



# SIDERISE®

## Cavity Barriers for Glazed Curtain Walls

The primary function of the Siderise® CWFS system is to provide a continuous perimeter fire, smoke and acoustic seal by sealing the void between a fire compartments floor slab edge and fire walls with the external building envelope.

For use with AS4284 Watertight Curtain Walls

## KEY FEATURES

- Engineered, factory made system
- Market leading fire resistance and smoke seals
- Unique systems providing ability to accommodate façade movement
- Simple and quick installation
- AS1530 Part 4 fire testing
- Complies with NCC C2.6
- Backed by Trafalgar technical support
- Small brackets at 600mm centres only
- Non-combustible
- EN1364-4 System Testing for - /180/180

## APPLICATIONS

This document covers cavity barriers for use with glazed/glass curtain walls, providing a fire, smoke and acoustic seal for :

- Horizontal cavities
- Vertical cavities
- Concrete and CLT slab edges behind glazed walls

For brick veneer curtain wall cavities [please click here!](#)

## POINTS OF DIFFERENCE

- **All components supplied by Trafalgar**
- **100% Tested** - Proven movement testing
- **Local Assurance** - Approvals to Australian standards
- **High Performance** - No continuous angle or steel flashing
- **Practicality** - Fast, clean and easy
- **Siderise App** - Certification made easy

## TRADES



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## BENEFITS SIDERISE® CWFS

### WHAT IS SIDERISE® Curtain Wall Fire Stop?

Siderise CWFS is designed for use as both vertical and horizontal cavity barriers in behind AS4284 Watertight Curtain Wall facades.

Siderise® CWFS is a factory foiled stone wool cavity barrier system engineered specifically to handle building movement whilst maintaining the fire, smoke and acoustic seals. Siderise® CWFS systems utilise a unique method of manufacture that provides a well identifiable, ready to use product that is resilient in lateral compression. The factory-manufactured material facilitates fast, clean and easy installation, ensuring a requisite tight fit and enhances fire, smoke and sound integrity.

Systems have been fire tested and approved to AS1530 Part 4 as well as European fire test method for an FRL of-/120/120 and can accommodate void widths up to 600mm wide.

Additional AS1530.4 fire testing has been conducted for CLT construction achieving an FRL of-/60/60.

Test Reports are available for:

[AS 1530.1](#)

[AS 1530.3](#)

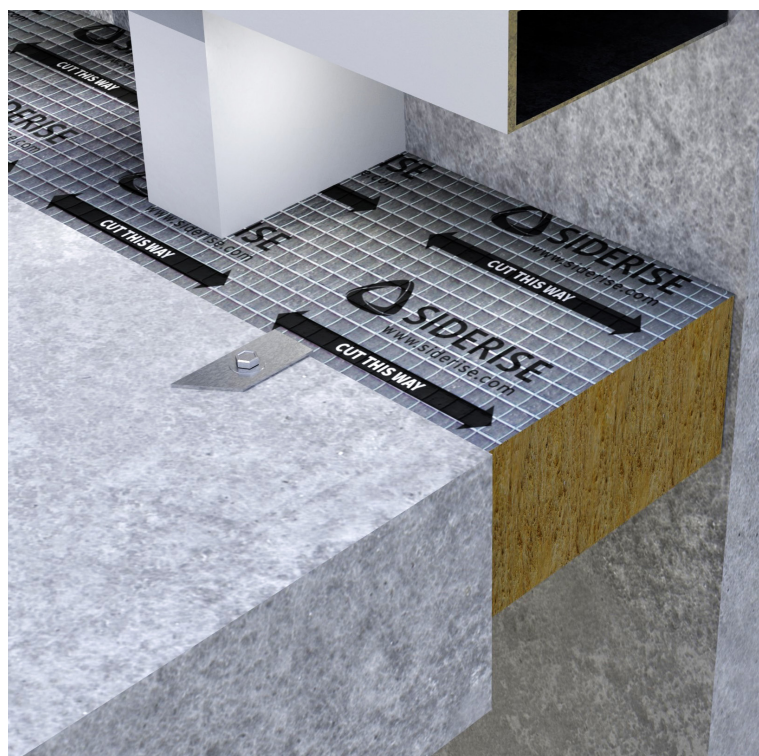
[AS 1530.4](#)

## APPLICATIONS

The primary function of Siderise® CWFS system is to maintain continuity of fire and smoke resistance by sealing the void between compartment floors and walls and the external watertight curtain wall facade.

The systems have been subjected to independent movement testing conducted prior to fire testing to ensure they can cater for thermal expansion and structural movement as required by NCC Clause C2.6.

The systems also have independent acoustic testing to provide an Rw25 rating, assisting with sound containment requirements.



# SPECIFICATIONS

Standard CWFS slab sizes are 1200mm x 1150mm which are easily cut on site to cater for void sizes if site tolerances vary significantly. Please note that when ordering the required quantity of fixing brackets need to be purchased separately along with the joining tape.

The standard fixing brackets are 1mm galvanized steel in flat form, pre-notched for easy folding on site when fitting.

All fixing holes are to be drilled on site to suit varying site conditions. Different size brackets are available according to the cavity or void size.



CWFS can be easily cut on site to suit varying void sizes .



