



SIDERISE CW range: Perimeter barriers & fire stops for curtain walling

Market leading solutions that meet fire and smoke stop, and sound barrier requirements in all architectural cladding panel applications.

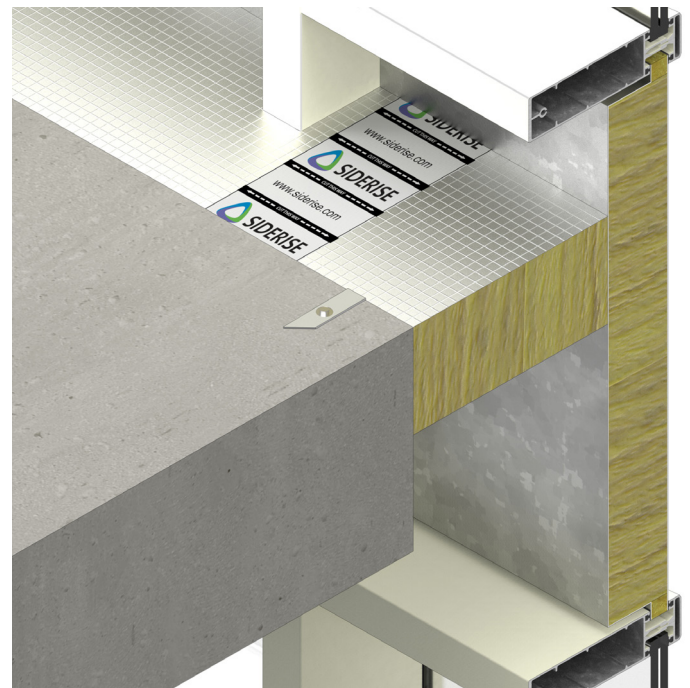
Application

Certifire approved **SIDERISE CW-FS perimeter barrier and fire stop systems** offer an extensive range of solutions for fire stop, smoke stop and sound barrier requirements in all architectural cladding panel applications.

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

The primary function of the CW system is to maintain continuity of fire resistance by sealing the void between the compartment floors or walls and the external curtain wall both horizontally and vertically.

No. 1 in the UK for 25 years.
Approved & fully compliant.
Available in the UAE for 4 years.



Benefits

- Market leading fire resistance and smoke seal
- Suitable for horizontal and vertical application
- Unique construction provides unrivalled movement performance
- Fully qualified acoustic performance
- Simplest and quickest to install
- Cheapest total installed cost

Product description

SIDERISE perimeter barriers and fire stops for curtain walling use a patented method of manufacture that provides a resilient lateral compression. This facilitates installation, ensures the requisite tight fit and enhances fire integrity.

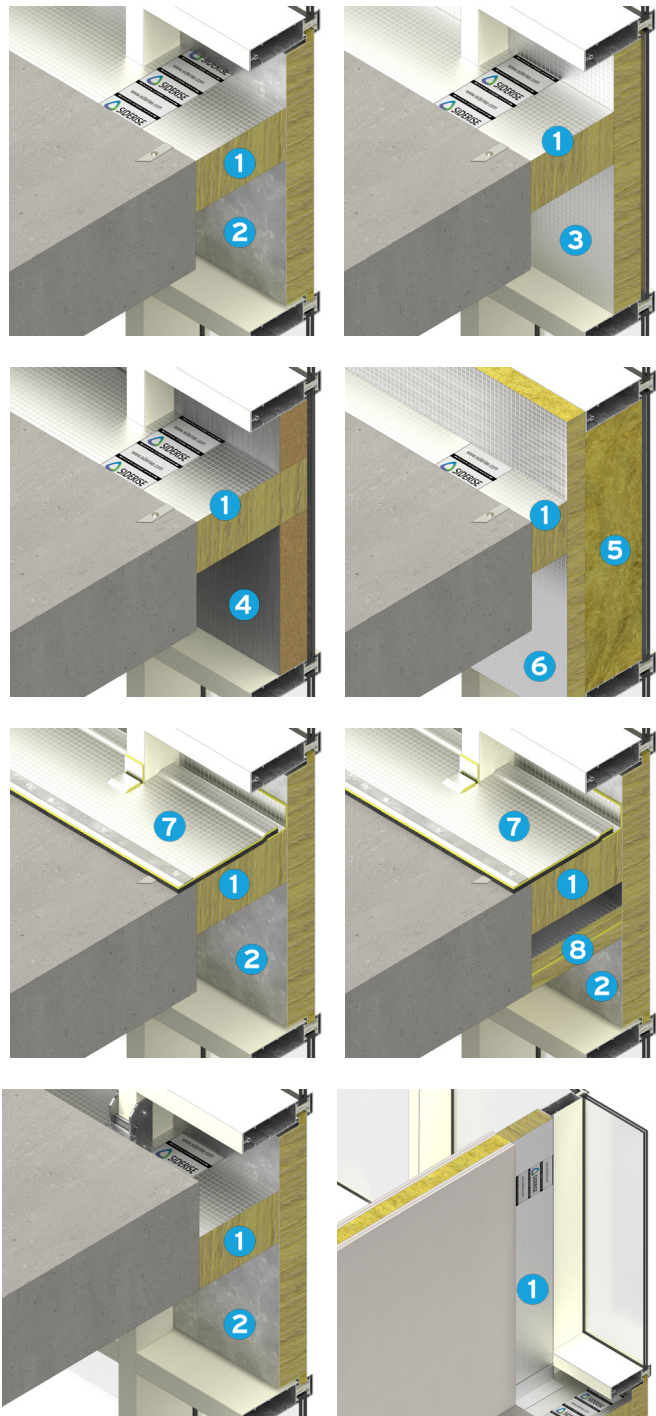
Throughout the range, the materials comprise a one-piece product with a pre-compressed non-combustible

stonewool core. The products also have integral aluminium foil facings to provide an overall Class A1 rating and excellent resistance to smoke.

SIDERISE CW-FS perimeter barrier and fire stop systems also offer an unrivalled combination of independent third party Certifire approval performance data for both horizontal and vertical applications, Certificate No CF563

The systems can offer tested fire rating options ranging from 30mins to 5 hours and can accommodate void widths up to 1200mm. For voids in excess of 400mm contact our Facades technical team for advice.

In addition to providing an effective seal against the passage of smoke and fire the products will also function as an effective acoustic barrier and plenum lining.



- 1 SIDERISE Cavity Barrier (CW-CB) or SIDERISE Fire stop (CW-FS)
- 2 Metal spandrel with SIDERISE Nexus Lamella Board Core
- 3 SIDERISE NXS Firesafe Glass Spandrel Insulation
- 4 Insulation other than Class A1
- 5 SIDERISE Nexus Lamella Board Core or SIDERISE NXS
- 6 SIDERISE CW-FB Curtain Wall Fireboard
- 7 SIDERISE Acoustic Barrier Overlay
- 8 SIDERISE Acoustic Void Barrier

Standard systems

The materials can be either supplied as pre-cut units to suit a quoted void size or in sheet form for cutting on site.

Standard sheet products are supplied 1200 x1200 mm which may prove beneficial when the actual void size is not known or where it varies significantly. (Please note that when ordered in sheet form, the requisite quantity of fixing brackets needs to be purchased separately.)

Pre-cut products are available in 1mm increments of width so as to provide a tight compressive fit within the void. Each pre-cut CW unit is supplied with fixing brackets to locate the material into position. The standard fixing brackets are supplied in 1mm galvanised mild steel in flat form that is complete with a prenotched facility for folding on site.

All holes are to be drilled to suit the varying site conditions. Different size brackets are available according to the cavity size - see Table 1.

Fire performance

Certifire approved **SIDERISE CW-FS perimeter barrier and fire stop systems** have been tested and assessed on proven fire performance to BS 476 :Part 20, and tested to EN 1364-4, with third party approval via Certifire certificate No. CF563.

SIDERISE perimeter barriers and fire stops provide continuity of fire resistance across the void when aligned with fire rated elements so as to maintain compartmentation.

The correct system is simply selected by matching the fire resistance requirements to the CW system type and void size.

Table 1 summarises the nominal fire rating for horizontal and vertical applications together with confirmation of void size limitation and standard dimensions.

Table 1

Horizontal and vertical application: Fire ratings, void size and bracket types

Product Type	Barrier Size	Fire Performance	Void height limitation & bracket requirements				
	Thickness (mm)	Insulation & Integrity (mins)	50 - 150 (mins)	151 - 240 (mm)	241 - 400 (mm)	401 - 600 (mm)	601 - 1200 (mm)
CW-CB30	75	30	2 no B65/110	2 no B195	2 no B335	N/A	N/A
CW-FS60	90	60	2 no B65/110	2 no B195	2 no B335	N/A	N/A
CW-FS60-X	120	60	N/A	N/A	N/A	4 no B355	N/A
CW-FS60-SB	120	60	N/A	N/A	N/A	N/A	3 no B900
CW-FS120	120	120	2 no B65/110	2 no B195	2 no B355	N/A	N/A
CW-FSH20-X	175	120	N/A	N/A	N/A	4 no B355	N/A
CW-FS120SB	175	120	N/A	N/A	N/A	N/A	3 no B900
CW-FSH300	175	300	2 no B65/110	2 no B195	2 no B355	N/A	N/A

NOTE:*CW-FS300 system is provided with 75mm rebated joints as standard. Certifire approval No CF563.

Certifire Certificate No. 563

SIDERISE CW AND FIRE STOPS - BS 476: PART 20

This Certificate of Approval relates to the fire resistance of SIDERISE CW and firestops when used in the applications below.

The approval uses the Integrity and Insulation criteria defined in BS 476: Part 20 subject to any undermentioned conditions.

SIDERISE CW-FS FIRE STOPS - BS EN 1364 PART 4

This Certificate of Approval relates to the fire resistance of SIDERISE CW-FS; firestops when used in the application below.

The approval uses the Integrity and Insulation criteria defined in BS EN 1364 Part 4 subject to any undermentioned conditions.

