

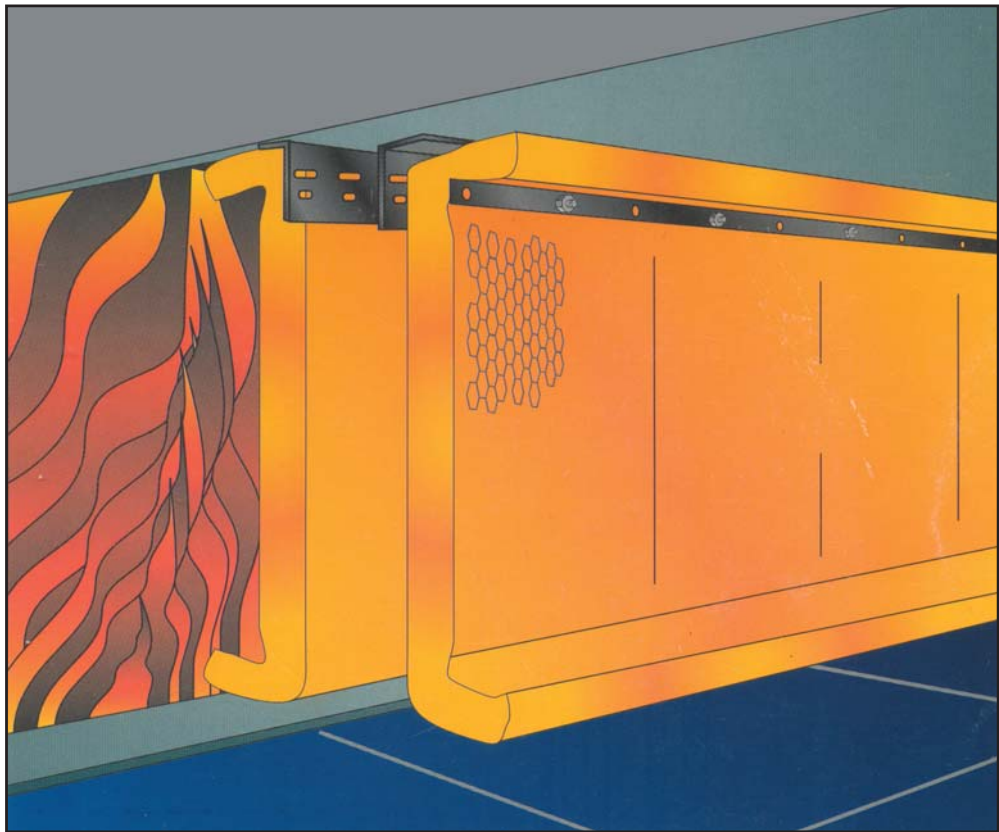


passive fire protection and insulation

# FIRESHIELD

## TOTAL COMFORT<sup>®</sup>

### Fire and Cavity Barrier



The **ONLY** fully tested product giving **1 hour integrity** and **20 minutes insulation** in one **50mm layer!**

Fireshield Total Comfort can be used as a half hour fire and cavity barrier in a single 50mm blanket, or upto one and a half hours when two 50mm blankets are used together.

Fireshield Total Comfort has been tested or conforms to the following standards:

BS 476: Part 4,	1970 NonCombustibility of Building Materials
BS 476: Part 6,	1989 Fire Propagation of Building Materials
BS 476: Part 7,	1987 Surface Spread of Flame
BS 476: Part 22,	1987 Fire Test for Building Materials in non loadbearing elements of construction

