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European Technical Assessment ETA-21/0754 of 2021/09/24

General Part

Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) No 305/2011: ETA-Danmark A/S

Trade name of the construction product:

Hilti CFS-TTS E Firestop Top Track Seal

Product family to which the above construction product belongs:

Fire Stopping and Fire Sealing Products: Linear Joint and Gap Seals

Manufacturer:

Hilti AG

Feldkircherstraße 100

DE-9494 Schaan

Liechtenstein

Internet: www.hilti.group

Manufacturing plant:

Hilti Plant 4a

This European Technical Assessment contains:

8 pages including 2 annexes which form an integral part

of the document

This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of:

EAD 350141-00-1106 Fire Stopping and Fire Sealing Products: Linear Joint and Gap Seals

This version replaces:

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II SPECIFIC PART OF THE EUROPEAN TECHNICAL ASSESSMENT

1 Technical description of product

Hilti CFS-TTS E Firestop Top Track Seal is a U-shaped strip based on flexible polyurethane foam in a plastic foil to seal top of wall joints of dry walls towards different ceiling constructions. This compressible strip is installed around the horizontal top track of a flexible wall.

For details of the seal design depending on orientation, building elements forming the joint/gap or backfilling material and the related classifications see Annex B.

For a description of the installation procedure see Annex A

Hilti CFS-TTS E Firestop Top Track Seal is supplied in lengths packed in cardboard boxes.

CFS-TTS E is available in 50 (..E5), 62 (..E6), 74 (..E7) and 95 (..E9) mm in width fitting to different steel track sizes. For double stud installation CFS-TTS ES is used which correspond to CFS-E9 with tear line in the mid of back and two strips of adhesion ribbon at the inner edges of the back to ease installation on track (see also Annex A, picture 1).

A detailed specification of the product is contained in document "Identification / Product Specification" which is a non-public part of this ETA.

2 Specification of the intended use(s) in accordance with the applicable European Assessment Document (hereinafter EAD)

The construction product Hilti CFS-TTS E Firestop Top Track Seal is intended for use is to provide fire resistance performance in the area of the top track of the partition. The Hilti CFS-TTS E Firestop Top Track Seal seals the respective track which is freestanding from the vertical studs and boards of the flexible wall construction and absorb movements generated by displacements of a surrounding building construction.

More information in table, section 3: "Performance of the product and references to the methods used for its assessment".

The fire sealing products are to be installed according to the manufacturer's installation manual.

The verification and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of at least 10 years, that the conditions lay down for the installation, packaging, transport and storage as well as appropriate use, maintenance and repair are met.

The indications given on the working life cannot be interpreted as a guarantee given by the manufacturer but are to be regarded only as a means for choosing the right product in relation to the expected economically reasonable working life of the works.

3 Performance of the product and references to the methods used for its assessment.

Characteristic		Assessment of characteristic		
3.2	Safety in case of fire (BWR 2)			
	Reaction to fire	The product is classified as Euroclass E in accordance with EN 13501-1.		
	Resistance to fire	Classification according to EN 13501-2, see Annex B for further information of fire resistant designs		
3.3	Hygiene, health and the environment (BWR 3)			
	Content, emission and/or release of dangerous	The concentration of total emission of VOC: After 3 days: ≤ 0.043 mg/m ³ After 28 days: ≤ 0.005 mg/m ³		
	substances.*	The concentration of total emission of SVOC: After 3 days: < 0,005 mg/m ³ After 28 days: ≤ 0,005 mg/m ³		
	Air permeability (material property) Water permeability (material property)	No performance assessed No performance assessed		
3.4	Safety and accessibility in use (BWR 4)			
	Mechanical resistance and stability	No performance assessed		
	Resistance to impact/movement	No performance assessed		
	Adhesion	No performance assessed		
	Durability	Use condition: Y ₁		
	Movement capacity	No performance assessed		
	Cycling of perimeter seals for curtain walls	No performance assessed		
	Compression set	No performance assessed		
	Linear expansion on setting	No performance assessed		
3.5	Protection against noise (BWR 5)			
	Airborne sound insulation	$\mathbf{R}_{S,w}$ (C; \mathbf{C}_{tr}) = 62 (-2;-5) dB		
3.6	Energy economy and heat retention (BWR 6)			
	Thermal properties	No performance assessed		
	Water vapour permeability	No performance assessed		

See additional information in section 3.8-3.9.

^{*}In addition to the specific clauses relating to dangerous substances contained in this European Technical Assessment, there may be other requirements applicable to the products falling within its scope (e.g., transposed European legislation and national laws, regulations and administrative provisions). In order to meet the provisions of the Construction Products Regulation, these requirements need also to be complied with, when and where they apply.

3.8 Methods of verification

The product is fully covered by EAD 350141-00-1106 and fulfils the requirements for use category: Y_1 , intended for use at temperatures below 0 °C, with casual exposure to UV but no exposure to rain.

3.9 General aspects related to the fitness for use of the product.

The European Technical Assessment is issued for the product based on agreed data/information, deposited with ETA-Danmark, which identifies the product that has been assessed and judged. Changes to the product or production process, which could result in this deposited data/information being incorrect, should be notified to ETA-Danmark before the changes are introduced. ETA-Danmark will decide if such changes affect the ETA and consequently the validity of the CE marking based on the ETA and if so whether further assessment or alterations to the ETA, shall be necessary.

