

# SIDERISE MC SYSTEM

Mullion overclad system for acoustic  
and fire safety enhancement



TECHNICAL DATA SHEET

# SIDERISE MC MULLION OVERCLAD SYSTEM

Siderise MC Mullion Overclad System is a decorative and robust mullion liner for Acoustic or Acoustic & Fire enhancement of curtain walling mullions.

Siderise MC System provides a practical means of improving the sound insulation performance of curtain walling mullions where partitions abut, a very common issue where noise levels readily travel between adjoining offices on the same floor via the hollow mullion. Their application to the mullions substantially improves the acoustic performance of lightweight aluminium mullions, Acoustic only and Acoustic +2 Hour Fire-rated versions are available.

The Siderise MC System is an external treatment to the mullions and therefore is suitable for use in 'New Build' projects where the layout is not known at design stage, so internal acoustic upgrades to the mullion are not practical; 'Fit-Out' projects where internal lining to the mullion is not possible as the façade is already in place; and in addition, due to the clean simplicity of installation, it can also be fitted to singular offices where there are acoustic issues whilst fully fitted out without the need to empty the office of furniture etc, fitted very quickly during 'Out of Hours' without disruption to the occupants.

The Siderise MC System is 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.

The Siderise MC System is supplied in a set of 14 main parts per mullion:

- 4 x Standard Retaining Strips
- 2 x Standard Female Cover Plates
- 2 x Standard Male Cover Plates (either small or large)
- 6 x Infill, cut to suit profile / mullion depth, either:
  - Acoustic Only (foam/barrier composite)
  - Fire & Acoustic (mineral wool/barrier composite)
- 1 x Roll Siderise Double-sided SA Tape to suit the Retaining Strips



## Benefits

- Excellent acoustic properties
- Offers up to 2 hours fire rating
- Accommodates façade movement
- Suit a wide range of mullion sizes as standard
- Extensive colour range
- Maintenance free
- Very simple to Install, with limited disruption
- Simple solution to common issues

## PRODUCT DESCRIPTION



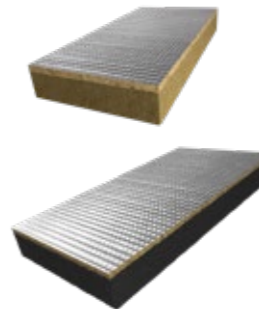
### Standard Retaining Strips and SA Tape

Supplied in 3m Lengths, 26mm wide, Dark Grey 7016 PPC, complete with retaining clips at 300mm centres, applied using Siderise Double sided SA Tape for direct adhesion to the rear of the glass unit and partition edge, usually it is recommended that the retaining strip to the partition edge is mechanically fixed also with counter sunk screws, the holes in the retaining strip will need to be counter sunk on-site to ensure the screw heads remain flush to the retaining strip.



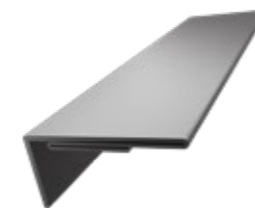
### Cover Plate

The standard female cover plate and standard male cover plate are put together prior to installing in the system



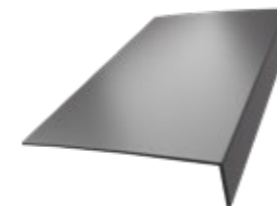
### Infill

The Infill is supplied cut to suit width of the profile / mullion depth, allowing for a tight fit between the cover assembly, the Acoustic Only option is a 30mm thick multi-layered acoustic foam and mass barrier composite, with a self-adhesive backing for direct application to the mullion, the Fire & Acoustic option is also a 30mm thick composite, comprising of mineral wool and mass barrier composite, with a self-adhesive backing for direct application to the mullion.



### Standard Female Cover Plate

Supplied in 3m lengths, one size only.



### Standard Male Cover Plate (small or large)

Supplied in 3m lengths, in two sizes, 'Small' to suit mullions 80mm-135mm depth or 'Large' to suit mullions 136mm-255mm depth. The male cover plate may require cutting on-site to suit mullion depth.

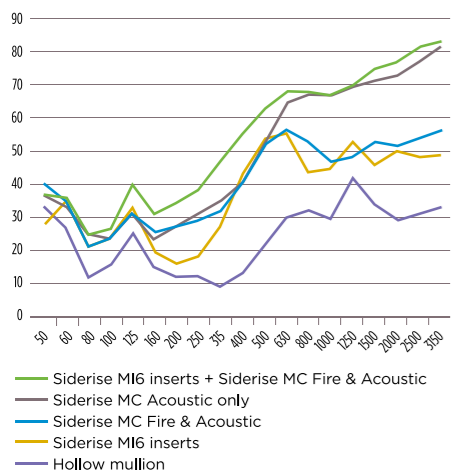
The Siderise MC System is usually available from stock for rapid delivery in both White RAL 9016 and Dark Grey RAL 7016 or can be supplied to any RAL Colour, subject to minimum order quantity and extended delivery period.

