

HILTI CFS-SP WB Firestop Joint Spray

The enclosed pages are taken from the
Hilti Firestop Systems Manual
Edition April 2011
Supported by additional standard details

For Material Safety data sheets
visit the technical library at www.hilti.co.uk/cfs

<p>Hilti (Gt Britain) Ltd TECHNICAL ADVISORY SERVICE TELEPHONE 0161 886 1144</p>

Quality Management System Certification

Standard: ISO 9001:2008

Issued by: The Swiss Association for Quality and Management Systems SQS.

Registration No: 12455 (The current certificate can be downloaded from www.hilti.co.uk)

Field of activity: Market Organisation.

Note: The certificate of Hilti (Gt. Britain) Ltd. is a sub-certificate to the master certificate of Hilti Aktiengesellschaft, FL-9494 Schaan with the field of activity: Research, Development, Manufacturing, Sales and Service.

Don't just use Hilti Firestop Products, use our Hilti Accredited Firestop Contractors

It is the combination of a quality conscious and third party accredited manufacturer working in close co-operation with a selected group of third party accredited installers that can offer you the best value.

Here are some of the benefits available to you by using this co-operation:-

- Reduce your liability; liability that comes from poor or incorrect installation and performance of products.
- Efficient Project Management based on the co-operation of a specialised manufacturer with a specialist contractor
- Commercially designed, effective Fire Protection solutions
- Products that adhere to 3rd party product conformity schemes such as FM, UL and Certifire.

These approvals are an assurance of product and manufacturer quality, they can also have an influence on the building insurance premium reducing the service costs of the building.

- Solutions that have been tested for long term performance.
- Solutions that offer business continuity and protections of premises.
- Certification of conformity of work completed.
- Installation work audited by FIRAS on site to ensure compliance with manufacturers' recommendations and Building regulations.
- Installer with site based manufacturer support.
- Installer having available site based manufacturers support when needed.
- Clear and comprehensive documentation of installation.
- Comprehensive support documentation for proposed solutions.
- Clarity and assistance understanding the role of Passive Fire measures in modern building construction.



Product Accreditation

Hilti Firestop Systems have been certified by a wide variety of international bodies, such as FM, UL, Certifire and iBMB

As part of this process products are monitored on an on-going basis so you can have absolute confidence in the quality and standard of the product you are specifying.

Installation Accreditation

Hilti-Accredited Firestop Contractors are also third party certified (e.g. FIRAS or LPCB).

This means that they work to agreed industry standards, employ trained operatives and are subject to on-site audits and inspection of representative samples of the work carried out to ensure compliance with manufacturers' recommendations and Building Regulations

Further details about Hilti accredited Firestop Contractors and the support that we can offer you can be obtained by telephoning Freephone 0800 083 8889 (GB only).



Association for Specialist Fire Protection

Hilti is proud to support and be a member of The Association for Specialist Fire Protection (ASFP)

ASFP Vision

To offer the industry it serves with:

- Knowledge / guidance on all aspects of 'built-in' fire protection
- Technical support / impartial advice
- Direction through industry authority

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	Hilti Firestop Systems Manual Pages for Hilti CFS-SP WB
FS 014-05	Hilti CFS-SP-WB Speed spray, Curtain Wall
FS 121-01	Hilti CFS-SP-WB Speed spray for Head of wall joints beneath composite deck
Data Summary	Additional Properties of Hilti CFS-SP WB
Data Summary	Hilti CFS-SP WB Firestop joint spray – BREEAM Criteria summary

Please note that Hilti CFS-SP WB Firestop joint spray is a direct replacement for Hilti CP 672 in all applications with properties that are at least as good as those of CP 672 and the previous test data has been assessed as being applicable to Hilti CFS-SP WB Firestop joint spray.

Material Safety Sheets and CAD files of the standard details FS ***-** can be downloaded from the technical library at www.hilti.co.uk/cfs

Revision History

May 2011	First release
July 2011	Major update new standard detail, Additional properties, BREEAM Criteria and NBS specification clauses
May 2013	Update

Firestop Joint Spray CFS-SP WB

A sprayable fire-rated mastic for construction joints where maximum movement is required



■ Application

- Top-of-wall joints
- Curtain wall/edge of slab
- Expansion joints
- Concrete, masonry and dry wall assemblies
- Wall and floor/wall assemblies rated up to 4 hours

