

Fitting guidance for the Siderise FIP system

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.

Description

Siderise FIP high-performance acoustic panel is a composite material comprising four primary layers, which are bonded together to offer a combination of stiffness and damping within a high mass panel. The layers include a 10mm high mass cementitious board either side of an 11mm central heavy elastomeric core, with an overall nominal thickness of 31mm.

The Siderise FIP is supplied as a board only, there are no fixing accessories supplied. This is due to the diverse range of installation methods that are tailored on site to suit project specific requirements. The Siderise FIP panel should be considered as a 'Specialist Building Board'. As with standard building boards, such as plasterboard, MDF, Plywood etc it can be used in many applications with all sorts of designs, details etc. The usual application for the Siderise FIP is to close the gap between a single mullion and adjacent partition.

Cutting the FIP

In respect to cutting the product on-site generally we suggest buying the correct cut width and only cut for small localised areas, such as around a skirting board or the last piece cut to length etc. When cutting our general guidance is to use a circular saw with a TCT blade, set to a depth of 10mm. Each side of the board should be cut individually i.e. do not cut into the soft layer in the middle. The soft middle layer can then be cut using a sharp kraft knife (non-serrated). The outer surface is a cementitious board, therefore dust can be created when cutting, so the usual PPE for this type of material should be used.

Sawing Equipment:

- Cross cut hand saws for thicknesses up to 12mm
- Jigsaw for thicknesses up to 12mm and small work
- Portable circular saw
- Fixed saw for dimensioning (vertical or horizontal)

Type of blade:

Alternative or trapezoidal teeth

Chart shows number of revolutions and number of teeth (Z)

Diameter (mm)	250	300	350	400
Panel thickness up to 12mm	Z=48	Z=60	Z=72	Z=72
Number of revolutions rpm	3000/4500	3000	3000	3000/1500

Drawings

We would advise that drawings, CAD or other are not currently available.

Common Installation Method

The project specific application and design normally would be offered by the project architect or designer., However, generally the most common method would be the use of a metal 'C' section applied to the mullion, head and floor, (supplied by others) with an internal dimension to suit the board (31mm).

The metal 'C' section is cut to length and mechanically fixed to the rear of the mullion or window frame (see Fig 1 indicative sketch). The method of fixing to the mullion can vary depending on the façade system. Usually 'through mechanical fixings' are recommended, but some system providers do not allow through fixings, and/or if there is a requirement to return area to its original state at the end of a tenancy then alternate methods of attachment should be sought. We are aware of successful projects where 3M double-sided tape was used. The method and type of tape were explored and chosen by the project architect / contractors in these instances. We cannot offer guidance and suggest discussing with an adhesive specialist if this is the preferred option.

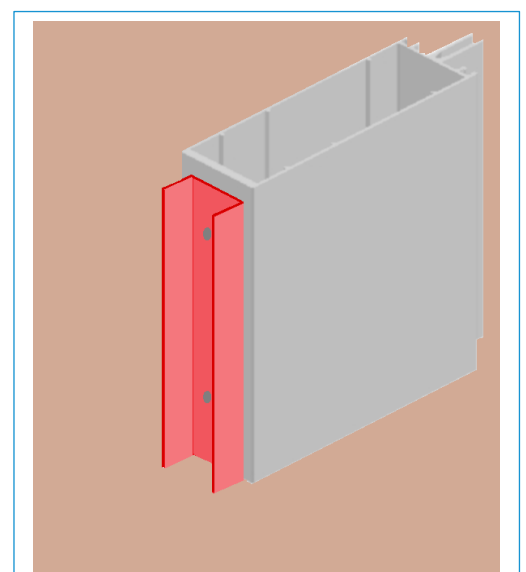


Fig 1: Shows metal 'C' section fixed to the rear of the Mullion (can be a Window frame)

Common Installation Method (cont.)

Next the metal 'C' section is cut to length and mechanically fixed to the head and floor (see Fig 2 indicative sketch at floor), the method of fixing to the soffit and floor should be 'through mechanical fixings' suitable for the substrate.

The Siderise FIP panel is then cut to length and slid into the sections and sealed with a suitable sealant (see Fig 3).

The partition is then constructed to oversail the board by a predesigned amount, usually to assist in the accommodation of some façade movement and to ensure a good acoustic seal. The method and closure is chosen by the project architect / contractors (see Fig. 4).

If the overall height is greater than the standard board length of 2400mm, it is common that a second smaller length is used above the full length. If the height is 3000mm, then a 600mm length of board will be fitted above (not at the bottom) the standard 2400mm length board with a butt joint. Please note that where a fire rating is required, this is only applicable for boards up to 300mm wide. For applications where use of a single continuous board is employed, the tested performance is 60 minutes EI fire rating, and if there is a horizontal butt joint (>2400mm high) then the tested performance reduces to 30 minutes EI.

Finish

The outer finish of the Siderise FIP panels are not decorative and are always decorated after installation. Depending on the project requirements this can vary from; a) polyester powder coated aluminium cover plates, b) UPVC cover trims, c) plaster skim and decorate, d) fill, sand and paint, etc to name but a few. We had one project where they were covered by 'faux animal skin' wrapped MDF board spaced slightly away from the main board. The method and decoration should always be agreed with the project architect and/or client.