The products are approved on the basis of:

- Initial type testing.
- A design appraisal against TS39.
- Certification of quality management system to ISO 9001: 2008 .
- Inspection and surveillance of factory production control
- Audit testing.

This Certificate of Approval must be read in conjunction with CERTIFIRE Technical Schedule TS39, Fire Resisting Cavity Barriers.

Application	Certifire reference page
Between concrete floor slabs and concrete cladding	4 - 5
Between concrete/masonry walls and concrete cladding	6 - 7
Between concrete floor slabs and external facade assemblies	8 - 12
Between concrete/masonry walls and external facade assemblies	13 - 14
Between concrete floor slabs and concrete/masonry walls	15 - 16

Application	Certifire reference page
Between concrete floor slabs and external facade assemblies	22 - 24

Certifire Certification No. 563

CERTIFICATE NO CF 563 - SIDERISE INSULATION LIMITED

SIDERISE CW Cavity Barriers and Fire Stops

Extract information - please refer to full certificate

Installation and fixing

The products are supplied either pre-cut or in sheet form to allow site cutting. Care shall be taken to ensure that the required over sizing of the cavity barriers and firestops given in the tables is strictly observed.

Unless otherwise indicated the seals shall be correctly supported by steel brackets supplied by the manufacturer in compliance with the required bracket type and frequency detailed in the tables. Brackets shall be pushed into the seal such that it is impaled at mid-thickness, with one leg extending to nominally 75% of the gap width. The other leg of each bracket is returned onto the top face of a concrete floor or onto one face of a wall. For gap widths up to 400 mm between a floor and wall assembly the bracket sits on the concrete floor but is not required to be fastened to it. For all the other situations each bracket is fastened to the wall or floor with an all-steel expanding anchor.

Jointing

The joints between the lengths of slab (with the exception of FS300) shall be straight butt joints and shall be fitted in slight compression so that they are tight. RFT20/45 self-adhesive reinforced aluminium foil tape shall be applied over the joints.

All FS300 applications requiring greater than 120 minute performances shall be provided with a rebated lap joint at mid-depth having an overlap of 75 mm.

Gap Stability

The gap stability is a fundamental requirement in order to achieve fire compartmentation when utilising these products and it should be noted that the fire stops will only function to the specified rating providing the gap stability does not deviate greater than the specified compression tolerances stated in the tables. Appropriate external facade support systems should be designed and installed to limit this potential movement at the elevated temperatures of a fire and, should the gap increase beyond these tolerances and or fail completely in the event of a fire, then the fire stop will cease to function.

The approval relates to on going production. Products and/or their immediate packaging are identified with the manufacturer's name, the product name or number, the CERTIFIRE name or name and mark, together with the CERTIFIRE certificate number (i.e. No. CF 563) and application where appropriate.

Further Information

Further information regarding the details contained in this certificate may be obtained from Siderise Insulation Limited (Tel: 01656 730833).

Further information regarding CERTIFIRE certification and other approved products can be obtained from CERTIFIRE (Tel: 01925 646777) .

Signed:



- Issued: 25th February 2008
- Revised: 19th February 2013
- Valid to: 18th February 2018



Table 2

SIDERISE CW Cavity Barriers and Fire Stops - BS 476: Part 20 - Floor slab to external facade assembly applications

Gap Width (mm)	Product	Seal Width x Thickness (mm)	Performance to BS 476: Part 20		Cover Length (mm)	Bracket Requirement
			Integrity (mins)	Insulation (mm)		
20 to 50	CW-CB30	Gap + 10 x 75	30	30	1200	No brackets required
	CW-FS60	Gap + 10 x 90	60	60	1200	
	CW-FS120	Gap + 10 x 120	120	120	1200	
	CW-FS300	Gap + 10 x 175	300	300	1125	
51 to 100	CW-CB30	Gap + 15 x 75	30	30	1200	2No. Standard brackets* per length at 600mm nominal centres
	CW-FS60	Gap + 15 x 90	60	Ei0	1200	
	CW-FS120	Gap + 15 x 120	120	120	1200	
	CW-FS300	Gap + 15 x 175	300	300	1125	
101 to 400	CW-CB30	Gap + 20 x 75	30	30	1200	
	CW-FSSO	Gap + 20 x 90	60	60	1200	
	CW-FS120	Gap + 20 x 120	120	120	1200	
	CW-FS300	Gap + 20 x 175	300	300	1125	
401 to 600	CW-FS60-X	Gap + 25 x 120	60	60	1200	4No. Standard brackets* per length at 300 mm centres
	CW-FS120-X	Gap + 25 x 175	120	120	1125	
601 to 1200	CW-FS60-SB	Gap + 40 x 120	60	60	1200	3No. Structural brackets* per length at 400 mm centres
	CW-FS120-SB	Gap + 40 x 175	120	120	11-25	

Table 3

SIDERISE 'CW-FS' Firestops BS EN 1364-4* - Floor slab to external facade assembly applications

Gap Width (mm)	Product	Seal Width x Thickness (mm)	Performance to BS EN 1364-4		Cover Length (mm)	Bracket Requirement
			Integrity (mins)	Insulation (mm)		
20 to 50	CW-FS120	Gap + 10 x 120	120	120	1200	No brackets required
	CW-FS180	Gap + 10 x 150	210	210	1200	
51 to 100	CW-FS120	Gap + 10 x 120	120	120	1200	2No. Standard 865/110 brackets per length at 600mm nominal centres
	CW-FS180	Gap + 10 x 150	210	210	1200	
151 to 250	CW-FS120	Gap + 10 x 120	120	120	1200	2No. Standard 8195 brackets per length at 600mm nominal centres
	CW-FS180	Gap + 10 x 150	210	210	1200	

NOTE: * in Compliance with ETAG 026 GUIDELINE FOR EUROPEAN TECHNICAL APPROVAL of Firestopping and Fire Sealing Products Part 3 Linear Joint and Gap Seals - Annex D.

Acoustic performance

The CW-FS range additionally provides an effective sound barrier as the material construction and inherent properties of the mineral fibre core afford the CW exceptional acoustic performance.

Also, the foil facings and the additional sealing of joints with foil tape all serve to provide improved air tightness.

Sound reduction between floors

The installation of the CW systems within an external curtain wall cavity will significantly increase the floor-to-floor attenuation.

As an example, the installation of 120mm thick CW-FS120 within the cavity will increase the transmission loss via the tortuous sound path by approximately 25dB.

The precise value will depend upon the specifics of the construction.

Table 2 confirms values for Weighted Sound Reduction Index (Rw) based on laboratory tests to determine airborne sound transmission in accordance with BS EN ISO 140-3 : 1995, BS 2750 Pt 3 :1995.

Table 4

CW acoustic performance

Weighted Sound Reduction Index		
Product Type	Thickness (mm)	Rw (dB)
CW-FS30	75	21
CW-FS60	90	22
CW-FS120	120	25
CW-FS300	175	27

ENHANCED ACOUSTIC PERFORMANCE AB ACOUSTIC BARRIERS

SIDERISE offer a range of complementary acoustic mass overlay materials which can further enhance the overall acoustic performance of the construction.

AB barriers are extremely quick and easy to install and are suitable for improving sound performance within all curtain walling environments.

The AB acoustic barriers are factory produced multi-layer composite materials consisting of a Class 0 foil faced polymeric layer bonded to a flexible acoustic foam. The products are available in two grades depending on the acoustic performance requirement, namely AB5 and AB10 whenever façade deflection is anticipated.

Table 5

AB acoustic performance

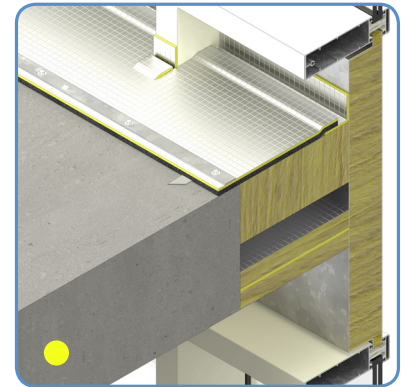
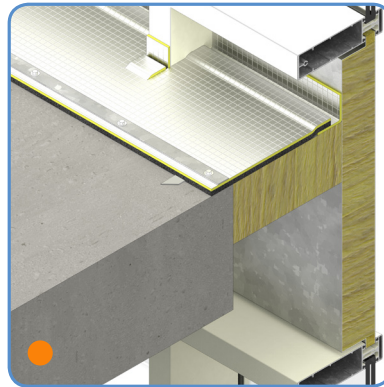
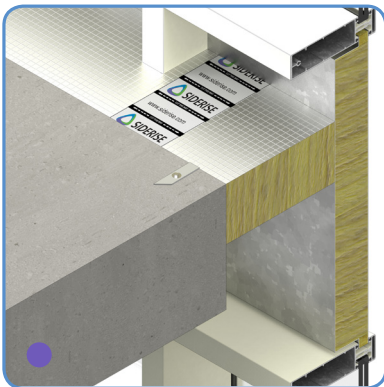
Weighted Sound Reduction Index		
Product Type	Surface mass (mm)	Rw (dB)
AB5	5 kg/m ²	25
AB10	10 kg/m ²	28

Table 6

The table below illustrates typical CW and AB acoustic performance of a range of different curtain wall fire stopping products, including products manufactured by SIDERISE.

Product	21 - 30dB Rw		31 - 35dB Rw		36 - 50dB Rw		50dB Rw +	
	Rw	Rw + Ctr	Rw	Rw + Ctr	Rw	Rw + Ctr	Rw	Rw + Ctr
SIDERISE CW-FS60	23	21	-	-	-	-	-	-
SIDERISE CW-FS120 ●	25	23	-	-	-	-	-	-
SIDERISE CW-FS60 + AB5 Overlay	-	-	33	27	-	-	-	-
SIDERISE CW-FS120 + AB5 Overlay	-	-	33	27	-	-	-	-
SIDERISE CW-FS60 + AB10 Overlay	-	-	-	-	36*	31*	-	-
SIDERISE CW-FS120 + AB10 Overlay ●	-	-	-	-	37	32	-	-
SIDERISE CW-FS120 + AB10 Overlay + CVB/C10 below ●	-	-	-	-	-	-	51	45
SIDERISE CW-FS120 + 2mm Steel Plate Overlay + CVB/C10/75 below	-	-	-	-	-	-	53	45

NOTE: *Assessed values by either UKAS accredited Laboratories or IOA registered Acoustic Engineers



Installation recommendations

For all installations the cut strips are located with fixing brackets which are impaled into the material at mid-thickness, at nominal 600mm fixing centres i.e. 300mm from each end.

