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Authorised and notified according to Article 29 of the Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011

MEMBER OF EOTA

European Technical Assessment ETA-21/0297 of 2021/05/07

I General Part

Technical Assessment Body issuing the ETA and designated according to Article 66 of the Regulation (EU) No 305/2011: ETA-Danmark A/S

Trade name of the construction product:	SIDERISE® CW-FS
Product family to which the above construction product belongs:	Fire stopping and fire sealing product – linear joint seals.
Manufacturer:	Siderise Insulation Ltd Forge Industrial Estate Nantyfyllon, Maesteg UK-Wales CF34 0AH Telephone: +44 1656 730833 www.siderise.com
Manufacturing plant:	Siderise Insulation Ltd Forge Industrial Estate Nantyfyllon, Maesteg UK-Wales CF34 0AH Telephone: +44 1656 730833
This European Technical Assessment contains:	12 pages including 2 annexes which form an integral part of the document
This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, based on:	European Assessment Document (EAD) No. 350141-00-1106, Fire stopping and fire sealing products - Linear joint and gap seals
This version replaces:	-

Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and should be identified as such.

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II SPECIFIC PART OF THE EUROPEAN TECHNICAL ASSESSMENT

1 Technical description of product and intended use.

SIDERISE® CW-FS system perimeter barrier and fire stop for curtain walling.

The materials comprise a one-piece product with a pre-compressed non-combustible stone-wool core. The products have integral aluminium foil facings, accommodating void widths up to 600mm (for details see annex A).

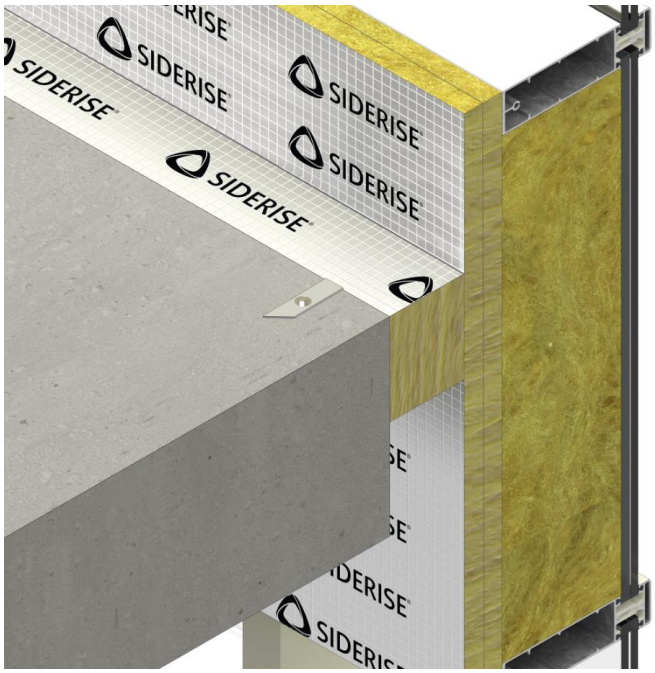


Figure 1: Illustration of the SIDERISE® CW-FS system

2 Specification of the intended use(s) in accordance with the applicable European Assessment Document (hereinafter EAD)

SIDERISE CW-FB is used for insulating the spandrel area. 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.

More information in table 3: “Performance of the product and references to the methods used for its assessment”.

SIDERISE® CW-FS system are to be installed according to the manufacturer’s installation manual.

The identified intended release scenario for the system and intended use with respect to dangerous substances are: System IA1: Product in direct contact with indoor air.

The specific elements of construction that the SIDERISE® CW-FS system may be used to provide a gap or joint seal in, are as follows:

a. Rigid floors: The floor must have a minimum thickness of 150 mm and comprise aerated concrete or concrete with a minimum density of 650 kg/m^3.
b. Rigid walls: The wall must have a minimum thickness of 150 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 650 kg/m^3.

The supporting construction must be classified in accordance with EN 13501-2 for the required fire resistance period.

The linear joint seals may be used in environmental conditions, Type Z_1: Intended for use at internal conditions with high humidity, excluding temperatures below 0°C. Includes lower categories i.e. Type Z_2.

The provisions made in this European Technical Assessment are based on an assumed intended working life of the SIDERISE® CW-FS system of 25 years, provided the manufacturers conditions laid down in the manufacturers data sheet for the packaging, transport, storage, installation, use, maintenance and repair are met.