## SPECIFICATIONS



Sheet Size and Thickness	Sheets of 1200 x 1150mm, thickness of 120mm
Colour	Silver, with Siderise® identification
Finish	Aluminum Foiled
Density	Nominal 75 Kg/m <sup>3</sup>
Thermal Conductivity	$\lambda_{10}$ = 0.038 W/m.K (tested foil to foil)
Cavities	20mm to 600mm
Non-Combustibility	Confirmed via AS 1530.1
Reaction to fire	AS1530 part 3. Rated with 0 ignitability and spread of flame. Heat evolved & smoke developed index of 1.
Resistance to fire	AS1530.4:2014, EN130501-2: EI30 to EI180 (minutes) or FRL of-/120/120
Acoustic Rating	Rw25
3rd Party Listings	Listed under Warrington Fire’s CERTIFIER program





# TERMINOLOGY

Below you can find a table of terms that will be used throughout this manual. Please, refer to this table if you need clarification while reading this manual. If you require further information on these terms or products, click the image on the right-hand column to redirect you to the specific product's page on our website.

## Siderise® - CWFS

Curtain Wall Fire Stop often called 'slab edge fire stop' or fire safing. these are used for waterproof curtain wall facades only complying with AS4284 (glazing, brick veneer etc)



## Siderise - CWFB Spandrel

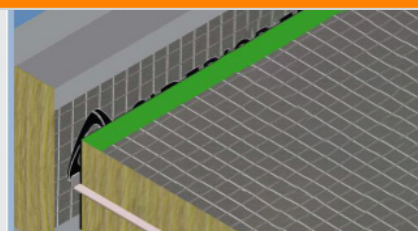
Siderise CW-FB Curtain Wall Fireboard is a high density stonewool board specifically engineered to provide high levels of structural fire protection. Siderise CW-FB is an effective solution in preventing the 'leap frogging' of fire from one level of a building to another.



## Siderise® - OSCI

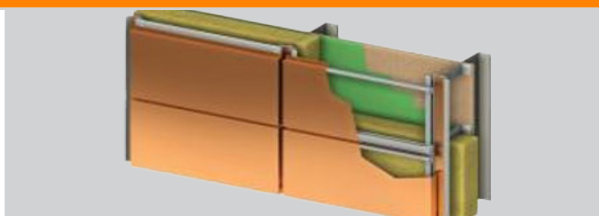
Siderise® Open State Cavity Inserts (OSCI) are designed for the use in cassette panel cladding systems. Siderise® OSCI can be used horizontally or vertically as part of a cladding system. It is applied directly to the internal surface of the cassette panel to simplify the detailing and installation of adjacent cavity barriers and/or to ensure that the ventilation air gap is dimensioned within permissible limits

OSCI



## Rainscreen Cladding

A rainscreen (or ventilated) facade is an exterior wall design where the cladding panels stand off from the moisture-resistant surface of an air/water barrier applied to the external wall to create a capillary and to allow drainage and evaporation. These cladding designs require open state cavity barriers like the Siderise RV range.



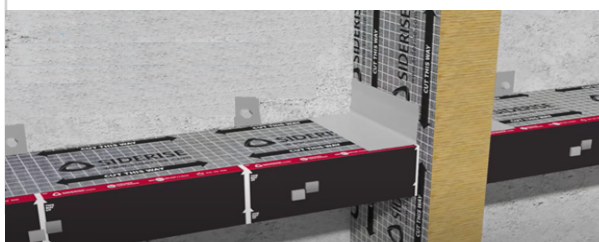
## Siderise® - RH

The Siderise RH cavity barrier stands for "Rainscreen Horizontal" and incorporates intumescent technology for rainscreen cladding. These allow for ventilation and drainage whilst a more traditional 'closed state' cavity barrier would plug the cavity and prevent drainage. For more information please refer to the [RH and RV technical manual here](#).

