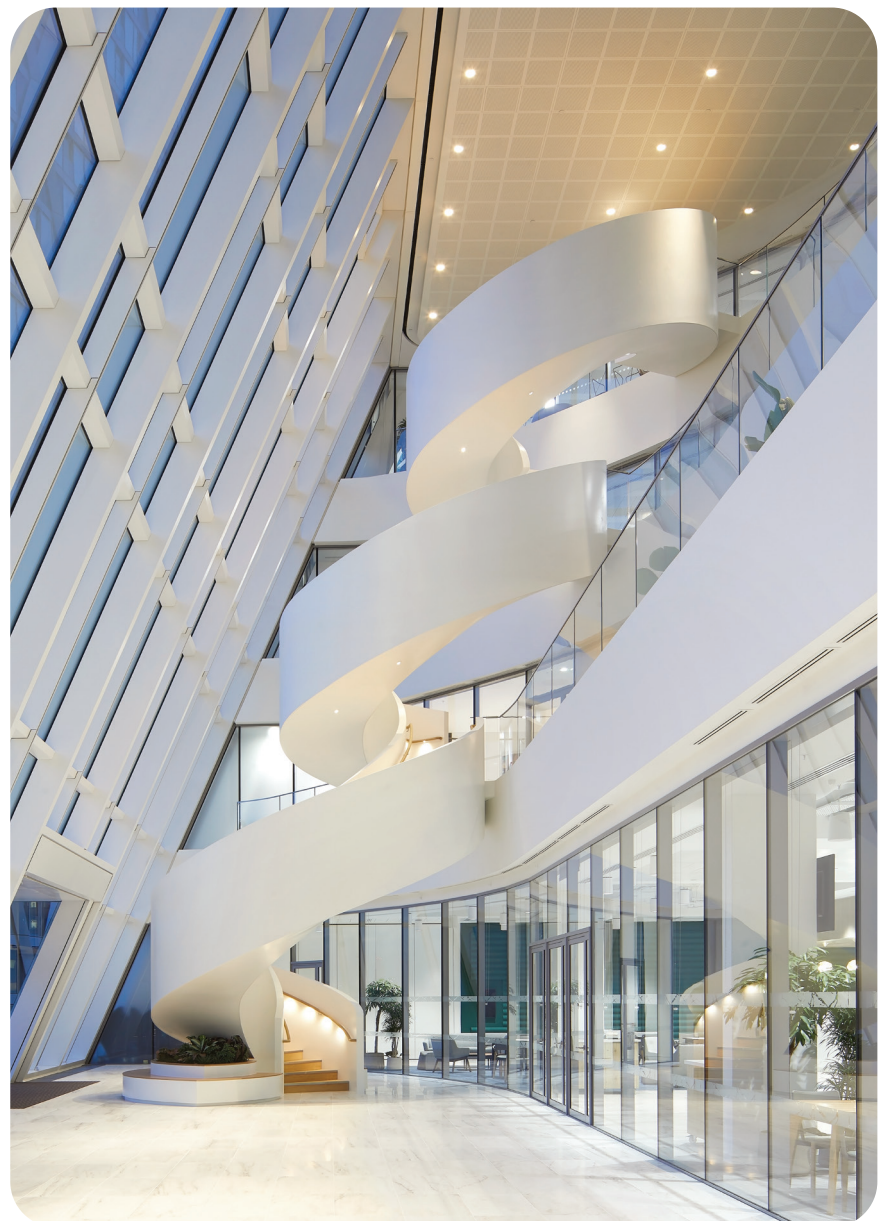


Interior construction

Siderise passive fire and acoustic insulation solutions for Interior construction



Acoustic solutions for interiors

The different soundscapes within a building fundamentally define how we experience and engage with its internal spaces. By finely tuning these acoustic environments, we can encourage greater focus, aid communication and understanding, and even help occupants to feel more positive and relaxed.

Good acoustic design is subtle, almost invisible to building occupants, enabling them to move through spaces without intrusive noise disrupting their experience. To achieve this, designers and developers need to think carefully about how sound travels within the building, considering not only the structure of building elements and partitions, but also the various voids which wind throughout them.

Preventing unwanted sound transmission

Sound separation between internal spaces is vital. Unwanted sound transmission can severely impact the function and success of a space. There are a number of common voids within wall and floor constructions which can act as a channel for sound to travel into adjoining spaces.

These include:

- Ceiling and soffit voids.
- Raised Access floor voids.
- Partition abutments to façades.
- End of wall e.g. AVC.

