





SIDERISE®

Curtain Wall Cavity Barriers for Non-Glazed Walls

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

For use with AS4284 Watertight Non-glazed 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 -

APPLICATIONS

- For use with AS4284 Non-Glazed Watertight Curtain Walls, providing a fire, smoke and acoustic seal
- Horizontal cavities
- Vertical cavities
- Slab edge
- Perimeter Wall

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 AS4284 Watreproof 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



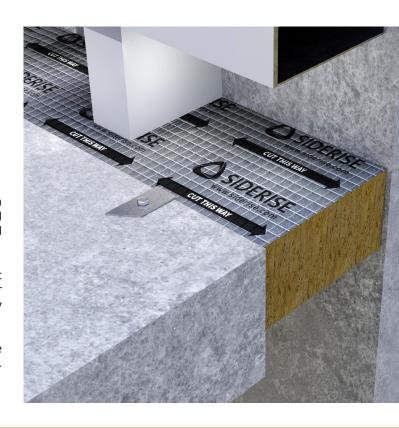
APPLICATIONS

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 waterproof 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/m³
	Thermal Conductivity	$\lambda_{10} = 0.038 \text{ W/m.K}$ (tested foil to foil)
	Cavities	20mm to 600mm
	Non-Combustibility	Confirmed via AS 1530.1
	Reaction to fire	AS1530 part 3. Rated with 0 ingnitability 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







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® - RV

Vertical Cavity Barrier (Closed State - Friction Fit)



Siderise® - RH - OSCB

Horizontal Cavity Barrier incorporating intumescent technology for rainscreen cladding also known as Open State Cavity Barrier (OSCB). These allow for ventilation and drainage.



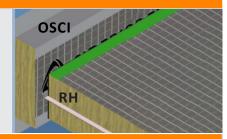
Siderise®- CWFS

Curtain Wall Fire Stop- often called slab edge fire stop or fire safing. these are used for waterproof facades only complying with AS4284.



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



Rainscreen Cladding

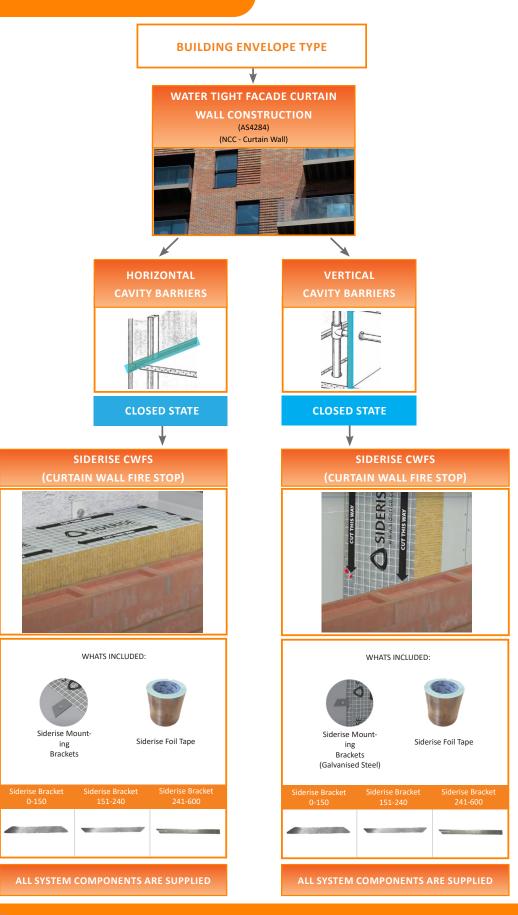
A rainscreen is an exterior wall detail where the siding (wall cladding) stands off from the moisture-resistant surface of an air/water barrier applied to the sheathing to create a capillary and to allow drainage and evaporation. The rainscreen is the cladding or siding itself but the term rainscreen implies a system of building.







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



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 SLABS

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 (with brackets at 600mm centers. No continuous angle/flashing required)	120 mm thick	-/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 <u>our website</u>, however if you can't find what you are looking for please contact us at technical@tgroup.com.au

CROSS LAMINATED TIMBER (CLT) SLABS

SIDERISE® CWFS120 CAVITY BARRIER SPECIFICATIONS



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	-/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 (with brackets at 600mm centers. No continuous angle/flashing required)	120 mm thick	-/120/120	438106/R

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

AS Certified Approvals

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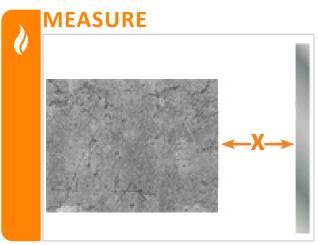




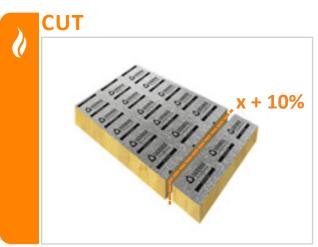
INSTALLATION AFTER CURTAIN WALL IS INSTALLED

HORIZONTAL





Measure the cavity width(s) for horizontal cavities.