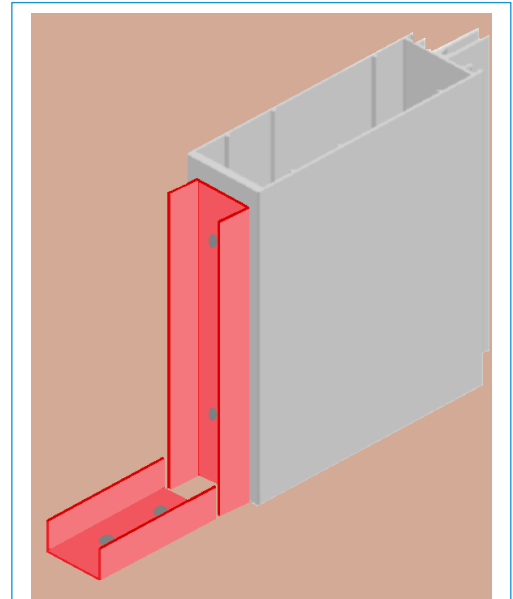


Fig 2: Shows metal 'C' section fixed to the floor in line with the mullion

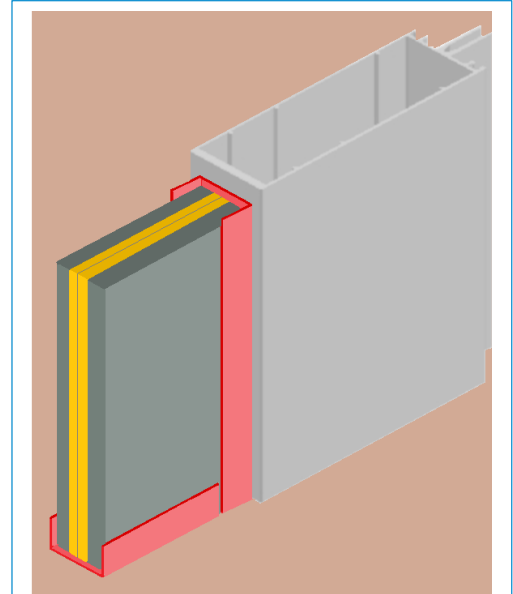


Fig 3: Shows the Siderise FIP slid into place

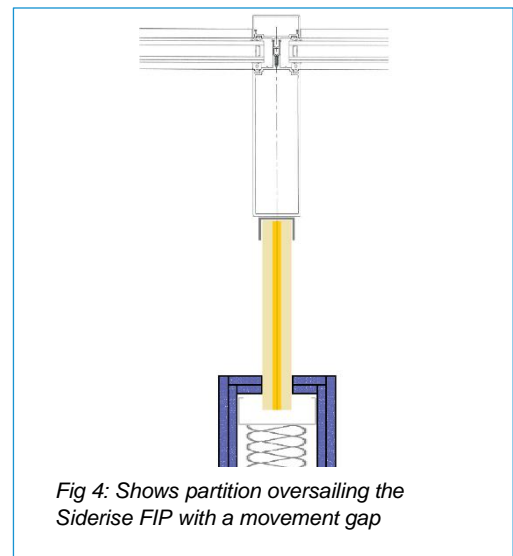
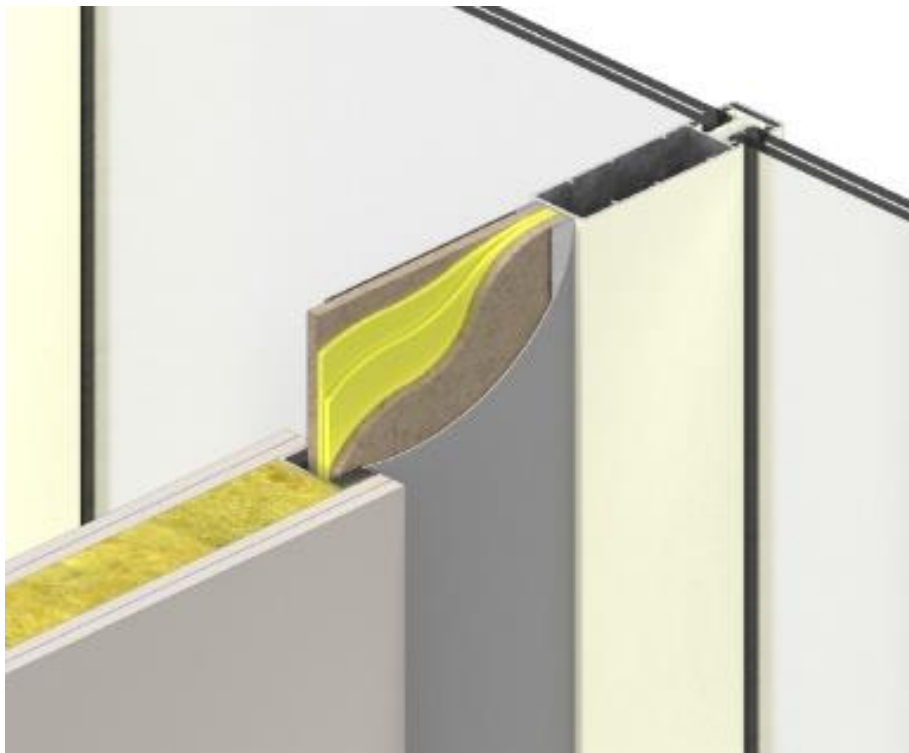


Fig 4: Shows partition oversailing the Siderise FIP with a movement gap



Further information

Technical support

Should you wish to provide any detailed drawings for the use of the FIP between a mullion and the partition, taking into account the guidance contained in this document, we would be happy to look at these and offer any potential comments / concerns from an acoustic perspective. We typically suggest to architects that they seek input from a drylining contractor / interior fit-out company for comment on buildability / practicality etc for their specific project design.

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

Available CPD's

Contact Siderise for further information on our CPDs:

- Siderise Acoustic Products for Commercial Interiors - Architect Edition
- Siderise Acoustic Products and Performance with 1/3rd Octave Data – Acoustic Consultants Edition

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