

# PERIMETER FIRESTOP & PROTECTED SPANDREL SYSTEM

'Type A' non-fire rated curtain walls.  
Tested to EN 1364-4 in accordance  
with EAD 350141-00-1106

- UL Test Report – 4789510601-2
- Fire Performance – E 120 / I 120
- European Technical Assessment  
– 21/0297
- CE Mark – 2531-CPR-CX010200

# PERIMETER FIRESTOP & PROTECTED SPANDREL SYSTEM

Tested to EN 1364-4: 2014 in accordance with EAD 350141-00-1106

## Application

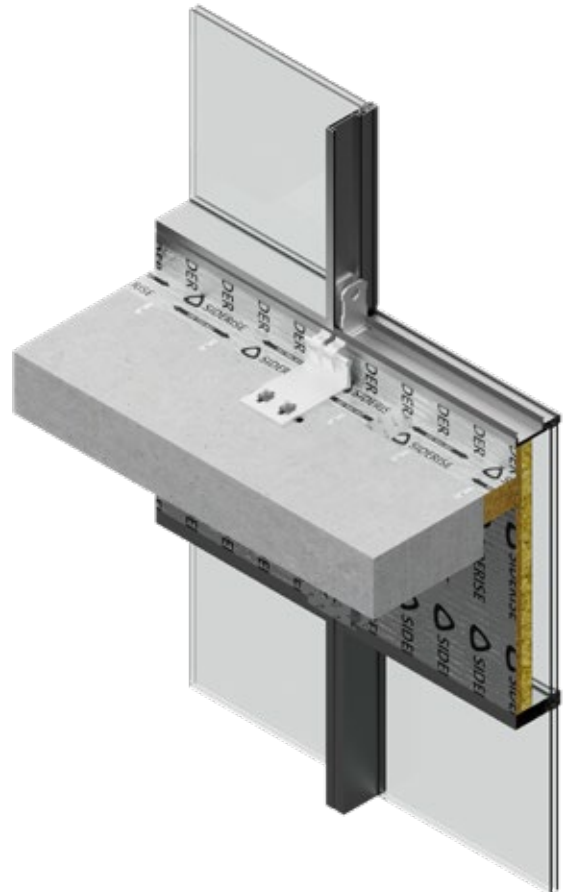
Siderise CW-FS and CW-FB have been jointly tested in conjunction with non-fire rated aluminium curtain wall assemblies to provide market leading fire resistance performance for the critical spandrel zone.

## CW-FS Perimeter Firestop / Movement Joint

Siderise CW-FS Curtain Wall Firestops have a unique lamella construction with vertical fibres to accommodate façade deflection over the life of the building.

EAD 350141-00-1106 requires the perimeter firestop to be cycled for 500 times to  $\pm 10\%$  of the seal width prior to fire resistance testing. This cyclic movement is to simulate the dynamic stresses endured by the firestop over the design life of the building, due to wind loading, temperature changes, seismic loads, and building settlement.

Please see CW-FS Technical Data Sheet for additional EN 1364-4 and ASTM E 2307 fire resistance performance data.



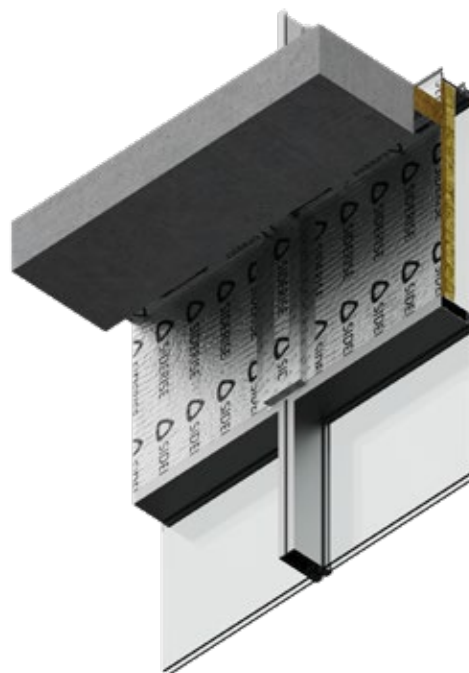
## System

<b>Façade</b>	Unitised curtain wall, Type A (non-fire rated)
<b>Perimeter Firestop</b>	CW-FS120 (120mm thick)
<b>Seal Width</b>	Up to 250mm
<b>Seal Compression</b>	10% (25mm)
<b>Floor Slab</b>	200mm (or greater)
<b>Spandrel Protection</b>	CW-FB (25mm thick)
<b>Spandrel Insulation</b>	50mm stonewool – classified A1 to EN 13501-1
<b>Spandrel Height</b>	Up to 900mm
<b>Mullion Protection</b>	CW-FB (25mm thick)
<b>Siderise Standard Detail</b>	SSD1986-A