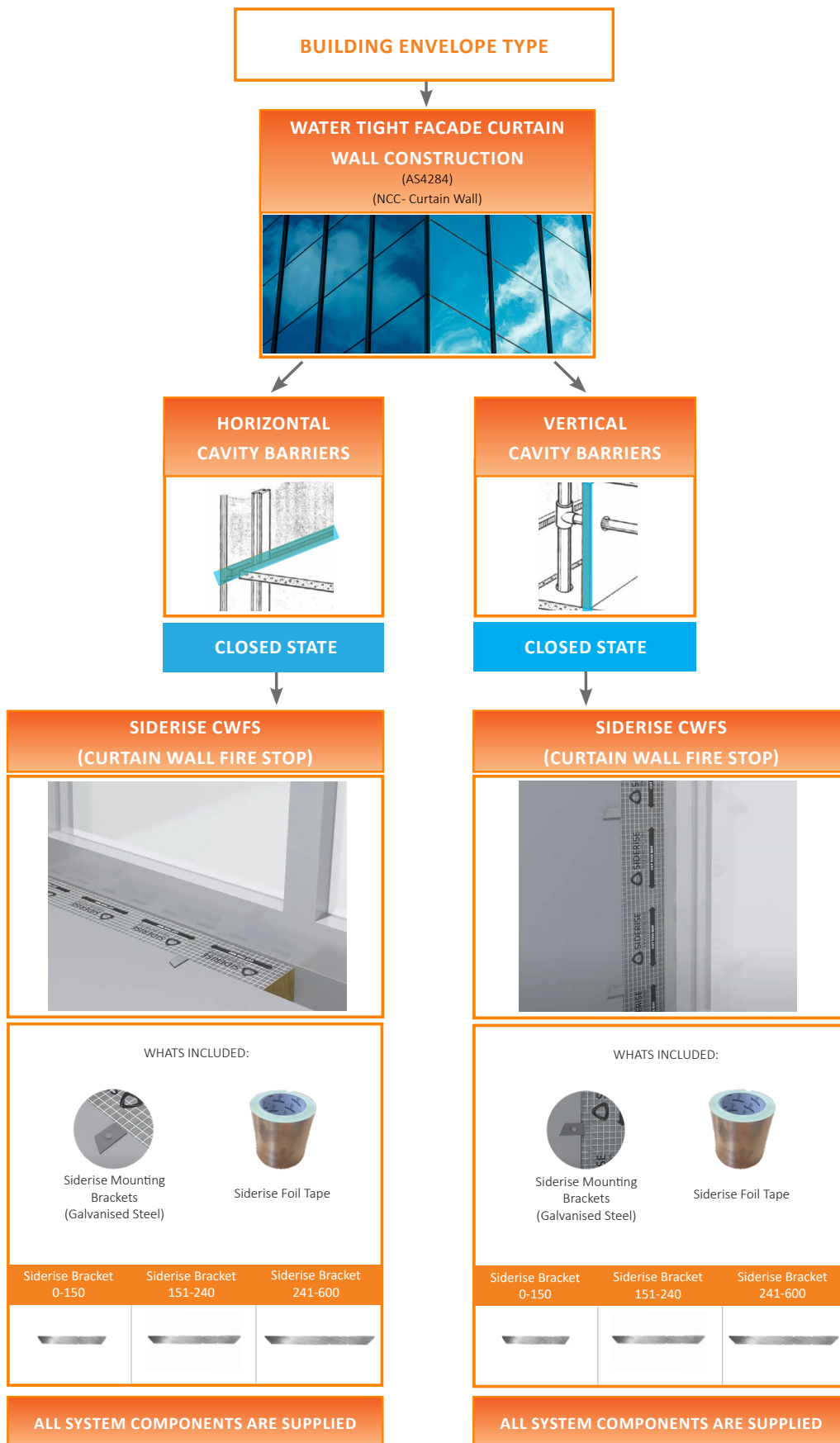


## Siderise® - RV

The Siderise RV cavity barrier stands for "Rainscreen Vertical" and is a closed state cavity barrier used to separate fire compartments vertically in a ventilated facade. As water and air will drain up or down the back of a rainscreen facade, the vertically run cavity barriers can be closed state, whereas the RH cannot. For more information please refer to the [RH and RV technical manual here](#).



# SYSTEM SELECTOR



# FIRE RESISTANCE LEVEL

## FIRE RATING – HOW IS FIRE PERFORMANCE MEASURED?

An FRL (fire resistance level) is a handy way of summarising the performance of a building element. It consists of 3 numbers, all given in minutes:

### FRL 120/120/120

(example)



#### Structural Adequacy

The ability of the building element to support the weight of adjacent building elements.

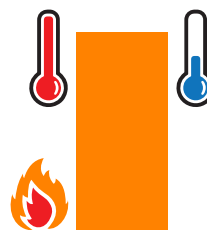
ie: a brick wall supporting a concrete floor slab above.



#### Integrity

The ability of an element to prevent the passage of flames and hot gasses.

ie: a plasterboard wall remaining intact and not allowing holes to form.



#### Insulation

The ability of an element to resist heat transfer from the exposed face to the unexposed face.

ie: a copper pipe remaining below a set temperature limit on the unexposed side of the wall penetration system.

**Note: Penetrations are not required to have a Structural Adequacy rating and is usually expressed as a dash. For example, a penetration through a 4 hour load bearing wall would be written as -/120/120.**

## INTEGRITY

Siderise® CWFS will achieve integrity performance of at least 2 hours (120 minutes) preventing the direct spread of fire.

## INSULATION (TEMPERATURE RISE)

Heat transfer via conduction (or heat rise) will occur through the conductive parts of any penetration system. The Siderise® CWFS system has been tested to AS1530.4-2014 and is able to keep the temperatures on the non-fire side under the insulation criteria of 180-degree temperature rise for a period of at least 2 hours (120 minutes).

# HORIZONTAL CAVITY BARRIERS

## CONCRETE SLAB EDGE

### SIDERISE® CWFS120

Meets NCC Clause C2.6a.  
 Fire Tested to AS15304, and also as a complete system  
 EN1364-4.



Installation Type	CWFS Specifications	FRL	Test Reference
Friction fit only for cavities less than 50mm. Larger cavities require brackets at 600mm centers (no continuous angle/ flashing required)	120 mm thick x width to suit cavity	-/120/120	438106/R

**Note: Brackets can be fully exposed to fire as fire tested**

**AS Certified Approvals**

Trafalgar Fire approval reports are available for download on [our website](#), however if you can't find what you are looking for please contact us at [technical@tgroup.com.au](mailto:technical@tgroup.com.au)

## CROSS LAMINATED TIMBER (CLT) SLABS

### SIDERISE® CWFS120



Meets NCC Clause C1.13.

Installation Type	CWFS Specifications	FRL	Test Reference
Friction Fit with brackets at 600mm centers. No continuous angle/ flashing required.	120 mm thick x width to suit cavity	-/60/60	438106/R



# VERTICAL CAVITY BARRIERS

## ALL WALL TYPES

## SIDERISE® CWFS120

Meets NCC Clause C2.6a.  
Fire Tested as a complete system to EN1364-4



Installation Type	CWFS Specifications	FRL	Test Reference
Friction fit only for cavities less than 50mm. Larger cavities require brackets at 600mm centers (no continuous angle/	120 mm thick x width to suit cavity	-/120/120	438106/R

