

Siderise MC Mullion Cover System

Siderise MC Mullion Overclad System is a decorative and robust mullion liner for Acoustic or Acoustic & Fire enhancement of Curtain Walling Mullions.



Application

The Siderise MC System provides a practical means of improving the sound insulation performance of curtain walling mullions abutting partitions, Acoustic only and Acoustic + 2 Hour Fire rated versions are available.

The Siderise MC System is fitted to the faces of the mullions and therefore is suitable for use in 'New Build' projects, 'Fit-Out' projects and refurbishment projects.

The Siderise MC System is suitable for use on both 'Stick' and 'Unitised' curtain wall system, and for any mullion size from 80mm - 255mm.

Product description

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 MOQ and Extended Delivery Period.

The Siderise MC System comprises:

Standard Retaining Strips

Supplied in 3m Lengths, 26mm wide, 'Dark Grey 7016 PPC', complete with retaining clips at 300mm centres.

Standard Female Cover Plate (x2)

Supplied in 3m Lengths, one width only, available in both 'White RAL 9016' and 'Dark Grey RAL 7016'.

Standard Male Cover Plate (x2) (either 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, available in both 'White RAL 9016' and 'Dark Grey RAL 7016'.

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 acoustic foam and mass barrier composite. The Acoustic & Fire option is also a 30mm thick composite, comprising of mineral wool and mass barrier layers.

Acoustic Performance

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

Table 1

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

Use in practice

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

If the partition value increases to 56dB R_w, the overall performance is typically only reduced by 2dB*, by comparison, for untreated mullions the reduction in performance would be over 17dB* reduction.

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

Fire Performance

Fire Resistance

The Siderise MC System has an Acoustic only version that has no Fire resistance performance and an Acoustic & Fire version which has a 2hr Fire Resistance performance. The Acoustic & Fire version 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 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 Mullions up to 205mm wide.

Reaction to Fire

The Siderise MC System individual component EN ISO 13501-1 classifications are given below.

(The final assembled system has not been classified to EN ISO 13501-1 in its final form due to the small sizes / surface Area)

Table 2

Reaction to Fire performance

Component	Material	Building Regs (Approved Document B) European Class (to EN 13501-1)
Cover plates	PPC Aluminium	A2
Acoustic barrier	Polymeric barrier	B2-s1,d0
Acoustic insulation	Acoustic foam	B2-s2,d0
Acoustic & Fire insulation	Mineral wool	A1

Façade movement

The Siderise MC allows for a degree of temporary building movement due to wind loading.

The typical movement that can be accommodated is:

- Compression 5mm. This is limited by the compressibility of the infill.
- Expansion 10mm. This is limited to prevent the male cover plate leaving the female completely. During expansion there will be a gap in the infill behind the cover plate which may affect the acoustic and fire performance for the temporary wind loading.

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.

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 Mineral Wool components, (if applicable), are made from an average of 40% recycled content and is also 100% recyclable.
- Siderise are ISO 14001:2015 registered (Intertek) for its Environmental Management System.

Further information

Technical support

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

Additional information

The following information is available upon request or via download from our website:

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

Available CPD's

Contact Siderise for further information on our CPDs

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