## CW-FB Spandrel Protection

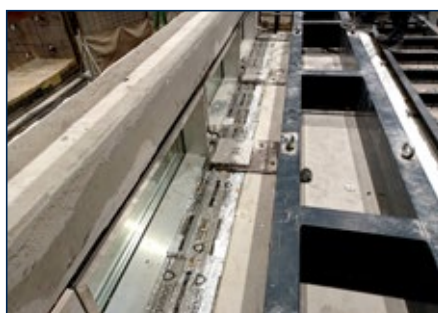
EN 1364-4 requires installation of the curtain wall assembly onto the furnace. For Type A non-fire rated curtain walling (the vast majority of curtain walling on the market), in order to be able to adequately test the perimeter firestop (CW-FS), the aluminium framing needs to be protected to allow it to persist for the required duration.

Siderise CW-FB is applied to the critical spandrel zone, including protection added to the aluminium mullions.



## Fire Resistance Testing

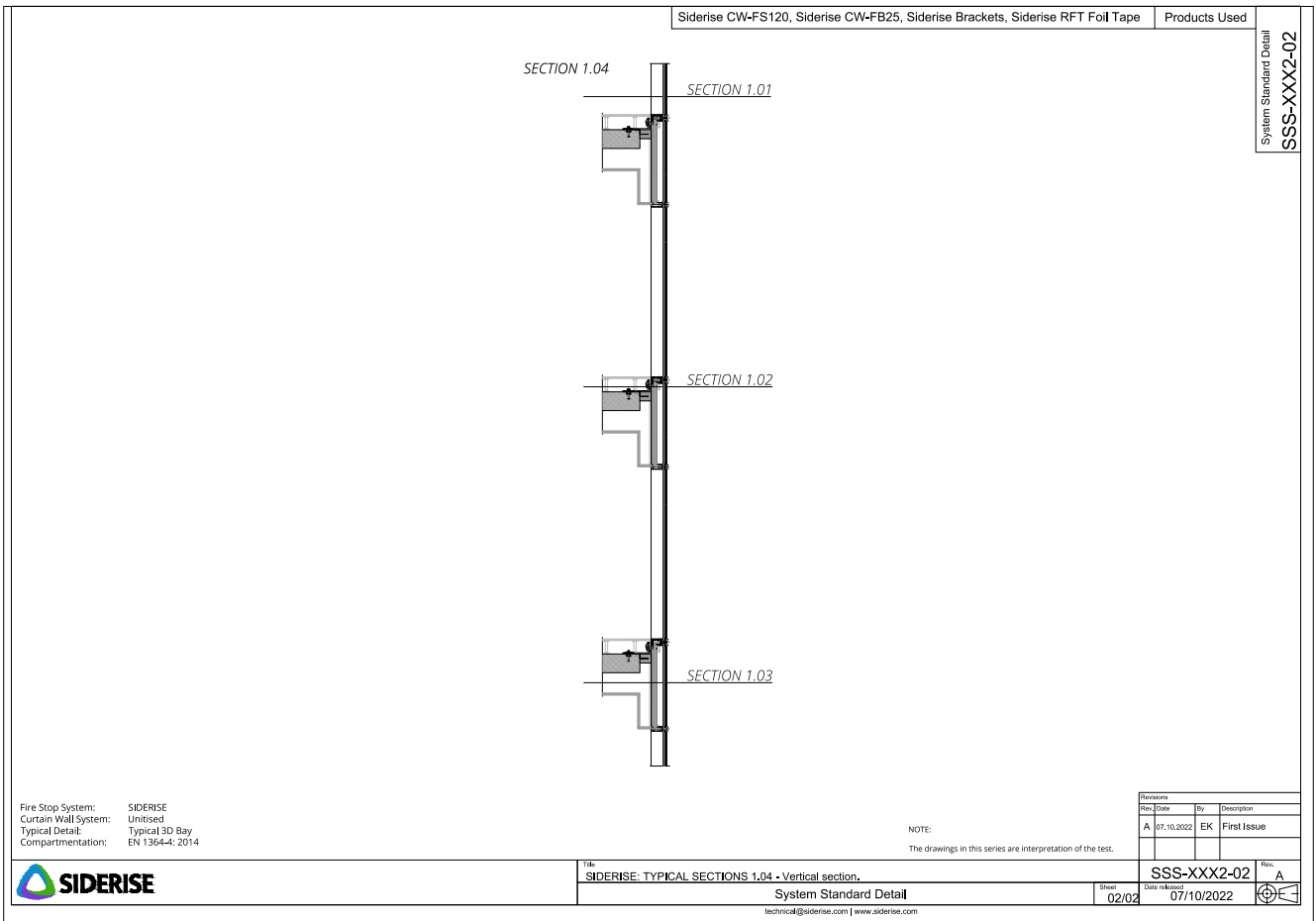
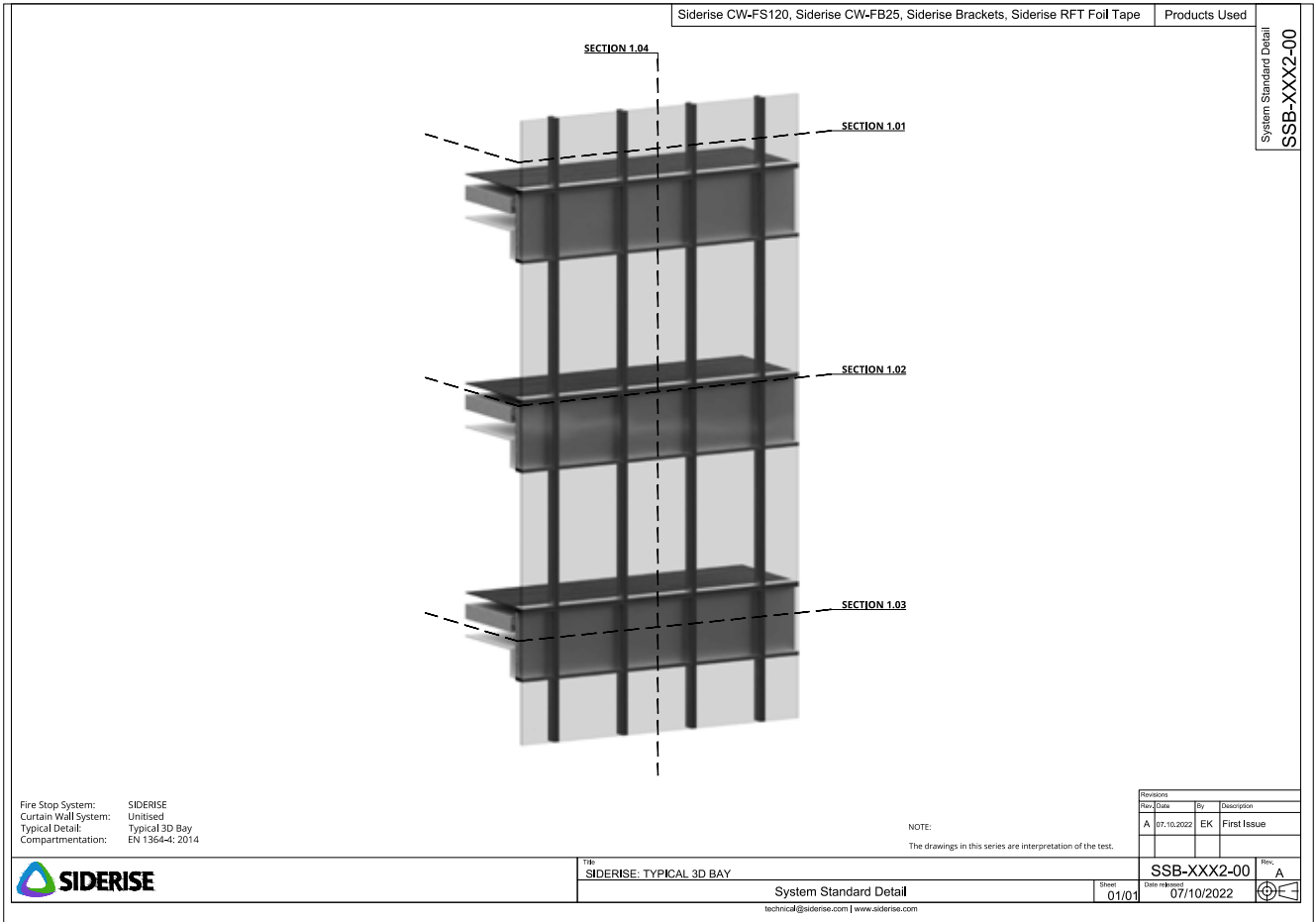
<b>Test Report</b>	4789510602-1
<b>Test Date</b>	15 October 2021
<b>Tested in Accordance with European Assessment Document 350141-00-1106</b>	Mechanically induced movement to $\pm 10\%$ the seal width — 500 cycles @ 30 cycles per minute
<b>Fire Test Standard</b>	EN 1364-4: 2014
<b>Fire Resistance</b>	120 Integrity [E] / 120 Insulation [I]
<b>Classification to EN 13501-2</b>	EI 120