Siderise products are made from robust materials and we provide customers with acoustic and fire solutions to suit their needs.

Each of these paths should be considered from an acoustic perspective, employing specialist solutions which are designed to reduce the noise transmission through these paths.

This is measured as their Sound Reduction Index (SRI). Whilst the exact performance requirements and product selection will depend on the project, choosing solutions which have been designed, developed, and tested for noise control applications can help to correct any transmission losses and ensure acoustic integrity.

Delivering exceptional room-to-room sound reduction

Over our 50 years in the business, we have developed interior acoustic solutions suitable for the interiors of all kinds of buildings, including:

- Offices
- Healthcare
- Education
- Retail
- Leisure and sports
- Industrial
- Residential

All Siderise products are made from robust materials and have been subject to rigorous testing, ensuring high-performance solutions that are designed to last. With decades of experience, our skilled Interiors Technical Team can also support designers in finding the most appropriate solutions to meet their project aims, whether solely related to acoustics or including passive fire protection too.





30 St Mary Axe (The Gherkin)

Table 1: Product application guide
Quick comparison of suitability and performance.

Product type	Noise control	Fire safety	Cut to size	Cut on site	Ceiling voids	Raised floors	Tops of wall	Façade abutment	Fire performance (min)	Acoustic performance (R _w)	D _{nf,w} up to*
CBX	●	—	—	●	●	—	—	—	—	35dB	55dB
FLX	●	—	—	●	●	—	—	—	—	31dB	50dB
CVB/LAM	●	●	●	●	●	—	—	—	30-60	21-23dB	45dB
CVB/P	●	—	—	●	●	●	—	—	—	28dB	50dB
RF	●	●	●	●	—	●	—	—	30-120	21-23dB	55dB
AVC	●	—	●	●	—	—	●	●	—	36dB	—
FIP	●	●	—	●	—	—	—	●	30-60	42dB	—
BM/P10	●	—	—	●	—	—	—	●	—	34dB	—
MC	●	●	●	●	—	—	—	●	120	44-49dB	—

*When installed in conjunction with a suspended ceiling system



Siderise CBX

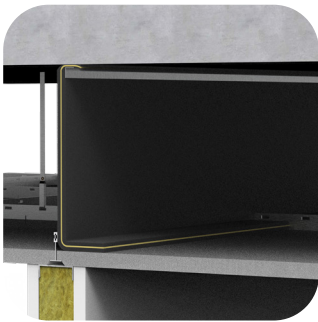
Flexible Acoustic Barriers for suspended ceilings

Flexible acoustic barrier for suspended ceilings made from a thin, multi-layered fibrous quilt with a high mass core.

Application: Use in ceiling voids above glazed/moveable or fixed partitions to help meet acoustic requirements, hung from soffit.

Key features

- Spans voids up to 1.8m in height.
- High mass core with 11kg/m² surface weight.
- 40mm thickness.
- Acoustic performance (R_w): 35dB.
- D_{nf,w} up to 55dB (airborne sound insulation performance for suspended ceilings).
- Twin arrangement with air cavity increases standalone (R_w) performance to 49dB.



Siderise FLX

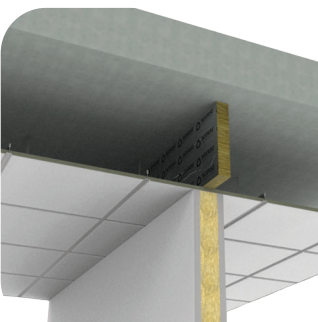
Flexible Acoustic Barriers for suspended ceilings

Flexible acoustic barrier for suspended ceilings made from a thin multi-layered, open cell acoustic foam composite with high mass central core.

Application: Use where void may be partially visible or ceiling voids above glazed/moveable or fixed partitions to help meet acoustic requirements.

Key features

- Spans voids up to 1.8m in height.
- High mass core with 11kg/m² surface weight.
- 17mm thickness.
- Fibre-free composition.
- Acoustic performance (R_w): 31dB.
- D_{nf,w} up to 50dB (airborne sound insulation performance for suspended ceilings).
- Twin arrangement with air cavity increases standalone (R_w) performance to 42dB.



Siderise CVB

Acoustic Void Barrier

Acoustic void barriers for suspended ceilings. Semi-rigid composite sheets designed for free standing in ceiling voids. A fibrous based product that is available with or without a central high mass core.

