

SIDERISE firestops for tops of walls

A one-piece passive fire insulation product for sealing the cavities formed between the top of compartment walls and the underside of the construction above, preventing the spread of fire and smoke and reducing sound transmission.

Application

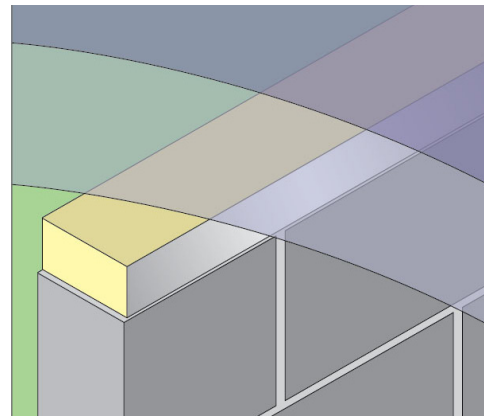
SIDERISE firestops for tops of walls provide a seal between the top of the compartment wall, partition, or fire resistant suspended ceiling, and the structural soffit. The choice of material is determined by the performance requirement in terms of fire resistance (i.e. insulation and integrity) and size of cavity.

Uses include:

- Fire-stopping voids above compartment walls and partitions up to 400mm dependant on fire performance
- Acoustic barrier at tops of walls

Benefits

- Ease of installation
- Fully qualified fire performance
- Fully qualified acoustic performance
- Integral smoke barrier
- Can accommodate structural service movement (during normal service life and fire)
- Cost-effective
- Durable



Product description

SIDERISE firestops for tops of walls comprise a single, close dimensioned product with a unique pre-compressed internal stonewool mineral fibre lamella core.

The materials are manufactured using a unique method to provide a resilient compression which ensures a tight fit. They are either supplied as pre-cut units to suit a quoted cavity size or in sheet form for cutting on site.

The range of **SIDERISE firestops for tops of walls** includes various types of products which are referenced 'TW' to designate the 'Tops of Walls' application.

The materials have been developed and tested at various thicknesses to meet the fire and acoustic performance requirements listed in Tables 1 and 3.



**Fire, thermal and acoustic
insulation specialists**

Fire performance

The design and manufacture of the range of **SIDERISE firestops for tops of walls** is based on proven fire performance to BS 476 : Part 20 :1987.

Please note that **SIDERISE firestops for tops of walls** can be supplied for higher fire ratings and for voids greater than 400mm, up to 1200mm.

The products have integral aluminium foil facings and are a functional smoke barrier.

In terms of 'Reaction to Fire', the products provide the following:

- Class 'A1', in accordance with EN13501-1 and EC Decision 96/603/EC
- Class 'O', in accordance with BS476 Part 6 & 7

Table 1 - Fire performance and product sizes

Gap Height (mm)	Product Type	Seal Height x Thickness (mm)	Performance to BS 476: Part 20		Cover Length (mm)
			Integrity (mins)	Insulation (mins)	
20 to 50	TW-CB30	Gap + 10 x 75	30	30	1200
	TW-FS60	Gap + 10 x 90	60	60	1200
	TW-FS120	Gap + 10 x 120	120	120	1200
51 to 100	TW-CB30	Gap + 5 x 75	30	30	1200
	TW-FS60	Gap + 5 x 90	60	60	1200
	TW-FS120	Gap + 5 x 120	120	120	1200
101 to 400	TW-CB30	Gap + 10 x 75	30	30	1200
	TW-FS60	Gap + 10 x 90	60	60	1200
	TW-FS120	Gap + 10 x 120	120	120	1200

NB: For bracket type and size please refer to Table 2

Table 2 - Fixing brackets

Bracket Reference	Min Void Size (mm)	Max Void Size (mm)	Number of Brackets	Bracket Centres (mm)
B65/110	50	150	2	600
B195	151	240	2	600
B355	241	400	2	600

Acoustic performance

SIDERISE firestops for tops of walls provide excellent acoustics performance and can help to reduce room-to-room sound transmission. Their high performance is attributable to the mass of the mineral fibre core and the unique resilient lamella internal construction.

In accordance with BS EN ISO 140-3 : 1995, BS 2750 : Part 3 : 1995 the Weighted Sound Reduction Index (Rw) values shown in Table 3 can be used.

These are based on laboratory tests for airborne sound transmission on a variety of lamella board constructions.

The installation of the products above a partition will significantly increase the room-to-room attenuation. The precise value will depend upon the specifics of the ceiling construction. Advice is available on a project basis.

Table 3 - Acoustic performance

Weighted Sound Reduction Index		
Product Type	Thickness (mm)	Rw (dB)
TW-CB30	75	21
TW-FS60 *	90	22
TW-FS120	120	25

* =Rw value interpolated from test results

Sound Research Laboratories Limited test report no. : C/99/SL/7743/1 refers

Installation recommendations

SIDERISE firestops for tops of walls are installed to the full depth of the cavity with an additional compression allowance to ensure a tight compressive fit. See Table 1 for seal height and compression requirements.

The height of the material can be trimmed on site using a sharp serrated knife providing the compression allowance is maintained. Packing with loose mineral fibre or off-cuts is not recommended.

Fixing brackets

Fixing brackets are not required for voids below 50mm. For voids above 50mm fixing brackets are incorporated into the assembly to maintain the integrity of the construction. They are simply impaled into the base of the barrier at mid-thickness prior to installation. Two brackets are required per unit.

The standard fixing brackets are supplied in flat pre-notched form for folding on site to the requisite "L" or "Z" shape. They are pre-cut to a spike so that the long leg can penetrate into the barrier.

Vertical joints

Vertical joints between adjacent strips are sealed with foil tape to maintain continuity of the smoke barrier foil facings and to enhance the fire and acoustic integrity of the assembly. The foil tape is applied to one side only.

Technical specification

Form supplied	Sheets 1200mm x 1200m x thickness Cut strips 1200mm x cavity + compression x thickness See Table 1
Colour	Silver, with coloured identification tape centrally located on product
Finish	Aluminium foil
Density	Nominal 80Kg/m ³
Thermal conductivity	$\lambda_{20} = 0.04$ w/mK
Cavities	20mm to 400mm
Fire resistance	30 to 120 minutes EI (insulation / integrity)
Reaction to fire	Class 'A1', Class 'O'

Products required

The following SIDERISE products are available.

- **SIDERISE firestops for tops of walls** - sheets or cut strip options
- **SIDERISE foil tape**: Type RT120 / 45
- **SIDERISE fire and acoustic gap sealant**

Additional information

The following information is available upon request or via download from the website:

- NBS Specification Clause
- Material Safety Data Sheet
- Cutting and Installation instructions

Environmental

SIDERISE fire stops for tops of walls are environmentally friendly.

- They contain no Volatile Organic Compounds (VOCs) and no very Volatile Organic Compounds (vVOCs).
- Zero Ozone Depleting Potential
- Zero Global Warming Potential
- Recyclable

**Developing insulation solutions
for over 40 years**