The indications given as to the working life of the construction product cannot be interpreted as a guarantee neither given by the product manufacturer or his representative nor by the Technical Assessment Body issuing an ETA based on the EAD No. 350141-00-1106 but are regarded only as means for expressing the expected economically reasonable working life of the product.

3 Performance of the product and references to the methods used for its assessment*

Characteristic	Assessment of characteristic
3.1 Safety in case of fire (BWR2)	
Reaction to fire	The product is classified as **Class A1** in accordance with EN 13501-1
Resistance to fire	Classification according to EN 13501-2, see Annex A1 for further information of fire resistant designs
3.2 Hygiene, health and the environment (BWR3)	
Content, emission and/or release of dangerous substances[1]	IA1: Product in direct contact with indoor air **TVOC ≤ 0,5 mg/m³**
Air permeability (material property)	See annex B
Water Permeability (material property)	External Use: The product is classified as **Class R7** in accordance with EN 12154 Internal Use: Watertight to 250 Pa
3.3 Safety in use (BWR4)	
Mechanical resistance and stability	**No performance assessed**
Resistance to impact/movement	**No performance assessed**
Adhesion	**No performance assessed**
Durability	Use condition: **Z_1**
Movement capability	**± 10%**
Cycling of perimeter seals for curtain walls	**Cycle tested at 30 cpm**
Compression set	**No performance assessed**
Linear compression on setting	**No performance assessed**
3.4 Protection against noise (BWR5)	
Airborne sound insulation	**R_w (C; C_{tr}) = 25 (-2;-3) dB**
3.5 Energy Economy and heat retention (BWR6)	
Thermal properties	**λ= 0,038 ± 5%**
Water vapour permeability	**μ-value: 94**

*) See additional information in section 3.6 – 3.7.

1 In addition to the specific clauses relating to dangerous substances contained in this European technical Assessment, there may be other requirements applicable to the products falling within its scope (e.g. transposed European legislation and national laws, regulations and administrative provisions). In order to meet the provisions of the Construction Products Regulation, these requirements need also to be complied with, when and where they apply.

3.6 Methods of verification.

The characteristic values of the joint sealing system are based on the EAD 350454-00-1104.

3.7 General aspects related to the fitness for use of the product.

The European Technical Assessment is issued for the product based on agreed data/information, deposited with ETA-Danmark, which identifies the product that has been assessed and judged. Changes to the product or production process, which could result in this deposited data/information being incorrect, should be notified to ETA-Danmark before the changes are introduced. ETA-Danmark will decide if such changes affect the ETA and consequently the validity of the CE marking based on the ETA and if so whether further assessment or alterations to the ETA, shall be necessary.

SIDERISE® CW-FS system is manufactured in accordance with the provisions of this European Technical Assessment using the manufacturing processes as identified in the inspection of the plant by the notified inspection body and laid down in the technical documentation.

4 Assessment and verification of constancy of performance (hereinafter AVCP) system applied, with reference to its legal base.

4.1 AVCP system

According to the decision 1999/454/EC of the European Commission, as amended, the system(s) of assessment and verification of constancy of performance is system 1 (see Annex V to Regulation (EU) No 305/2011).

5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD.

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at ETA-Danmark prior to CE marking