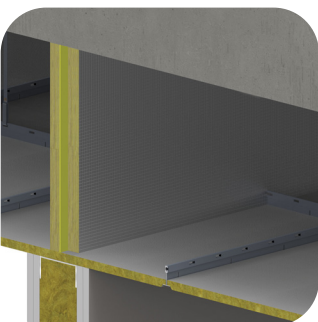
Application: The barriers are installed free standing, and are compression fixed within typical voids including those formed at partition lines and the cavity formed at floor slab abutments to curtain walls. They can be used in a variety of building types.

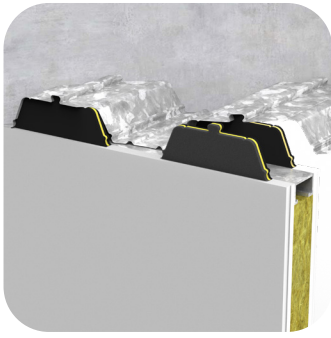
Key features - CVB/LAM

- Designed specifically for acoustic performance.
- Acoustic performance (R_w): 21-23dB.
- D_{nf,w} up to 45dB (airborne sound insulation performance for suspended ceilings).
- Fire performance: 30-120 minutes.
- Can be used in air plenum applications.

Key features - CVB/P10

- Designed specifically for acoustic performance.
- Acoustic performance (R_w): 28dB.
- D_{nf,w} up to 55dB (airborne sound insulation performance for suspended ceilings).





Siderise AVC

Acoustic Void Closures for tops of walls

Acoustic void closures for tops and ends of walls, supplied as either die cut pieces to infill profile decks and awkward apertures or sheets, these semi-rigid composite sheets are designed to close small apertures and voids.

Application: Used in small and/or irregular shaped cavities at tops and ends of walls which can be found in a wide range of buildings, both new and existing.

Key features

- High mass core with 18kg/m² surface weight.
- 29mm thickness.
- Acoustic performance (R_w): 36dB.
- Combination arrangement available to increase standalone (R_w) performance to 45dB.
- Can be used in conjunction with Siderise firestops.



Siderise FIP

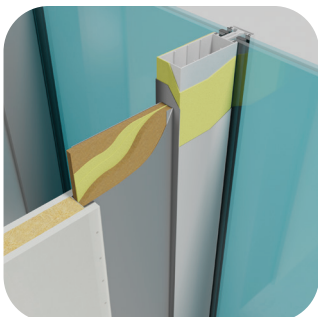
Acoustic Panel

Thin and rigid acoustic panel made from a multi-layered board, offering excellent noise control with a thickness of just 31mm.

Application: Specifically developed to be installed at the gap between curtain wall or window mullions and internal walls. Its thin construction maintains the clean lines of curtain wall construction, in keeping with the internal partition or mullion and offering space and daylighting gains. It can also be used in many other conditions that demand the combination of a high SRI performance with a minimal thickness.

Key features

- Very thin construction – 31mm thickness.
- Acoustic performance (R_w): 42dB.
- Double arrangement with 50mm cavity to improve standalone (R_w) performance to 55dB.
- Fire resistance up to 60EI.



Siderise BM/P10

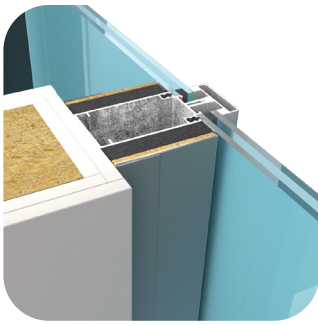
Acoustic Barrier Mat

A thin acoustic barrier mat designed to improve the sound insulation value of mullions.

Application: Used where high performing partitions, or partition and Siderise FIP panel combinations about a lightweight, hollow mullion. It is installed on two or three of the external sides, offering enhanced acoustic performance in a thin product. This can then be covered with a decorative 2mm PPC Aluminium cover plate, tapered at the leading edge at the glass (not supplied).

Key features

- Available with or without self adhesive backing.
- Reduces 'coincidence dip'.
- Flexible to use around multi-sided constructions.
- 5mm thickness.
- 10kg/m² surface weight.
- Acoustic performance (R_w): 34dB.
- Low odour.



Siderise MC System

Mullion overclad system

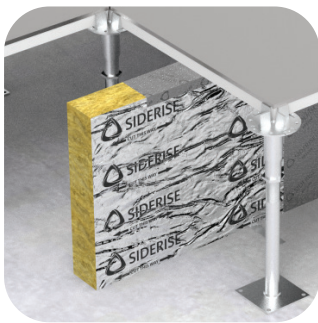
Mullion overclad system for where partitions abut single mullions with acoustic only and acoustic and fire safety enhancement options.