**Note: Brackets can be fully exposed to fire as fire tested**

**AS Certified Approvals**

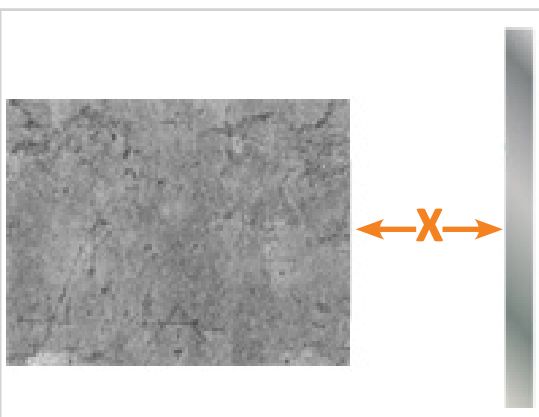
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# INSTALLATION AFTER CURTAIN WALL IS INSTALLED

## HORIZONTAL

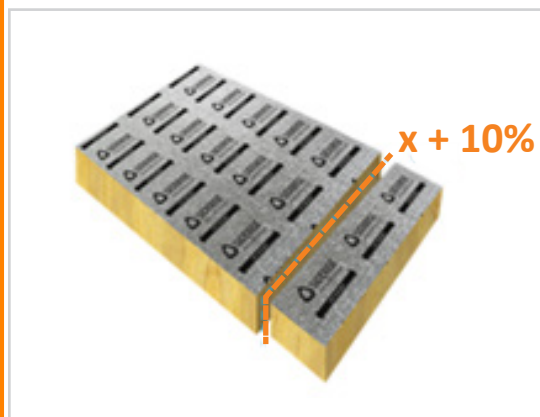


### MEASURE



Measure the cavity width(s) for horizontal cavities.

### CUT



Cut the sheets into strips, **allowing an additional 10% for compression fit and dry smoke seal.** For example, for a 100mm cavity, measure and cut out 110mm (10% compression).

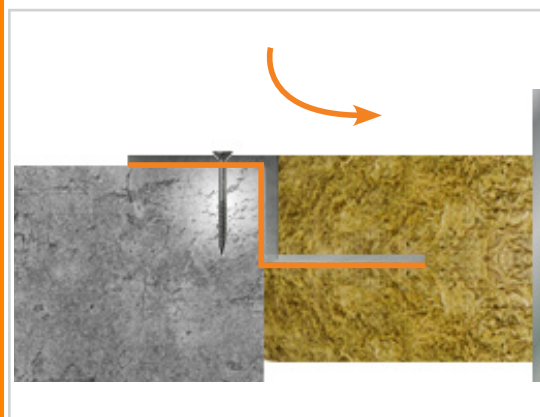
*The Siderise® CWFS system doesn't require any additional spray or cladding.*

### INSERT BRACKETS



Bend and insert the z-brackets into the side of the CWFS material, ensuring the top of the bracket is flush with the top of the material (in line with the foiled face). Brackets should be installed at 600 centres (300mm from each edge). **Brackets are not required for cavities less than 50mm.** Note: CWFS does not require a continuous and expensive angle or flashing.

### FIT Siderise® CWFS



Fit the CWFS Strip into the cavity, flush with the top of the slab. Drill fixing holes and fit the brackets into the slab using Min 8 x 50mm steel masonry anchor.

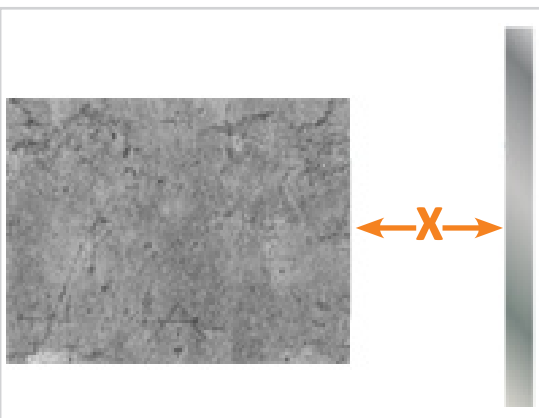
Tape all butt joints with Siderise® foil tape on the top side only.

## INSTALLATION BEFORE CURTAIN WALL IS INSTALLED

### HORIZONTAL

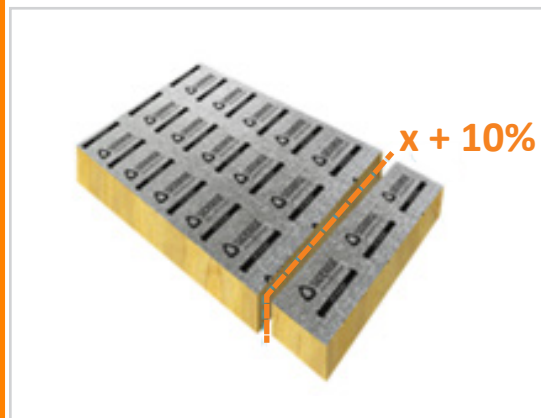


#### MEASURE



Measure the cavity width(s) for horizontal cavities.

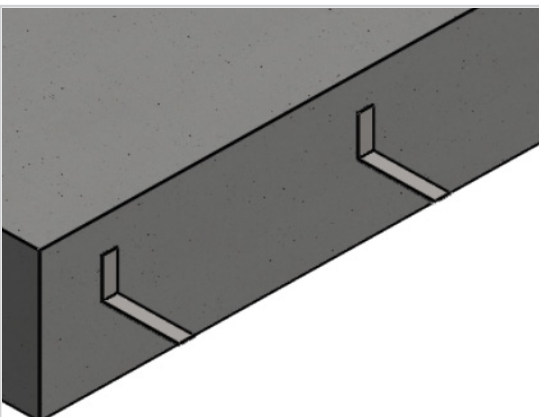
#### CUT



Cut the CWFS sheets into strips, **allowing an additional 10% for compression fit and dry smoke seal.**

