

**Hilti Firestop Joint  
Spray  
CFS-SP WB**

European  
Technical Approval  
ETA N° 11/0343

Perimeter seal



## Firestop joint spray CFS-SP WB

Firestop joint spray for quick and reliable prevention of fire penetration at facades, decks and wall joints

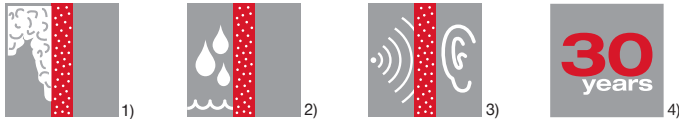


### Applications

- Sealing openings between the tops of walls and concrete metal floor decks or ceilings
- Sealing building perimeter gaps between floor slabs and exterior curtain wall facades

### Advantages

- Water-based, low VOC, contains no halogens
- High degree of elasticity
- Excellent sprayability and low slump characteristics
- Fast, efficient sealing of wide, difficult-to-access joints
- Easy to apply by airless spray, good stiffness and covering capacity
- Very easy application and good adhesion at low temperatures



### Technical data

	CFS-SP WB
<b>Fire rating</b>	≤ 240 min
<b>Density</b>	1.26 kg/l
<b>Color</b>	Red
<b>Paintability</b>	Yes
<b>Application temperature range</b>	4°C - 40°C
<b>Storage and transportation temperature - range</b>	4 °C - 25 °C
<b>Shelf life</b>	12 months
<b>Base materials</b>	Concrete, Masonry, Gypsum, Steel, Aluminium, Glass
<b>Chemical basis</b>	Water-based acrylic dispersion
<b>Cure Time (at 23°C/50% r.H)</b>	3 mm / 24 h
<b>Movement</b>	≤ 40 %
<b>pH Value</b>	~ 8-9

The European Technical Approval (ETA) and the technical data sheet can be obtained via your local Hilti contact.



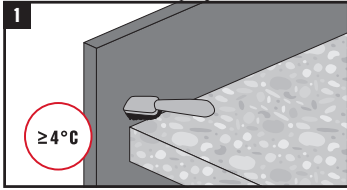
Order designation	Sales Quantity	Item Number
<b>Firestop joint spray CFS-SP WB white</b>	1 pc	<b>00430806</b>
<b>Firestop joint spray CFS-SP WB red</b>	1 pc	<b>00430811</b>

- 1) Smoke and gastightness, 2) W-rating, 3) Sound insulation,  
4) Resistant to ageing and tested to ensure a service life of at least 30 years.

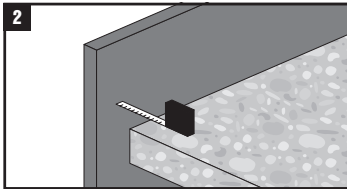
Fire resistance test reports, approvals and certificates normally do not contain any information on the service life of a firestop product or assembly. By carrying out its own additional ageing tests which simulate extreme temperature and humidity conditions, Hilti provides a very high level of information on product reliability and the service life expectancy of Hilti firestop systems. On the basis of the ageing cycles obtained in these test procedures and the experience gained in the field of concrete construction, it can be assumed that Hilti firestop systems have a service life (ageing resistance) of approximately 30 years from manufacturing date. Please note that this expected long-term ageing resistance of Hilti firestop systems, which is given on the basis of the above-mentioned tests, depends on a number of factors on which Hilti basically has no influence (e.g. environmental factors such as extreme environmental conditions, e.g. chemicals, etc.) and, therefore, is subject to the following conditions which must be strictly observed by the user with regard to the respective Hilti firestop system:

- Strict adherence to Hilti's operating, setting, installing and other technical instructions
- Rigorous compliance with all other conditions set out in the respective specifications during the lifetime of the Hilti firestop systems, in particular with regard to regular control and maintenance as well as to foreseeable use under normal climatic conditions in the respective field of application.

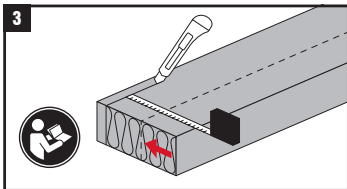
## Installation instructions



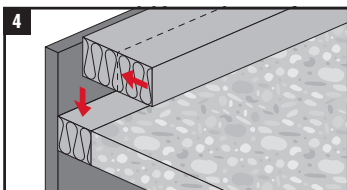
Surfaces to which CFS-SP WB will be applied should be cleaned of loose debris, dirt, oil, moisture, frost and wax, and any other conditions which could impair adhesion.



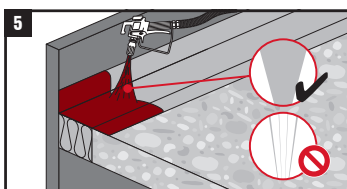
Measure the gap between the two assemblies.



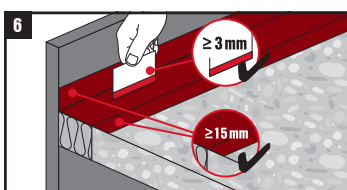
Choose appropriate mineral wool and cut to size (min. 150mm depth) according to regulations.



Compress the mineral wool as specified in the regulations and insert the compressed mineral wool in the gap.



Apply Hilti firestop joint spray, preferably using an airless spray pistol. Apply an even, uniform coating.



Measure the wet film thickness (WFT). Verify compliance of the film thickness and overlaps with regulation requirements and installation instructions.



Allow Hilti Firestop Joint Spray to dry completely. \*The period of time required for drying depends on temperature, air humidity and ventilation. Protect Hilti Firestop Joint Spray from water exposure and other physical influences (e.g., freezing, physical damage) during application and the curing period.