For horizontal applications, the cut strips are then inserted within the void with the fixing brackets located over the edge of the concrete floor slab.

Note: The brackets should be mechanically fixed to slab where void sizes exceed 400mm.

Build the CW into the void to provide the necessary compression.

For all void sizes: see CF563

Ensure that there are no gaps and that all joints, including the intersections of horizontal / vertical installation, are tightly abutted and sealed with **SIDERISE foil tape** to ensure the integrity of the smoke barrier.

Fixing brackets

A range of support brackets for **SIDERISE CW-FS horizontal perimeter barriers** are available for void widths of up to 1200mm (see Table 1 for appropriate type and quantity).

The fixing brackets should be trimmed, if necessary, to approximately 75% of the cavity width. The standard fixing brackets are supplied in 1mm galvanised mild steel in flat form that is complete with a pre-notched facility for folding on site. All holes are to be site drilled to suit the varying site conditions.

Where the void is smaller than the section available, the CW-CB/CW-FS can be trimmed on site with a sharp serrated knife providing that the compression allowance is maintained. Also, if used in sheet form, the product must be cut to provide the requisite compression fit.

INSTALLATION PRINCIPLES

The CW material must be installed with the unfaced mineral fibre in contact with the sides of the cavity, the aluminium foil smoke barrier facings will be positioned top and bottom i.e. remains visible to the installer. For all installations the CW seals are to be sized to provide the correct compression allowance.

For all void sizes: see CF563

Installation considerations

As standard, the CW material must be compressed within the void to maintain the integrity of the seal.

For vertical applications, where the façade deflection may be up to 15mm, we recommend that you calculate the design deflection of the external façade system in both positive and negative wind load situations. Then follow CF563 + the design deflection of the system.

Additional material allowances should be included whenever facade deflection is anticipated. For example:

CW-CB/CW-FS + Deflection + Compression

CW-CB/CW-FS to suit void + 15mm + 10mm = CW-CB/CW-FS to suit void + 25mm

Therefore for 120mm void = 120mm + 15mm + 10mm = 145mm of CW-CB/CW-FS

INSTALLATION DETAILING

For the interface with the mullion condition we recommend that the CW-FS is trimmed to accommodate mullion with the joint between adjacent product being along the centre line of the mullion.

For curtain wall systems with mullion centres in excess of 1200mm we recommend the use of standard 1200mm CW-CB/CW-FS trimmed to accommodate mullion, together with a smaller section of CW-CB/CW-FS trimmed to accommodate mullion.

Please note that the smaller 300mm CW-CB/CW-FS length is secured with two fixing brackets. We specify that all small portions of CW-CB/CW-FS are fixed with two fixing brackets as part of the system.

For the interface with the spandrel panel at the mullion position we recommend the use of a cut portion of CW product to suit the void (cut oversize to maintain compression). This is then bonded into position with **SIDERISE fire and acoustic gap sealant**.

Smaller voids and/or particularly difficult situations can be treated by the additional application of SIDERISE fire and acoustic gap sealant to make good joints, areas of missing material or complex details.

The CW material is easily cut on site with a sharp serrated knife to form a tight resilient seal around mullion details and structural brackets etc.

Movement characteristics

Curtain walling and external facade deflection

The qualification of proprietary fire stop systems are typically limited by the condition that they must be installed in a static environment.

However, for curtain walling applications it is imperative that the installed seal is able to function effectively with due regard to all designed movement serviceability limits. SIDERISE recognise that curtain walling and cladding façade systems will deflect due to:

- Positive windload
- Negative windload
- Occupational live load

The above are covered by EN 13116:2001

Typically, a project may stipulate that the curtain walling system may have the following allowable deflection limits:

Under the declared wind loads the maximum frontal deflection of the curtain walling's framing members shall not exceed $L/200$ or 15mm, whichever is the less, when measured between the points of support or anchorage to the building's structure in compliance with EN 13116. [Extract from EN 13830]

These factors may inevitably combine to preclude the suitability and therefore, use of certain systems e.g. high density material slab products.

However, the CW-FS fire stop systems are very effective for their function within curtain walling as the unique material construction can accept the cyclical negative and positive wind and live loads imposed on the façade.

CONSIDERATIONS

Design considerations

Important factors for the application of fire stops within curtain wall façades:

- Review the position of fire stop and distance from fixing bracket connection.
- Ensure the structural engineer specifies the façade deflection.
- Review the curtain wall expansion and any floor slab/building movement.
- Review transom/mullion deflection

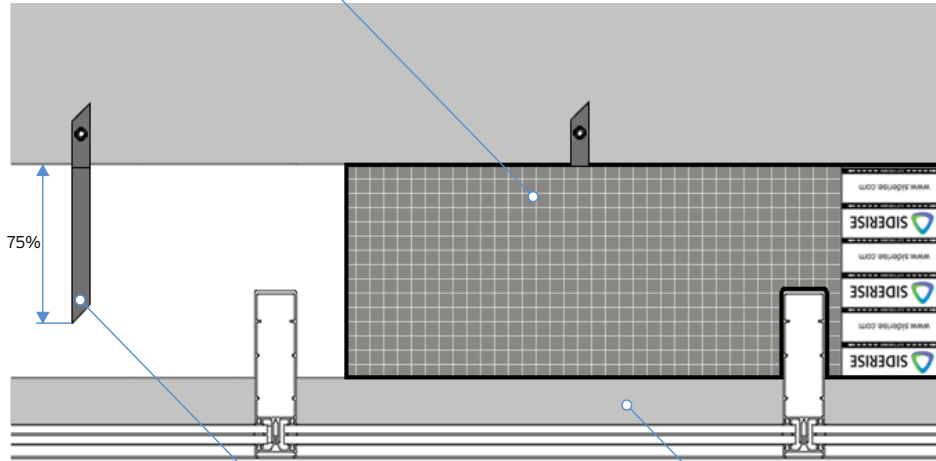
Upon confirmation and consideration of the above parameters, the required fire stop compression factor can be assessed for the specific project application.

Note 1: SIDERISE CW vertical fire stop systems can accommodate façade deflection due to their unique construction. However, installation of the correct material size is important so as to ensure that integrity is maintained.

Note 2: On a project basis, consider both inward and outward deflection requirements for the system

Horizontal perimeter barrier installation: CW-FSH-01-A

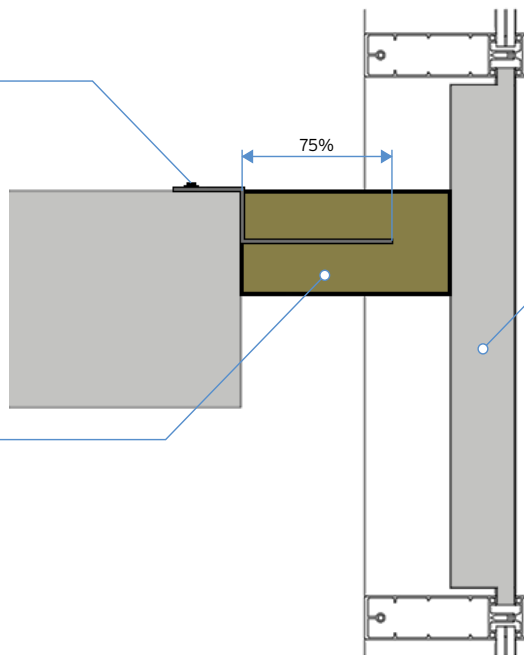
Curtain Wall Fire Stop
SIDERISE CW-FS



Fixed Bracket
SIDERISE Bracket

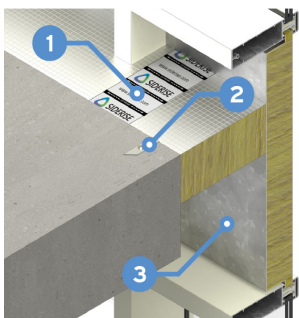
Spandrel Panel
SIDERISE NXR Core

Fixed Bracket
SIDERISE Bracket



Spandrel Panel
SIDERISE NXR Core

Curtain Wall Fire Stop
SIDERISE CW-FS



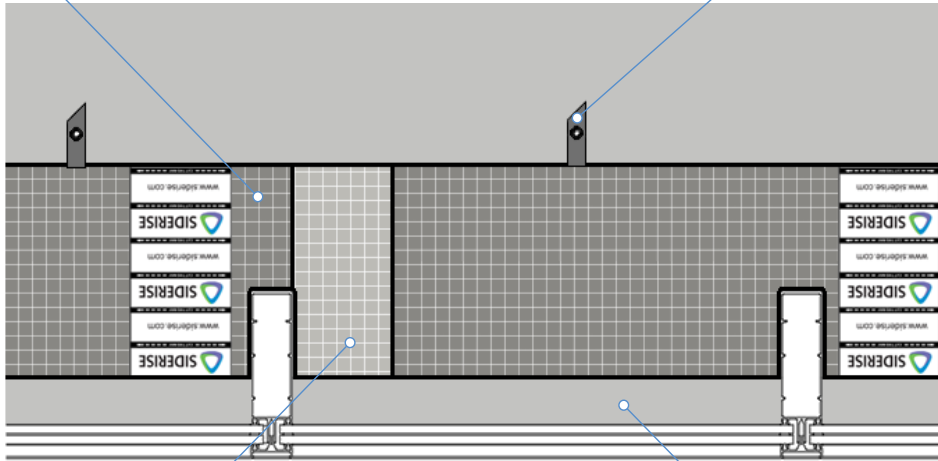
PRODUCTS USED

- 1 SIDERISE curtain wall fire stop CW-FS
- 2 SIDERISE support brackets
- 3 SIDERISE nexus llamella boards