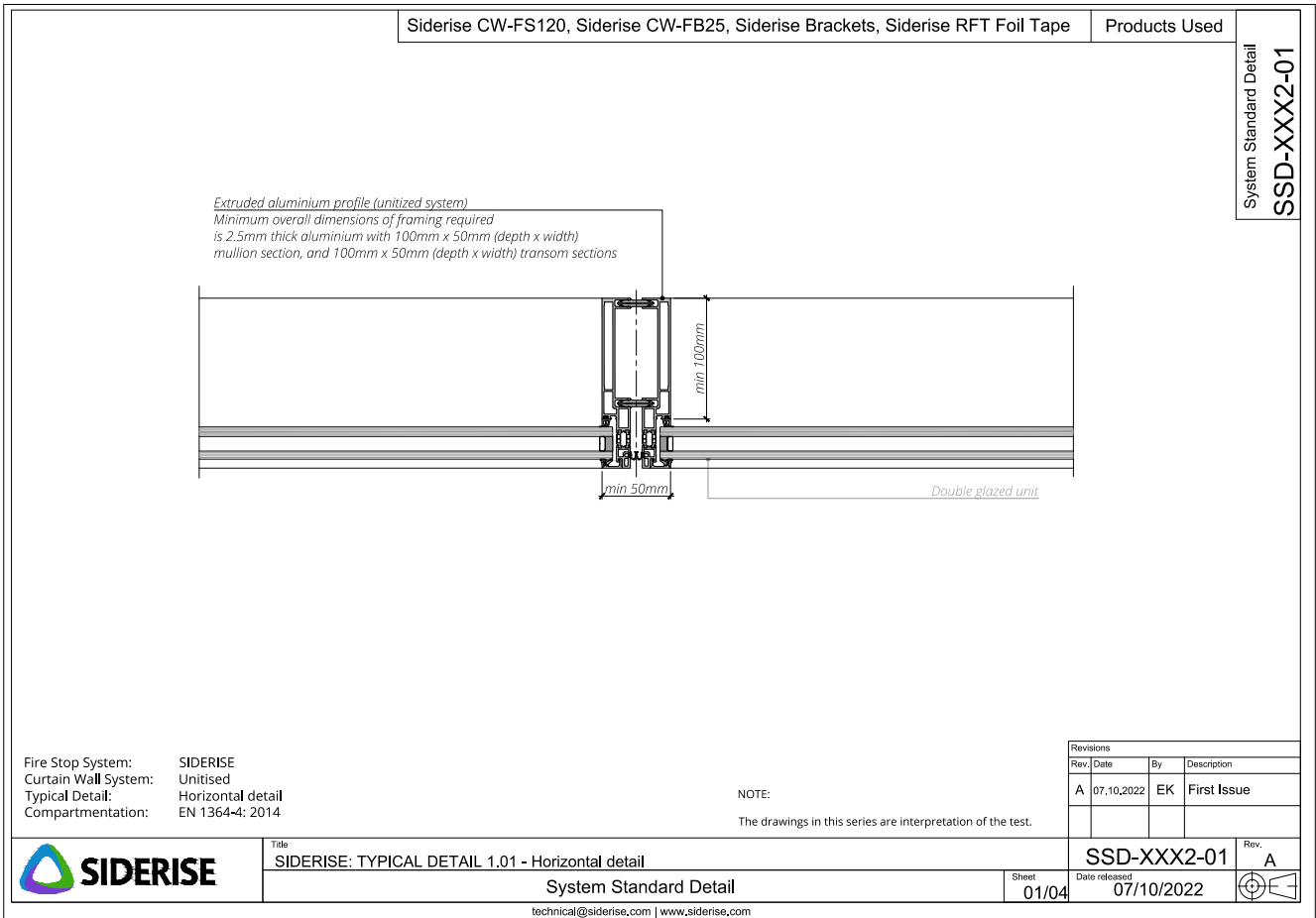