Advantages

- Best in class sprayable at cold temperatures
- Maximum flexibility, meets 500 cycle requirements (Class II and III Approval*)
- Quick and easy installation with the sprayers can help save time and money
- Contains no halogens, solvents or asbestos
- Water based formulation so spills and over-spray clean up quickly and easily
- Paintable
- Meets LEED™ requirements for indoor environmental quality credit 4.1 Low Emitting Materials, Sealants and Adhesives and 4.2 Paints and Coatings

(*ASTM E 1966 and UL 2079)

Technical data*

	CFS-SP WB
Density	Approx 1.3 g/cm ³
Colour	Available in white and red**
Application temperature	4°C to 40°C
Temperature resistance	-40°C to 80°C
Consistency	Sprayable liquid
Chemical basis	Acrylic-water-based-dispersion
Curing time	Approx. 24 hours @ 23°C, 50% humidity for 3.2mm depth
Ph-value	Approx. 8-9
Movement capability	Up to 50%
Skin forming time (at 23° C / 50% r.H.)	2 hours

*At 23°C and 50% relative humidity

**Red colour requires two (2) weeks lead time



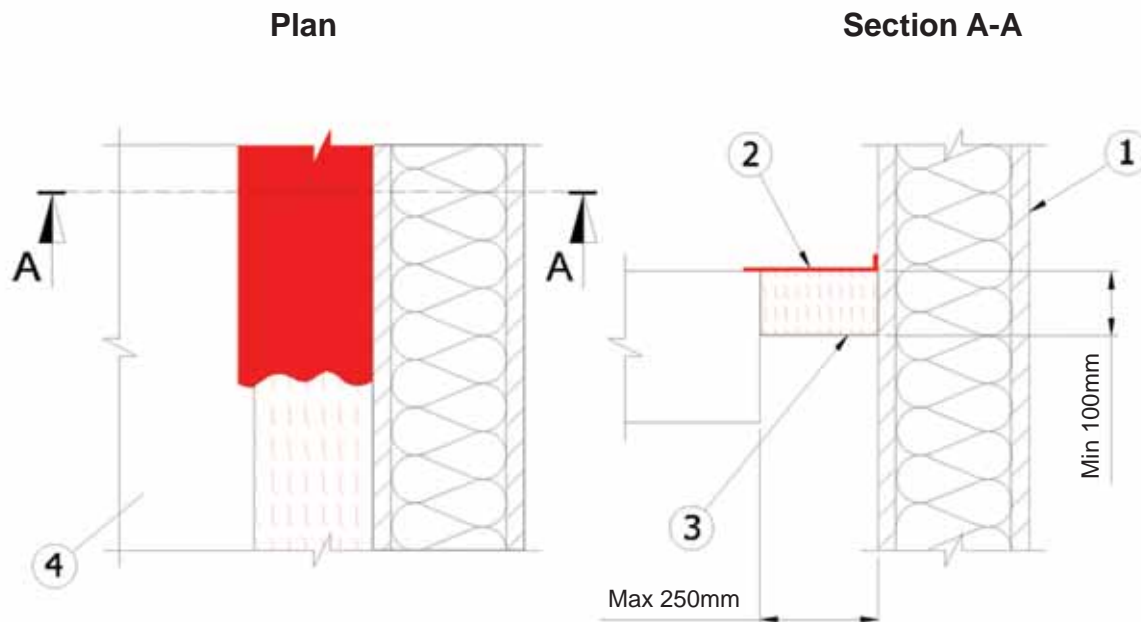
EN 1364-4



Ordering

Order description	Package Contents	Package Quantity	Item number
Firestop joint spray CFS-SP WB white	CFS-SP WB bucket (19 litres) White	1 pc	00430806
Firestop joint spray CFS-SP WB red	CFS-SP WB bucket (19 litres) Red Requires two (2) weeks lead time	1 pc	00430811

Technical Information



1. Curtain wall assembly
2. CFS-SP WB Firestop Joint Spray - 1.5mm dry film thickness (3mm wet).
Installed in accordance with Hilti guidelines.
Overlap spray onto slab and curtain wall by min 12.5mm.
3. Mineral fibre - min density 60Kg/m³ - min melting temp 1000°C
Fibres must run vertically to allow compression.
Compressed to min 33% (e.g. 150mm compressed into 100mm gap).
4. Concrete floor slab capable of providing the fire rating of the proposed seal.