Horizontal perimeter barrier installation: CW-FSH-02-A

Curtain Wall Fire Stop
SIDERISE CW-FS

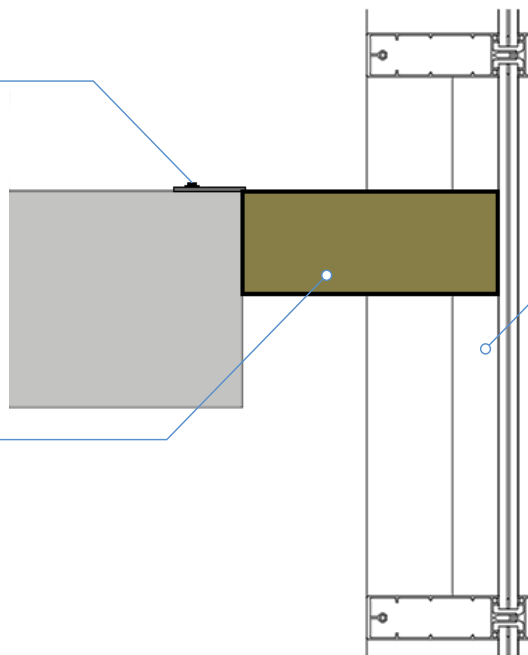
Fixed Bracket
SIDERISE Bracket



Foil Tape
SIDERISE FT 120/45

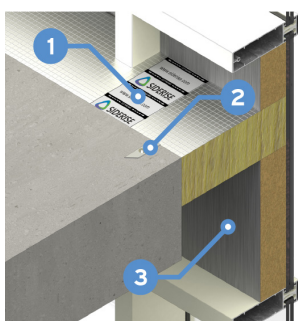
Spandrel Insulation
Non Fire Rated

Fixed Bracket
SIDERISE Bracket



Spandrel Insulation
Non Fire Rated

Curtain Wall Fire Stop
SIDERISE CW-FS



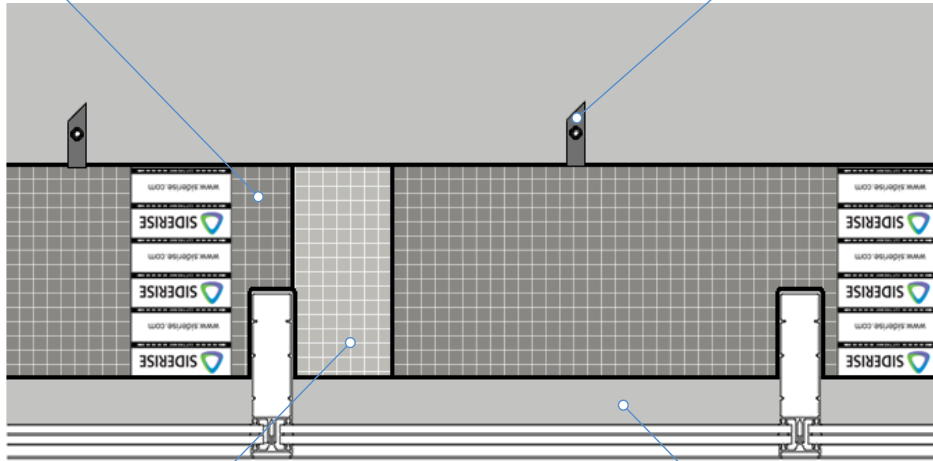
PRODUCTS USED

- 1 SIDERISE curtain wall fire stop CW-FS
- 2 SIDERISE support brackets
- 3 Spandrel insulation

Horizontal perimeter barrier installation: CW-FSH-03-A

Curtain Wall Fire Stop
SIDERISE CW-FS

Fixed Bracket
SIDERISE Bracket



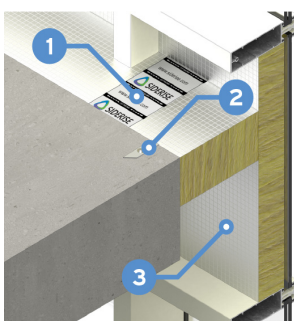
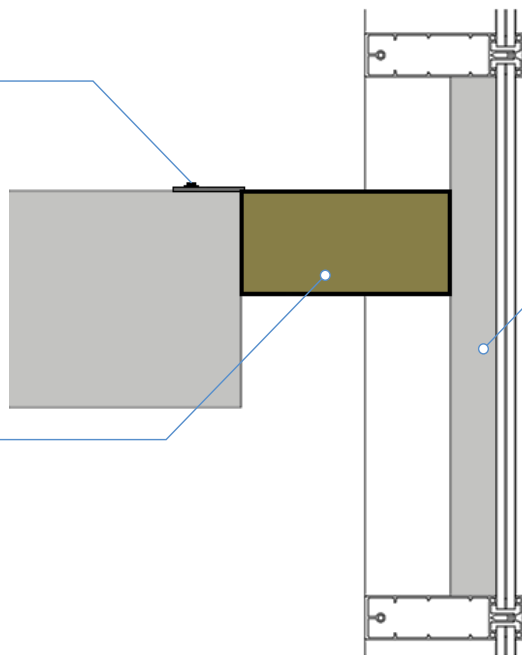
Foil Tape
SIDERISE FT 120/45

Composite Panel
SIDERISE NXS Panel

Fixed Bracket
SIDERISE Bracket

Curtain Wall Fire Stop
SIDERISE CW-FS

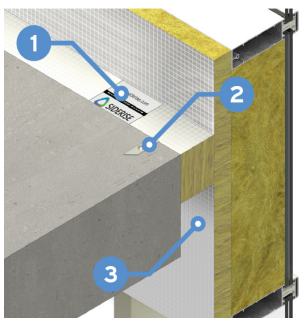
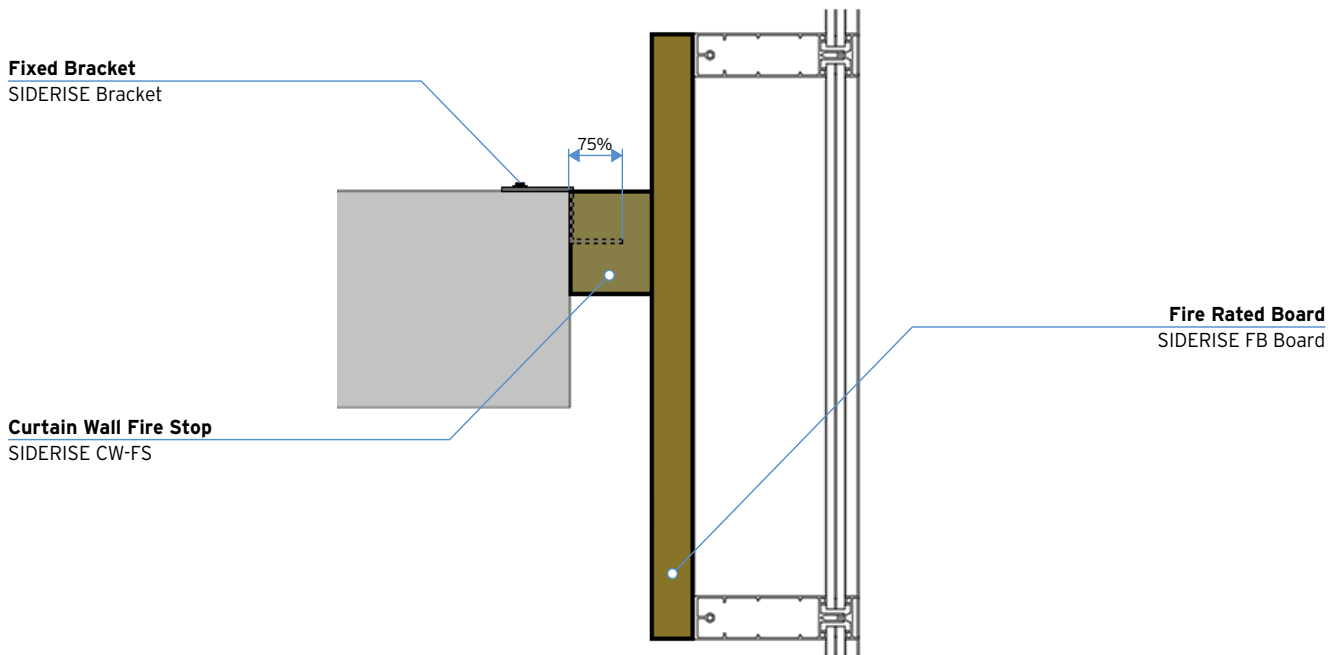
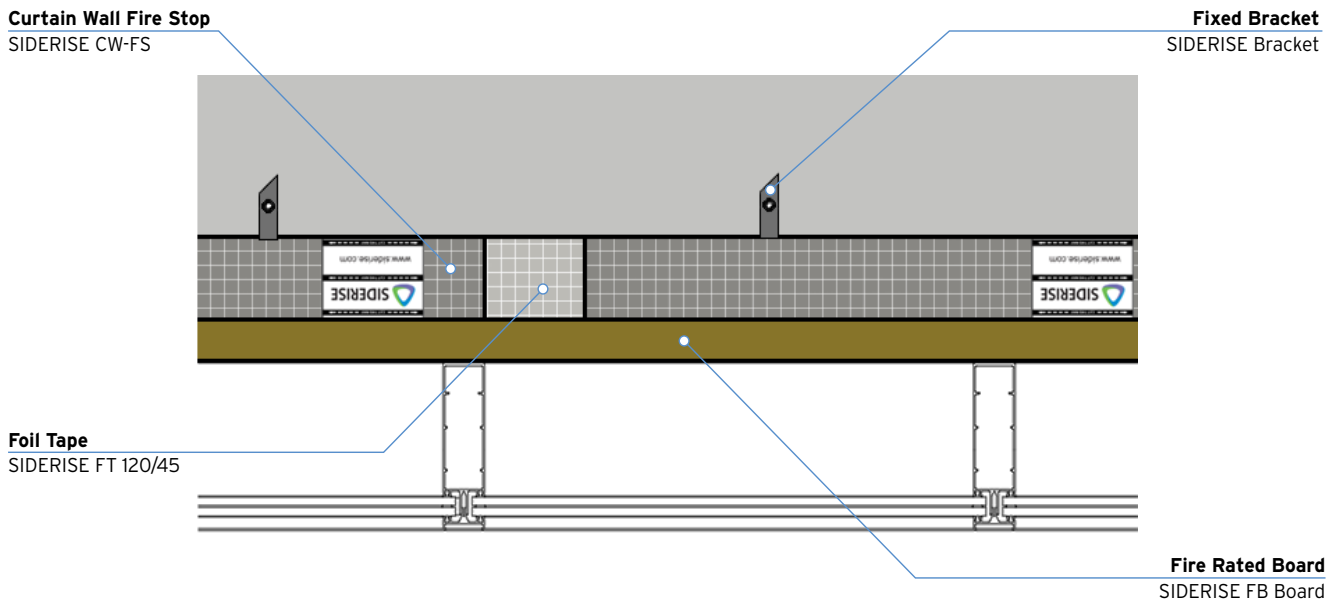
Composite Panel
SIDERISE NXS Panel