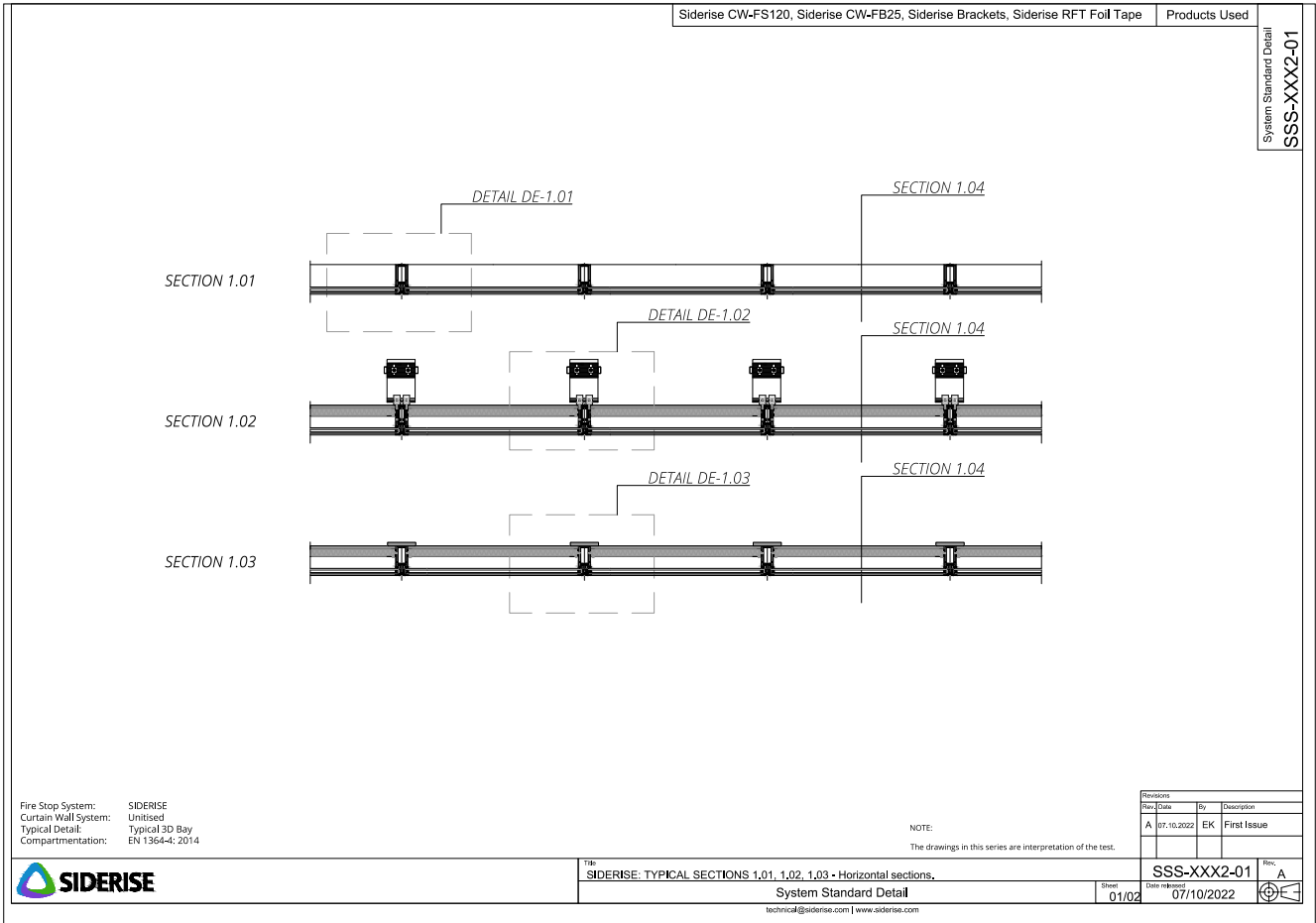