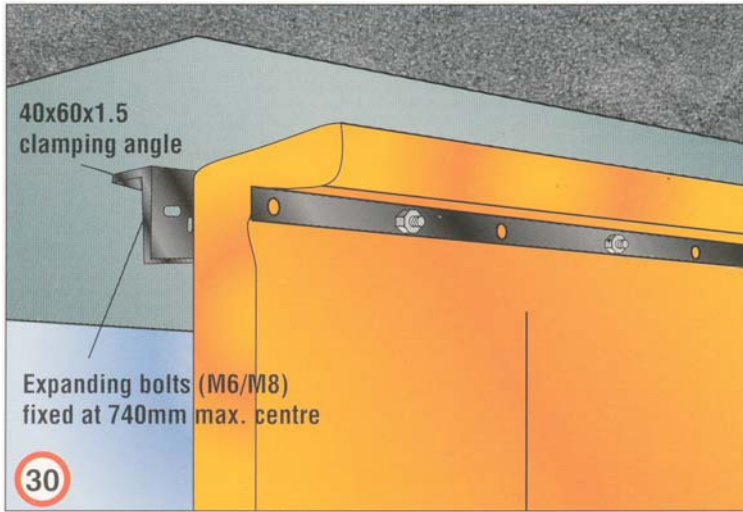


# FIXING DETAILS

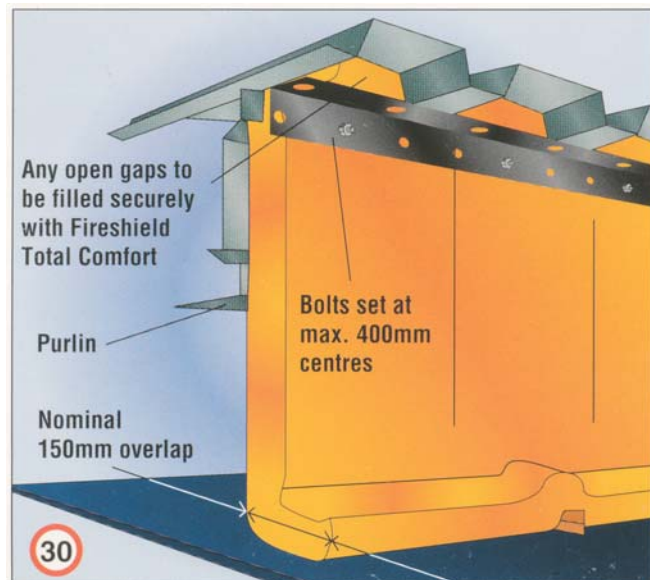
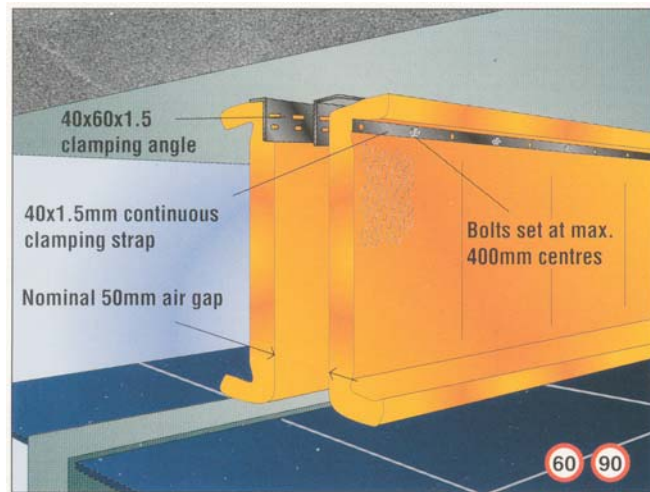
## Metal and Concrete

### Soffit fixing

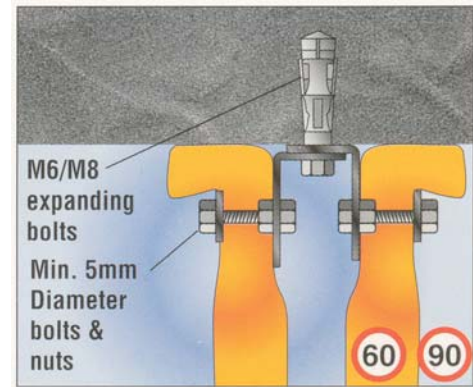
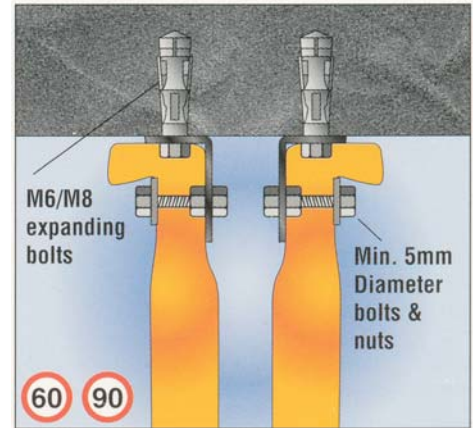
Time Code in Minutes	<b>30</b>	<b>60</b>	<b>90</b>
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When fixing to a concrete soffit, the continuous clamping angle, size 40x60x1,5mm or 50x50x1.5mm, should be attached with M6 minimum expanding bolts anchored at 740mm maximum centres. 5mm diameter bolts & nuts should be used to attach Fireshield Total Comfort to the clamping strap at maximum 400mm centres.



