

CFS-SP WB: FIRESTOP JOINT SPRAY

Product pack

ETA 11/0343 & 12/0078



APPLICATIONS

CHANGE LOG 🕑





Technical data



Overview

Installation instructions

CFS-SP WB WATER-BASED ACRYLIC SEALANT SPRAY

A water-based acrylic firestop joint spray designed for sealing various construction joints between walls, floors and exterior facades.





APPLICATIONS

- · Sealing wall and top-of-wall openings and joints
- Sealing joints between floor slabs
- Sealing building perimeter gaps between floor slabs and exterior curtain walling façades

ADVANTAGES

- · Water-based, low-VOC, halogen-free formulation
- High degree of elasticity movement capability of up to ± 40%
- Excellent sprayability and low slump characteristics
- · Fast, efficient sealing of wide, difficult-to-access joints
- Quick and easy installation with airless sprayer can help save time and money

Technical data Fire rating Up to 4 hours **Base materials** Concrete, Masonry, Gypsum, Steel, Aluminium, Glass **Application temperature** 4°C - 40°C range Colour White 3 mm/day1 **Curing time** Acoustic performance Up to 40dB ± 40% for Walls/Floors & **Movement capabilities** ± 25% for Curtain Wall

¹ at 75°F/24°C, 50% relative humidity

ACOUSTIC PERFORMANCE

The resulting $R_{w(C;Ctr)}$ and $D_{n,e,w(C;Ctr)}$ values are:

Coating	Rw(C;Ctr) [dB]	Dn,e,w (C;Ctr) [dB]
Both sides	40 (-1;-5) ^{a)}	55 (0;-4) ^{b)}
Top side	37 (-1;-4) ^{a)}	52 (-1;-4) ^{b)}

^{a)} where S = 0,3 m² (S = Area to which the measurement applies) ^{b)} where $A_0 = 10 m^2$ (A_0 = Area to which the stndardisation is carried out)

Order description	Package contents	Package quantity	Item number
Firestop Joint Spray CFS-SP WB White	Bucket 5 Gal / ca. 19 litres	1 pc	430806



Overview

Installation instructions

INSTALLATION INSTRUCTIONS

CURTAIN WALLING



LINEAR JOINTS







APPLICATION INFORMATION

FOR PIPES/CABLE DIAMETERS

S = Single pipe/cable*

B = pipe/cable Bundle

*For pipes, if no S or B, assume single pipe.

FOR INSULATION

N-C = Non-Combustible (e.g., stone wool etc.) C = Combustible (e.g., Armaflex, phenolic etc.) None = No insulation

LS = Local Sustained

- LI = Local Interrupted
- CS = Continuous Sustained
- CI = Continuous Interrupted

Please note, in many cases details have numerous pages. Please check all pages for the necessary information as differing insulation layouts might be on differing pages (e.g., LS one page 1 and LI on page 2 etc.).

PENETRATION TYPE

Single = penetration seal intended for penetrations with only one service passing through

Multi = penetration seal intended for penetrations where more than one service of the same type (e.g. cables) or pipe material group pass through

Mixed = penetration seal intended for penetrations where more than one type of services (e.g. cables and pipes or pipes of different pipe material groups) pass through

CLASSIFICATION

Classification will give the best-case El value possible. As such, check each specific detail as there may be instances where a higher I value is possible or another sized service within the application may attain a lower value (e.g., 110mm pipe achieves El 120 but a 160mm pipe achieves El 90).

PRODUCT/DETAIL

Full product name first/Detail ID (See specific detail for the full ID).

Please note, in many cases details have numerous pages. Please check all pages for the necessary information.





Continued Sustained (CS)







Local Sustained (LS)









							Linear joints
Top of	wall	Wall to wall	1	Floor to floor		Fa	açade
Base mat	erials	Allowable joint w	vidth	Movement capacity	Classification		uct/Detail
Rigid wall & r	igid floor	6-100		40%	EI 120	CFS-SP W	B:LJ-RW/RF-01 👂





							Linear joints
Top of	wall	Wall to wall		Floor to floor	Door frames		açade
Base mat	erials	Allowable joint w	ridth	Movement capacity	Classification		uct/Detail
Rigid wall &	rigid wall	6-100		40%	EI 240	CFS-SP \	WB:LJ-RW-01 📀







								Linear joints
Top of	wall	Wall to wall	_	Floor to floor			Fa	açade
Base mat	erials	Allowable joint w	idth	Movement capacity Classification		Prod	uct/Detail	
Rigid floor &	rigid floor	6-100		40%		EI 120	CFS-SP	WB:LJ-RF-01 👂