## Third Party Certification

<b>Certification Body</b>	<b>Type</b>	<b>Certificate</b>
ETA Danmark	European Technical Assessment	21/0297
DBI Certification	CE Mark	2531-CPR-CX010200
UL	UL-EU Mark	Applied for
UL	UKCA Mark	Applied for

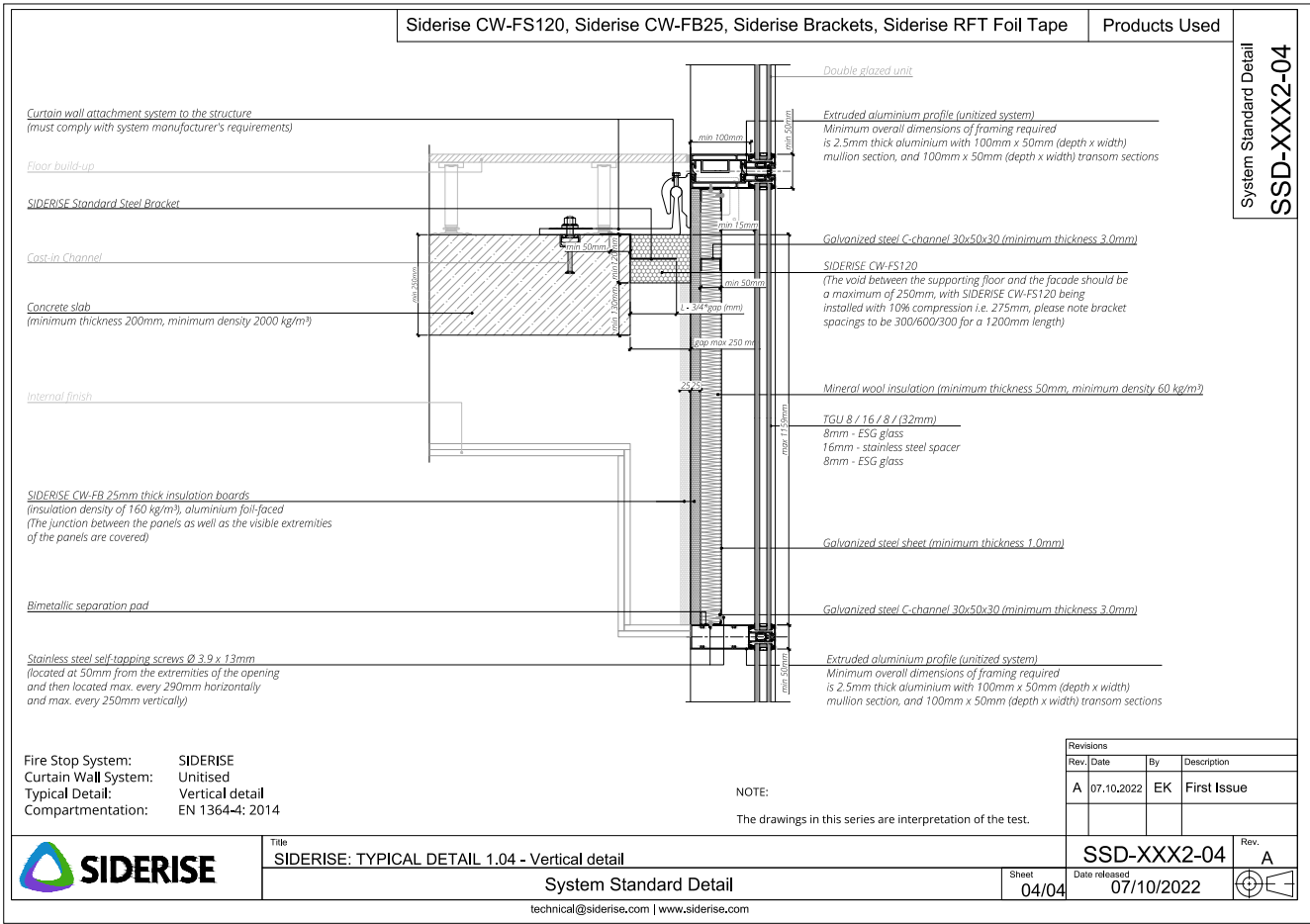
System Detail - Section





<b>Siderise CW-FS120, Siderise CW-FB25, Siderise Brackets, Siderise RFT Foil Tape</b>		<b>Products Used</b>	<b>System Standard Detail SSD-XXX2-02</b>												
<p><i>Concrete slab</i> (minimum thickness 200mm, minimum density 2000 kg/m<sup>3</sup>)</p> <p><i>SIDERISE RFT120 Joint Tape</i> Applied to joints in adjacent SIDERISE CW-FS120 Width: 120mm</p> <p><i>Curtain wall attachment system to the structure</i> (must comply with system manufacturer's requirements)</p> <p><i>SIDERISE Standard Steel Bracket</i></p> <p><i>SIDERISE CW-FS120</i> (The void between the supporting floor and the facade should be a maximum of 250mm, with SIDERISE CW-FS120 being installed with 10% compression i.e. 275mm, please note bracket spacings to be 300/600/300 for a 1200mm length)</p> <p><i>SIDERISE CW-FB 25mm thick insulation boards</i> (insulation density of 160 kg/m<sup>3</sup>), aluminium foil-faced (The junction between the panels as well as the visible extremities of the panels are covered)</p> <p><i>Mineral wool insulation</i> (minimum thickness 50mm, minimum density 60 kg/m<sup>3</sup>)</p> <p><i>Galvanized steel sheet (minimum thickness 1.0mm)</i></p> <p><i>Galvanized steel C-channel 30x50x30 (minimum thickness 3.0mm)</i></p> <p><i>Stainless steel self-tapping screws Ø 3.9 x 13mm</i> (located at 50mm from the extremities of the opening and then located max. every 290mm