### Fixing options



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.

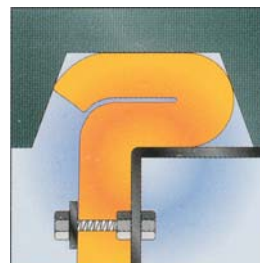
Adjacent barriers should be wired together. Fireshield Total Comfort should also be draped over the suspended ceiling or wired to the grid.

Vertical fixing to a perimeter wall should be carried out with a 1.5mm clamping strap.



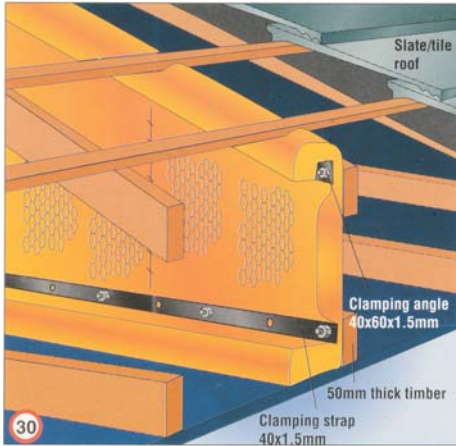
### Roofing - Troughed metal decking

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.



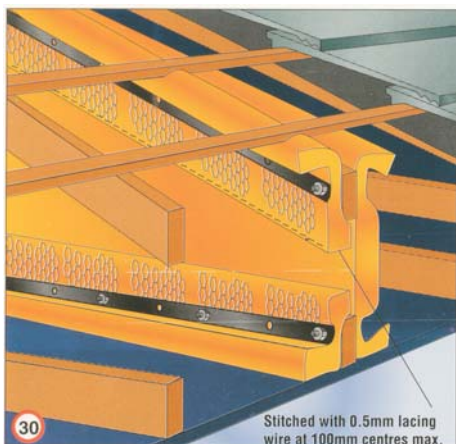
The information in this document is given as a recommendation for the highest quality installation. The company reserves the right to alter or improve the specification or composition of its products without prior notice. The company does not accept responsibility if its products are used in applications which differ from those mentioned in this publication. In these cases, consultation with the fire testing authority or the manufacturer is recommended.

## Timber Rafters - 50mm thick



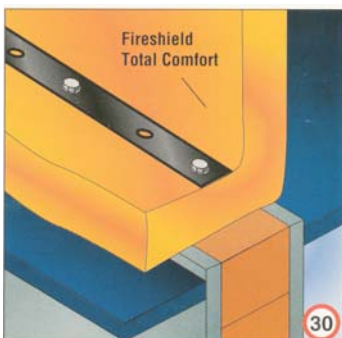
In roof constructions, if the timber is a minimum of 50mm thick, Fireshield Total Comfort needs to be tightly butted and stitched. The clamping strap should be attached with M6 screws or bolts at a maximum 300mm centres.

## Rafters - less than 50mm thick



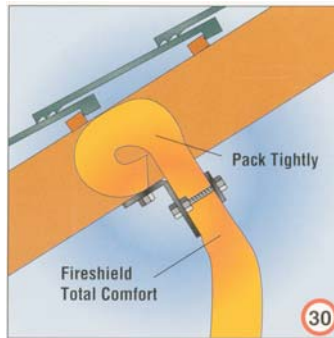
If the timber is less than 50mm thick, both sides of the truss will require the application of Fireshield Total Comfort. In this case, the clamping strap should be attached with screws at a maximum of 400mm centres.