For more standard details and technical information register online at the Hilti Firestop Design Centre at www.hilti.co.uk/cfs

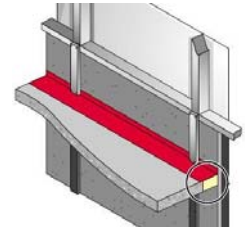
Installation instructions for Firestop Joint Spray CFS-SP WB

- | | | |
|---|---|---|
| <p>Notice</p> <ul style="list-style-type: none"> • Before handling, read Material Safety Data Sheet and product label for safe usage and health information. • Instructions below are general guidelines <p>Opening</p> <ol style="list-style-type: none"> 1. Clean the opening. Surfaces to which Firestop Joint Spray will be applied should be cleaned of loose debris, dirt, oil, wax and grease. The surface should be moisture and frost free. | <p>Application of Firestop Joint Spray</p> <ol style="list-style-type: none"> 2-4. Mineral wool packing: Install the prescribed back filling material type and depth to obtain desired rating. 5. Application of Firestop Joint Spray: Apply Firestop Joint Spray to the required depth in order to obtain the desired rating. Make sure Firestop Joint Spray contacts all surfaces. 6. Curing time: Allow approx. 24 hours for typical application thickness (@ 73°F / 23°C) 50% humidity for 1/8" depth for the Firestop Joint Spray to fully cure. 7. Identification: For maintenance reasons all Firestop Joint Spray applications can be permanently marked with an identification plate and fastened in a visible position next to the seal. | <p>Not for use</p> <ul style="list-style-type: none"> • In areas immersed in water • On hot surfaces (above 176°F) <p>Storage</p> <ul style="list-style-type: none"> • Store only in the original packaging at temperatures 39°F to 77°F (4°C to 25°C) • Observe expiry date on package |
|---|---|---|



* 48h @ 73°F (23°C) / 50% rH.

APPLICATION



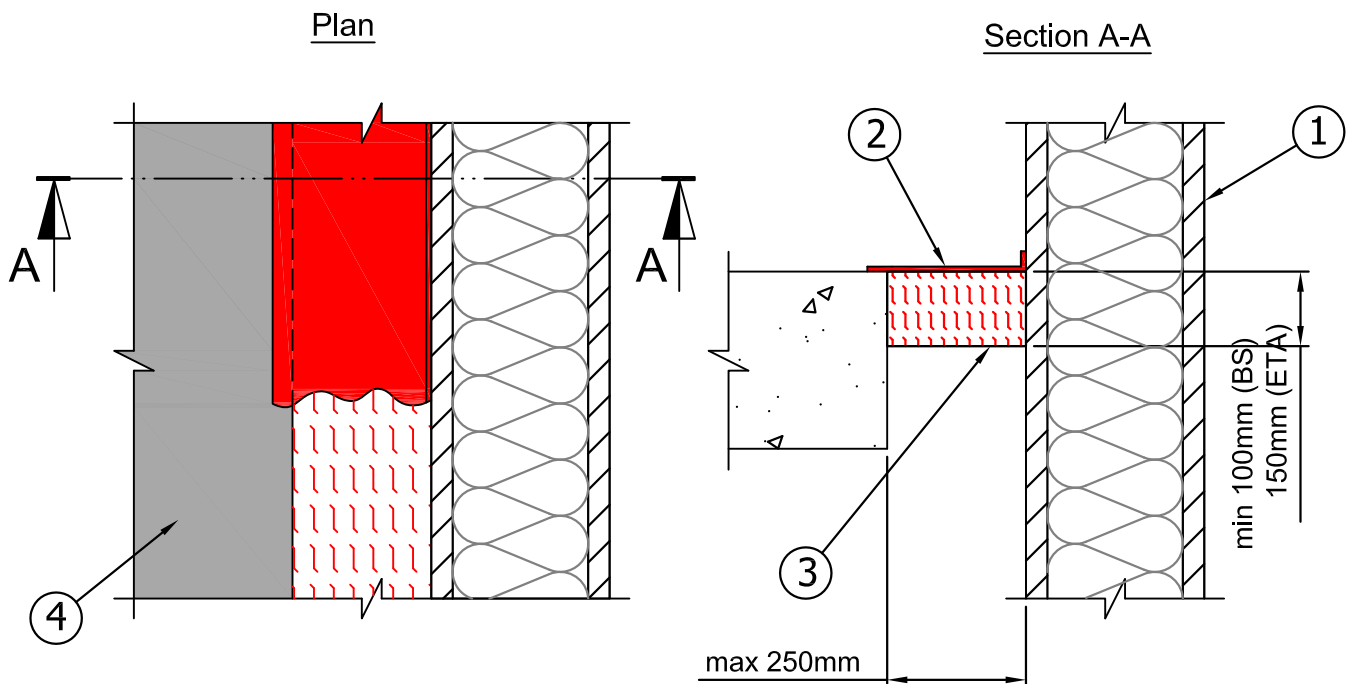
Curtain wall

Hilti CFS SP WB Speed Spray

Test	Up to
Fire Integrity	2 hr
Insulation	2 hr
Acoustics	Rw=31 dB *
Air Tightness	✓
Age Testing	30 years

