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Siderise FIP high performance acoustic panel

A high-performance acoustic panel solution for use where an internal partition abuts a curtain wall.



Application

Siderise FIP high performance acoustic panel is a thin multi-layered board offering exceptional sound transmission performance and has been specifically developed to provide a solution where an internal partition abuts a curtain wall or window mullion.

Due to the impressive 46dB Rw performance at only 31mm thickness, the Siderise FIP high performance acoustic panel can also be used in many other conditions which demand the combination of a high SRI performance with a minimal thickness.

This simple yet effective solution has been used on a number of projects which include hotels, residential, government and commercial buildings in both the UK and overseas.

Product description

Siderise FIP high performance acoustic panel is a bonded composite material comprising four primary layers which are bonded together to offer a combination of stiffness and damping within a high mass panel, with a nominal thickness of only 31mm.

The layers include a high mass cementitious board either side of a central heavy elastomeric core. A unique bonding technique is used to ensure that the finished composite is heavily damped, resulting in a product with good performance at lower frequencies (stiffness and dampening controlled regions) and no 'drop-off' due to coincidence dip.

Finish

As standard, Siderise FIP is supplied unfinished to be separately clad with a thin covering (e.g. decorative laminate or coated metal plate). Normally a decorative covering is applied to both sides.



Acoustic performance

The product's acoustic performance is tested in accordance with BS EN ISO 10140-2:2010. Weighted soundreduction index (dB R_w) values are given below in Table 1.

Table 1 - Acoustic performance

Weighted Sound Reduction Index

Product Code	Weight (Kg/m²)	R _W (dB)
FIP	50	46

Use in practice

When Siderise FIP is used in combination with a partition offering a 50dB R_w performance, no measurable loss in total room-to-room separation is expected.

Even if the partition value increases to 55dB R_w , the overall performance is only reduced by 1dB. By comparison, for conventional infill materials this valuewould be nearer to a 10dB reduction.

Fire performance

Fire Resistance

Siderise FIP has been tested to the temperature and pressure conditions of BS EN 1363 Part 1: 2012, and the test principles of BS EN 1366 Part4: 2021. See table 2 below.

Table 2 - Fire resistance performance

Product Code	Void Width(mm)	Integrity(Mins)	Insulation(mins)	Product Length(mm)
FIP	100-300	60	60	<2400 (no horizontal joints)
FIP	100-300	30	30	>2400(with horizontal joints)
FIP	301-600	Not classified	Not Classified	Any

Reaction to Fire

In terms of 'Reaction to Fire', the components are classified to EN 13501-1. See Table 3.

Table 3 - Reaction to Fire performance

	Building Regs (Approved Document B)European Class (to EN 13501-1)		
Component			
Acoustic barrier	B-s2, d0 (scrim face) B-s1, d0 (foil face)		
Cementitious board	A2-s1, d0		

Technical specification

Form Supplied	Sheets 2400mm x 100-600mm
Colour / Finish	Light Grey cementitious finish
Thickness	Nominal 31mm
Surface weight	Nominal 50kg/m² (Example, 2400 x 100mm = 12kg, 2400 x 300mm = 36kg, 2400 x 600 = 72kg)
Fire resistance performance	See section above
Reaction to Fire	See section above



Products available

The following Siderise products for use the Interiors Sector are available:

- Siderise AVC acoustic void closures for tops of walls
- Siderise BM/P series barrier mat
- Siderise CBX flexible acoustic barriers
- Siderise CLS acoustic lining system
- Siderise CVB/LAM acoustic barriers for suspended ceilings
- Siderise CVB/P10 acoustic barriers for suspended ceilings and raised access floors
- Siderise DWX duct acoustic barriers
- Siderise FLX foam based flexible acoustic barriers
- Siderise MC mullion overclad system

Contact us for a copy of our building acoustics range brochure. Contact us for further information on our CPDs

Further information

Technical support

For further information please contact our technical team at the address below.

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