PRODUCTS USED

- 1 SIDERISE curtain wall fire stop CW-FS
- 2 SIDERISE support brackets
- 3 SIDERISE nexus llamella boards

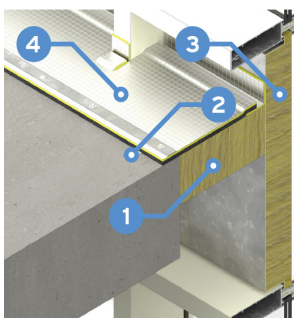
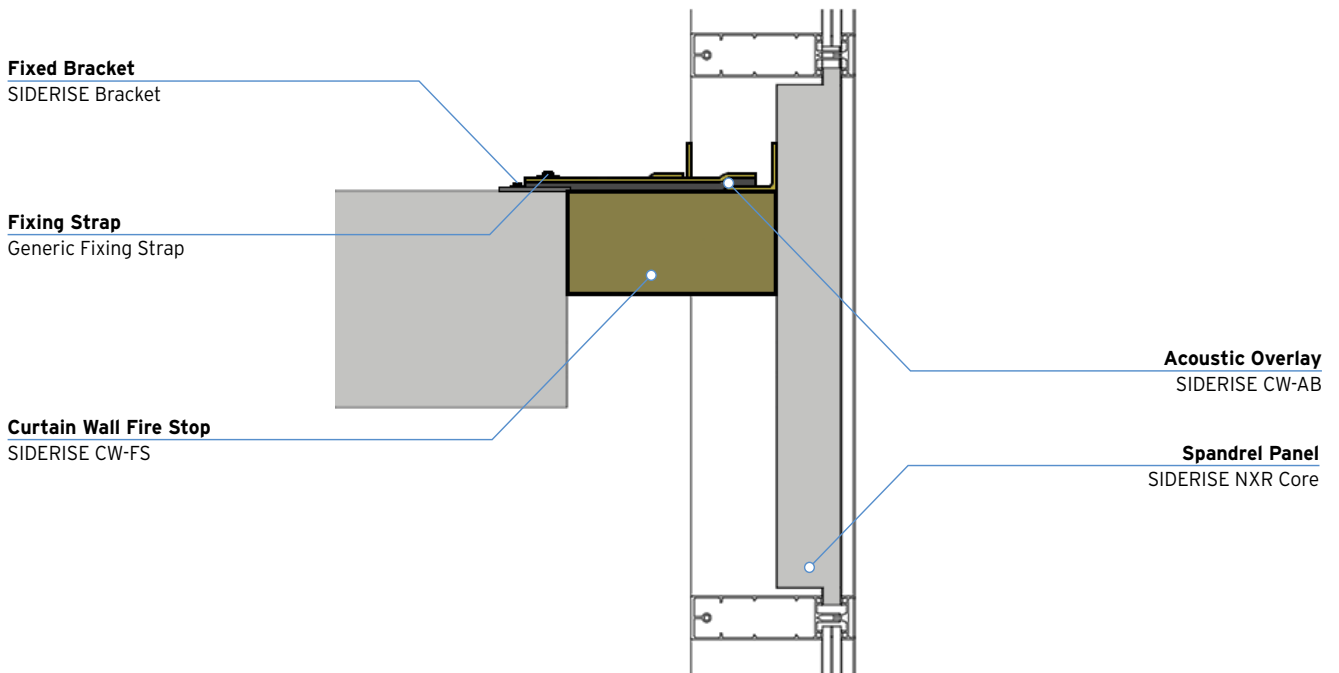
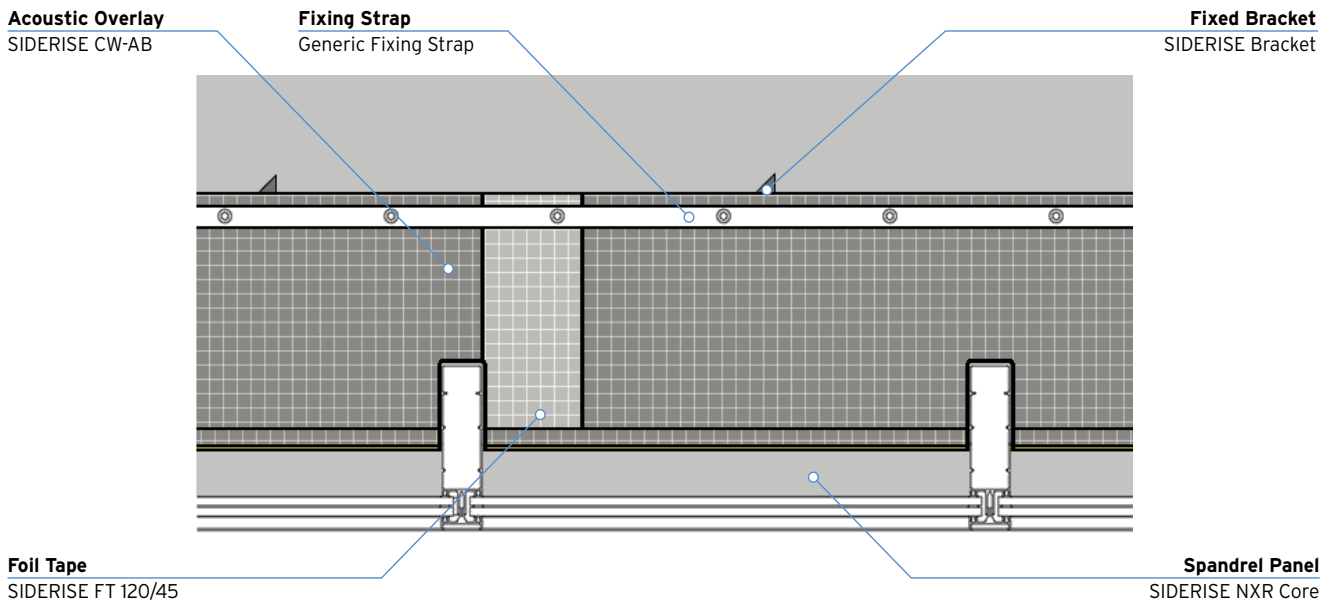
Horizontal perimeter barrier installation: CW-FSH-04-A



PRODUCTS USED

- 1 SIDERISE curtain wall fire stop CW-FS
- 2 SIDERISE support brackets
- 3 Spandrel insulation