## Linear Joint and Gap Seals

### Perimeter Seal of Curtain Walls

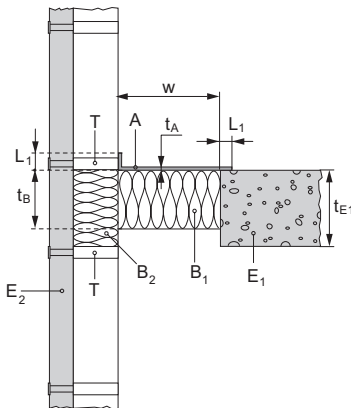
Hilti Firestop Joint Spray CFS-SP WB has been tested in accordance with EN 1364-4 and has been classified in accordance with EN 13501-2.

Hilti Firestop Joint Spray CFS-SP WB is a membrane-forming coating used to form a perimeter seal between rigid floor slabs and curtain walls with mineral wool as backfilling material. In façade constructions the coating is normally only applied on the top side. The floor must have a minimum thickness of 150 mm and comprised of concrete with a minimum density of 2400 kg/m<sup>3</sup>.

Joint Seal Type Orientation	Floor type (E <sub>1</sub> ) and thickness (t <sub>E1</sub> )	Curtain Walling (E <sub>2</sub> )	Nominal joint width (w)	Movement Capability	Classification E=Integrity I=Insulation	Other criteria, Description
Perimeter Seal between rigid floor constructions and curtain walling	Rigid Floor ≥ 150 mm, minimum density of 2400 kg/m <sup>3</sup>	Curtain walls with steel framing (transoms, mullions), the cavity formed by the spandrel area and the framing filled with mineral wool board or mineral wool lamella board of a density of minimum 120 kg/m <sup>3</sup> (B <sub>2</sub> ) to form the perimeter joint edge, the transom forming the underground for the Firestop Joint Spray CFS-SP WB.	10 – 200 mm	+/- 25%	EI 90 (EI 90-H-M 25-F-W 10 to 200)	Hilti Firestop Joint Spray CFS-SP WB (A), t <sub>A</sub> = 3–5 mm wet film, resulting in ca. 2 mm dry film thickness. Overlap on floor construction and curtain wall (L <sub>1</sub> ), minimum 15 mm. Together with mineral wool products (B) <sup>1</sup> as backfilling material: t <sub>B</sub> ≥ 150 mm, compression ≥ 55%, splice distance min. 1000 mm.

H=horizontal, M=Movement, F=splice, field, W=joint width

<sup>1</sup> Mineral wool products suitable for being used as backfilling material of the perimeter seal: stone wool according to EN 13162 or EN 14303, density 40 to 70 kg/m<sup>3</sup>, no Al or other facing.



## Characteristics of CFS-SP WB

### Additional attributes

Hilti Firestop products are comprehensively tested and individually tailored to the technical requirements of a building's joint seals. In addition to their superior behaviour in passive fire protection, Hilti Firestop products also meet the requirements in building technology that continue to gain significance and also help the designer and installer in meeting these additional requirements. The assessment of fitness for use has been made in accordance with EOTA ETAG N° 026 – Part 3.

Characteristics	Assessment of characteristics	Norm, standard, test
<b>Health and environment</b> Water permeability Dangerous substances	Water tight to 1 m head of water or 9806 Pa As per the list of the European Commission this product does not contain dangerous substances above the acceptable limits.	ETAG 026-3 Material safety datasheet
Protection against noise (air borne sound insulation)	A special test set-up was used to simulate the conditions of a perimeter seal of a curtain wall. Joint width 200mm, seal depth 200mm Coating both sides: <b>R<sub>w</sub> (C; C<sub>tr</sub>) = 40 dB</b> <b>D<sub>n, e, w</sub> (C; C<sub>tr</sub>) = 55 dB</b> Coating top side: <b>R<sub>w</sub> (C; C<sub>tr</sub>) = 37 dB</b> <b>D<sub>n, e, w</sub> (C; C<sub>tr</sub>) = 52 dB</b>	EN 20140-10 EN ISO 140-1 EN 20140-3 EN ISO 10140-1 EN ISO 10140-2 EN ISO 10140-5 EN ISO 717-1
<b>Durability and servicability</b> Movement capability	Use category Y <sub>1</sub> specified in EOTA ETAG 026-3 (suitable for perimeter seals intended for use at temperatures between –20 °C and +70 °C). The movement capability of +/- 25 % was verified by a small scale movement test (500 cycles).	EOTA Technical Report TR 024 ETAG 026-3 ISO 11600
<b>Safety in use</b> Mechanical resistance Resistance to impact Adhesion	Resistance: up to 10 Nm impact without damages The adhesion to the substrates is assessed via the impact test and the tests determining the movement capability.	ETAG 026-3
Reaction to Fire	Class E	EN 13501-1

## Service

With more than 20 years of experience worldwide, Hilti is one of the leading suppliers of firestop systems.

We actively help you manage your firestop projects better by providing:

- Quick engineering judgements
- Extensive technical literature
- On-site training and demonstration
- Sophisticated jobsite logistics
- Assurance of conformity with specific application requirements
- International network of Hilti firestop specialists

Our network of experienced sales representatives, field engineers, firestop specialists and customer service representatives is just a phone call away (use the local toll-free Hilti number).

**Hilti. Outperform. Outlast.**

Hilti Corporation | 9494 Schaan | Liechtenstein | P +423-234 2111 | F +423-234 2965 | [www.hilti.com](http://www.hilti.com)