Issued in Copenhagen on 2021-05-07 by

Thomas Bruun
Managing Director, ETA-Danmark

Siderise 'CW-FS' Firestops (BS EN 1364-4) Horizontal Orientation

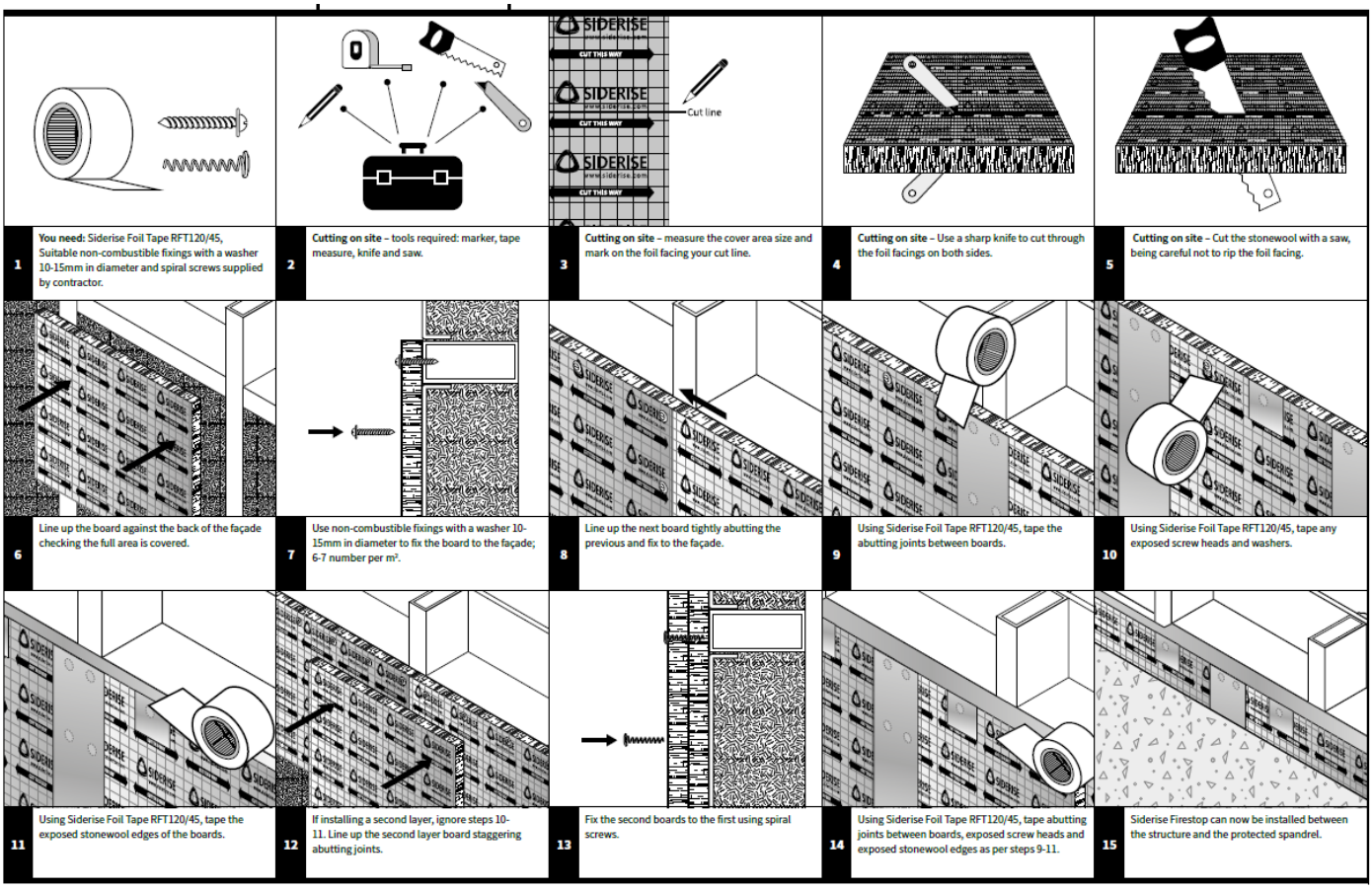
Gap Width (mm)	Product	Seal Thickness (mm)	Compression %	Integrity (mins)	Insulation (mins)	Cover Length (mm)	Bracket Requirement
20 to 50	CW-FS120	120	10%	120		1200	2 No. Standard brackets B65/110 per length at 600mm nominal centres, brackets to be mechanically fixed to structure
	CW-FS180	150		180			
51 to 150	CW-FS120	120		120			
	CW-FS180	150		180			
151 to 250	CW-FS120	120		120			2 No. Standard brackets B195 per length at 600mm nominal centres, brackets to be mechanically fixed to structure
	CW-FS180	150		180			

Siderise 'CW-FS' Firestops (BS EN 1366-4) Vertical Orientation
Concrete to concrete substrates