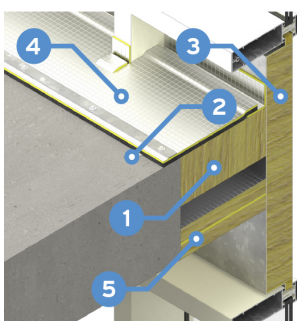
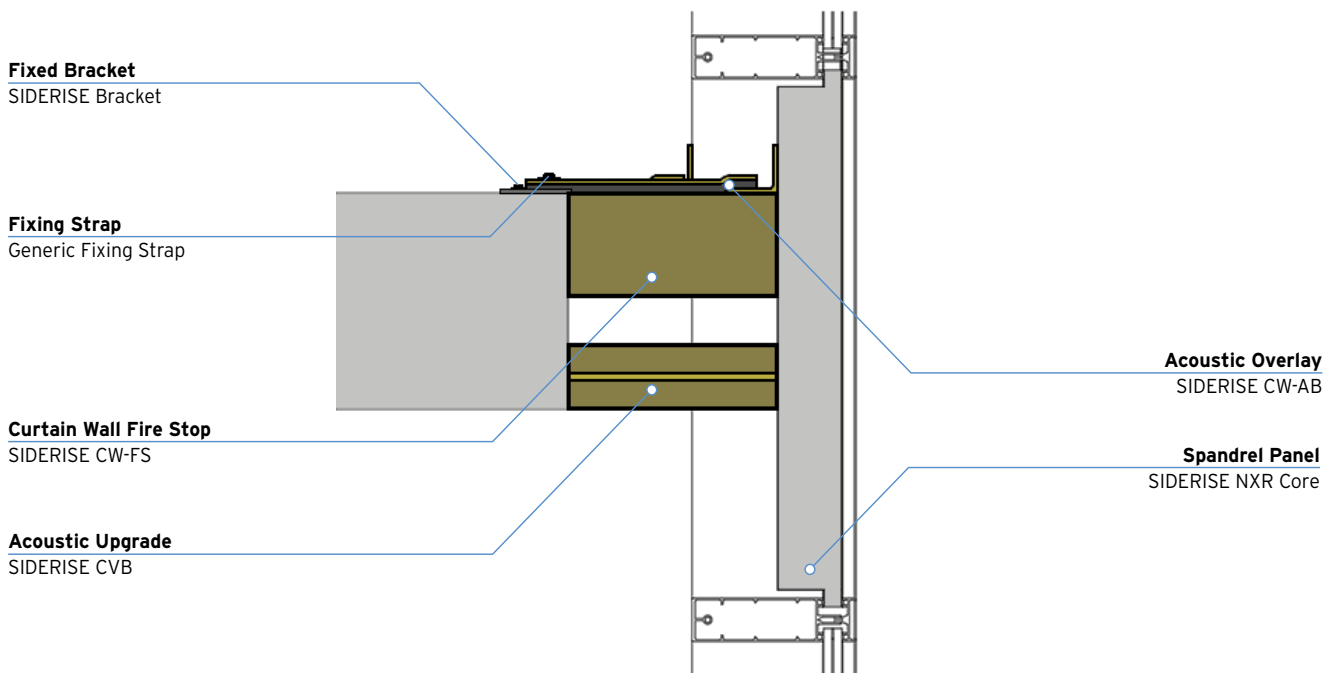
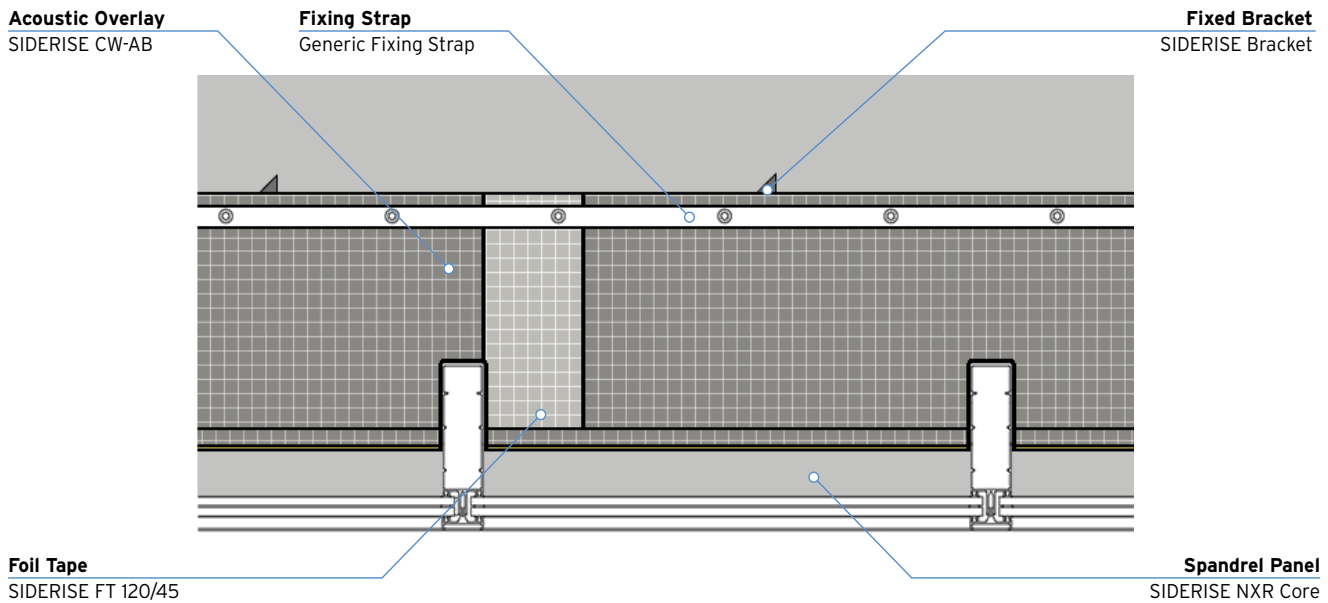
Horizontal perimeter barrier installation: CW-FSH-05-A



PRODUCTS USED

- 1 SIDERISE curtain wall fire stop CW-FS
- 2 SIDERISE support brackets
- 3 SIDERISE nexus llamella boards
- 4 SIDERISE acoustic barrier overlay

Horizontal perimeter barrier installation: CW-FSH-06-A

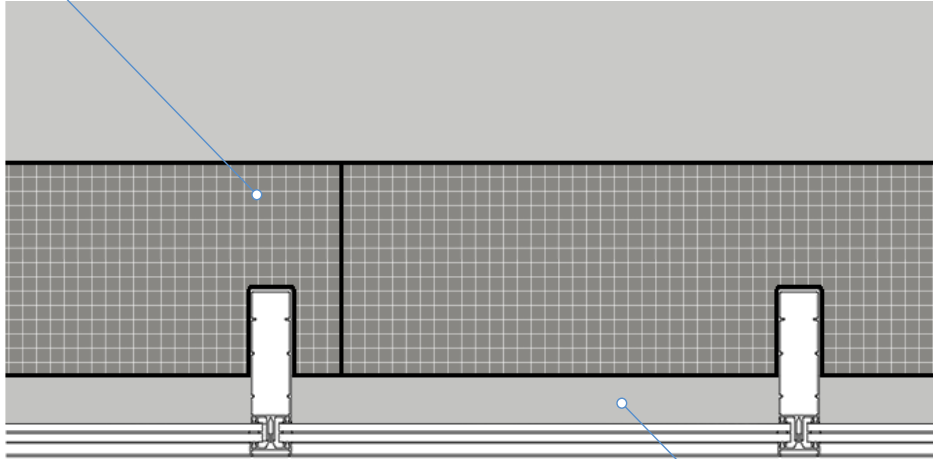


PRODUCTS USED

- 1 SIDERISE curtain wall fire stop CW-FS
- 2 SIDERISE support brackets
- 3 SIDERISE nexus llamella boards
- 4 SIDERISE acoustic barrier overlay
- 5 SIDERISE acoustic upgrade CVB

