# Siderise CW-FB Fireboard

High-density non-combustible stone wool fireboard for protecting the spandrel and mullion and transom profiles in curtain walls



# Application

**Siderise CW-FB curtain wall fireboard** forms part of a perimeter barrier firestop and spandrel zone protection system for use with non-fire rated aluminium curtain wall facades.

The fire resistance performance of CW-FS Firestop, functioning as a perimeter barrier, in combination with CW-FB Fireboard, has been tested in conjunction with commercially available 'Type A' non-fire rated curtain wall constructions. This configuration allows in-test deflection of both the façade and the floor slab, incurred as a result of being subjected to over 1000°C during the test, to be considered - giving a more accurate indication of in-application performance.

EN 1364-4 testing is the primary route for compliance for testing firestops in horizontal orientation in combination with curtain wall facades. When testing to EN 1364-4 in combination with 'Type A' non-fire rated curtain walls it is necessary to protect the spandrel zone with Siderise CW-FB. 'Type A' is the most common type of curtain wall in the UK. Please see our public website for EN 1364-4 tested arrangements and standard details. The CW-FB does not have a product specific fire resistance performance however it facilitates the fire resistance performance of the CW-FS Firestop in the EN 1364-4 test arrangement.

There are specific configurations of the test that can be chosen depending on the primary element to be assessed. To understand these further, please refer to BS EN 1364-4:2014. In a very simplified explanation, Configuration 2 is used to assess performance of the façade, and incorporates flaming on the inside and outside of the façade with specific furnace pressures and temperatures; this configuration would be used by system manufacturers for specific data on the façade. Configuration 5 is used to assess the linear joint seal/firestop in application and focusses on the ability of containing the fire inside the compartment, utilising higher temperatures and pressures. All Siderise EN 1364-4 testing is carried out in accordance with configuration 5.

Whilst existing test data is unlikely to replicate specific project details, Siderise have tested to EN 1364-4 with a number of different curtain wall systems with CW-FB in both single and double-layer arrangements.



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In combination, CW-FS and CW-FB can be used in curtain wall façade assemblies requiring enhanced fire resistance performance.

The product combination provides the following advantages in the test arrangement:

- Protection of mullions and transoms
- Enhances the performance of the covered area of curtain wall to enable the CW-FS Firestop to perform for the required period of fire resistance
- CW-FB is used as part of the tested arrangements to EN 1364-4 to allow the CW-FS Firestop to be certified for both 120 and 180 minutes integrity and insulation
- Market-leading performance

On this basis, and in order to reflect the tested arrangement, Siderise do recommend that the CW-FB is applied to the curtain wall in line with the CW-FB Installation Instructions wherever the CW-FS firestop is being used in a horizontal orientation to the rear of a curtain wall. However, in instances where the project does not intend to utilise the CW-FB, we would suggest consulting with the Supervising Authorities to ensure they accept the proposed application.

Please also refer to our standard details for specific arrangements of protected spandrel.

## **Product Description**

Siderise CW-FB curtain wall fireboard is a high-density stone wool board specifically engineered to provide a simple and easy to install method of facilitating the fire resistance performance of the CW-FS Firestop in conjunction with non-fire rated curtain wall facades.

Based on the experience gained through being the premier supplier to the UK and UAE 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 1180mm. It may be provided in pre-cut sizes when the dimensions of the spandrel area are known.

## Fire Performance

Siderise CW-FS in combination with CW-FB has been tested to EN 1364-4:2014. This has allowed the CW-FS to achieve third-party certification via Certifire CF563 and Intertek WHI19-32944301.

## Thermal Performance

λ= 0.042 W/m.K



# Technical Specification

### Siderise CW-FB curtain wall fireboard

Properties	Value
Form Supplied	Sheets: 2000mm x 1180mm Sheets: 2000mm x 1200mm (ME)
Thickness (mm)	25
Colour	Silver with Siderise Logo on one face, green-brown stone wool on other surfaces
Finish	Aluminium foil to one side, exposed stone wool on other surfaces
Density	Nominal 160kg/m <sup>3</sup>
Thermal Conductivity	λ = 0.042 W/m.K
Durability	Odourless, rot proof, non-hygroscopic, do not sustain vermin and will not encourage the growth of fungi, mould, or bacteria
Reaction to fire	Class 'A1'
Resistance to fire	Specific to project design. Facilitates the fire resistance performance of the following products when tested to EN 1364-4; CW-FS120 Perimeter Barrier, E 120, I 120 CW-FS180 Perimeter Barrier, E 180, I 180 Third-party Certification for CW-FS Firestop - Certifire CF563, Intertek WHI19032944301

## **Environmental**

Stone wool core is recyclable.

## Additional Information Available

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

- Safety Data Sheet
- Standard Details
- Installation instructions
- NBS Specification Clause

NOTE: The fire resistance performance of the spandrel panel is not considered when testing the perimeter seal to EN 1364-4 on non-fire rated curtain wall assemblies. The fire resistance values quoted for the CW-FS Firestop apply to that product only. Where requirements exist for a fire resisting curtain wall assembly, this should be sought from the curtain wall manufacturer.

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

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# **Technical Support**

For technical advice or support please contact: technical.services@siderise.com

For Installation Training or Site Inspections please contact: <a href="mailto:site.services@siderise.com">site.services@siderise.com</a>

For technical advice or support in the Middle East, India or Asia Pacific contact: smetech@siderise.com

## 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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