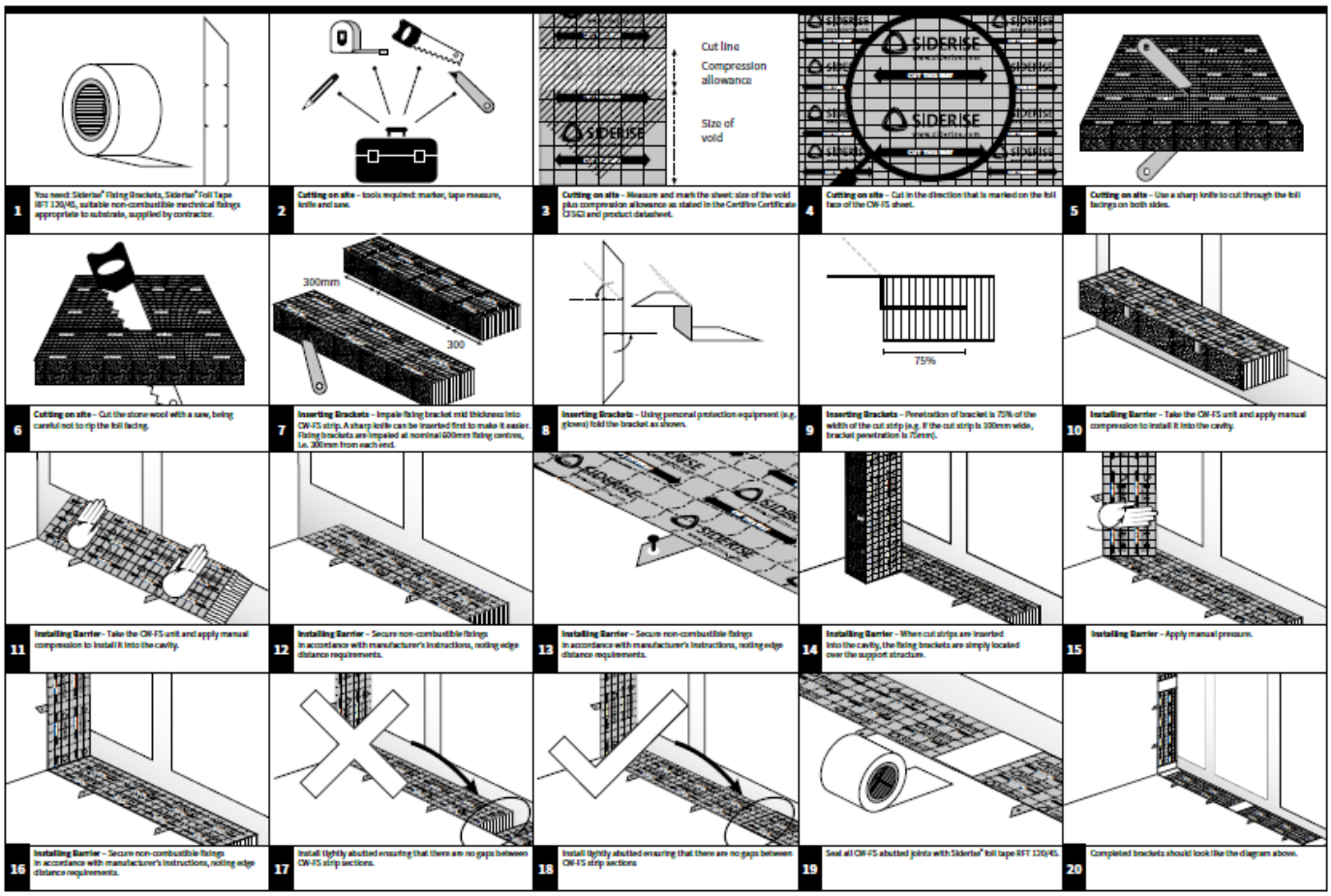
Product	Seal Thickness (mm)	Cover Length (mm)	Compression Minimum (mm)	Integrity (minutes)	Insulation (minutes)	Gap Width (mm)	Bracket Requirement	Qty Bkts	Bracket Centres (mm)
CW-CB30	75	1200	Gap Width +10mm	90	30	51-150	B65/110	2	600
						151-240	B195		
						241-300	B355		
						301-450	B355		
CW-FS60	90	1200	Gap Width +10mm	90	60	51-150	B65/110	2	600
						151-240	B195		
						241-300	B355		
CW-FS120	120	1200	Gap Width +10mm	120	120	51-150	B65/110	2	600
						151-240	B195		
						241-300	B355		
						301-450	B355		