The Hilti CFS-TTS E Firestop Top Track Seal is manufactured in accordance with the provisions of this European Technical Assessment using the manufacturing processes as identified in the inspection of the plant by the notified inspection body and laid down in the technical documentation.

4 Assessment and verification of constancy of performance (hereinafter AVCP) system applied, with reference to its legal base.

4.1 AVCP system

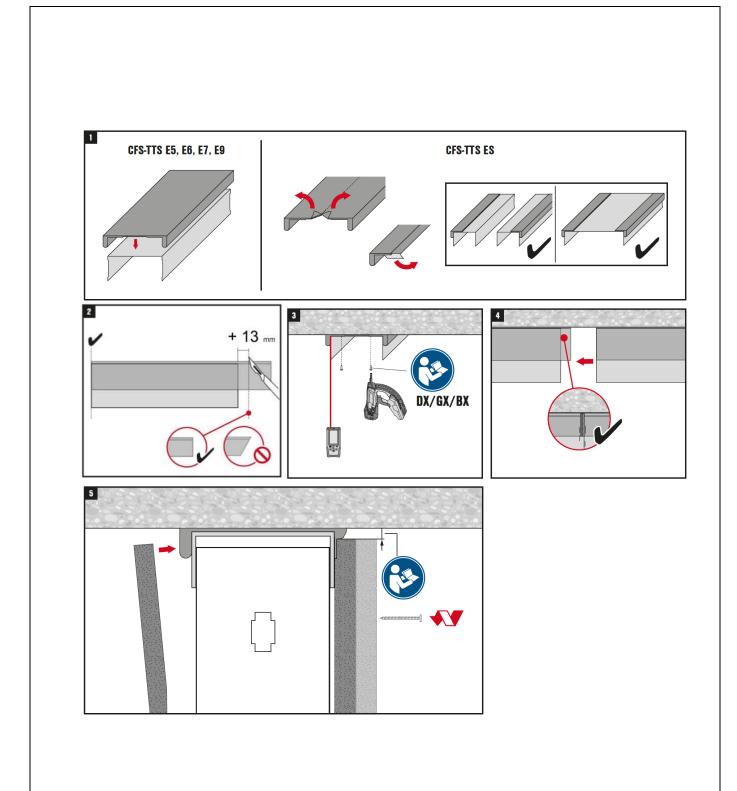
According to the decision 1999/464/EC (EU) of the European Commission, as amended by 2001/596/EC, the system(s) of assessment and verification of constancy of performance (see Annex III to Regulation (EU) No 305/2011) is 1.

5 Technical details necessary for the implementation of the AVCP system, as foreseen in the applicable EAD.

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at ETA-Danmark.

Issued in Copenhagen on 2021-09-24 by

Thomas Bruun
Managing Director, ETA-Danmark



Hilti CFS-TTS	E Firestop To	p Track Seal
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Installation of product and ancillary products.

Annex A

Floor and ceiling constructions

Rigid floors: The floor must have a minimum thickness $t_E \ge 100$ mm and comprise of concrete with a minimum density of 2200 kg/m³.

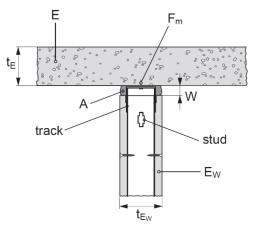
Flexible wall constructions

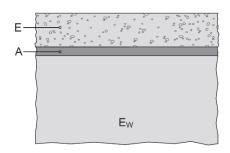
Flexible wall construction must be classified in accordance with EN 13501-2 for the required resistance period and must have a minimum thickness of 100 mm. The maximum hight of the wall is 4 m.

Linear wall seal installation specifics

Hilti CFS-TTS E Firestop Top Track Seal is applied on the topside of the upper horizontal U-profile, along the entire width of the wall. The (gypsum plasterboard) lining is fixed onto the vertical studs, compressing (a minimum) of 14 mm of the Hilti CFS-TTS E Firestop Top Track Seal, leaving a joint of (maximum) 25 mm width. The joint will accommodate the incidental movement of the ceiling relative to the wall. Maximal joint width (W): up to 25 mm;

Generalised construction details:





A = Hilti Fire Stop Product CFS-TTS E E = ceiling; concrete accoding Annex B1 Ew= flexible wall according Annex B2

Fm= Material/anchors to fix track to concrete ceiling (Hilti DX/GX/BX nails; Hilti HPS-1 \geq 6/10x35 or similar)

 $t_{Ew} = thickness of concrete slab$ $<math>t_{Ew} = thickness of the flexible wall$

W = maximal joint width

Stud and top track are overlapping but are not fixed to each other e.g. by screws.

Splices by CFS-TTS E pieces are allowed. At each splice there should be a compression force active corresponding extra CFS-TTS E of 3 cm/3 m (see also Annex A, picture 2, 4)

	Classification
Joint horizontal Joint width max. 25 mm	EI 120 -T-X-F-W25-25

Hilti CFS-TTS E Firestop Top Track Seal	
Resistance to fire – classification.	Annex B