EL

ΔΗΛΩΣΗ ΑΠΟΔΟΣΗΣ

σύμφωνα με το Παράρτημα III του Κανονισμού (ΕΕ) αριθ. 305/2011 (Κανονισμός Προϊόντων Δομικών Κατασκευών)

Hilti πυράντοχη μαστίχη πλήρωσης CFS-FIL

Αρ. Hilti CFS-FIL

1. Μοναδικός κωδικός ταυτοποίησης του τύπου του προϊόντος:
Hilti πυράντοχη μαστίχη πλήρωσης CFS-FIL

2. Προβλεπόμενη(-ες) χρήση(-εις):
Προϊόν πυροφραγής και σφράγισης για σφραγίσματα περασμάτων, βλέπε ETA-21/0256 (26.01.2021)

Περάσματα καλωδίων και σωλήνων	Πλαστικοί σωλήνες καλωδίων και μη μονωμένοι

3. Κατασκευαστής:
Hilti Corporation, Feldkircherstrasse 100, 9494 Schaan, Principality of Liechtenstein

4. Σύστημα AVCP (αξιολόγηση και επαλήθευση της σταθερότητας της επίδοσης):
Σύστημα 1

5. Ευρωπαϊκό έγγραφο αξιολόγησης:
EEA 350454-00-1104 «Προϊόντα πυροφραγής και σφράγισης – Σφραγίσματα περασμάτων
Ευρωπαϊκή Τεχνική Αξιολόγηση:
ETA-21/0256 (26.01.2021))
Οργανισμός τεχνικής αξιολόγησης:
ETA-Danmark A/S
Κοινοποιημένος(-οι) οργανισμός(-οι):
MPA-Braunschweig, Αρ. 0761

6. Δηλωθείσα(-ες) επίδοση(-εις):

Ουσιώδες χαρακτηριστικό	Δηλωθείσα επίδοση / Εναρμονισμένη τεχνική προδιαγραφή
Αντίδραση σε φωτιά	Κλάση E σύμφωνα με το EN 13501-1
Αντοχή σε φωτιά	Επίδοση αντοχής στη φωτιά και πεδίο εφαρμογής σύμφωνα με το EN 13501-2. Βλέπε Παράρτημα
Επικίνδυνες ουσίες	Βλέπε Παράρτημα
Αεροδιαπερατότητα	Βλέπε Παράρτημα
Ανθεκτικότητα κα λειτουργικότητα	Y_2
Προστασία έναντι θορύβου	Ελέγχθηκε σύμφωνα με το EN ISO 10140-2. Rw (C; Ctr) = 63 (-3;-8) dB

Η επίδοση του προϊόντος που ταυτοποιείται ανωτέρω είναι σύμφωνη με τη (τις) δηλωθείσα(-ες) επίδοση(-εις). Η δήλωση αυτή των επιδόσεων συντάσσεται, σύμφωνα με τον κανονισμό (ΕΕ) αριθ. 305/2011, με αποκλειστική ευθύνη του κατασκευαστή που ταυτοποιείται ανωτέρω.
Υπογραφή για λογαριασμό και εκ μέρους του κατασκευαστή από:

Stefan Juli
Υπεύθυνος Προϊόντος
Επιχειρησιακή Μονάδα Πυροπροστασίας
Hilti Corporation

Martin Althof
Επικεφαλής Ποιότητας
Επιχειρησιακή Μονάδα Πυροπροστασίας
Hilti Corporation

Extract of ETA-21/0256 (26.01.2021)

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

Characteristic	Assessment of characteristic
3.1 Safety in case of fire (BWR2)	
Reaction to fire	The product is classified as **Class E** in accordance with EN 13501-1
Resistance to fire	Classification according to EN 13501-2, see Annex A for further information of fire resistant designs
3.2 Hygiene, health and the environment (BWR3)	
Content, emission and/or release of dangerous substances	The concentration of total emission of VOC: **After 3 days: 0,18 mg/m³** **After 28 days: 0,06 mg/m³**
Air permeability (material property)	At a pressure of 50 Pa the nominal flow rate is ≤ **2,1 E-07 m³/(h·m²)** At a pressure of 250 Pa the nominal flow rate is ≤ **1,0 E-06 m³/(h·m²)**
Water Permeability (material property)	**No performance assessed**
3.3 Safety in use (BWR4)	
Mechanical resistance and stability	**No performance assessed**
Resistance to impact/movement	**No performance assessed**
Adhesion	**No performance assessed**
Durability	Use condition: **Y_2**
3.4 Protection against noise (BWR5)	
Airborne sound insulation	**R_w (C; C_{tr}) = 63 (-3;-8) dB**
3.5 Energy Economy and heat retention (BWR6)	
Thermal properties	**No performance assessed**
Water vapour permeability	**No performance assessed**

*) See additional information in section 3.6 – 3.7.

A.1 General Information

a) Cables (up to 21mm) cover all cable types currently and commonly used in building practice in Europe except non-sheathed cables (wires), tied bundles and waveguides, optical fibre cables are covered.

b) The classification results obtained using standard wall and floor configurations for cable penetration seals are valid for a penetration seal size equal to or smaller than tested, the maximum opening size is 60 mm. Provided the total amount of cross sections of the cables (core and insulation) does not exceed 60% of the penetration area and the working clearances are not smaller than the minimum working clearances used in the test.

c) The maximum opening size of the pipe penetration seal is the sum of the outer diameter of the single pipe (up to 60,3 mm) and the annular sealant Hilti Firestop Filler Mastic CFS-FIL around the circular opening in walls and floors.

d) The pipes and cables are installed perpendicular (90°) to the penetration seal.

e) The separation between the adjacent single pipe penetration seals is ≥ 50 mm.

f) The separation between adjacent multiple cable penetration seals is ≥ 200 mm.

g) The first support of the service is located at maximum 250 mm away from both faces of wall constructions (separating element) and maximum 300 mm from the upper face of floor constructions (separating element)

h) For a thicker separating element (t_E) than given in this ETA the thickness of the penetration seal (t_A) is increased by an equal amount

i) The pipe end configuration U/C also covers C/C.