Siderise 'CW-FS' Firestops (BS EN 1366-4) Horizontal Orientation

Seal Thickness (mm)	Product	Cover Length (mm)	Compression Minimum (mm)	Integrity (minutes)	Insulation (minutes)	Gap Width (mm)	Bracket Requirement	Qty Bkts	Bracket Centres (mm)
75	CW-CB30	1200	Gap Width +10mm	90	30	51-150	B65/110	2	600
						151-240	B195		
						241-300	B355		
90	CW-FS60	1200	Gap Width +10mm	90	60	51-150	B65/110	2	600
						151-240	B195		
						241-300	B355		
120	CW-FS120	1200	Gap Width +10mm	120	120	51-150	B65/110	2	600
						151-240	B195		
						241-300	B355		



SIDERISE® CW-FB	Annex A2
Installation instructions	



1 You need: Siderise® Fixing Brackets, Siderise® Foil Tape RFT 120/45, suitable non-combustible mechanical fixings appropriate to substrate, supplied by contractor.

2 **Cutting on site** – tools required: marker, tape measure, knife and saw.

3 **Cutting on site** – Measure and mark the sheet: size of the void plus compression allowance as stated in the Certifire Certificate CF5621 and product datasheet.

4 **Cutting on site** – Cut in the direction that is marked on the foil face of the CW-FS sheet.

5 **Cutting on site** – Use a sharp knife to cut through the foil facings on both sides.

6 **Cutting on site** – Cut the stone wool with a saw, being careful not to rip the foil facing.

7 **Inserting Brackets** – Impale fixing bracket mid thickness into CW-FS strip. A sharp knife can be inserted first to make it easier. Fixing brackets are impaled at nominal 600mm fixing centres, i.e. 300mm from each end.

8 **Inserting Brackets** – Using personal protection equipment (e.g. gloves) fold the bracket as shown.

9 **Inserting Brackets** – Penetration of bracket is 75% of the width of the cut strip (e.g. if the cut strip is 100mm wide, bracket penetration is 75mm).

10 **Installing Barrier** – Take the CW-FS unit and apply manual compression to install it into the cavity.

11 **Installing Barrier** – Take the CW-FS unit and apply manual compression to install it into the cavity.

12 **Installing Barrier** – Secure non-combustible fixings in accordance with manufacturer's instructions, noting edge distance requirements.

13 **Installing Barrier** – Secure non-combustible fixings in accordance with manufacturer's instructions, noting edge distance requirements.

14 **Installing Barrier** – When cut strips are inserted into the cavity, the fixing brackets are simply located over the support structure.

15 **Installing Barrier** – Apply manual pressure.

16 **Installing Barrier** – Secure non-combustible fixings in accordance with manufacturer's instructions, noting edge distance requirements.