Horizontal perimeter barrier installation: CW-FSH-07-A

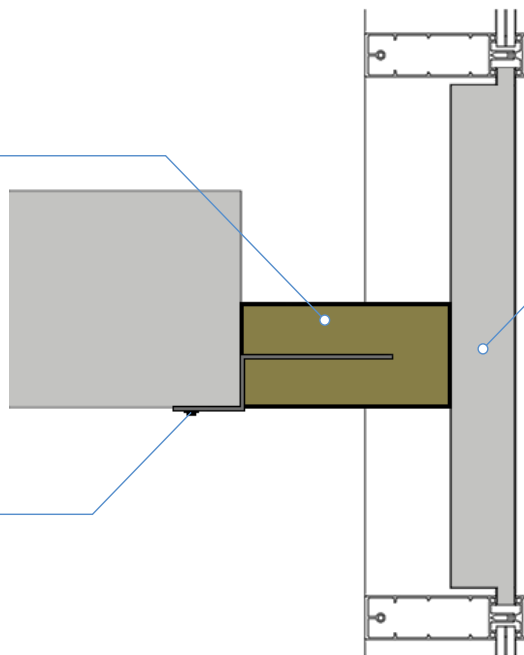
Curtain Wall Fire Stop
SIDERISE CW-FS



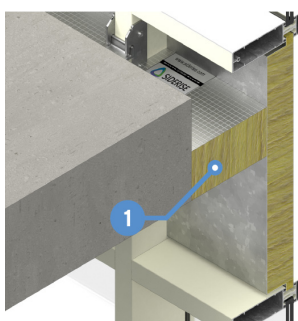
Spandrel Panel
SIDERISE NXR Core

Curtain Wall Fire Stop
SIDERISE CW-FS

Fixed Bracket
SIDERISE Bracket



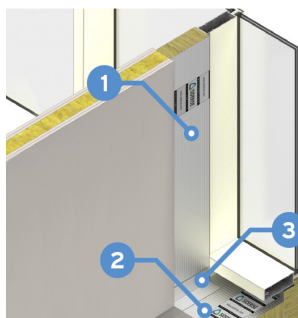
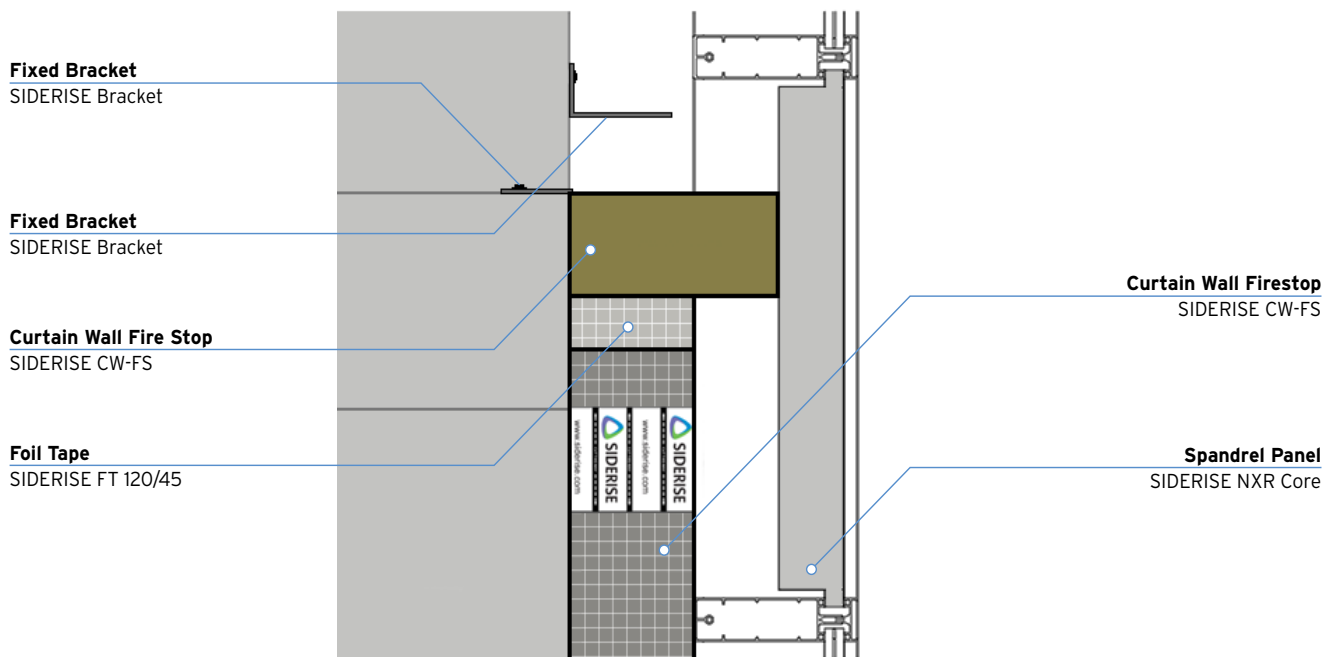
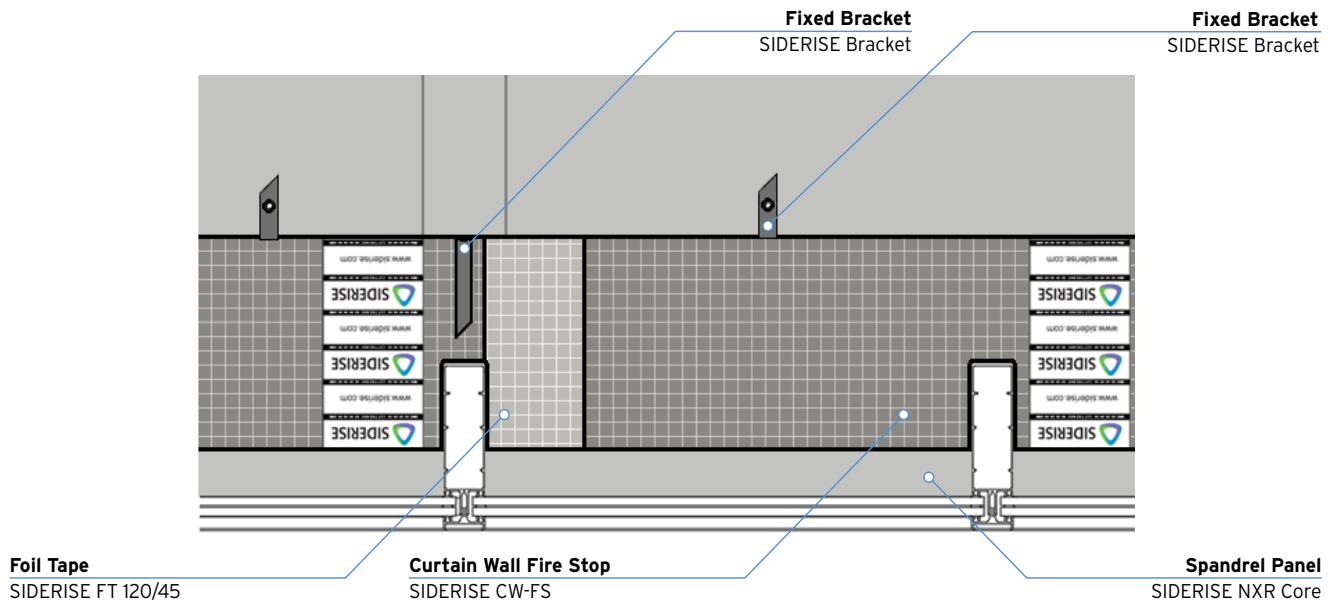
Spandrel Panel
SIDERISE NXR Core



PRODUCTS USED

- 1 SIDERISE curtain wall fire stop CW-FS

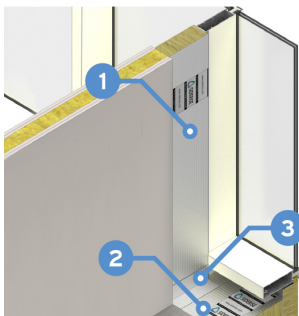
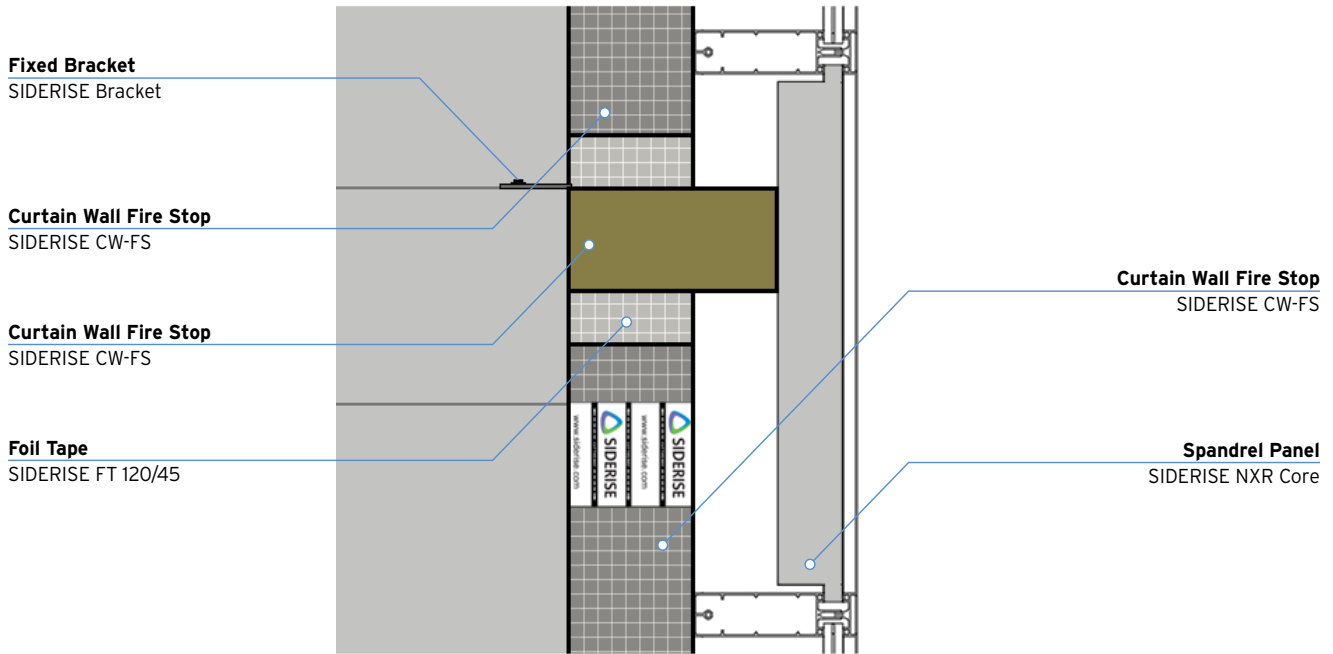
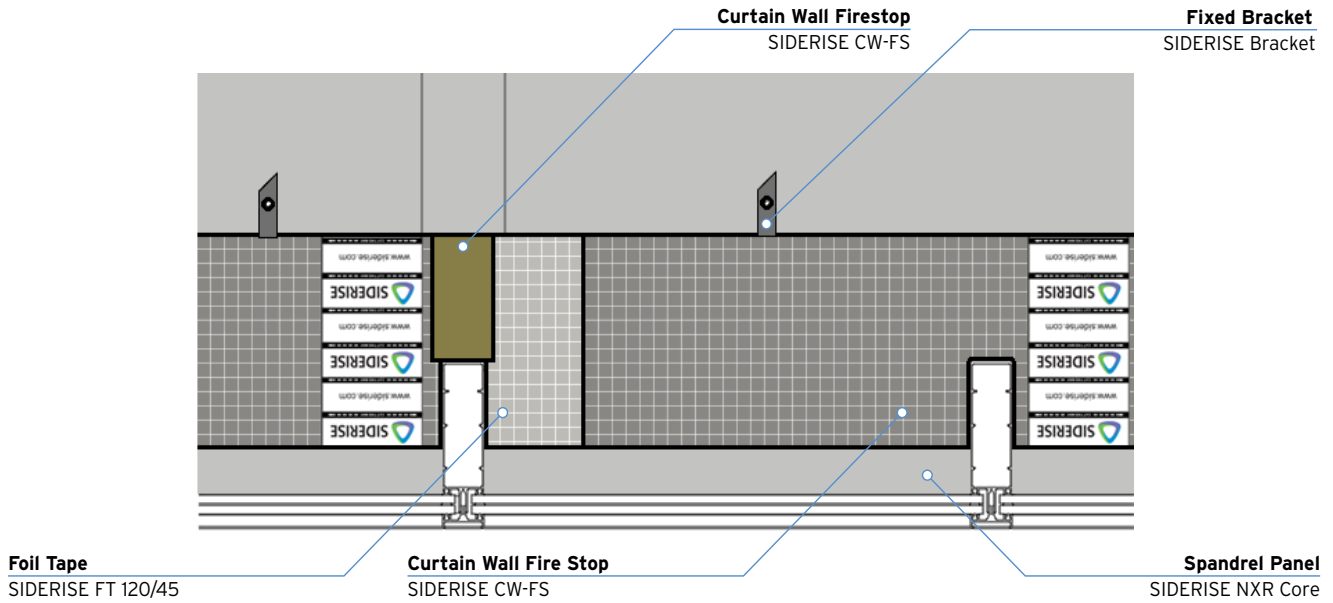
Vertical perimeter barrier installation: CW-FSV-08-A



PRODUCTS USED

- 1 SIDERISE nexus llamella boards
- 2 SIDERISE curtain wall fire stop CW-FS
- 3 SIDERISE foil tape: FT120/45