Technical data Applications Change log A CFS-SP WB



									Metal deck	Linear joints
Top of v	wall	Wall to wa	II		Floor to floor	D			Fa	içade
Base mat	erials	Façade Curtain wall	system Light vential	ed façade	Allowable joint width	Movement capacity	Classifica	() ation	Produ	0 uct/Detail
Rigid floor & ci	urtain wall	~			10-200	25%	EI 180)	CFS-SP W	B:LJ-CW-01.1 📀
Rigid floor & cı (aluminium	urtain wall sheet)	~			10-200	25%	EI 180)	CFS-SP W	B:LJ-CW-01.2 🧿
Rigid floor & ci (calcium silica	urtain wall te board)	~			10-200	25%	EI 180)	CFS-SP W	B:LJ-CW-01.3 📀





G Back

SP-WB: LJ-RF-01

JOINTS BETWEEN FLOORS

Fire rating up to EI 120

CFS-SP WB Joint Spray applied to surface of stonewool to a wet film thickness of 3-5mm and a min. 15mm overlap onto the base material. To be applied on top side of the floor only*

- Information
- Not to scale
- All units are in millimetres
- Tested according EN 1366-4
- Approval ETA-12/0078

DWG • PDF • BIM/CAD • Web •



Joint width (mm)	S₀ sealant depth (mm)	Mineral backfilling compression (%)	Classification
6 – 100	Min. 3-5 wet film thickness to achieve 2 dry film thickness	≥ 50 ¹	EI 120-H-M 40-F-W 6 to 100

Movement requirement (mm)	Min. required joint width (mm)			
5	15			
10	25			
15	40			
20	50			
25	65			

¹ Mineral wool, with a vertical lamellae, must be pressed into the joint taking into consideration that the uncompressed thickness of the mineral wool board before installation must be at least 12mm (for 6mm joint) and up to 200mm (for a 100mm joint).

* A compressed-air paint machine can be used to apply the CFS-SP WB Joint Spray. The recommended criteria is as follows:

Maximum Movement Capability: ± 40 % see above table for min. joint width recommendations to suit specific movement requirements

Volume = min ~ 2,5l / min (0,6gal/min) Max Pressure = >200 bar (> 2900 PSI)

The application limits on this detail are for guidance purposes only. For more detailed information based on the full range of available test results please contact the Hilti Technical Advisory Service.
The product and application has been assessed as a minimum to the BS 476 standard. It may have additional European and worldwide testing. Please contact Hilti for further information.
All installations should be carried out in accordance with Hilti's installation instructions and by competent & experienced installers using Hilti branded products.

All services are to be correctly and adequately supported to prevent collapse and distortion.

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SP-WB: LJ-RW-01 Information Not to scale JOINTS BETWEEN RIGID WALLS All units are in millimetres Tested according EN 1366-4 Fire rating EI 240 Approval ETA-12/0078 DWG O PDF O BIM/CAD O Web O CFS-SP WB Joint Spray applied to 6 - 100 surface of stonewool to a wet film SD thickness of 3-5mm and a min. 15mm 22 overlap onto the base material. To be u L L applied on both sides of the wall* 150 min 75 <u>min</u> 15 min 5 ш Mineral wool according to EN 13162 or EN Concrete, aerated concrete 14303, 30 - 70 kg/m3 or mansonry with min. density density 380 kg/m³ min 150 Joint width (mm) S_D sealant depth (mm) Mineral backfilling compression (%) Classification Min. 3-5 wet film thickness to 6 - 100 ≥ 50¹ EI 240-V-M 40F-W 6 to 100 achieve 2 dry film thickness

Movement requirement (mm)	Min. required joint width (mm)
5	15
10	25
15	40
20	50
25	65

¹ Mineral wool must be pressed into the joint taking into consideration, that the uncompressed thickness of the mineral wool board before installation must be at least 12mm (for 6mm joint) and up to 200mm (for a 100mm joint).

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Change log **CFS-SP WB Technical data Applications** Page 1 Page 2 SP-WB: LJ-RW-01 Information Not to scale JOINTS BETWEEN RIGID WALLS All units are in millimetres Tested according EN 1366-4 Fire rating EI 240 Approval ETA-12/0078 DWG DDF BIM/CAD Web Mineral wool according to EN 13162 or EN 14303, CFS-SP WB Joint Spray applied to 30 - 70 kg/m3 density surface of stonewool to a wet film thickness of 3-5mm and a min. 15mm 75 6 - 100 overlap onto the base material. To be uin. applied on both sides of the wall* min 150 min 75 min 15 min 15 Concrete, aerated concrete or mansonry with min. density 380 kg/m² Joint width (mm) S_D sealant depth (mm) Mineral backfilling compression (%) Classification Min. 3-5 wet film thickness to ≥ 501 EI 240-H-F-M25-W 10 to W 200 6 - 100achieve 2 dry film thickness

Movement requirement (mm)	Min. required joint width (mm)	
5	15	
10	25	
15	40	
20	50	
25	65	

Maximum Movement Capability: ± 40 % see above table for min. joint width recommendations to suit specific movement requirements

¹ Mineral wool must be pressed into the joint taking into consideration that the uncompressed thickness of the mineral wool board before installation must be at least 12mm (for 6mm joint) and up to 200mm (for a 100mm joint).

