CFS-SP WB: FIRESTOP JOINT SPRAY

Product pack

ETA 11/0343 & 12/0078

TECHNICAL DATA

APPLICATIONS

CHANGE LOG

Revision 01 – 31/01/2025

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

ACOUSTIC PERFORMANCE

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

Coating	$R_{w(C;Ctr)}$ [dB]	$D_{n,e,w\ (C;Ctr)}$ [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 m^2 (S = Area to which the measurement applies)
[b] where A_0 = 10 m^2 (A_0 = Area to which the stndardisation is carried out)

Technical data

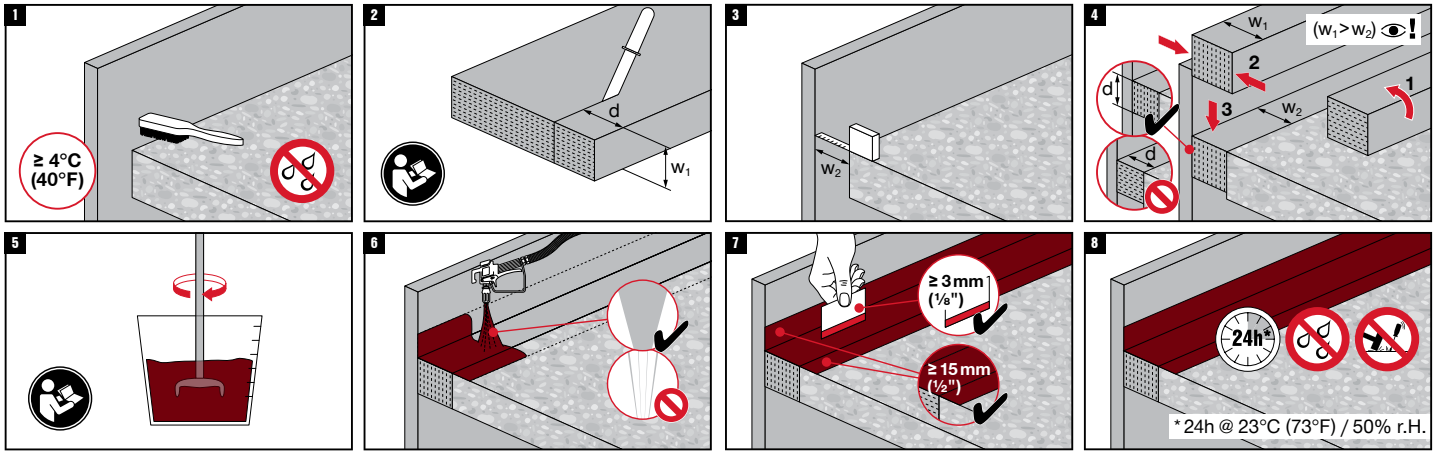
Fire rating	Up to 4 hours
Base materials	Concrete, Masonry, Gypsum, Steel, Aluminium, Glass
Application temperature range	4°C – 40°C
Colour	White
Curing time	3 mm/day[1]
Acoustic performance	Up to 40dB
Movement capabilities	± 40% for Walls/Floors & ± 25% for Curtain Wall

[1] at 75°F/24°C, 50% relative humidity

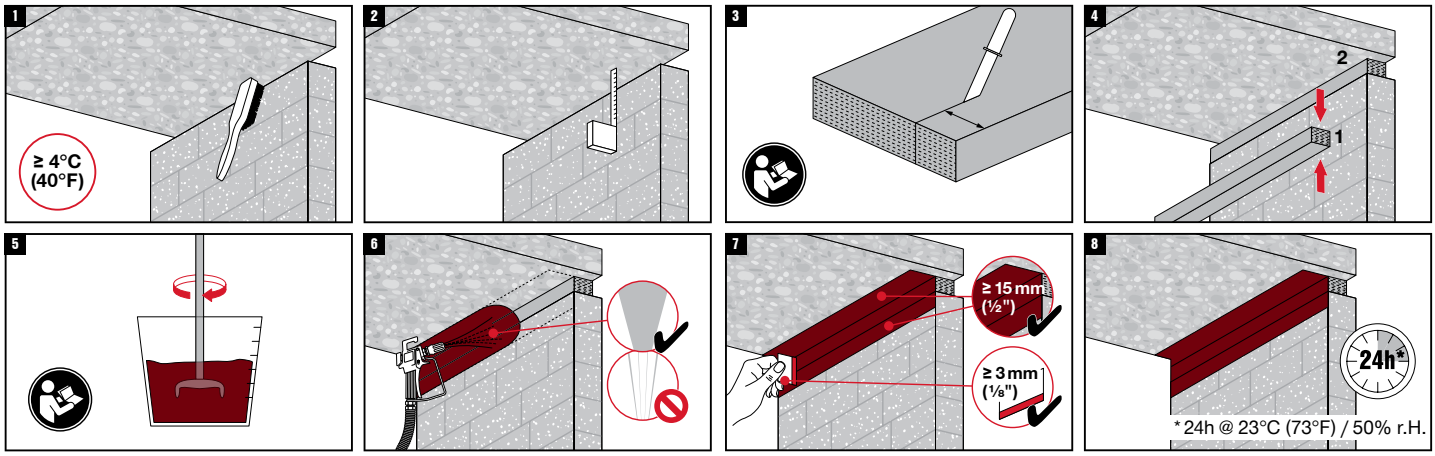
Order description	Package contents	Package quantity	Item number
Firestop Joint Spray CFS-SP WB White	Bucket 5 Gal / ca. 19 litres	1 pc	430806

