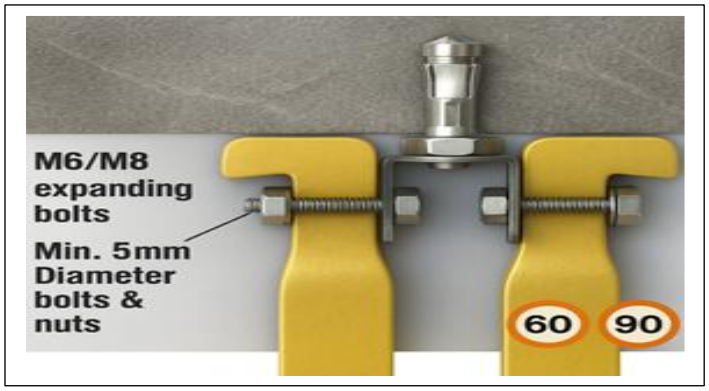

If direct fixing to the concrete soffit is used without the clamping strap, M6 expanding bolts at 300mm centres to the soffit should be used. Adjacent barriers should be wired together. Fireshield Total Comfort should also be draped over the suspended ceiling or wired to the grid. Vertical fixing to a perimeter wall should be carried out with a 1.5mm clamping strap.

Roofing - Troughed metal decking

In roof constructions with troughed and metal decking, it is essential to continuously support and clamp the top edge of the Fireshield total Comfort barrier to the structure instead of the roof decking to maintain the fire integrity of the construction. Please ensure that all open spaces are tightly and securely filled, leaving no visible gaps.

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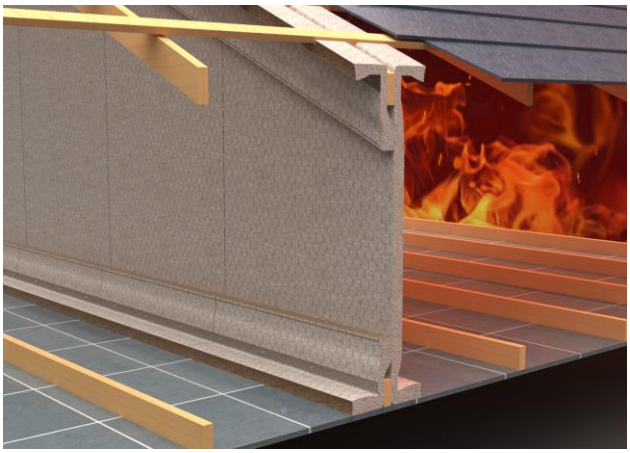
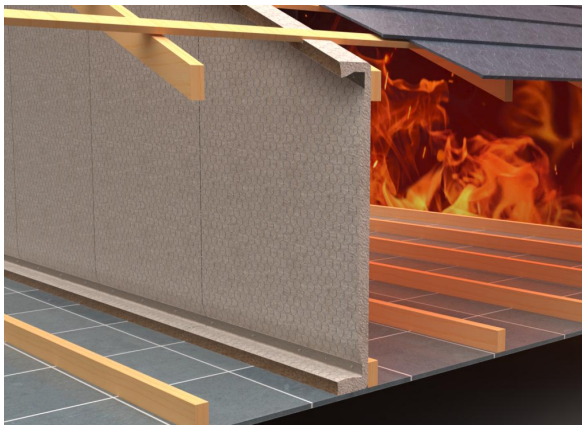
Rafters 50 mm Thick

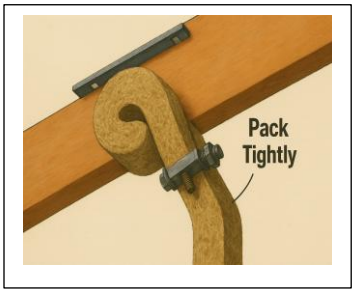


In roof constructions, if the timber is a minimum of 50mm thick, Fireshield Total Comfort needs to be be tightly butt jointed and stitched. The clamping strap should be attached with M6 screws or bolts at a maximum 300mm

Rafters less than 50 mm Thick

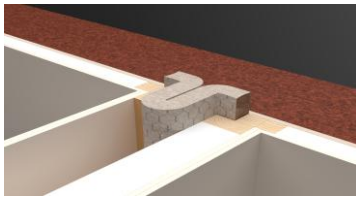


If the timber is less than 50mm thick, both sides of the truss will require the application of Fireshield Total Comfort. In this case, the clamping strap should be attached with screws at a maximum of 400mm centers.