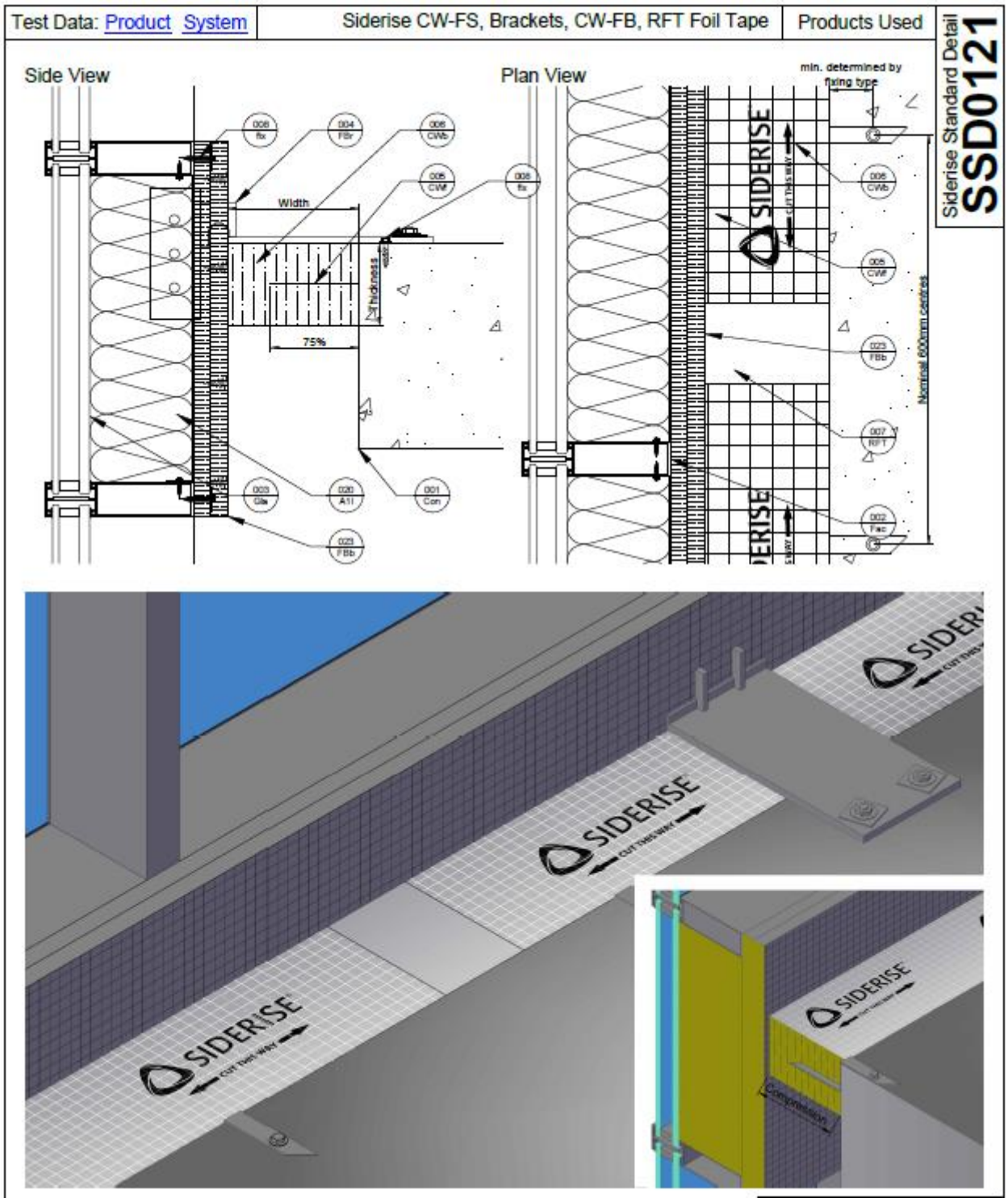
17 Install tightly abutted ensuring that there are no gaps between CW-FS strip sections.

18 Install tightly abutted ensuring that there are no gaps between CW-FS strip sections

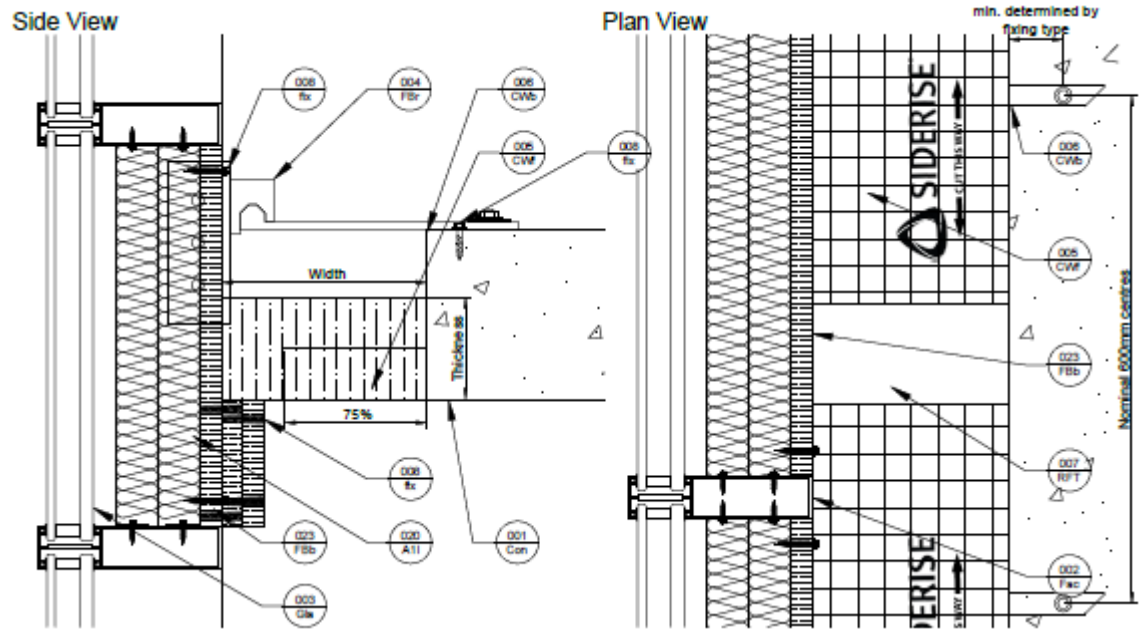
19 Seal all CW-FS abutted joints with Siderise® foil tape RFT 120/45.