horizontally and max. every 250mm vertically)</p> <p><i>Bimetallic separation pad</i></p> <p><i>Extruded aluminium profile (unitized system)</i> Minimum overall dimensions of framing required is 2.5mm thick aluminium with 100mm x 50mm (depth x width) mullion section, and 100mm x 50mm (depth x width) transom sections</p>															
			<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="4">Revisions</th> </tr> <tr> <th>Rev.</th> <th>Date</th> <th>By</th> <th>Description</th> </tr> <tr> <td>A</td> <td>07.10.2022</td> <td>EK</td> <td>First Issue</td> </tr> </table>	Revisions				Rev.	Date	By	Description	A	07.10.2022	EK	First Issue
Revisions															
Rev.	Date	By	Description												
A	07.10.2022	EK	First Issue												
<p><b>Fire Stop System:</b> SIDERISE  <b>Curtain Wall System:</b> Unitised  <b>Typical Detail:</b> Horizontal detail  <b>Compartmentation:</b> EN 1364-4: 2014</p>		<p>NOTE:</p> <p>The drawings in this series are interpretation of the test.</p>	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;"><b>SSD-XXX2-02</b></td> <td style="text-align: center;">Rev. <b>A</b></td> </tr> <tr> <td style="text-align: center;">Sheet <b>02/04</b></td> <td style="text-align: center;">Date released <b>07/10/2022</b></td> <td style="text-align: center;"></td> </tr> </table>	<b>SSD-XXX2-02</b>		Rev. <b>A</b>	Sheet <b>02/04</b>	Date released <b>07/10/2022</b>							
<b>SSD-XXX2-02</b>		Rev. <b>A</b>													
Sheet <b>02/04</b>	Date released <b>07/10/2022</b>														
		<p><b>SIDERISE: TYPICAL DETAIL 1.02 - Horizontal detail</b></p> <p><b>System Standard Detail</b></p> <p>technical@siderise.com   www.siderise.com</p>													