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

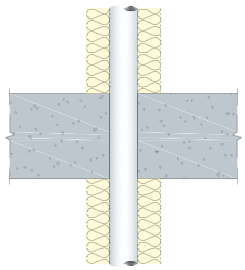
CLASSIFICATION

Classification will give the best-case EI 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 EI 120 but a 160mm pipe achieves EI 90).

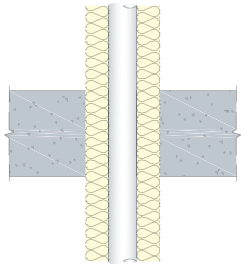
PRODUCT/DETAIL

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 Interrupted (CI)



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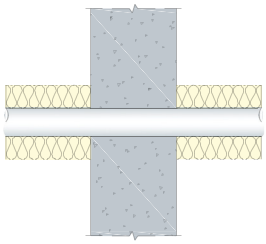

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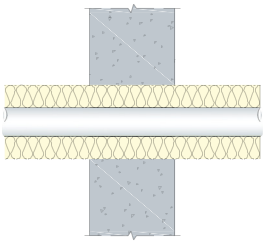
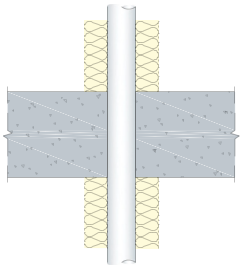
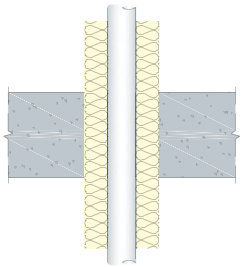


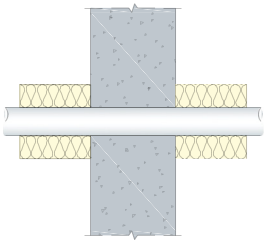
Continued Sustained (CS)



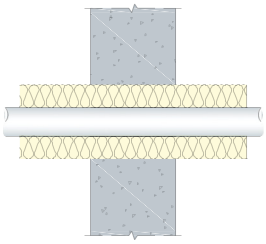
Local Interrupted (LI)



Local Sustained (LS)



Local Interrupted (LI)



Local Sustained (LS)

Base materials	Allowable joint width	Movement capacity	Classification	Product/Detail
Rigid wall & rigid floor	6-100	40%	EI 120	CFS-SP WB:LJ-RW/RF-01

Base materials	Allowable joint width	Movement capacity	Classification	Product/Detail
Rigid wall & rigid wall	6-100	40%	EI 240	CFS-SP WB:LJ-RW-01

Base materials	Allowable joint width	Movement capacity	Classification	Product/Detail
Rigid floor & rigid floor	6-100	40%	EI 120	CFS-SP WB:LJ-RF-01

Base materials	Façade system: Curtain wall	Façade system: Light ventialed façade	Allowable joint width	Movement capacity	Classification	Product/Detail
Rigid floor & curtain wall	✓		10-200	25%	EI 180	CFS-SP WB:LJ-CW-01.1
Rigid floor & curtain wall (aluminium sheet)	✓		10-200	25%	EI 180	CFS-SP WB:LJ-CW-01.2
Rigid floor & curtain wall (calcium silicate board)	✓		10-200	25%	EI 180	CFS-SP WB:LJ-CW-01.3

