

Siderise TW Cavity Barrier and Firestop for Tops of Walls

Firestops designed to ensure compartmentation at the tops of compartment walls



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 the cavity.

Uses include:

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

Product Description

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

The materials are manufactured using a unique manufacturing process 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 Performance

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

- Class 'A1', in accordance with EN13501-1

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.

Table 1 - Fire performance and product sizes

| Product Ref | Void Width (mm) | Thickness (mm) | Compression (min.) | Integrity (Mins) | Insulation (mins) | Product Length (mm) |
|-------------|-----------------|----------------|--------------------|------------------|-------------------|---------------------|
| TW-CB30 | 20 - 50 | 75 | Gap Width +10mm | 30 | 30 | 1200 |
| TW-FS60 | 20 - 50 | 90 | Gap Width +10mm | 60 | 60 | 1200 |
| TW-FS120 | 20 - 50 | 120 | Gap Width +10mm | 120 | 120 | 1200 |
| TW-CB30 | 51 - 100 | 75 | Gap Width +5mm | 30 | 30 | 1200 |
| TW-FS60 | 51 - 100 | 90 | Gap Width +5mm | 60 | 60 | 1200 |
| TW-FS120 | 51 - 100 | 120 | Gap Width +5mm | 120 | 120 | 1200 |
| TW-CB30 | 101 - 400 | 75 | Gap Width +10mm | 30 | 30 | 1200 |
| TW-FS60 | 101 - 400 | 90 | Gap Width +10mm | 60 | 60 | 1200 |
| TW-FS120 | 101 - 400 | 120 | Gap Width +10mm | 120 | 120 | 1200 |

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

Table 2 - Fixing brackets

| Bracket Ref. | Min. Void Size (mm) | Max Void Size (mm) | No. 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 acoustic performance and can help to reduce room-to-room sound transmission. Their high performance is attributable to the mass of the stone wool 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 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/l refers

Thermal Performance

Thermal conductivity : λ = 0.038 W/m.K (tested foil to foil)

Technical Specification

Siderise TW Firestops for Tops of Walls

Table 4: Product properties

| Properties | Value |
|----------------------|--|
| 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 75 kg/m ³ |
| Thermal conductivity | λ= 0.038 W/m.K (tested foil to foil) |
| Cavities | 20mm to 400mm |
| Reaction to Fire | Class 'A1' to EN 13501-1 |
| Resistance to Fire | 30 to 120 minutes (integrity/insulation) |

Environmental

The stone wool core is recyclable

Additional Information Available

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

- NBS Specification Clause
- Material Safety Data Sheet

Technical Support

For technical advice or support please contact: technical.services@siderise.com

For Installation Training or Site Inspections please contact: site.services@siderise.com

Context

The information in this datasheet is believed to be accurate at the date of publication. Siderise has a policy of continuous product improvement and reserves the right to alter or amend the specifications of products without prior notice. Siderise does not accept responsibility for the consequences of using the products described outside of the recommendations within this datasheet. Expert advice should be sought where there is any doubt about the correct specification or installation of Siderise products.

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