DÉCLARATION DES PERFORMANCES
conformément à l'annexe III du Règlement (UE) n° 305/2011 (Règlement sur les produits de construction)

Spray coupe-feu pour joints silicone Hilti CFS-SP SIL
N° Hilti CFS-SP SIL

1. Code d'identification unique du produit type :
Spray coupe-feu pour joints silicone Hilti CFS-SP SIL

2. Usage prévu :
Produit coupe-feu et de calfeutrement de joints linéaires et de vides : joint périmétrique de murs-rideaux, voir ETE-17/0082 (09.02.2018)

<table>
<thead>
<tr>
<th>Joints linéaires et calfeutrement de vides : joints périmétriques de murs-rideaux</th>
<th>Le domaine d'application doit être conforme au contenu de l'ETE-17/0082</th>
</tr>
</thead>
</table>

3. Fabricant :
HILTI Corporation, Feldkircherstrasse 100, 9494 Schaan, Principauté du Liechtenstein

4. Système d’EVCP :
Système 1

5. Document d'évaluation européen :
ETAG N° 026-1 et ETAG N° 026-3
Evaluation technique européenne :
ETE-17/0082 (09.02.2018)
Organisme d'évaluation technique :
UL International (UK) Ltd
Organisme(s) notifié(s) :
MPA Braunschweig, n° 0761
MFPA Leipzig, n° 0800
UL International (UK) Ltd, n° 0843

6. Performances déclarées :

<table>
<thead>
<tr>
<th>Exigence fondamentale</th>
<th>Performances déclarées/spécification technique harmonisée</th>
</tr>
</thead>
<tbody>
<tr>
<td>Réaction au feu</td>
<td>Classe E selon NF EN 13501-1</td>
</tr>
<tr>
<td>Résistance au feu</td>
<td>Performances de résistance au feu et domaine d'application selon NF EN 13501-2. Voir annexe.</td>
</tr>
<tr>
<td>Substances dangereuses</td>
<td>Voir annexe.</td>
</tr>
<tr>
<td>Permeabilité à l’air</td>
<td>Aucune performance déterminée</td>
</tr>
<tr>
<td>Caractéristiques thermiques</td>
<td>Aucune performance déterminée</td>
</tr>
<tr>
<td>Résistance mécanique et stabilité</td>
<td>Voir annexe.</td>
</tr>
<tr>
<td>Durabilité et fonctionnalité</td>
<td>X selon le rapport technique TR 024 de l'EOTA.</td>
</tr>
<tr>
<td>Autre</td>
<td>Non applicable / Aucune performance déterminée</td>
</tr>
</tbody>
</table>


Signé pour le compte du fabricant par :

Eric Marcuson
Chef de produit
Unité opérationnelle des produits chimiques
Hilti Corporation
Schaan, le 9 février 2018

DoP_fr_01-00_00000002897_Hilti CFS-SP SIL

Martin Althof
Responsable qualité
Unité opérationnelle des produits chimiques
Hilti Corporation
3.2 Hygiene, health and environment (BWR 3)

3.2.1 Release of dangerous substances

Hilti AG have presented a Material Safety Data Sheet according to 91/155 EEC and a declaration that Hilti Firestop Joint Spray CFS-SP SIL is in compliance with Council Directive 76/769/EEC of 27th July 1976 on the approximation of the laws, regulations and administrative provisions of the Member States relating to restrictions on the marketing and use of certain dangerous substances and preparations (incl. all amendments and adaptations).

Confirmation has further been declared that all dangerous chemical substances ≥ 1.0 % w/w as well as all toxic, carcinogenic, toxic for reproduction and mutagenic chemical substances ≥ 0.1 % w/w (Status: 29. adaption – 2004/73/EG – of the EU directive 67/548/EEC , classification, packaging and labelling of dangerous substances) are stated in Hilti safety data sheets (according to 91/155/EEC including amendments) and have been considered for the classification of the products according to the directive 1999/45/EG (classification of preparations, including amendments).

All dangerous chemical substances are below the classification limits of 67/548/EEC.

3.3 Safety and accessibility in use (BWR 4)

3.3.1 Mechanical resistance and stability

See 3.3.2

3.3.2 Resistance to impact / movement

The resistance to impact/movement has been tested using the test procedure according to ETAG 026-3, section 2.4.13.2.2.1. The test construction was subjected to cycling 500 times between the minimum and maximum joint width corresponding to a movement capability of 12.5%. A cyclic rate of 30 cpm (cycles per minute) was used, designated as seismic. This cycling rate also covers lower frequency cycling rates designated as “wind sway” and “thermal”.