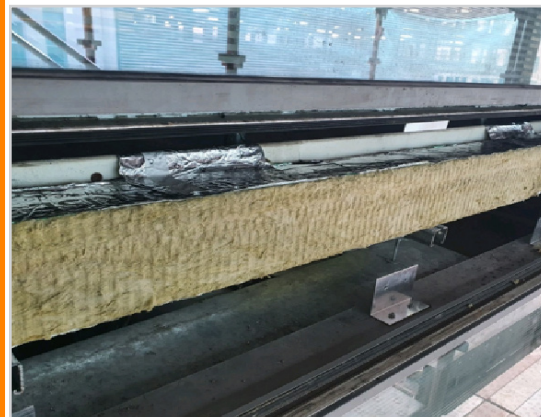
*The Siderise® CWFS system doesn't require any additional spray or cladding.*

#### FIX BRACKETS TO SLAB



The Siderise® brackets are to be bent into a Z shape as per page 8 instructions, or L shape to be fixed to the edge of the slab shown here. Brackets must be installed at maximum 600mm centers (300mm from each end). Drill fixing holes and fit the brackets into the slab using minimum 8 x 50mm steel masonry anchors.

#### FIT SIDERISE® CWFS



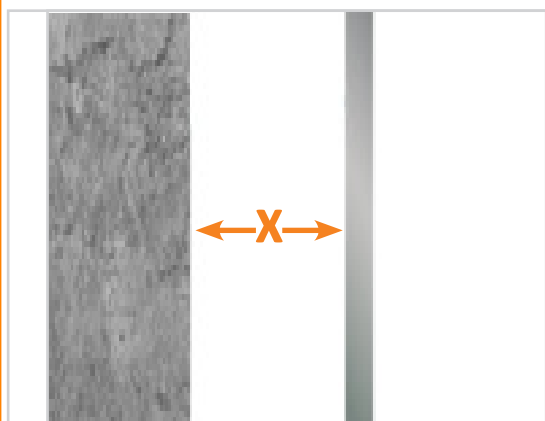
Using a short/sharp knife stab the center of the CWFS material to line up with the bracket locations, and impale the CWFS onto the brackets. Tape all butt joints with foil tape. The cladding/façade can now be installed, forming a compression fit and dry smoke seal without need for continuous metal flashings.

## INSTALLATION AFTER CURTAIN WALL IS INSTALLED

### VERTICAL

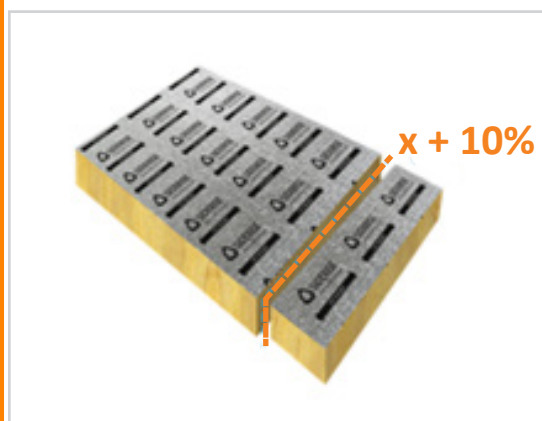


#### MEASURE



Measure the cavity width(s) for vertical cavities.

#### CUT



Cut the sheets into strips, **allowing an additional 10% for compression fit and dry smoke seal.** For example, for a 100mm cavity, measure and cut out 110mm (10% compression).

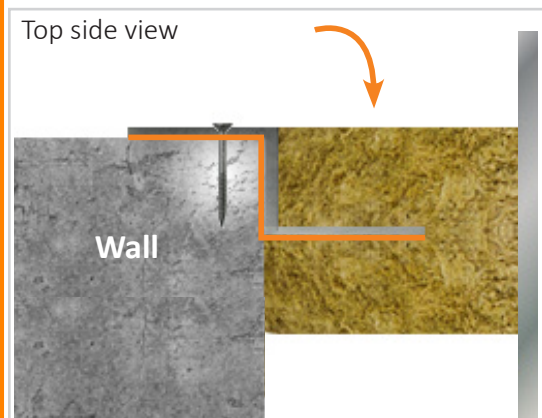
*The Siderise® CWFS system doesn't require any additional spray or cladding.*

#### INSERT BRACKETS



Bend and insert the z-brackets into the side of the CWFS material, ensuring the top of the bracket is flush with the top of the material (in line with the foiled face). Brackets should be installed at 600 centres. **Brackets are not required for cavities less than 50mm.** Note: CWFS does not require a continuous and expensive angle or flashing.

#### FIT Siderise® CWFS



Fit the CWFS Strip into the cavity, flush with the side of the wall. Drill fixing holes and fit the brackets into the slab using Min 7.5 x 50mm steel masonry anchor. Tape all butt joints with Siderise® foil tape.