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.

Bracket maximum 75% of cavity width

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 top of the slab. 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.

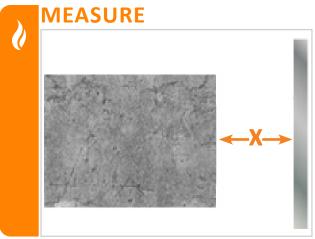




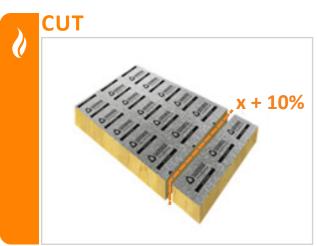
INSTALLATION BEFORE CURTAIN WALL IS INSTALLED

HORIZONTAL





Measure the cavity width(s) for horizontal cavities.



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. Drill fixing holes and fit the brackets into the slab using minimum 7.5 x 50mm steel masonry anchors.



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.

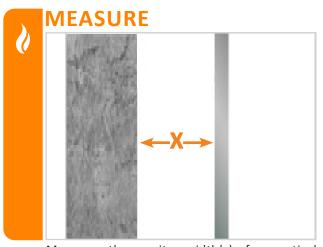




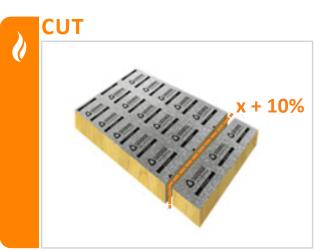
INSTALLATION AFTER CURTAIN WALL IS INSTALLED

VERTICAL





Measure the cavity width(s) for vertical cavities.



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.

Bracket maximum 75% of cavity width

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 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.

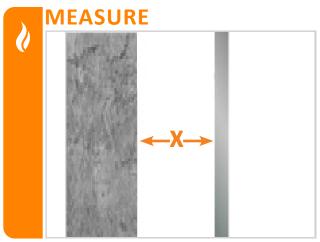




INSTALLATION BEFORE CURTAIN WALL IS INSTALLED

VERTICAL





Measure the cavity width(s) for horizontal cavities.

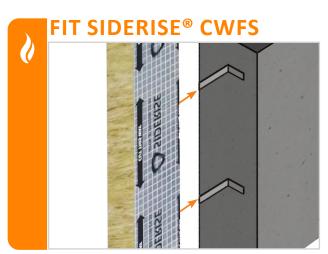


Cut the CWFS sheets into strips, allowing an additional 10% for compression fit and dry smoke seal.

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. Mechanically fix the brckets onto the wall.

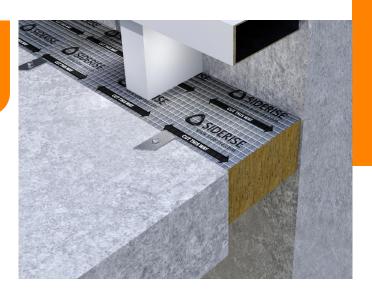


Using a short/sharp knife stab the center of the CWFS material to line up with the bracket locations, and impale the CWFS onto the brackets. Tape all butt joints with foil tape. The cladding/façade can now be installed, forming a compression fit and dry smoke seal without need for continuous metal flashings.





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-Brack- et_0-150-CWFS	Siderise-Brack- et-151-240-CWFS	Siderise-Brack- et-241-600-CWFS	Siderise-Tape-120	Siderise Spandrel Board (Glass Only)
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COLLATERAL LINKS

MSDS	
Siderise CWFS MSDS	https://tfire.com.au/documents/SIDERISE_MSDS
Videos	
EN1364-4 fire test glazed curtain wall video	https://www.youtube.com/watch?v=rK3YeSVOHuk
Siderise Installation Guidance: CW-FS Perimeter barriers & firestops (2019)	https://www.youtube.com/watch?v=q1ywDxlhN7w
How to install Siderise	https://www.youtube.com/watch?v=cd5RJocNQh8
Fire Test Reports	
AS1530.1 Fire test report	https://tfire.com.au/documents/as530.1-test-report
AS1530.3 Fire test report	https://tfire.com.au/documents/Siderise-CWFS-Cavi- ty-Barrier-Reaction-to-Fire-Test-Report
AS1530.4- 2014 Fire test report slab edge	https://tfire.com.au/documents/Siderise-CWFS-RV-Cav- ity-Barrier-AS1530.4-Test-Report
AS1530.4- 2014 fire test for CLT construction	https://tfire.com.au/documents/siderise-CLT
Installation Instructions	
Installation PDF Files	https://tfire.com.au/product/siderise-cwfs/?attach- ment_id=15650&download_file=5wkmfifu5ge6t&cus- tomize_changeset_uuid=43970bfa-f9ed-4694-a983- ef2fa394da47
Certifications	
Independent and ongoing third party certification	https://www.siderise.com/App_Data/product-approvals/CF563%20Siderise%20Insulation%20v2%20-%20430602.pdf
App	
Download the Siderise Inspection and Certification App	https://www.siderise.com/services/inspection-app







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

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





