

CERTIFICATE OF APPROVAL No CF 563

This is to certify that, in accordance with TS00 General Requirements for Certification of Fire Protection Products
The undermentioned products of

SIDERISE INSULATION LIMITED

Forge Industrial Estate, Maesteg, Bridgend, CF34 0AZ, United Kingdom Tel: 01656 730833 Fax: 01656 812509

Have been assessed against the requirements of the Technical Schedule(s) denoted below and are approved for use subject to the conditions appended hereto:

CERTIFIED PRODUCT

Siderise 'CW-FS' linear joint and perimeter firestop seals (BS EN 1364-4:2014 & BS EN 1366-4:2006+A1:2010)

TECHNICAL SCHEDULE
TS 40 Fire Resisting Linear
Gap Sealing Systems

Signed and sealed for and on behalf of Warringtonfire Testing and Certification Limited

Paul Duggan

Certification Manager

Issued: 25th February 2008

Reissued: 5th December 2024 (Ext 4)

Valid to: 4th March 2025







This certification is provided to the client for their own purposes and we cannot opine on whether it will be accepted by Building Control authorities or any other third parties for any purpose.

Siderise CW-FS Linear joint (perimeter firestop) seals - BS EN 1364-4:2014

This Certificate of Approval relates to the fire resistance of Siderise CW-FS; linear joints seals (perimeter firestop) when used in the following application.

Application

Between concrete floor slab edge and external specific, tested curtain wall system assemblies

This approval uses the Integrity and Insulation criteria defined in BS EN 1364-4:2014.

This approval also relates to the use of Siderise CW-FS linear joint (perimeter firestop) seals for the fire protection of linear joint gaps between a minimum 200mm thick concrete slab edge (density ≥2200kg/m3) and external specific, tested curtain wall system assemblies. The CW-FS linear joint seal, which comprises a foil faced stone mineral lamella core, is formed in 1200mm long sections, and is provided in a range of thicknesses. The detailed scope is given in the Approval Matrix included in this Certificate. This shows the thickness, width and reference to the specific Siderise CW-FS linear joint seal, required to provide fire resistance periods in accordance BS EN 1364-4:2014 for up to 180 minutes for horizontal applications.

The certification is only applicable to straight linear joint seals, as those considered by BS EN 1364-4:2014 and does not consider corner detailing.

The products are approved on the basis of:

- i) Initial type testing.
- ii) A design appraisal against TS40
- iii) Certification of quality management system to ISO 9001: 2015.
- iv) Inspection and surveillance of factory production control.
- v) Audit testing.

This Certificate of Approval must be read in conjunction with CERTIFIRE Technical Schedule TS40, Fire Resisting Linear Gap Sealing Systems.

General Requirements

The linear joint seals shall not be penetrated by services, e.g., pipes or cables.

Approved products, applications and fire resistance periods

This certificate approves the products and applications detailed within the following table subject to the installation of the products in accordance with the manufacturer's installation instructions.

The approval relates to edge of slab linear joint gap sealing applications involving external curtain wall assemblies tested in accordance with BS EN 1364-4:2014. Only the specific types of constructions defined in the test reports ref may be considered as relevant to this Certification.

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Siderise 'CW-FS' Linear joint (perimeter firestop) seals (BS EN 1364-4:2014)

Horizontal Orientation

Concrete slab edge to external, specific, tested curtain wall system substrates

Gap Width* (mm)	Product	Seal Thickness (mm)	Compression	Integrity and Insulation (minutes)	Cover Length (mm)	Bracket Requirement*	
20 to 50 51 to 150	CW- FS120	120		120		Minimum 2 No. Standard brackets B65/110 per length at 600mm	
	CW- FS180	150		180			
	CW- FS120	120		120		nominal centres, brackets to be	
	CW- FS180	150	10%	180	1200	mechanically fixed to structure Minimum 2 No. Standard brackets B195 per length at 600mm nominal centres, brackets to be mechanically fixed to structure	
	CW- FS120	120	1070	120	1200		
151 to 250	CW- FS180	150		180			

^{*}Refer to the Siderise CW-FS Linear Gap Seal installation details and gap stability limitations section for further information.