## ACOUSTIC PERFORMANCE

The Siderise MC System has been tested to EN ISO 10140-2:2021 and assessed to BS EN ISO 717-1:2020 Table 1 below shows the laboratory tested values.

| Product                               | Rw   | (C;Ctr) |
|---------------------------------------|------|---------|
| 205mm x 50mm Empty Mullion            | 24dB | (-2;-5) |
| Siderise MC – Acoustic Only           | 44dB | (-3;-8) |
| Siderise MC – Fire & Acoustic         | 43dB | (-2;-7) |
| Siderise MI6 Inserts – Inside Mullion | 36dB | (-3;-8) |
| Siderise MC + Siderise MI6 Inserts    | 52dB | (-3;-9) |

1/3rd octave data available upon request.



### Use in practice

When Siderise MC System is used in combination with a partition offering up to 50dB Rw performance, no measurable loss in total room-to-room separation is expected (0.44dB\*).

Even if the partition value increases to 56dB Rw, the overall performance is typically only reduced by 2dB\*, by comparison, for untreated mullions the reduction in performance would be over 17dB\* reduction (a 10dB reduction in performance would result in a 'Doubling' of 'Perceived Loudness'), therefore a significant improvement.

The practical airborne sound separation achieved between adjoining areas is often limited by the weakest element(s).

\*Based on Composite SRI Calculations for a 4m partition abutting a 150mm mullion, empty or using the Acoustic only option.

## FIRE PERFORMANCE

### Fire Resistance

The Siderise MC System has a fire-rated option available upon request, which uses a special low-resin-content mineral wool in lieu of the acoustic foam for the absorption / spacing layer and 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 + in concrete apertures and achieved a 120/120 rating, (EI).

From this test data the Acoustic + Fire Siderise MC System can offer the following fire resistance ratings: 120 minutes (E) Integrity and 120 minutes (I) Insulation for the tested mullion, 205mm x 50mm.

### Reaction to Fire Classification

The Siderise MC System has not been classified to EN ISO 13501-1 in its final form due to the small sizes / surface area, however the outer cover plates are Polyester Powder Coated Aluminium. Aluminium is generally recognised as being rated non-combustible, A1 if uncoated and typically be of Limited Combustibility, A2 if an organic coating such as Polyester Powder Coating (PPC) is applied. The primary components in the system behind the cover plate assembly have been tested separately, the Mass Barrier achieved B,s2,d0 on its own, the Acoustic Foam backing layer achieved B,s2,d0 and the Mineral Wool achieved A1.

## ENVIRONMENTAL

The Siderise MC System is environmentally friendly.

- The Aluminium components are made from an average of 60% recycled content, 40% Primary Aluminium, 13% Recovered Post Industrial Scrap & 47% Recovered Post-Consumer Scrap and is also 100% recyclable
- The Mass Barrier is made from an average of 68% recycled material fillers and is also recyclable
- The Acoustic Foam components, (if applicable), contain no VOCs, vVOCs, Zero Ozone Depleting Potential, Global Warming Potential of less than 5 and is also recyclable
- The Mineral Wool components, (if applicable), are made from an average of 40% recycled content and are also 100% recyclable
- Siderise are ISO 14001:2015 registered (Intertek) for its Environmental Management System

## THERMAL SHOCK

With any material that abuts the glass, such as dummy mullions, plasterboard etc, consideration to the possibility of 'Thermal Fractures' or 'Thermal Shock' should be given.

The Siderise MC System requires the steel retaining strip to be bonded to the glass with an SA tape, generally it is considered that if the glass is either heat strengthened or toughened, issues are unlikely, however if in doubt it would be prudent to check with the glazing manufacturer for confirmation for your specific project.

## MAINTENANCE

The Siderise MC System require no maintenance other than periodic cleaning by light vacuuming or wiping with a damp cloth.

## FURTHER INFORMATION

### Additional options

The following options are available:

- A full range of RAL Colours available.

### Additional information

- 1/3rd octave Laboratory Test Data available on request
- Fire Test Report available on request
- Fixing Guidance Sheet
- Safety Data Sheets

### Available CPDs

Contact Siderise for further information on our CPDs:

- **Façade Acoustics** – Architects and Façade Consultants
- **Interior Acoustics** – Architects and Contractors
- **Siderise MC** – Architects and Contractors
- **Siderise MC** – Acoustic Consultants
- **Façade Acoustics** – Acoustic Consultants
- **Interior Acoustics** – Acoustic Consultants

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