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Applications

Back



Joint width (mm)	S⊳ sealant depth (mm)	Mineral backfilling compression (%)	Classification		
6 – 100	Min. 3-5 wet film thickness to achieve 2 dry film thickness	≥ 50 ¹	EI 120-H-M 40-F-W 6 to 100		
Movement Min. required joint requirement (mm) width (mm)		¹ Mineral wool with a horizontal lam pressed into the joint taking into co	nellae must be onsideration that		
5	15	the uncompressed thickness of the mineral wool board before installation must be at least 12mm (for 6mm joint) and up to 200 mm (for a 100mm joint).			
10	25				
15	40	* A compressed-air paint machine	can be used to		
20	50	apply the CFS-SP WB Joint Spray.	The		
25	65	recommended criteria is as follows:			
Maximum Moveme	ent Capability:± 40 % see above	Volume = min ~ 2,5l / min (0,6gal/min) Max Pressure = >200 bar (> 2900 PSI)			

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Curtain wall type	Joint width (mm)	S _D sealant depth (mm)	Mineral backfilling compression (%)	Classification
Aluminium framed	10 – 200	Min. 3-5 wet film thickness to achieve 2 dry film thickness	≥ 50 ¹	EI 180-H-F-M25-W 10 to W 200
Steel framed	10 – 200	Min. 3-5 wet film thickness to achieve 2 dry film thickness	≥ 50 ¹	EI 90-H-F-M25-W 10 to W 200

¹Mineral wool must be pressed into the joint taking into consideration, that the uncompressed thickness of the mineral wool board before installation must be at least 20mm (for 10mm joint) and up to 200 mm (for a 100mm joint).

Horizontal distance	Vertical deflection	Horizontal deflection
25	16.67	6.25
50	33.33	12.50
75	50.00	18.75
100	66.67	25.00
125	83.33	31.25
150	100.00	37.55
175	116.67	43.75
200	133.33	50.00



Maximum Movement Capability: ± 25 % horizontal and vertical movement, see above table for min. joint width recommendations to suit specific movement requirements. Please note, these are different and not to be combined. For combined movement, please contact Hilti for further support.

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Aluminium framed	10 – 200	Min. 3-5 wet film thickness to achieve 2 dry film thickness	≥ 50 ¹	EI 180-H-F-M25-W 10 to W 200
Steel framed	10 – 200	Min. 3-5 wet film thickness to achieve 2 dry film thickness	≥ 50 ¹	EI 90-H-F-M25-W 10 to W 200

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SP-WB: LJ-CW **CFS-SP WB Joint** Information Spray applied to Not to scale surface of stonewool, JOINTS BETWEEN CURTAIN WALL All units are in millimetres on the top side only, to Tested according EN 1364-4 Fire rating up to EI 180 a wet film thickness of Approval ETA-11/0343 3-5mm and a min. 15 DWG DDF BIM/CAD Web mm overlap onto the base material and onto the inner face of the spandrel 15 . Lin calcium silicate boards Rigid Floor min. density ъ min 15 2400 kg/m3 Cavity formed by the spandrel panel and the framing filled with stone wool or stone wool boards 150 of min 70kg/m³ density with . Lin calcium silicate boards Air permeability (See section 3.2.1 of ETA): according to EAD 350141-00-1106, clause 2.2.3 10 - 200 by test principle of EN 1026: No 40 to 70 kg/m³ mineral/stone wool representative air flow measured compressed \geq 50% in the vertical orientation, Acoustics (See section 3.4.1 of ETA): with a min depth of 150 mm. - 37 dB Rw (coating top side only) - 40 dB Rw (coating top and bottom)

Curtain wall type	Joint width (mm)	S₀ sealant depth (mm)	Mineral backfilling compression (%)	Classification
Aluminium framed	10 – 200	Min. 3-5 wet film thickness to achieve 2 dry film thickness	≥ 50 ¹	EI 180-H-F-M25-W 10 to W 200
Steel framed	10 – 200	Min. 3-5 wet film thickness to achieve 2 dry film thickness	≥ 50 ¹	EI 90-H-F-M25-W 10 to W 200

¹Mineral wool must be pressed into the joint taking into consideration, that the uncompressed thickness of the mineral wool board before installation must be at least 20mm (for 10mm joint) and up to 200 mm (for a 100mm joint).

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CHANGE LOG

Date	Description



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