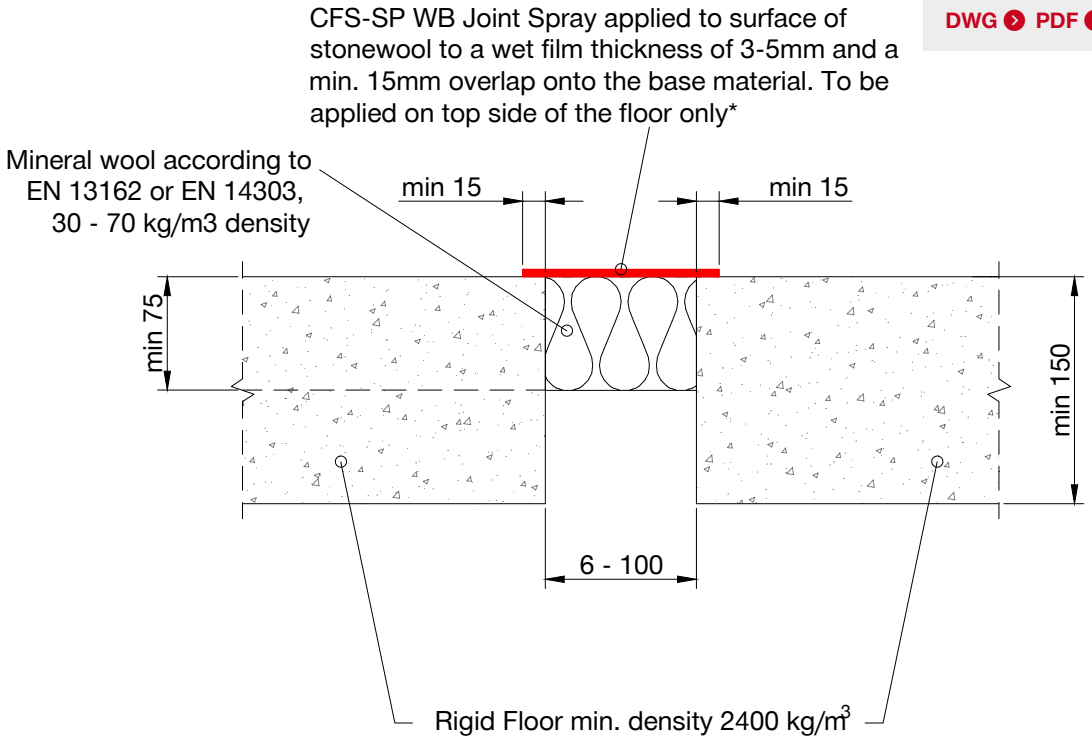
SP-WB: LJ-RF-01

JOINTS BETWEEN FLOORS

Fire rating up to EI 120

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)	S_D 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

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

[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:

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

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2. 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.
3. All installations should be carried out in accordance with Hilti's installation instructions and by competent & experienced installers using Hilti branded products.
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SP-WB: LJ-RW-01