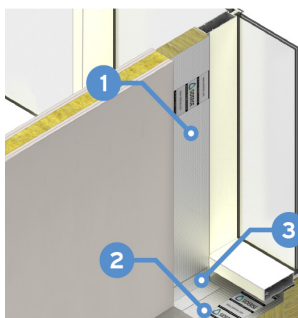
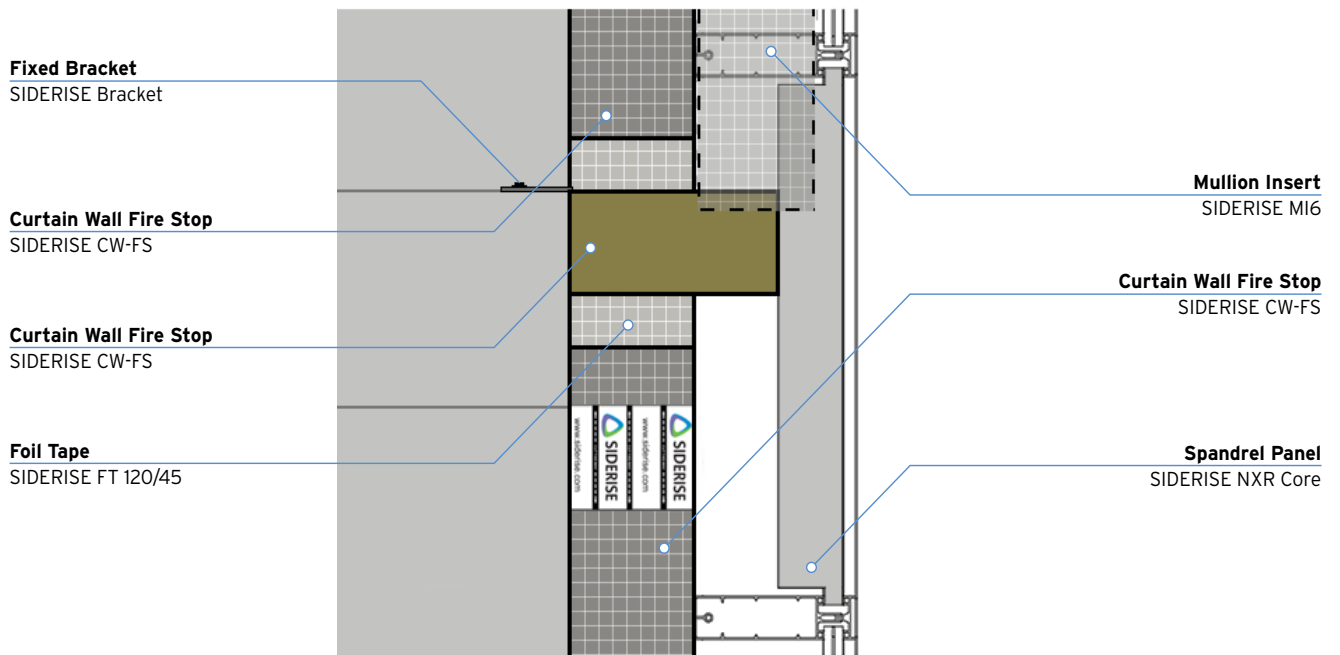
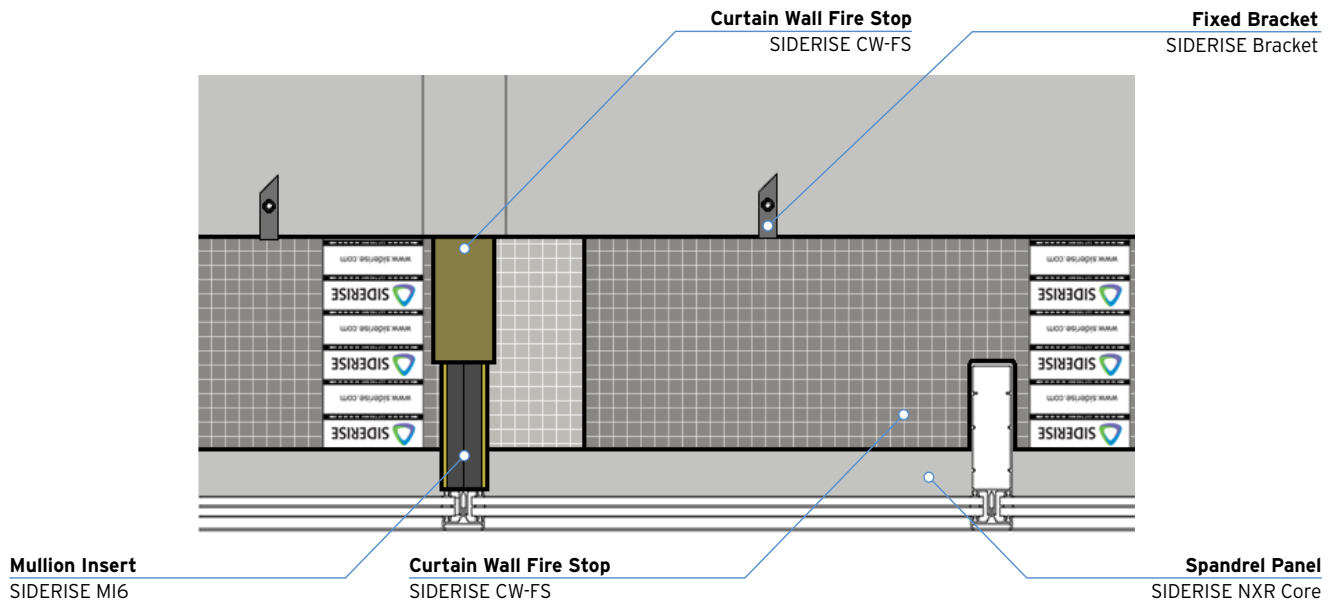
Vertical perimeter barrier installation: CW-FS-08-B



PRODUCTS USED

- 1** SIDERISE nexus llamella boards
- 2** SIDERISE curtain wall fire stop CW-FS
- 3** SIDERISE foil tape: FT120/45

Vertical perimeter barrier installation: CW-FS-08-C



PRODUCTS USED

- 1 SIDERISE nexus llamella boards
- 2 SIDERISE curtain wall fire stop CW-FS
- 3 SIDERISE foil tape: FT120/45

Regulations guidance

Approved Document B to the Building Regulations requires that cavity barriers must have a minimum standard of fire resistance of 30 minutes integrity and 15 minutes insulation with regards to BS 476 : Part 20 : 1987 criteria respectively.

The Loss Prevention Council's 'Design Guide for the Fire Protection of Buildings' states that cavity barriers have 30 minutes integrity and minimum 30 minutes fire insulation.

The 'Standard Performance Criteria' for fire & smoke stopping issued by the Centre for Window and Cladding Technology states:

'There shall be continuity of time temperature rated fire and smoke stopping between the curtain wall and compartment walls and floors. Any spaces or cavities between the two shall be effectively stopped against the spread of smoke and flame. The fire resistance of such stopping shall be equal to that required of the compartment floor or wall against which it abuts.'

SIDERISE CW-FS fire stops are used to maintain the continuity of the fire resistance by sealing the gap between compartment floors (and walls) and the external curtain walling façade or any other external cladding systems.

Cavity barriers ... a definition "A construction provided to close a concealed space against penetration of smoke or flame, or provided to restrict the movement of smoke or flame within such a space SIDERISE CW-CB/CW-FS30

Developed in recognition of the more demanding requirements of the 'Design Guide for the Fire Protection of Buildings' as issued by The Loss Prevention Council.

Fire stops ... a definition 'Sealing an imperfection of fit or design tolerance between fire rated elements of a building to restrict the passage of fire and smoke for the same period of fire resistance.'

For the purpose of SIDERISE product terminology, the 'imperfection of fit' is considered to be the discontinuity between the edge of the structural frame (slab or wall) and the interface with the external cladding system.

Compartment floors or walls may typically have the following fire ratings: 1 hour, 2 hours, up to 4 hours.

SIDERISE CW-FS60 Is suitable for installation in alignment with a 1 hour rated compartment wall or floor to provide continuity of fire resistance across the cavity.

SIDERISE CW-FS120 Is suitable for installation in alignment with a 90 minute or 2 hour rated compartment wall or floor.

SIDERISE CW-FS300 Is suitable for installation in alignment with a 4 hour compartment wall or floor.

Technical specification

SIDERISE Perimeter Barriers & Fire stops for Curtain Walling

Form supplied	Sheet: 1200mm x 1200mm x thickness; Pre-cut strips 1200mm x (cavity + compression as CF563 Certifire) x thickness (See Table 1.)
Colour	Silver, with coloured identification tape centrally located on the product
Finish	Aluminium foil
Density	Nominal 75Kg/m ³
Thermal conductivity	$\lambda_{20} = 0.039\text{w/mK}$
Cavities	50mm to 1200mm For voids over 400mm please contact facades@siderise.com
Fire resistance	30 to 300 minutes
Reaction to fire	Class 'A1', Class 'O'

Note: Lamatherm and SIDERISE brands

From 1 January 2005, the operation of Lamatherm Products Ltd and Siderise (Western) Ltd were merged into Siderise Insulation Ltd - formerly Siderise (Western) Ltd.

Both Lamatherm Products Ltd & Siderise Insulations Ltd are members of the Siderise (Holdings) Ltd Group of companies. The ultimate holding of the companies remains with Siderise (Holdings) Ltd.

Siderise Insulation Ltd holds the rights to sole use of all design and intellectual rights related to Lamatherm products developed and tested prior to 1 January 2005.



Further information

PRODUCTS AVAILABLE

The following SIDERISE products are available.

- **SIDERISE CW-FS perimeter barriers and fire stops for curtain walling** - sheet or pre-cut strip options
- **SIDERISE foil tape:** FT 120/45
- **SIDERISE fire and acoustic gap sealant**

DOCUMENTS AVAILABLE

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

- NBS Specification Clause
- Safety Data Sheet
- Cutting and Installation instructions

ENVIRONMENTAL

SIDERISE perimeter barriers and fire stops for curtain walling 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

ORDERING

When ordering please:

- Indicate contract title and location of project.
- Specify product type required, e.g. sheet form.
- Specify fire rating or thickness required.
- Specify void height or schedule of sizes for each product type.
- Confirm total linear metres required for each size.
- Specify bracket type and quantity required
- Specify foil tape quantity requirement: FT 120/45 (or RF/SFT100/10 for a high specification tape).
- Order **SIDERISE fire and acoustic gap sealant** 310ml cartridge

SPECIFICATION

SIDERISE offer specifiers support from initial enquiry and technical consultation to project realisation. NBS draft specifications are provided for standard products and applications and can be tailored to suit specific project performance requirements.

TECHNICAL SUPPORT

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



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