<b>Siderise CW-FS120, Siderise CW-FB25, Siderise Brackets, Siderise RFT Foil Tape</b>		<b>Products Used</b>	<b>System Standard Detail SSD-XXX2-03</b>												
<p><i>Extruded aluminium profile (unitized system)</i> Minimum overall dimensions of framing required is 2.5mm thick aluminium with 100mm x 50mm (depth x width) mullion section, and 100mm x 50mm (depth x width) transom sections</p> <p><i>Galvanized steel C-channel 30x50x30 (minimum thickness 3.0mm)</i></p> <p><i>SIDERISE CW-FB 25mm thick insulation boards</i> (insulation density of 160 kg/m<sup>3</sup>), aluminium foil-faced (The junction between the panels as well as the visible extremities of the panels are covered)</p> <p><i>Galvanized steel sheet (minimum thickness 1.0mm)</i></p> <p><i>Mineral wool insulation (minimum thickness 50mm, minimum density 60 kg/m<sup>3</sup>)</i></p> <p><i>Stainless steel self-tapping screws Ø 3.9 x 13mm</i> (located at 50mm from the extremities of the opening and then located max. every 290mm horizontally and max. every 250mm vertically)</p> <p><i>Bimetallic separation pad</i></p>															
			<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="4">Revisions</th> </tr> <tr> <th>Rev.</th> <th>Date</th> <th>By</th> <th>Description</th> </tr> <tr> <td>A</td> <td>07.10.2022</td> <td>EK</td> <td>First Issue</td> </tr> </table>	Revisions				Rev.	Date	By	Description	A	07.10.2022	EK	First Issue
Revisions															
Rev.	Date	By	Description												
A	07.10.2022	EK	First Issue												
<p><b>Fire Stop System:</b> SIDERISE  <b>Curtain Wall System:</b> Unitised  <b>Typical Detail:</b> Horizontal detail  <b>Compartmentation:</b> EN 1364-4: 2014</p>		<p>NOTE:</p> <p>The drawings in this series are interpretation of the test.</p>	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;"><b>SSD-XXX2-03</b></td> <td style="text-align: center;">Rev. <b>A</b></td> </tr> <tr> <td style="text-align: center;">Sheet <b>03/04</b></td> <td style="text-align: center;">Date released <b>07/10/2022</b></td> <td style="text-align: center;"></td> </tr> </table>	<b>SSD-XXX2-03</b>		Rev. <b>A</b>	Sheet <b>03/04</b>	Date released <b>07/10/2022</b>							
<b>SSD-XXX2-03</b>		Rev. <b>A</b>													
Sheet <b>03/04</b>	Date released <b>07/10/2022</b>														
		<p><b>SIDERISE: TYPICAL DETAIL 1.03 - Horizontal detail</b></p> <p><b>System Standard Detail</b></p> <p>technical@siderise.com   www.siderise.com</p>													



# BY YOUR SIDE®

## **Siderise Insulation**

Passive fire solutions for the building envelope

### **United Kingdom (Global Headquarters)**

Siderise Group Ltd, Forge Industrial Estate,  
Maesteg, Bridgend CF34 0AH, UK

T: +44 (0) 1656 730833

F: +44 (0) 1656 812509

E: [enquiries@siderise.com](mailto:enquiries@siderise.com)

### **Middle East (Branch Office)**

Siderise Middle East Fz LLC, Office 132,  
Al Shafar Investment Building,  
Al Quoz Industrial Area 1, Dubai, UAE

T: +971 (0) 4 250 9643

E: [sideriseme@siderise.com](mailto:sideriseme@siderise.com)

### **India (Branch Office)**

Siderise India Pvt. Ltd, Apeejay Business Centre,  
Cabin 10, 1st Floor, Apeejay Express, Plot 87,  
Sector 17, Navi Mumbai, Maharashtra 400703,  
India

T: +91 998 700 4611

E: [siderisein@siderise.com](mailto:siderisein@siderise.com)

### **Asia Pacific (Branch Office)**

Siderise (Asia Pacific) Pte. Ltd. 80 Robinson Road,  
#02-00 Singapore 068898

T: +65 963 19310

E: [sideriseap@siderise.com](mailto:sideriseap@siderise.com)

## **Siderise Special Products**

Engineered acoustic solutions for equipment  
manufacture and construction

### **Siderise (Special Products) Ltd**

Lady Lane Industrial Estate  
Hadleigh, Suffolk, IP7 6BQ

T: +44 (0) 1473 827695

[www.siderise.com](http://www.siderise.com)



**Disclaimer:** The information in this product brochure 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 brochure. Expert advice should be sought where there is any doubt about the correct specification or installation of Siderise products.