Application: Suitable for use on both 'Stick' and 'Unitised' curtain wall system, and for any mullion size from 80mm–250mm by simply trimming the 'male' cover plates to suit – which are supplied in either 'Small' for 80mm–135mm mullions or 'Large' for 136mm–255mm mullions.

Key features

- 35mm thickness at the widest point.
- Suitable for mullion depths from 80mm.
- Acoustic performance (R_w): 44dB.
- Option to upgrade to system tested for 120EI resistance to fire (43dB R_w).
- Combine with Siderise MI6 Mullion Insert for 49dB R_w performance (new builds only).
- Male and female intersecting cover plates to allow some deflections.
- Technical detailing support available to accommodate onerous requirements.
- Custom colour RAL options, to match the curtain wall.

Cavity Barriers and Firestops



Siderise RF

Cavity Barriers and Firestops for raised access floors

Cavity barrier and firestop system. Whilst their primary purpose is passive fire protection, these products also help to reduce sound transmission by sealing the voids between raised access floors.

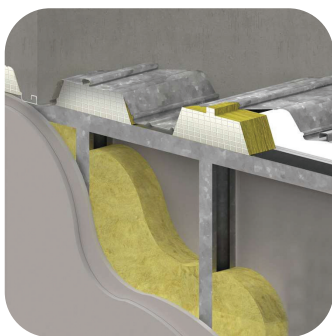
Application: These simple to install systems have been tested for fire performance, acoustic performance and for use as a plenum liner – making them suitable for a number of applications. The range also includes options to either subdivide large uninterrupted cavities or to provide continuity of fire and sound resistance when aligned underneath partitions.

Key features

- Spans voids up to 1m.
- Resistance to Fire performance options of 30, 60 or 120EI.
- Acoustic performance (R_w): 21-23dB.
- $D_{nf,w}$ up to 55dB (airborne sound insulation performance for raised access floors).
- Twin arrangement with CVB/P10 to increase standalone (R_w) performance to 42dB.
- 60 year design life, accommodating slab deflection and live load building movement.

Certification

intertek Spec ID 66975
EN 12501-1:2018



Siderise TW-P

Firestops for profiled decks

Fire stops for profiled floor decks. Supplied either cut to shape or as a full sheet, these semi-rigid boards are made from compressed A1-rated mineral wool insulation with foil facings and are designed to seal the junction between the tops of compartment walls and the underside of profiled decking.

Application: Used in small and/or irregular shaped cavities at 'tops of walls' which can be found in a wide range of buildings, both new and existing.

Key features

- Offers both fire and acoustic performance.
- Acoustic performance (R_w): 21-23dB.
- Fire performance: 60-120 minutes.
- Upgradable with Siderise AVC.
- Custom profiles available.

Certification

intertek Spec ID 66975
EN 12501-1:2018



Table 2: Ceiling and Vertical Barrier combination performance guide

D_{nf,w} performances of various ceiling constructions with upgrade options.

Generic Ceiling Type	Siderise Cavity Void Barrier upgrade options by type				
	CVB/LAM90R (21dB R _w)	CVB/LAM120R (23dB R _w)	CVB/P10 (28dB R _w)	CBX (35dB R _w)	CVB/P10 + CB10P (46dB R _w)
Metal pan – fleece (18dB D _{nf,w})	32	33	34	38	45
Metal pan – pad to rear (28dB D _{nf,w})	37	38	40	43	47
Metal pan – pad to rear c/w recessed lighting etc. (24dB D _{nf,w})	33	34	36	39	43
MF Ceiling Tile (35dB D _{nf,w})	42	43	44	47	49
MF Ceiling Tile c/w recessed lighting etc. (27dB D _{nf,w})	36	37	39	42	46
Plaster Board ceiling (39dB D _{nf,w})	45	46	47	51	52
Plaster Board ceiling c/w recessed lighting etc. (28dB D _{nf,w})	38	39	41	42	48

Note: The analysis is based on the following assumptions:

- Negligible transmission through partition wall itself
- The ceiling void depth is 600mm (a typical value)
- No absorptive soffit lining (higher performances would result if present)

- The ceiling is discontinuous over the partition wall head
- Site installation (to a reasonably good standard) is allowed for.
- The predicted performances are rounded to integer values



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