A.1.1 Rigid wall constructions $t_E \geq 100$ mm

Rigid walls made of concrete, aerated concrete or masonry with a minimum density of 550 kg/m³, a minimum thickness of 100 mm.

A.1.2 Rigid floor $t_E \geq 150$ mm

Rigid walls made of concrete, aerated concrete or masonry with a minimum density of 550 kg/m³, a minimum thickness of 150 mm.

The separating elements shall be constructed as prescribed in the EN 1366-3:2009 (see 7.2.2 standard supporting constructions)

A.2 Penetration seal for rigid walls ≥ 100 mm

Hilti Firestop Filler Mastic CFS-FIL(A) applied in full dept of the separating element (E), thickness (t_A) ≥ 100 mm.

Minimum distances between the cables (mm) acc. A.1

Single/multiple cable to single/multiple cable	$S_2 = 0$
Single cable or multiple cable to edge of aperture; see A.1 b)	$S_1 = 0$

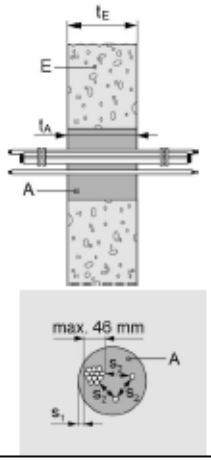
Minimum distances between the penetrations (mm) acc. A.1

CPVC pipe to CPVC pipe penetration	50
Single/multiple cable(s) penetration to other services	200

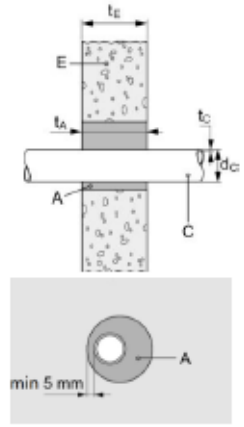
A.2.1 Construction details

For abbreviations see the related text and Annex **Fejl! Henvisningskilde ikke fundet.** of the ETA.

Cables



Single pipe penetration



A.2.2 Cables[1]

	Classification
single cable diameter up to Ø 21 mm (small cables, see A.1 a))	EI 90 E 120
multiple cables (single cable diameter max. Ø 21 mm. small cables, see A.1 a)), up to a bundle of Ø 46 mm with zero distance between the cables	EI 90 E 120

[1] the total amount of cross sections of the cables (core and insulation) does not exceed 60% of the penetration area acc. A.1 b)

A.2.3 Single pipe penetrations				
	CPVC Blazemaster: The width of the annular gap is min **5 mm, max. 25 mm**			
	Pipe		Opening size	Classification
	diameter (d_C) [mm]	wall thickness (t_C) [mm]	max. (d_C + 25) [mm]	
Blazemaster 25	33,4	2,7	58,4	EI 120 U/C
Blazemaster 32	42,2	3,4	67,2	EI 120 U/C
Blazemaster 50	60,3	4,7	85,3	EI 120 U/C

	CPVC Spears EverTuff: The width of the annular gap is min **5 mm, max. 25 mm**			
	Pipe		Opening size	Classification
	diameter (d_C) [mm]	wall thickness (t_C) [mm]	max. (d_C + 25) [mm]	
Spears EverTuff ½"	15,88	1,98	40,88	EI 120 U/C
Spears EverTuff 1"	28,58	2,85	53,58	EI 120 U/C
Spears EverTuff 2"	53,98	5,19	78,98	EI 120 U/C

A.3 Penetration seal for rigid floors ≥ 150 mm

Hilti Firestop Filler Mastic CFS-FIL (A) applied in full depth of the separating element (E), thickness (t_A) ≥ 150 mm.

Minimum distances between the services (mm) acc. A.1

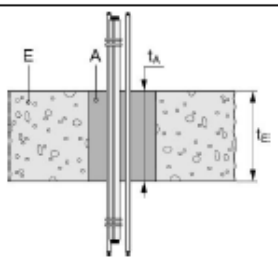
Single/multiple cable(s) to single/multiple cable(s)	S_2 = 0
Single/multiple cable(s) to edge of aperture; see A.1 b)	S_1 = 0

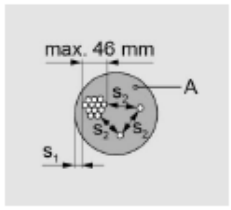
Minimum distances between the penetrations (mm) acc. A.1

Cable or multiple cable penetration and other services	200

A.3.1 Construction details

Cables





For abbreviations see the related text and Annex **Fejl! Henvisningskilde ikke fundet.** of the ETA.

A.3 2 Cables[2]	
	Classification
single cable diameter up to Ø 21 mm (small cables, see A.1 a))	EI 120
multiple cables (single cable diameter max. Ø 21 mm. small cables, see A.1 a)), up to a bundle of Ø 46 mm with zero distance between the cables	EI 120

[2] the total amount of cross sections of the cables (core and insulation) does not exceed 60% of the penetration area acc. A.1 b)

Abbreviation	Description drawings
A	Hilti Firestop Filler Mastic CFS-FIL
E	separating element (wall, floor)
C	penetration/service element (Pipe, cable)
s_1, s_2	Distances
t_A	Thickness (depth) of penetration seal
t_E	Thickness of the separating element
d_C	Pipe diameter (nominal outside diameter) for pipes
t_C	Pipe wall thickness