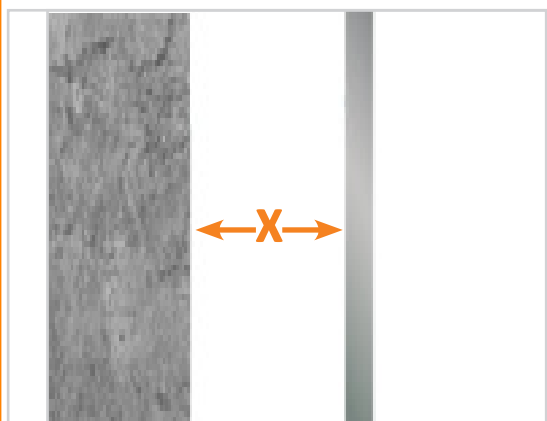


## INSTALLATION BEFORE CURTAIN WALL IS INSTALLED

### VERTICAL

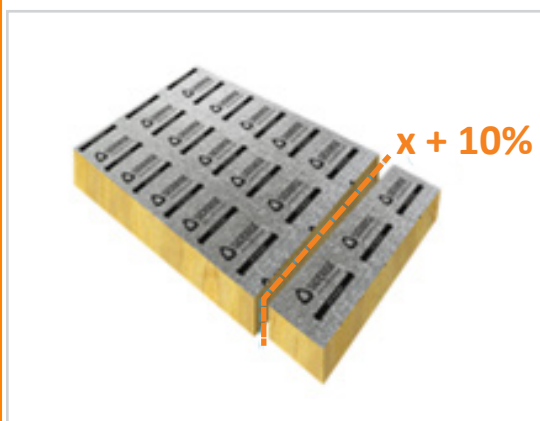


#### MEASURE



Measure the cavity width(s) for horizontal cavities.

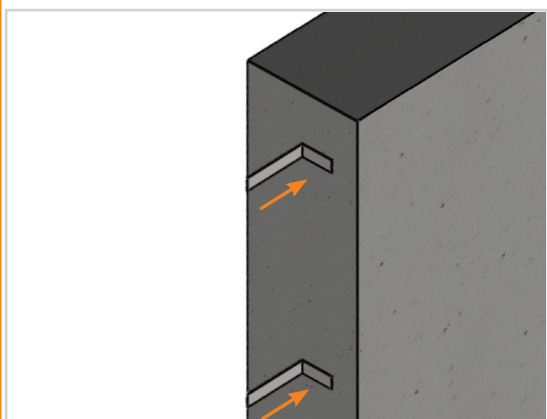
#### CUT



Cut the CWFS sheets into strips, **allowing an additional 10% for compression fit and dry smoke seal.**

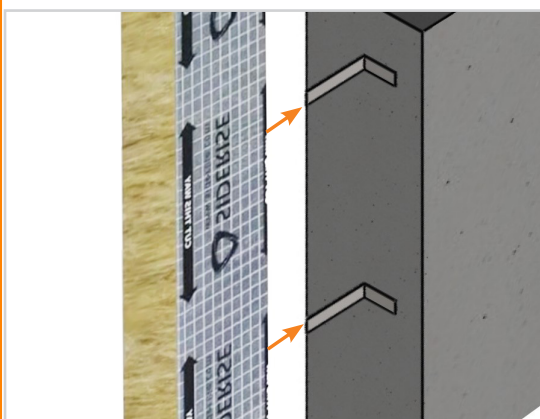
*The Siderise® CWFS system doesn't require any additional spray or cladding.*

#### FIX BRACKETS TO WALL



The Siderise® brackets are to be bent into a Z shape as per page 8 instructions, or L shape to be fixed to the edge of the wall shown here. Brackets must be installed at maximum 600mm centers (300mm from each end). Mechanically fix the brackets onto the wall with 8

#### FIT SIDERISE® CWFS



Using a short/sharp knife stab the center of the CWFS material to line up with the bracket locations, and impale the CWFS onto the brackets. Tape all butt joints with foil tape. The cladding/façade can now be installed, forming a compression fit and dry smoke seal without need for continuous metal flashings.

## SIDERISE® CWFB

Siderise CW-FB Curtain Wall Fireboard is a high density stonewool board specifically engineered to provide high levels of structural fire protection.

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.

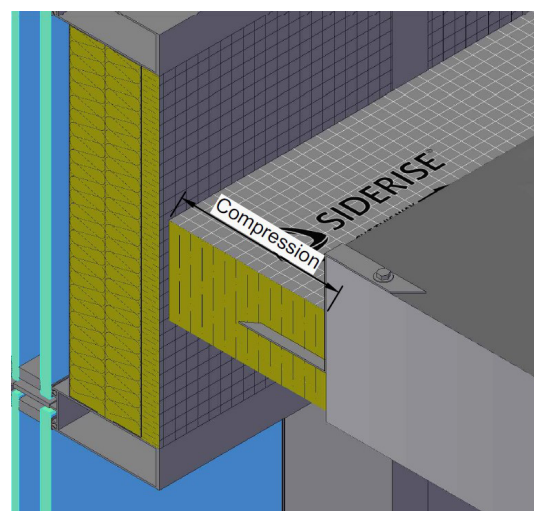
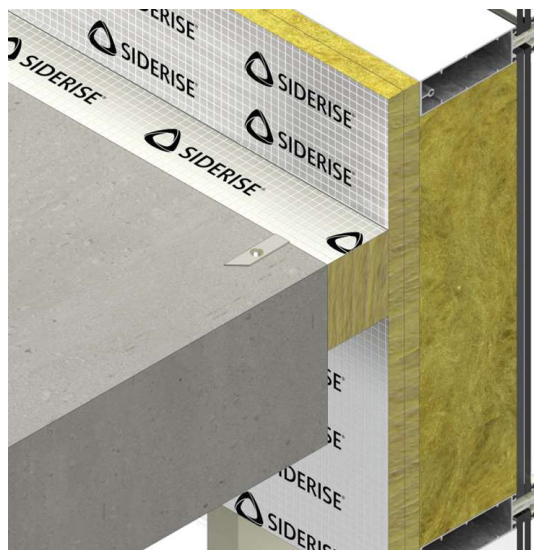
CW-FB and CW-FS (perimeter barrier and fire stop systems), have been jointly tested in conjunction with non-fire rated aluminium curtain wall assemblies to provide market-leading fire resistance performance for the critical spandrel zone.

Siderise CW-FB Curtain Wall Fireboard is a high-density stonewool board specifically engineered to provide high levels of structural fire protection.