## Partition Heads



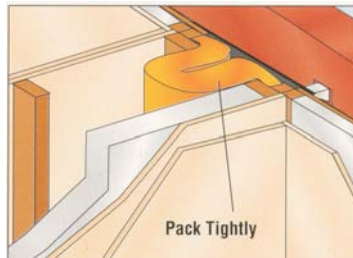
At the head of the fire rated partition, M6 coach screws should be used at a maximum of 400mm centres to attach the clamping strap to the headplate.

## Rafters



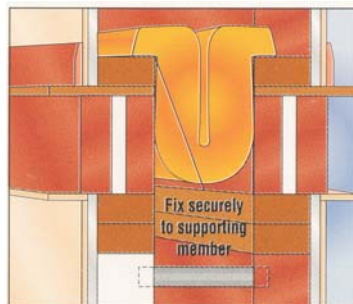
When installing Fireshield Total Comfort transverse to the rafters, a continuous clamping strap should be secured to the underside of each rafter with M6 coach screws or similar.

## Wall Junctions

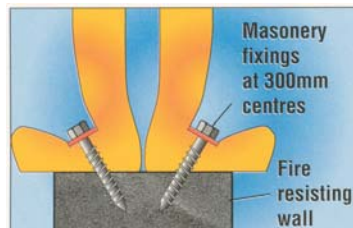


At the junction of a separating and external wall in a timber frame construction, Fireshield Total Comfort should be used to a depth of 300mm to provide a cavity barrier.

## Floor Junctions



## Fire resisting walls

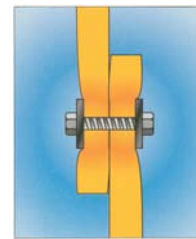


If the fire barrier is used as a continuation of a fire resisting wall, it is advisable that mechanical fixing and strap is used.

## Long Drops

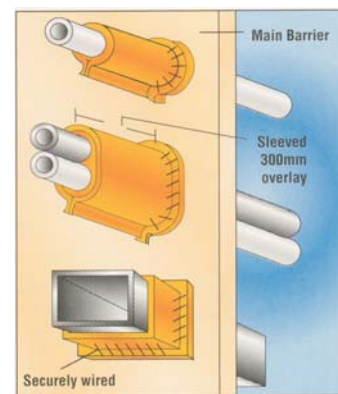
A drop of up to 6 metres can be achieved using a single length, or jointing in the manner shown. Subsequent lengths of up to 6 metres must use a clamping angle and strap fixing, suspended on hangers which are fixed directly to the soffit and extending downwards to provide a minimum overlap of 50mm at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

## Pipework, ducting and beams



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 minimum 0.5mm 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 60 minute barrier. Application is made with a 300mm minimum overlay of the Fireshield Total Comfort wired to the main barrier.

# FIRESHIELD TOTAL COMFORT

## Fire and cavity barrier

The half hour cavity barrier performance was tested to BS 476: Part 22 at Warrington Fire Research centre in 1987 (Report No. WARRES 41584). The test showed 62 minutes stability and integrity before being discontinued, and 20 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 476: Part 22 at Warrington Fire Research Centre in 1989 (Report No. WARRES 46351). This test showed 105 minutes stability and integrity before being discontinued, and 89 mins insulation.



Fireshield Total Comfort can be supplied with aluminium foil facing on one or both sides, to provide excellent smoke barrier characteristics and improved acoustic attenuation properties.

## 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 gaps and with 150mm overlap on top of ceiling	43db
3	Installed as 2 but Fireshield faced with foil on one side	45db
4	2 independently hung barriers with foil facing	50db

N.B. all values are estimated based on total system integrity

## Typical Specification

Fire resistance to BS 476, Part 22 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

PART OF BUILDING	MINIMUM PROVISIONS WHEN TESTED TO RELEVANT PART OF BS 476 (MINUTES)			METHOD OF EXPOSURE
	Loadbearing Capacity	Integrity	Insulation	
<b>Cavity Barrier</b>	<b>Not applicable</b>	<b>30</b>	<b>15</b>	<b>Each side separately</b>

Your distributor:



**Fireus Ltd.**

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