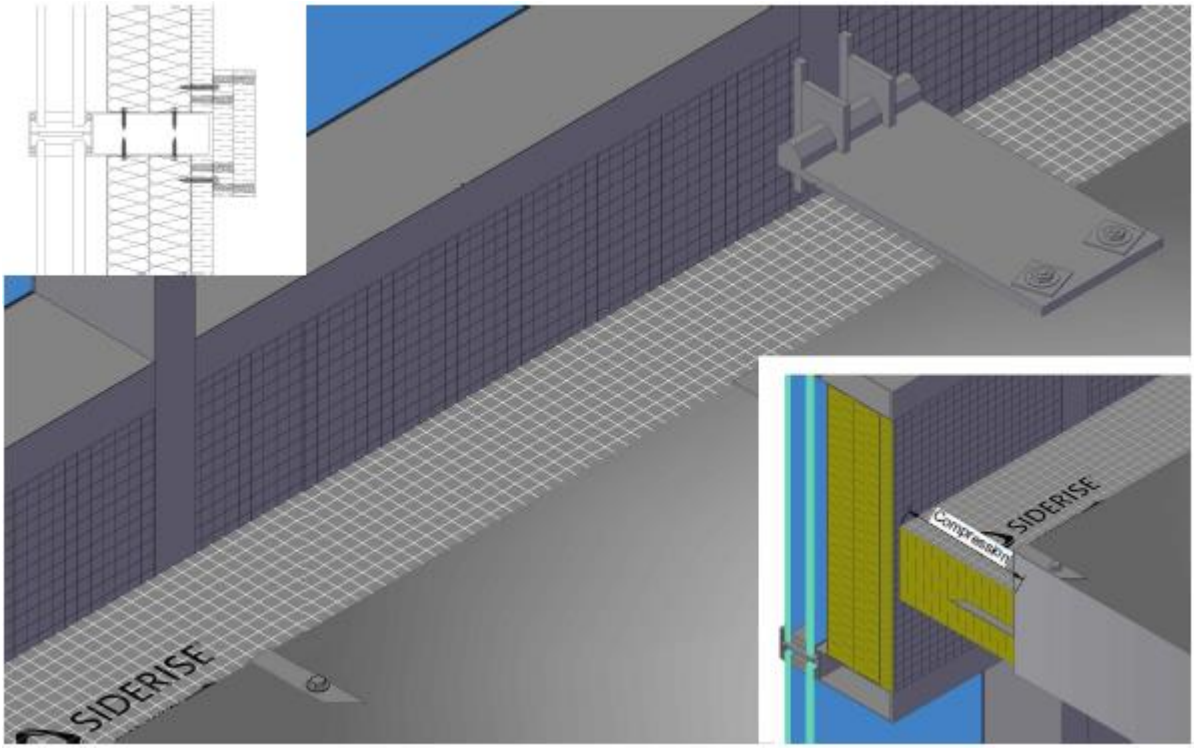
20 Completed brackets should look like the diagram above.

SIDERISE® CW-FS	Annex A3
Installation instructions	



SIDERISE® CW-FS	Annex A4
Top of slab, top of slab façade bracket with CW-FB	





SIDERISE® CW-FS	Annex A5
CW-FS bottom of slab, with CW-FB Protected Spandrel	

SIDERISE® CW-FS with SIDERISE RFT120 foil tape applied.		
Pressure (Pa)	**Leakage (m^3/h/m)**	**Leakage (m^3/h/ m^2)**
50	**0.01**	**0.04**
100	**0.10**	**0.40**
150	**0.11**	**0.44**
200	**0.09**	**0.36**
250	**0.09**	**0.36**
300	**0.09**	**0.36**
450	**0.07**	**0.29**
600	**0.10**	**0.40**