Approvals
BS476 pt 20
Omega Point
Factory Mutual
BSEN 1364-4

*check configuration with Hilti technical Advisory Service



1. Curtain wall assembly.
2. CFS SP WB Speed Spray - 1.5mm dry film thickness (3mm wet) -BS.
- 2 mm dry film thickness (3-5 mm wet) - ETA
Installed in accordance with Hilti guidelines.
Overlap spray onto slab and curtain wall by min 12.5mm (BS)/15 mm (ETA).
3. Mineral fibre - min density 60Kg/m³ - min melting temp 1000°C.
Fibres must run vertically to allow compression.
Compressed to min 33% (e.g. 150mm compressed into 100mm gap).
4. Concrete floor slab to be capable of providing the fire rating of the proposed seal.

1. The application limits on this detail are for guidance purposes only. For more detailed information on the full range of available test results please contact a Hilti Firestop Specialist on 0800 886100.
2. The product and application has been fire tested as a minimum to BS 476. 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, by competent, experienced installers using Hilti branded products.

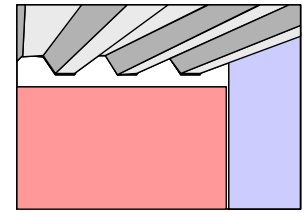
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Hilti CFS-SP-WB Speedspray for Top of wall joints

Test	Up to
Fire Integrity	2 hr
Insulation	2 hr
Acoustics	39 dB and 49dB*
Air Tightness	✓
Age Testing	30 years