The brackets must be fixed to the internal floor slab edge. The minimum floor slab thickness must be 200mm thick reinforced concrete with a minimum density of 2200kg/m³ using a Eurocode 2 design specification.

The Certificated scope for the Siderise 'CW-FS' edge of slab linear joint gap seals has been derived from fire resistance testing in accordance with BS EN 1364-4:2014 and its associated DIAP rules. The above fire resistance performances relate specifically to the tested construction details only. For specific installation and construction specifications, especially in relation to the approved curtain walling arrangements the following test reports should be utilised:

WF 317785 - Dated 18th June 2012 EFR-15-U-001110 Dated 30th May 2016 EFR-17-U-000353 Dated 16th August 2018 EFR-17-U-000351 Dated 22nd January 2018

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Siderise CW-FS Linear joint and perimeter firestop seals - BS EN 1366-4:2006+A1:2010

This Certificate of Approval relates to the fire resistance of Siderise CW-FS Linear joint and perimeter firestop seals when used in the following application.

Application

Between concrete to concrete/masonry, or masonry to masonry/concrete substrates

This approval uses the Integrity and Insulation criteria defined in BS EN 1366-4:2006+A1:2010.

This approval also relates to the use of Siderise CW-FS linear joint seals for the fire protection of linear joint gaps installed between a minimum 150mm thick concrete or masonry substrates of a density ≥670kg/m³. The CW-FS linear joint seal, which comprises a foil faced stone mineral lamella core, is formed in 1200mm long sections, and is provided in a range of thicknesses. The detailed scope is given in the Approval Matrix included in this Certificate. This shows the thickness, width and reference to the specific Siderise CW-FS linear joint seal, required to provide fire resistance periods in accordance with BS EN 1366-4:2006+A1:2010 for up to 120 minutes Integrity and Insulation performance for horizontal and vertical applications.

The certification is only applicable to straight, linear joint seals, as those considered by BS EN 1366-4:2006+A1:2010 and does not consider corner detailing.

The products are approved on the basis of:

- i) Initial type testing.
- A design appraisal against TS40. ii)
- iii) Certification of quality management system to ISO 9001: 2015.
- vi) Inspection and surveillance of factory production control.
- vii) Audit testing.

This Certificate of Approval must be read in conjunction with CERTIFIRE Technical Schedule TS40, Fire Resisting Linear Gap Sealing Systems.

General Requirements

The linear joint seals shall not be penetrated by services, e.g., pipes or cables.

Approved products, applications and fire resistance periods

This certificate approves the products and applications detailed within the following table subject to the installation of the products in accordance with the manufacturer's installation instructions.

The approval relates linear joint gap sealing applications tested in accordance with BS EN 1366-4:2006+A1:2010. Only the specific types of constructions defined in the test reports ref may be considered as relevant to this Certification.

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Siderise 'CW-FS' Linear joint and perimeter firestop seals (BS EN 1366-4:2006+A1:2010)

Horizontal Orientation

Concrete/masonry to concrete/masonry substrates

Product	Seal Thickness (mm)	Cover Length (mm)	Compression Minimum (% or mm)	Integrity (minutes)	Insulation (minutes)	Gap Width* (mm)	Bracket Requirement *	Qty Bkts* (min)	Max Bracket Centres * (mm)
CW-CB30	75	1200	10 %	60	30	20-50	N/A	0	N/A
						51-150	B65/110		
CW-CB30	75	1200	Gap Width	60	30	151-240	B195	2	600
			+10mm			241-300	B355	<u> </u>	
CW ESSO	00	1200	10.0/	00	60	20.50	NI/A	0	NI/A
CW-FS60	90	1200	10 %	90	60	20-50	N/A	0	N/A
CW-FS60	90	1200	Gap Width +10mm	90	60	51-150	B65/110		
						151-240	B195	2	600
						241-300	B355		
			1			,			
CW-FS120	120	1200	10 %	120	120	20-50	N/A	0	N/A
	120	1200	Gap Width +10mm	120	120	51-150	B65/110	2	
CW-FS120						151-240	B195		600
						241-300	B355		
CW-FS60-	120	1200	Gap Width +20mm	60	60	301-600	B355	2	600