JOINTS BETWEEN RIGID WALLS

Fire rating EI 240

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

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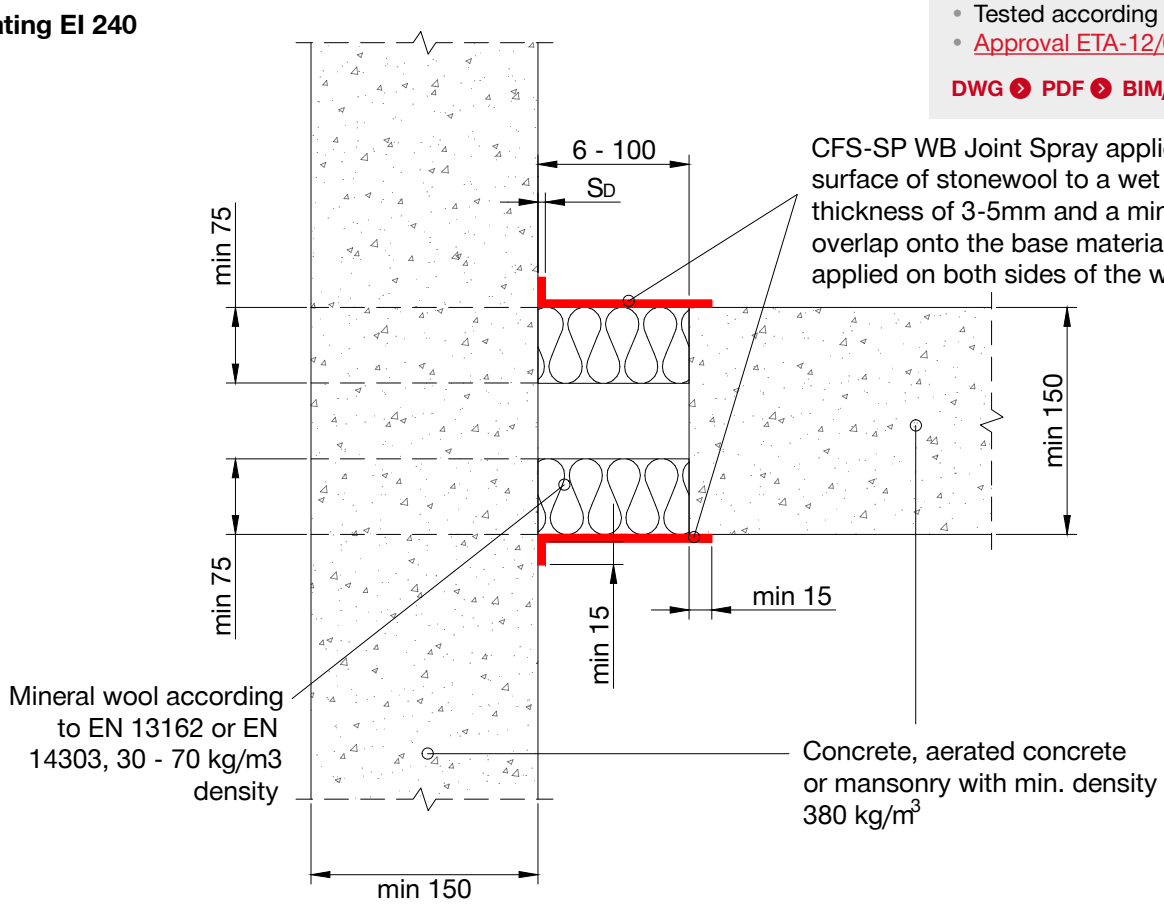

Joint width (mm)	SD sealant depth (mm)	Mineral backfilling compression (%)	Classification
6 – 100	Min. 3-5 wet film thickness to achieve 2 dry film thickness	≥ 50[1]	EI 240-V-M 40F-W 6 to 100

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).

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

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

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SP-WB: LJ-RW-01

JOINTS BETWEEN RIGID WALLS

Fire rating EI 240

Information
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- Approval ETA-12/0078

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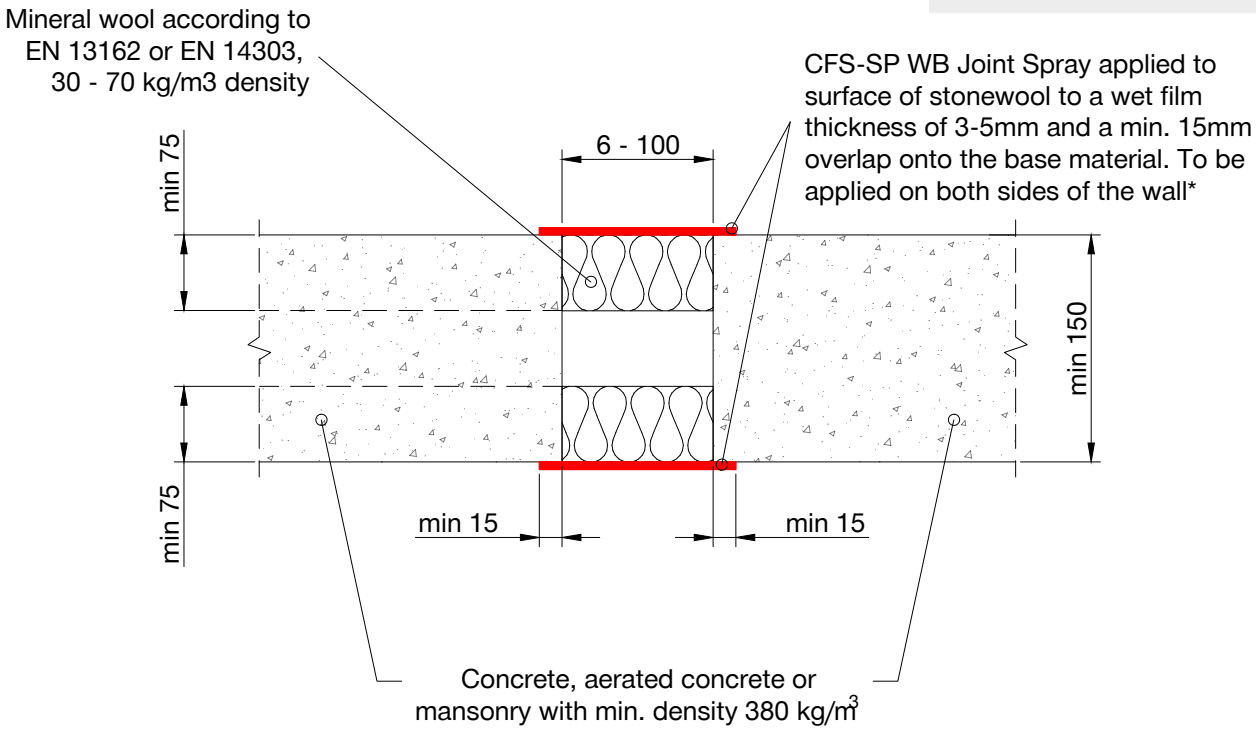