Siderise CW-FS Perimeter Barrier comprises a one-piece product with a pre-compressed non-combustible stonewool core and integral aluminium foil facings. In combination, the products can be used in curtain wall façade assemblies requiring enhanced fire resistance performance. The product combination provides the following advantages:

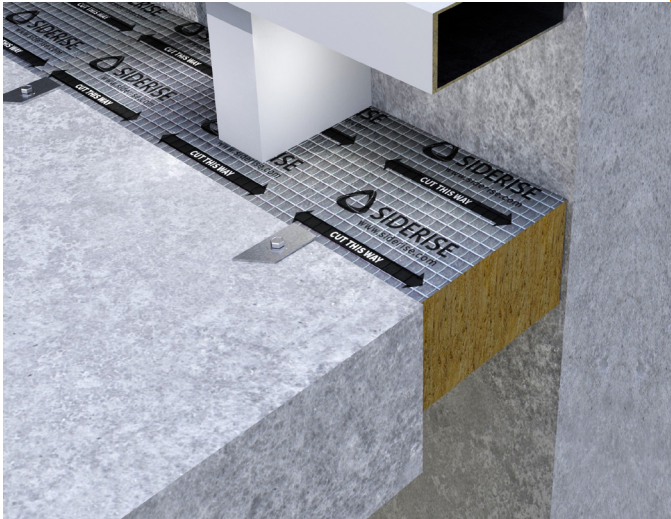
- Protection of mullions and transoms
- Maximises the stability and integrity of framing elements and spandrel construction
- Approved design that extends the rating of the compartment floor to the exterior wall
- Fully tested to EN 1364-4:2014 and certified up to EI 180
- Market-leading performance

CW-FB has been tested in both single and double-layer arrangements as part of EN 1364-4 testing



**For Siderise® CWFB Installation Instructions, click here!**

# SYSTEM COMPONENTS



Item Number	Description	Pallet QTY
SIDERISE-CWFS-120	Siderise® Curtain Wall FireStop (CWFS) full board to be cut down on site- 1200 length x 1150 width x 120mm thickness	20
SIDERISE-CWFS-90	Siderise® Curtain Wall FireStop (CWFS) full board to be cut down on site- 1200 length x 1150 width x 90mm thickness	20
SIDERISE-BRACKET-0-150-CWFS	Siderise® CWFS/RV metal bracket to suit openings 0-150mm	500
SIDERISE-BRACKET-151-240-CWFS	Siderise® CWFS/RV metal bracket to suit openings 151-240mm	500
SIDERISE-BRACKET-241-600-CWFS	Siderise® CWFS/RV metal bracket to suit openings 241-600mm	500
SIDERISE-TAPE-120	Siderise® Class O Foil tape 120mm wide x 45mm roll	8

Siderise-CWFS-120	Siderise-Bracket_0-150-CWFS	Siderise-Bracket-151-240-CWFS	Siderise-Bracket-241-600-CWFS	Siderise-Tape-120	Siderise Spandrel Board (Glass Only)
					

## COLLATERAL LINKS

MSDS	
Siderise CWFS MSDS	<a href="https://tfire.com.au/documents/SIDERISE_MSDS">https://tfire.com.au/documents/SIDERISE_MSDS</a>
Videos	
EN1364-4 fire test glazed curtain wall video	<a href="https://www.youtube.com/watch?v=rK3YeSVOHuk">https://www.youtube.com/watch?v=rK3YeSVOHuk</a>
Siderise Installation Guidance: CW-FS Perimeter barriers & firestops (2019)	<a href="https://www.youtube.com/watch?v=q1ywDxIhN7w">https://www.youtube.com/watch?v=q1ywDxIhN7w</a>
How to install Siderise	<a href="https://www.youtube.com/watch?v=cd5RJocNQh8">https://www.youtube.com/watch?v=cd5RJocNQh8</a>
Fire Test Reports	
AS1530.1 Fire test report	<a href="https://tfire.com.au/documents/as530.1-test-report">https://tfire.com.au/documents/as530.1-test-report</a>
AS1530.3 Fire test report	<a href="https://tfire.com.au/documents/Siderise-CWFS-Cavity-Barrier-Reaction-to-Fire-Test-Report">https://tfire.com.au/documents/Siderise-CWFS-Cavity-Barrier-Reaction-to-Fire-Test-Report</a>
AS1530.4- 2014 Fire test report slab edge	<a href="https://tfire.com.au/documents/Siderise-CWFS-RV-Cavity-Barrier-AS1530.4-Test-Report">https://tfire.com.au/documents/Siderise-CWFS-RV-Cavity-Barrier-AS1530.4-Test-Report</a>
AS1530.4- 2014 fire test for CLT construction	<a href="https://tfire.com.au/documents/siderise-CLT">https://tfire.com.au/documents/siderise-CLT</a>
Installation Instructions	
Siderise CWFS Installation PDF Files	<a href="https://tfire.com.au/product/siderise-cwfs/?attachment_id=15650&amp;download_file=5wkmfifu5ge6t&amp;customize_changeset_uuid=43970bfa-f9ed-4694-a983-ef2fa394da47">https://tfire.com.au/product/siderise-cwfs/?attachment_id=15650&amp;download_file=5wkmfifu5ge6t&amp;customize_changeset_uuid=43970bfa-f9ed-4694-a983-ef2fa394da47</a>
Siderise CWFB Installation PDF File	<a href="#">(link will be included once pdf file can be put live)</a>
Certifications	
Independent and ongoing third party certification	<a href="https://www.siderise.com/App_Data/product-approvals/CF563%20Siderise%20Insulation%20v2%20-%20430602.pdf">https://www.siderise.com/App_Data/product-approvals/CF563%20Siderise%20Insulation%20v2%20-%20430602.pdf</a>
App	
Download the Siderise Inspection and Certification App	<a href="https://www.siderise.com/services/inspection-app">https://www.siderise.com/services/inspection-app</a>



## FAQ

**Q Are your cavity barriers tested locally to Australian standards?**

**A** Yes, the CWFS has testing to AS 1530.1, AS1530.3 and AS1530.4.

**Q What size are your cavity barriers?**

**A** The CWFS is 120mm thick and comes in sheets of 1200 x 1150mm, but can be pre-cut to the width that is required on site.