^{*}Refer to the Siderise CW-FS Linear Gap Seal installation details and gap stability limitations section for further information.

Siderise CW-FS linear joint seals may be fitted between a minimum 150mm thick concrete or masonry substrates of a density ≥670kg/m3.

The Certificated scope for the Siderise 'CW-FS' linear gap seals has been derived from fire resistance testing in accordance with BS EN 1366-4:2006+A1:2010. For specific installation and construction details the following test reports should be utilised:

WF 399726

WF 408622

WF 348661

WF 412181

WF 431532

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Siderise 'CW-FS' Linear joint and perimeter firestop seals (BS EN 1366-4:2006+A1:2010)

Vertical Orientation

Concrete/masonry to concrete/masonry substrates

Product	Seal Thickness (mm)	Cover Length (mm)	Compression Minimum (% or mm)	Integrity (minutes)	Insulation (minutes)	•	Bracket Requirement*	Qty Bkts* (Min)	Max Bracket Centres* (mm)
CW-CB30	75	1200	10 %	90	30	20-50	N/A	0	N/A
	75	1200	Gap Width +10mm	90	30	51-150	B65/110	2	600
CW-CB30						151-240	B195		
CVV-CB30						241-300	B355		
						301-450	B355		
CW-FS60	90	1200	10 %	90	60	20-50	N/A	0	N/A
	90	1200	Gap Width +10mm	90		51-150	B65/110	2	600
CW-FS60					60	151-240	B195		
						241-450	B355		
CW-FS120	120	1200	10 %	120	120	20-50	N/A	0	N/A
	120	1200	Gap Width +10mm	120	120	51-150	B65/110	2	600
CW-FS120						151-240	B195		
CVV-F5120						241-300	B355		
						301-450	B355		
				•	•				•
CW-FS60-	120	1200	Gap Width +20mm	60	60	451-600	B355	2	600

^{*}Refer to the Siderise CW-FS Linear Gap Seal installation details and gap stability limitations section for further information.

Siderise CW-FS linear joint seals may be fitted between a minimum 150mm thick concrete or masonry substrates of a density ≥670kg/m3.

The Certificated scope for the Siderise 'CW-FS' linear gap seals has been derived from fire resistance testing in accordance with BS EN 1366-4:2006+A1:2010. For specific installation and construction details the following test reports should be utilised:

WF 389382 Issue 2

WF 398827

WF 424701

WF 412180

WF 431532

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Siderise CW-FS Linear gap and perimeter firestop seal installation details and gap stability limitations

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 linear joint seals is accounted for in order to achieve the specified compression given in the tables. The compression requirements must be 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. The bracket centres shall be such that they are installed to a maximum of 300mm from each end of a 1200mm section. The brackets may be bent to suit the specific substrate thickness. 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 steel angle brackets should be fixed with suitable fire rated fixings, which are a minimum of 7 mm in diameter and 50 mm in length. A minimum of two brackets are required for each section of linear joint seal and short lengths of seal should be avoided, where possible. The seals must be fitted within the thickness of the substrate.

The certification is only applicable to straight linear joint seals, as those considered by BS EN 1364-4:2014 and BS EN 1366-4:2006+A1:2010, as applicable, and does not consider corner detailing.

Jointing

The joints between the lengths of seals shall be straight butt joints and shall be fitted in slight compression so that they are tight. RFT120/45 self-adhesive reinforced aluminium foil tape shall be applied over the joints.

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 façade 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).

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