Joint width (mm)	S_D sealant depth (mm)	Mineral backfilling compression (%)	Classification
6 – 100	Min. 3-5 wet film thickness to achieve 2 dry film thickness	≥ 50[1]	EI 240-H-F-M25-W 10 to W 200

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).

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

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Max Pressure = >200 bar (> 2900 PSI)

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SP-WB: LJ-RW/RF-01

HEAD OF RIGID WALL

Fire rating EI 120

Information
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- Tested according EN 1366-4
- Approval ETA-12/0078

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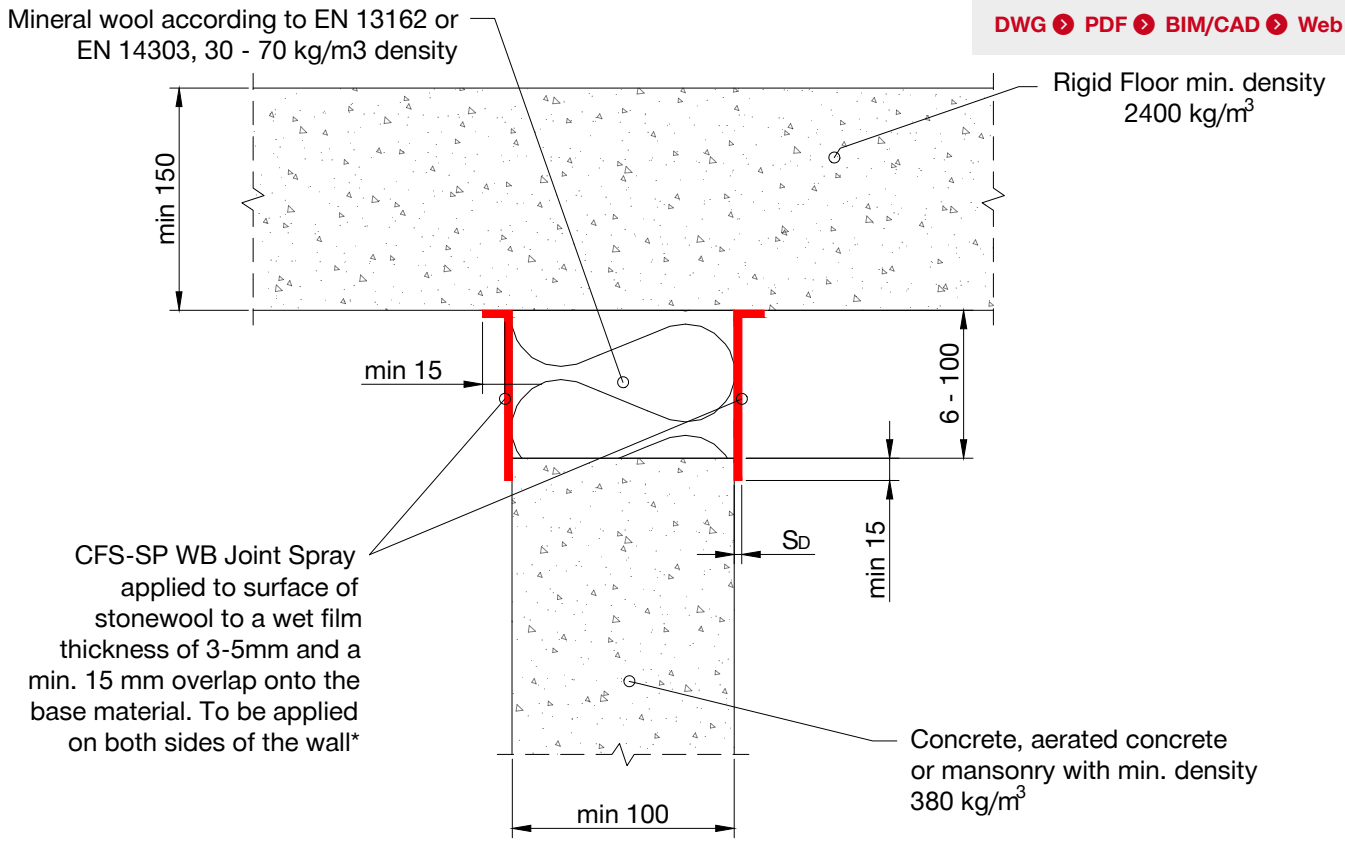

