

# CW-SI | CURTAIN WALL SPANDREL INSULATION

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**Technical Data Sheet**

Version: 1.4 – October 2023



**SIDERISE**<sup>®</sup>  
*integrity in all we do*

Acoustic, fire and thermal insulation specialists

## Application

**Siderise CW-SI Curtain Wall Spandrel Insulation** is an engineered thermal insulation that forms part of a perimeter barrier firestop and spandrel zone protection system for use with non-fire rated aluminium curtain wall facades.

Siderise CW-SI Curtain Wall Spandrel Insulation is a high-density stonewool board specifically engineered to provide high levels of structural fire protection. CW-SI, CW-FB (Curtain Wall Fire Board) and CW-FS (perimeter barrier and fire stop systems), have been jointly tested in conjunction with non-fire rated aluminium curtain wall assemblies to provide market-leading fire resistance performance for the critical spandrel zone.

The product combination (system) provides the following advantages:

- Protection of mullions by use of CW-FB.
- Maximises the stability and integrity of framing elements and spandrel construction.
- Approved design that extends the rating of the compartment floor to the exterior wall.
- Fully tested to ASTM E2307 & ASTM E2874.
- Market-leading performance.

CW-SI has been tested as part of systems with voids up to 200 mm and spandrel heights up to 1500 mm.

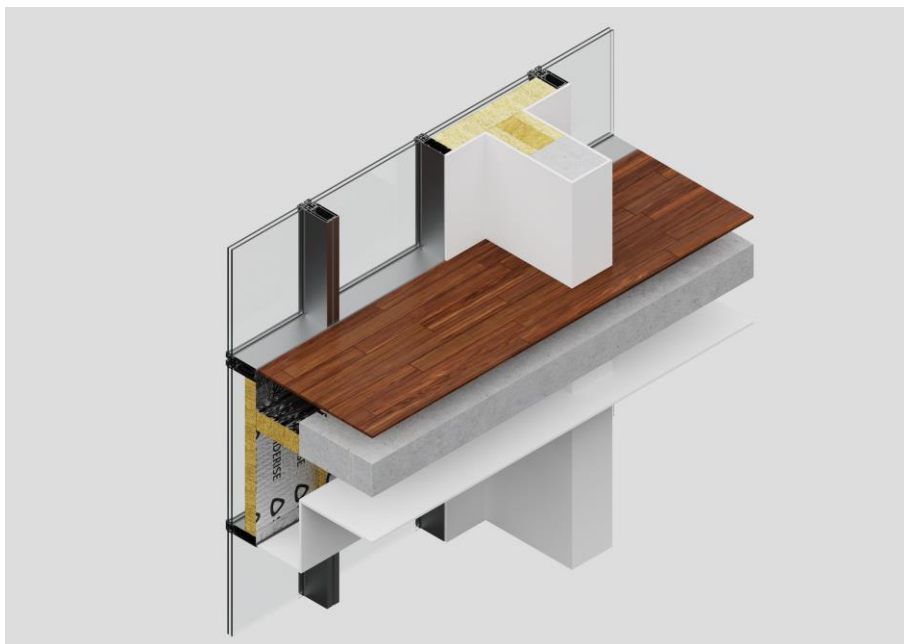
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## Product Description

**Siderise CW-SI Curtain Wall Spandrel Insulation** is a high-density stonewool board specifically engineered to provide high levels of structural fire protection. It has been developed to provide a simple and easy installation process.

Based on the experience gained through being the premier supplier to the global curtain walling markets, the products represent an unrivalled combination of fully qualified performance, and practical installation and service benefits.

The standard sheet size is 2000mm x 1200mm and may be of benefit when the actual spandrel panel size is not known or where it varies significantly. It may be provided in pre-cut sheets when the spandrel panel size is known.



## Fire Performance

Siderise CW-SI, CW-FS and CW-FB (Mullion Cover) have been tested to ASTM E2307 & ASTM E2874 and are certified with Thomas Bell Wright International Consultants Certification Division and UL solutions.

## Technical Specification

### Siderise CW-SI Curtain Wall Spandrel Insulation

Thickness	75mm, 50mm
Colour	Silver, with Siderise identification.
Finish	Class 'O' Aluminium foil to one side
Density	Nominal 128 kg/m <sup>3</sup>
Thermal Conductivity	$\lambda = 0.034 \text{ W/m.K}$
Thermal Resistance	R = 2.205 m <sup>2</sup> .K/W (75 mm) R = 1.471 m <sup>2</sup> .K/W (50 mm)
U-Value	U = 0.4535 W/m <sup>2</sup> .K (75 mm) U = 0.6800 W/m <sup>2</sup> .K (50 mm)
Durability	Odourless, rot proof, non-hygroscopic, do not sustain vermin and will not encourage the growth of fungi, mould, or bacteria.
Water Vapour Sorption	<1 (Weight %)
Reaction to Fire	Class A1 (Non-combustible) as per EN 13501-1
Resistance to Fire	The following table details the fire resistance rating of Siderise system which incorporates Siderise CW-SI, Siderise CW-FB and Siderise CW-FS, when tested to ASTM E2307 and ASTM E2874 for Siderise CW-SI75.

ASTM E2307			
Void Size (mm)	Spandrel Height (mm)	F-Rating (Minutes)	T-Rating (Minutes)
100	964	198	159
200	1500	153	83

ASTM E2874			
Spandrel Height (mm)	F-Rating (Minutes)	T-Rating (Minutes)	I-Rating (Minutes)
1500	153	83	83

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3 <sup>rd</sup> Party	Thomas Bell Wright International Consultants - Certification Division
Approvals	Underwriters Laboratory (UL)

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## Environmental

Siderise CW-SI Curtain Wall Spandrel Insulation systems are environmentally friendly.

- They contain no Volatile Organic Compounds (VOCs) and no very Volatile Organic Compounds (vVOCs).
- Zero Ozone Depleting Potential
- Zero Global Warming Potential
- Recyclable

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## Additional Information

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

- Safety Data Sheet
- Standard Details
- Installation instructions

NOTE: \* The insulation performance of the panel should only be assumed to be satisfied on the unexposed surface of the seal. Due to the highly conductive nature of metallic facings, it cannot be assumed that the surface temperature of these facings will also satisfy the insulation performance criteria. Evidence of the panel's ability to satisfy the insulation criteria in this specific application should be sought from the panel manufacturer if an insulation performance is required from the panel construction.

Please contact the Siderise Technical team for further information and advice regarding Infill Panel specifications.

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## Technical Support

Siderise can assist you with preliminary U-Value calculations of the spandrel area for varied project cases. We would require information on the components used in the spandrel. Siderise technical team can assist with installation training and correct application of the product.

For technical advice or support please contact: [smetech@siderise.com](mailto:smetech@siderise.com)

For Installation Training or Site Inspections please contact: [smetech@siderise.com](mailto:smetech@siderise.com)

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## Context

The information in this datasheet is believed to be accurate at the date of publication. Siderise has a policy of continuous product improvement and reserves the right to alter or amend the specifications of products without prior notice. Siderise does not accept responsibility for the consequences of using the products described outside of the recommendations within this datasheet. Expert advice should be sought where there is any doubt about the correct specification or installation of Siderise products.

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