Approvals
BS476 pt 20

APPLICATION

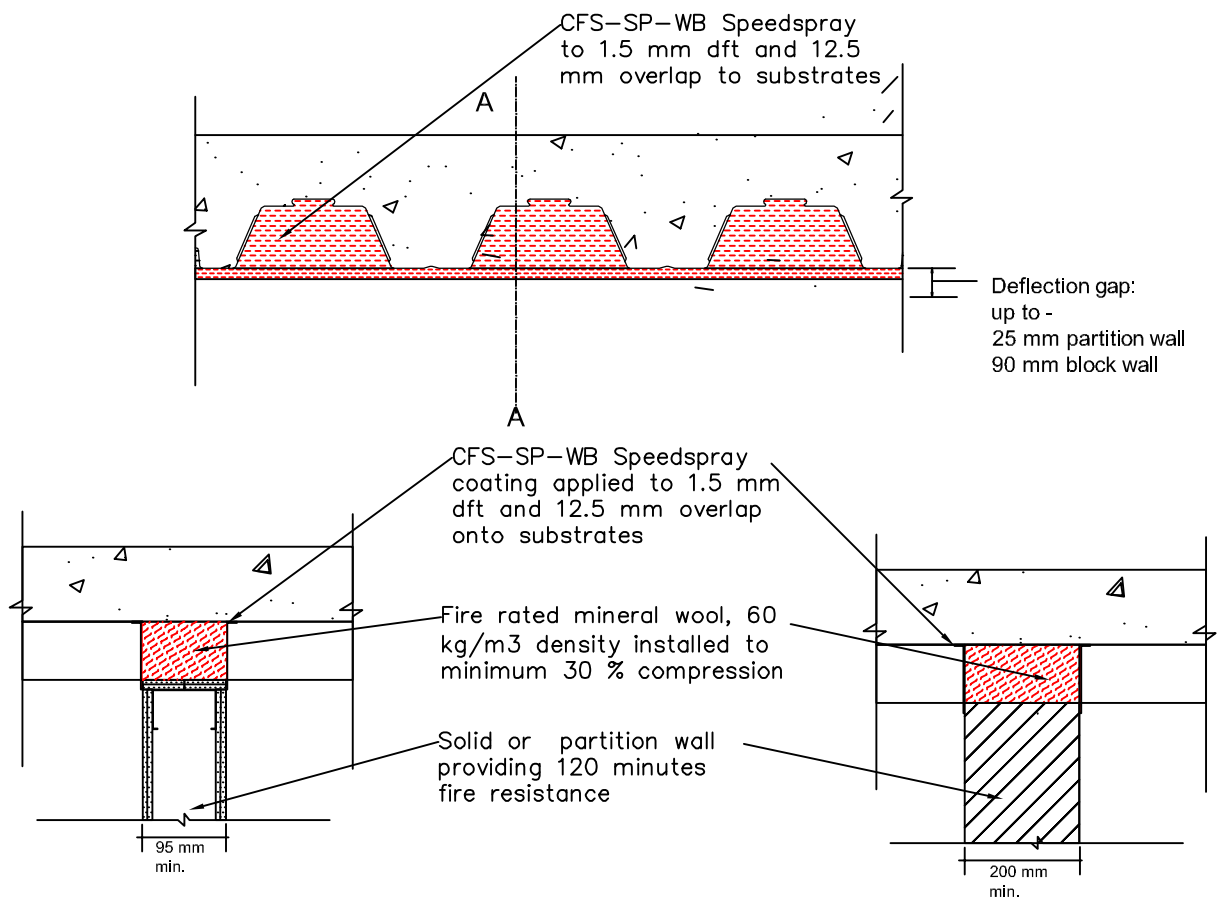


Head of wall joint

beneath

composite deck

* For further acoustic data contact Hilti Technical Advisory Service



The above applications are not exhaustive. For further details please contact

1. The application limits on this detail are for guidance purposes only. For more detailed information on the full range of available test results please contact a Hilti Firestop Specialist on 0800 886100.
2. The product and application has been fire tested as a minimum to BS 476. It may have additional European and worldwide testing. Please contact Hilti for further information.
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Additional Properties of Hilti CFS-SP WB

Property	Test regime	Notes	
Fire	BS 476 - 20		✓
	BS EN 1366-4		✓
	FM approval (Class 4990)		✓
	ETA		
Acoustic	EN ISO 20 140-10: 1992	Dnw	✓
	EN ISO 20 140-10: 1992	Blank	✓
	EN 20 140-10: 1992-09		✓
	ISO 140-9 & BS EN ISO 10848		✓
	ISO 140-9 & BS EN ISO 10848		✓
Ageing	DAfSTB		✓ (CP 672)
	Fire test after ageing		✓ (CP 672)
Air sealing	(DIN 1026)		
	Pressure difference 50Pa		✓ (CP 672)
	Pressure difference 200Pa		✓ (CP 672)
Movement	Fire test in accordance with UL2079 after dynamic loading		✓
Water resistance	Rain Resistance		✓ (CP 672)
	Mold and Mildew resistance	ISO 846	✓
	Water tightness	UL 1479	✓
Chemical Resistance	Contact Hilti Technical Advisory Service with details of type, concentration, duration and ambient temperature of exposure conditions		
			✓ Meets standard




Please note that Hilti CFS-SP WB Firestop joint spray is a direct replacement for Hilti CP 672 in all applications with properties that are at least as good as those of CP 672 and the previous test data has been assessed as being applicable to Hilti CFS-SP WB Firestop joint spray.

CFS-SP WB Firestop Joint Spray –BREEAM Criteria summary

BREEAM Section

	No power tools required for installation (no energy source required)	x
Management construction site impact	Dust free installation	✓
	Saves water during application	✓
	No water pollution	✓
	Low VOC* (air quality)	✓
Health and wellbeing	No ozone depletion potential (ODP)	✓
	Low global warming potential ((GWP)	✓
	Smoke and gas tightness	✓
	Noise reduction	✓
Energy	Air tightness	✓
	Avoidance of air infiltration	✓
Materials	Product Carbon Footprint or LCA Data	✓
	Thermal insulation	✓
	Recycling of packaging	✓
Waste	Reuse of materials	x
	Re-penetration in existing opening (No waste)	x
Product contributes to Green Building under this clause	✓	
Not applicable for this product	NA	
Product makes No contribution to green Building under this clause	x	

Visit our web site at <http://www.Hilti.co.uk/cfs> to access our **Firestop Design Centre**

Penetration product selector	Other product features	Joints product selector
		
<p>Interactive product selector for firestopping openings through walls and floors</p>	<p>Find out more about the benefits of using Hilti firestop systems</p>	<p>Interactive product selector for wall to wall, top of wall, curtain wall , floor to floor and floor to wall applications.</p>

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- may be subject to a handling charge of £10 or 20% Hilti Gt. Britain Ltd) of the value of the Goods, whichever amount is the greater; and
- Must be in the same condition as originally supplied to the Buyer.
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