Joint width (mm)	S_D sealant depth (mm)	Mineral backfilling compression (%)	Classification
6 – 100	Min. 3-5 wet film thickness to achieve 2 dry film thickness	≥ 50[1]	EI 120-H-M 40-F-W 6 to 100

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

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

[1] Mineral wool with a horizontal 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 200 mm (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:

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

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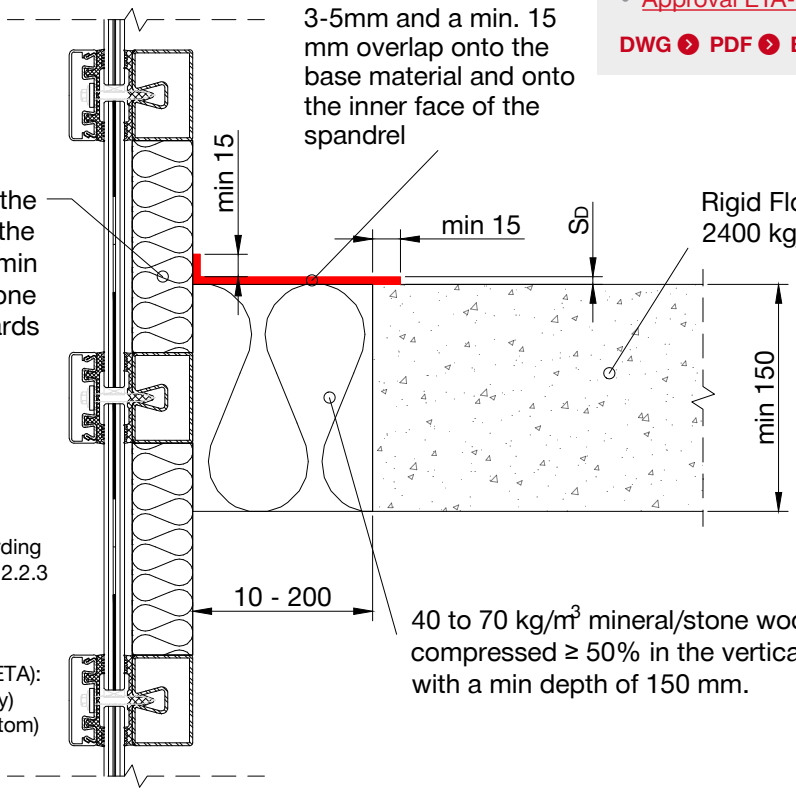
SP-WB: LJ-CW

JOINTS BETWEEN CURTAIN WALL

Fire rating up to EI 180



Air permeability

(See section 3.2.1 of ETA): according to EAD 350141-00-1106, clause 2.2.3 by test principle of EN 1026: No representative air flow measured

Acoustics (See section 3.4.1 of ETA):
- 37 dB Rw (coating top side only)
- 40 dB Rw (coating top and bottom)

Information
- Not to scale
- All units are in millimetres
- Tested according EN 1364-4
- Approval ETA-11/0343

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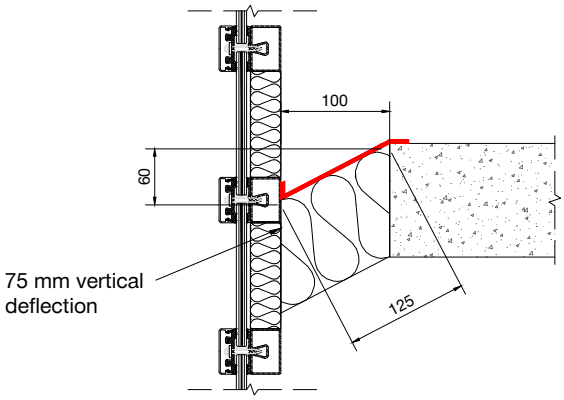
Curtain wall type	Joint width (mm)	S_D sealant depth (mm)	Mineral backfilling compression (%)	Classification
Aluminium framed	10 – 200	Min. 3-5 wet film thickness to achieve 2 dry film thickness	≥ 50[1]	EI 180-H-F-M25-W 10 to W 200
Steel framed	10 – 200	Min. 3-5 wet film thickness to achieve 2 dry film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