3.3.3 Adhesion

Adhesion is covered by tests carried out for the determination of movement capability described in 3.3.2

3.4 Protection against noise (BWR 5)

3.4.1 Airborne sound insulation

Test reports from noise reduction according to EN 20140-10, EN ISO 140-1, EN 20140-3, EN ISO 10140-1, EN ISO 10140-2, EN ISO 10140-5 and EN ISO 717-1 have been provided.

A special test set-up was used to simulate the conditions of a perimeter seal of a curtain wall.

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

<table>
<thead>
<tr>
<th>Joint width [mm]</th>
<th>Seal depth [mm]</th>
<th>Coating</th>
<th>$R_{w(C;Ctr)}$ [dB]</th>
<th>$D_{n,e,w(C;Ctr)}$ [dB]</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>200</td>
<td>Both sides</td>
<td>38 (-1; -5)</td>
<td>53 (-1; -4)</td>
</tr>
<tr>
<td>200</td>
<td>200</td>
<td>Top side</td>
<td>36 (-1; -3)</td>
<td>51 (-1; -3)</td>
</tr>
</tbody>
</table>

$a)$ where $S = 0.3 m^2$

$b)$ where $A_0 = 10 m^2$
ANNEX 1 – DESCRIPTION OF THE PRODUCT AND ANCILLARY PRODUCT(S)

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

Hilti Firestop Joint Spray CFS-SP SIL is a water based 1-component product and is composed essentially of filling substances and a neutral cross-linking silicone.

Hilti Firestop Joint Spray CFS-SP SIL is supplied in 19 Litre buckets.

A detailed specification of the product is contained in document “Identification / Product Specification relating to the European Technical Assessment ETA-17/0082 - Hilti Firestop Joint Spray CFS-SP SIL” which is a non-public part of this ETA.

The Control Plan is defined in document "Control Plan related to the European Technical Assessment ETA-17/0082 - Hilti Firestop Joint Spray CFS-SP SIL” which is a non-public part of this ETA.

1907/2006 (REACH) with its amendment Regulation (EC) No. 830/2015

**Mineral Wool**

Mineral wool products suitable for being used as backfilling material of the perimeter seal

<table>
<thead>
<tr>
<th>No.</th>
<th>Characteristics</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mineral /Stone wool</td>
<td>EN 13162 or EN 14303</td>
</tr>
<tr>
<td>2</td>
<td>Density</td>
<td>≥ 60 kg/m³</td>
</tr>
<tr>
<td>3</td>
<td>Facing</td>
<td>No Al-facing, no other facing</td>
</tr>
<tr>
<td>4</td>
<td>Reaction to fire class</td>
<td>A1 or A2 according EN 13501-1</td>
</tr>
<tr>
<td>5</td>
<td>Melting point</td>
<td>&gt; 1000°C</td>
</tr>
</tbody>
</table>
ANNEX 2 – RESISTANCE TO FIRE CLASSIFICATION OF HILTI FIRESTOP JOINT SPRAY CFS-SP SIL

A.2.1 Specific characteristics for rigid floor and curtain wall construction

a) Rigid floors: The floor must have a minimum thickness $t_{E1} \geq 150$ mm and comprise of concrete with a minimum density of 2400 kg/m$^3$.

b) Curtain wall: Curtain walls with steel framing (transoms, mullions). The cavity formed between the floor slab and surface of the curtain wall construction (measured from the outer edge of the mullion and transom structure) is filled with mineral of a density of minimum 60 kg/m$^3$ to form the perimeter joint edge, with the Joint Spray CFS-SP SIL applied to the top surface of the mineral wool – see figure in Annex A.2.2.

A.2.2 Perimeter seal installation specifics

Hilti Firestop Joint Spray CFS-SP SIL (A) has to be applied with a $t_A = 3-5$ mm wet film thickness, resulting in ca. 2 mm dry film thickness. Hilti Firestop Joint Spray CFS-SP SIL (A) should overlap on floor construction and curtain wall ($L_1$) at minimum 15 mm. As backfilling material, a mineral wool product (B) as specified in Annex A.1.2 should be taken. This mineral wool has to be compressed in the A-A direction by ≥ 33% during installation in a depth $t_B \geq 150$ mm. Splice distance has to be ≥ 1000 mm. The thickness of the mineral wool slab should be such as to result in the application of a minimum number of layers; a maximum number of 3 layers is considered acceptable.

Nominal joint width (w): 10 to 150 mm;

Movement capability: max. ± 12.5%;

Construction details:

A.2.3 Classification for perimeter seal acc.2.2

This perimeter seal as shown in 2.2 with
- a joint width (w) of 10 to 150 mm and
- a maximum movement capability of ± 12.5%

has a classification of:
EI 180 – H – M 12.5 – F – W 10 to 150 (regarding integrity and insulation)