

BY
YOUR
SIDE®

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SIDERISE MC SYSTEM

Mullion overclad system
for acoustic and fire safety
enhancement

SIDERISE MC MULLION OVERCLAD SYSTEM

Aesthetics meet acoustics for contemporary glass buildings

With their sophisticated look and daylighting ability, curtain walling is a popular façade choice in all kinds of multi-occupancy buildings in cities all over the world — from offices and commercial developments to residential and public spaces. However, they can present some acoustic challenges which must be overcome to ensure a comfortable and private internal environment.

Making plans for the mullions

Consideration is often given to how the façade will prevent disturbance from external noises, and how the internal walls and separations will limit noise transmission between adjoining spaces — but the mullions are often overlooked. These hollow, lightweight vertical aluminium channels which hold in the glazing provide an acoustic weak point which sound can easily travel through and into adjoining spaces. To solve this, we created the Siderise MC Mullion Overclad System.

Siderise MC Mullion Overclad System

The Siderise MC system is installed over the curtain wall mullions where partitions abut, substantially improving their acoustic performance. Suitable for both 'stick' and 'unitised' curtain wall façades, the system is ideal for projects where internal acoustic upgrades to the mullion are not practical. This includes situations where the internal layout is unknown during construction or when fit-out or operation has already begun. Its simple installation process allows it to be installed quickly with minimal disruption to occupiers, without the need to empty spaces of furniture, etc.

Maintaining aesthetics

Virtually maintenance free, the Siderise MC System is available in a wide range of sizes and colours, with standard colour option like 'White RAL 9016' and 'Dark Grey RAL 7016' available for rapid delivery.

PRODUCT DESCRIPTION

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



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 the Siderise Double-sided SA Tape for direct adhesion to the rear of the glass unit and partition edge.



It is usually recommended that the retaining strip is also mechanically fixed with counter sunk screws. Holes in the retaining strip will need to be counter sunk on-site to ensure the screw heads remain flush to the retaining strip.

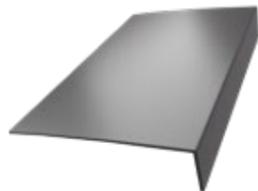
Standard Female Cover Plate

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.



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.

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 classified 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.

FIRE PERFORMANCE

Fire Resistance

Mullions can also present a fire risk. The Siderise MC System has a Fire Rated option available upon request. This uses a special low resin content mineral wool for the absorption / spacing layer.

The Fire-Rated Siderise MC System can offer:

- 120 minutes (E) Integrity and 120 minutes (I) Insulation for mullions up to 205mm wide.

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 (PPC) Aluminium which is typically A2 Limited Combustibility rated. 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.

Quartermile, Edinburgh





Dollar Bay, London

ENVIRONMENTAL

We have taken steps to make the Siderise MC System as environmentally responsible as possible:

- Aluminium components are made from an average of 60% recycled content, 40% primary aluminium, 13% recovered post-industrial scrap and 47% recovered post-consumer scrap and is also 100% recyclable.
- Mass barrier is made from an average of 68% recycled material fillers and is also recyclable.
- Acoustic foam components (for standard product) contain no VOCs, vVOCs, has Zero Ozone Depleting Potential and a Global Warming Potential of less than 5. It is also recyclable.
- Mineral wool components (for fire rated version) 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.

For more details, please see

- Product Technical Data Sheet
- 1/3rd Octave Test Data
- Installation Guidance
- Safety Data Sheets
- Spec Clauses / NBS BIM

BY YOUR SIDE

Since the 1970s, Siderise has been a global leader in the supply of high-performance fire safety, acoustic and insulation solutions for a wide range of façade types. From the very beginning, our offering has been underpinned by a core value of “integrity in everything we do.” This means that we are not only committed to developing quality products which

have been tested to rigorous industry standards, but that we stand ‘By Your Side’ at every step of the construction process, from the earliest design stages right through to building maintenance. This helps you to ensure compliance, as well as to demonstrate your own commitment to safety and clarity, allowing you to deliver safer, more beautiful buildings.

Technical & Sales support

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