[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 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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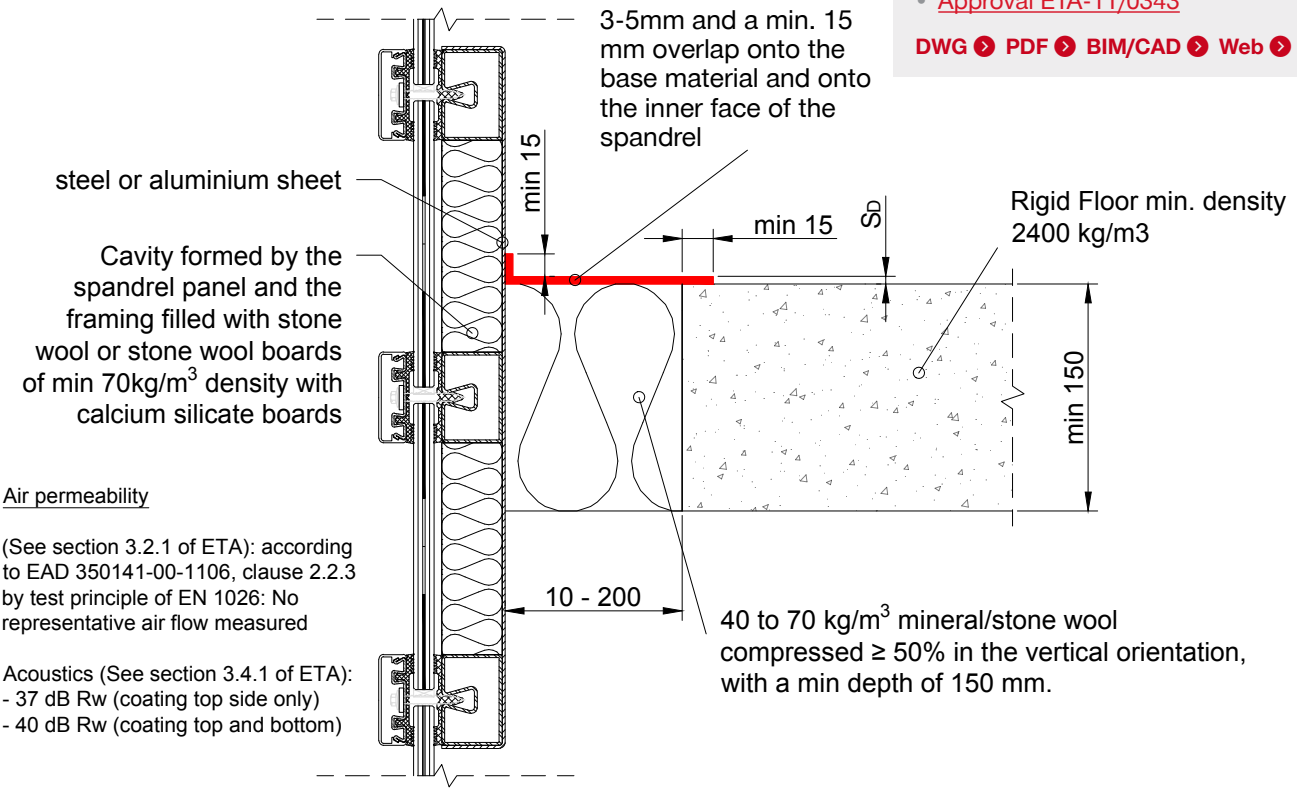
SP-WB: LJ-CW

JOINTS BETWEEN CURTAIN WALL

Fire rating up to EI 180



Information

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- Tested according EN 1364-4
- Approval ETA-11/0343

DWG PDF BIM/CAD Web

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

[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 20mm (for 10mm joint) and up to 200 mm (for a 100mm joint).