When installing Fireshield Total Comfort transverse to the rafters, a continuous clamping strap should be secured to the underside of each rafter with M6 coach screws or similar.

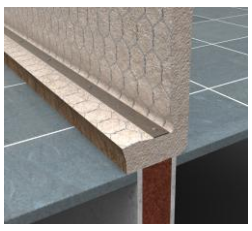
Wall Junctions



At the junction of a separating and external wall in a timber frame construction, Fireshield Total Comfort should be used to a depth of 300mm to provide a cavity barrier.

Floor Junctions

Partition Heads



Fire resisting

If the fire barrier is used to continue a fire resisting wall, it is advised that a fixing and strap is used.

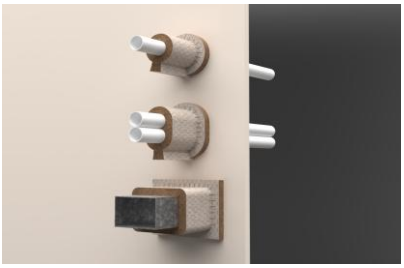
Long Drops

A drop of up to 6 metres can be achieved using a single length, or jointing in the manner shown. Subsequent lengths of up to 6 metres must use a clamping angle and strap fixing, suspended on hangers which are fixed directly to the soffit and extending downwards to provide a minimum overlap of 50mm at the junction of the fire barrier.

Achieving the required drop

Fireshield Total Comfort can be installed up to 6000mm lengths utilising standard suspension systems. If the application requires longer drops, mechanical fixing with clamping angle and strap is required. Mechanical fixings need to be separately suspended with suspension hangers directly from the soffit.

Pipe Penetrations



When the area to be treated is penetrated by pipes, ducts or beams, Fireshield Total Comfort should be cut to accommodate the infrastructure and then re-stitched using a minimum0.5mm wire with a 100mm maximum gap between stitches. The pipe, duct or beam is then sleeved one side for the 30 minute barrier and both sides for the 60minute barrier. Application is made with a 300mm minimum overlay of the Fireshield Total Comfort wired to the main barrier.

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'FIRESHIELD' TOTAL COMFORT

Fire and cavity barrier

The cavity barrier performance was tested to BS EN1364-1:2015 at Warrington Fire Research center in 2024 (Report No. WARRES 544490/R). The test showed 132 minutes stability and integrity before being discontinued, and 7 mins insulation.

Addition of LGF41/15 facing tissue has been assessed and will not impair the fire Performance (WARRES Report No. C80525)

The one hour barrier was tested to BS EN 1364-1:2015 at Warrington Fire Research Centre in 2023 (Report No. WARRES 521289/R). This test showed 132 minutes stability and integrity before being discontinued, and 30 mins insulation.

Acoustic Performance		
Room to noise reduction		
1	Typical wet felt ceiling tile in lay-in-grid system	30db
2	As above + 50mm thick fireshield TC hung	
	vertically from soffit leaving no gap and	43db
	150mm overlap on top of the ceiling	
3	installed as 2 but fireshield faced with foil 1 side	45db
4	2 independently hung barriers with foil facing	50db

Product Packing/Supply

Typical Specification

Fire resistance to BS EN1364 -1 2015 integrity/insulation

Product Packing/Supply

Standard roll size:
4000mm x 1000mm x 50mm

Standard Width:
1000mm

Also made to measure in shorter or longer lengths up to 6000mm, and alternative widths such as 500mm, 333mm or 250mm