**Q Do I need continuous metal flashing to achieve the smoke seal?**

**A** No, the tight compressive fit and foiled faces of the CWFS negate the need to apply and additional sealant or flashing for smoke seals.

**Q Why can't I use any stone-wool insulation to fill the cavity?**

**A** Unlike ordinary stone-wool products, the CWFS has undergone strenuous movement and fire testing to ensure it will stand the test of time against building movement, and still perform as intended in the event of a fire.

**Q Can you help mark up my slab-edge drawing?**

**A** Yes, send any relevant details to [technical@tgroup.com.au](mailto:technical@tgroup.com.au)

**Q Do they have to go underneath the sarking?**

**A** No, the CWFS with externally of the sarking.

**Q How is CWFS installed?**

**A** Simple mounting brackets at 600mm centres.

**Q Can the brackets be exposed?**

**A** Yes, the brackets can be fully exposed to fire as this is how it was in the fire test.

## SOCIAL MEDIA

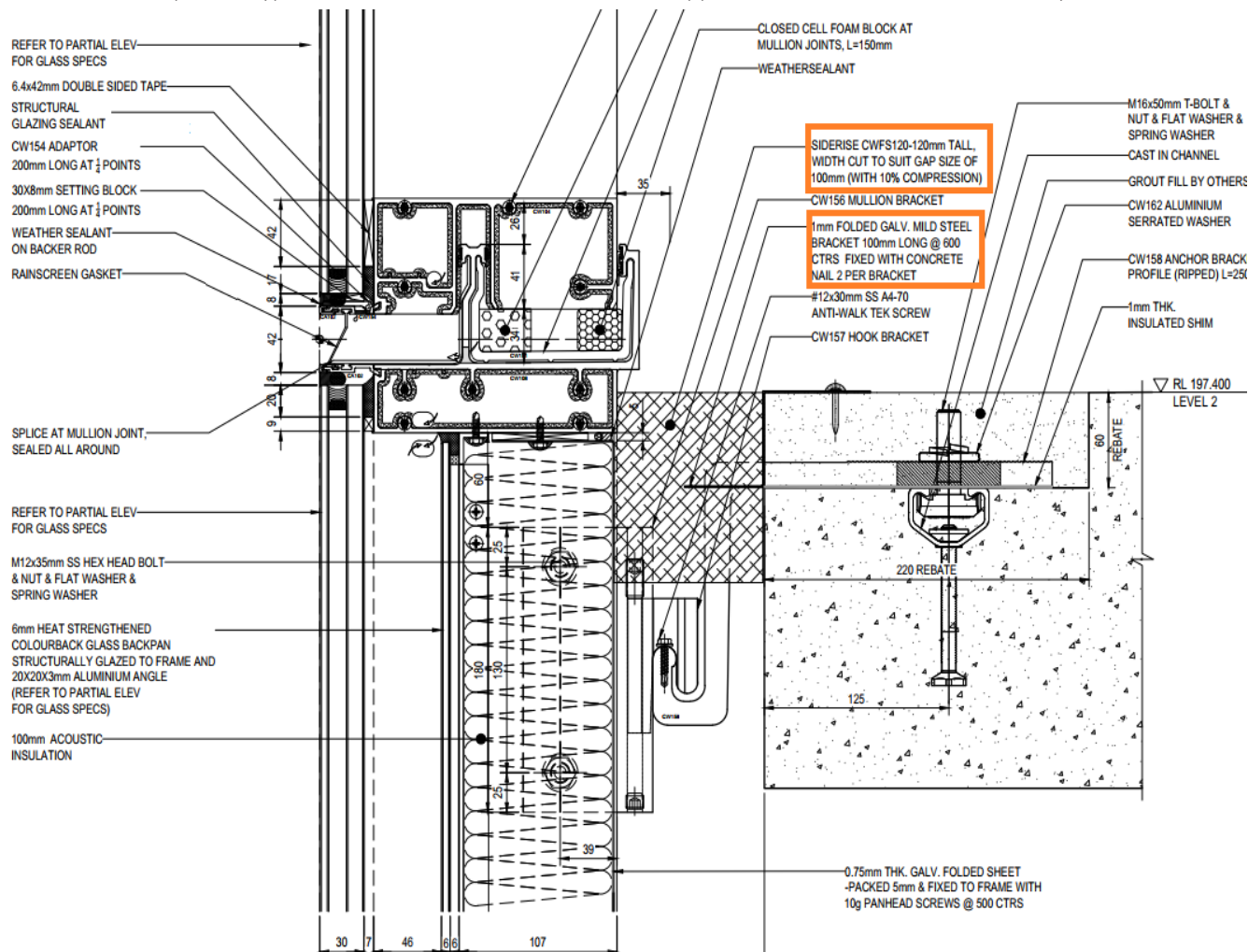


**Linked in**

**YouTube**

# ARCHITECTURAL DRAWINGS

Below is an example of a typical architectural detail for a horizontal application of the Siderise CWFS-120 system.



## SOCIAL MEDIA



Linked in

YouTube