Horizontal distance	Vertical deflection	Horizontal deflection
25	16.67	6.25
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75	50.00	18.75
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125	83.33	31.25
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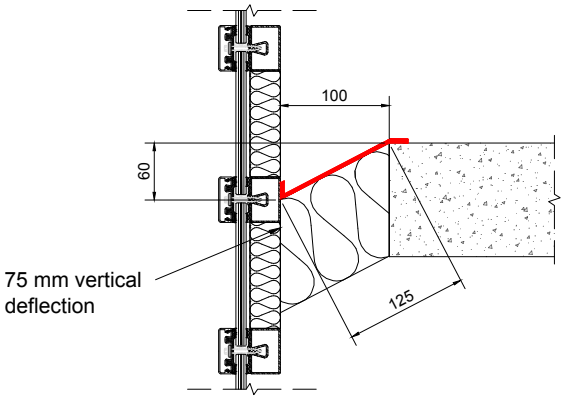
200	133.33	50.00



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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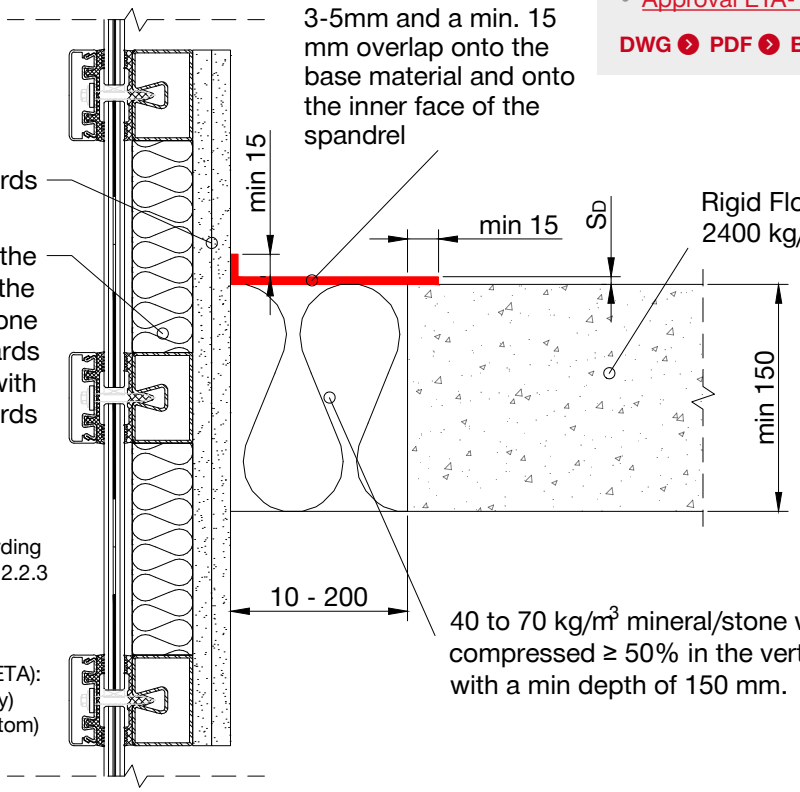
SP-WB: LJ-CW

JOINTS BETWEEN CURTAIN WALL

Fire rating up to EI 180



Air permeability

(See section 3.2.1 of ETA): according to EAD 350141-00-1106, clause 2.2.3 by test principle of EN 1026: No representative air flow measured

Acoustics (See section 3.4.1 of ETA):
- 37 dB Rw (coating top side only)
- 40 dB Rw (coating top and bottom)

Information
- Not to scale
- All units are in millimetres
- Tested according EN 1364-4
- Approval ETA-11/0343

DWG PDF BIM/CAD Web

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

[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 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
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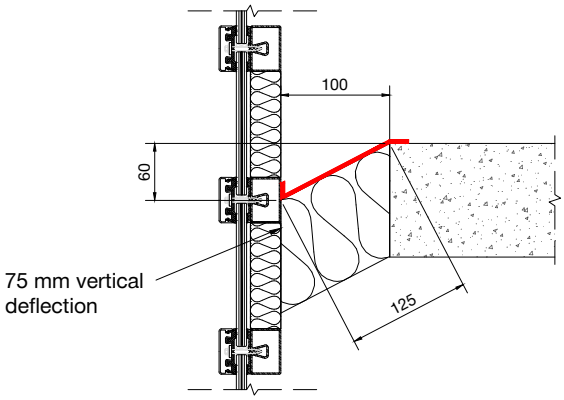

Maximum Movement Capability:± 25 % horizontal and vertical movement, see above table for min. joint width recommendations to suit specific movement requirements. Please note, these are different and not to be combined. For combined movement, please contact Hilti for further support.

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CHANGE LOG

Date	Description

Hilti (Gt. Britain) Ltd
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3 Symphony Park Manchester
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