

**Hilti Española**

Avda. Fuente de la Mora 1  
3ª Planta  
28050 Madrid  
España

PROJECT:  
RETINOL

HILTI Market Organization:  
Spain

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Inq. number: 24070878 md

CUSTOMER:  
ISQ-ingeniería  
Nadia Surina

HILTI Contact Partner:  
Manuel Cajide

Date: 19.11.2024

Tel: +34 913343657

Firestop seals according to : Fire resistance of the Hilti CFS-BL Firestop Block

Rating : EI 90

**Details:**

### 1. PROPOSAL

This engineering judgement report has been prepared on customers request.

The content is to seal cable penetrations through sandwich panel walls using Hilti Firestop Block CFS-BL.

This Engineering Judgment represents a firestop system that would be expected to pass the stated ratings if tested utilising the general principles and performance criteria of EN Standards.

### 2. BASIC TEST EVIDENCE

The following test evidence has been taken into account in preparing this engineering judgement

- European Technical Assessment ETA-13/0099 (CFS-BL) in acc. with EN 1366-3
- Test report no. WF 155418, Warringtonfire, in acc. with EN 1366-3

### 3. NOTES

- This judgement is to be seen as an expert opinion and not completely tested in this configuration.
- All products must be installed in accordance with Hilti guidelines.
- All dimensions shown are in millimeters.

**Note:**

This specification was provided on the basis of the data and information given to Hilti by "the customer", the respective Hilti product information and the existing level of technical knowledge (state of the art). This specification relates to the expected level of fire resistance performance, should the proposed detail be subjected to the standardised fire resistance test against which the judgement was made.

The accuracy of this specification is guaranteed provided that:

1. only original Hilti products as defined in this specification are used.
2. these specific products are used and installed only by a competent and experienced user in a manner which represents the state of the art and by strictly obeying the calculations and conditions mentioned in this specification as well as all relevant technical instructions, the operating manual, the setting manual and the installation manual and other data sheets of Hilti.
3. the proposed performance, the listed prerequisites and criteria conform with the conditions actually existing on the jobsite and have been checked and agreed by the user.

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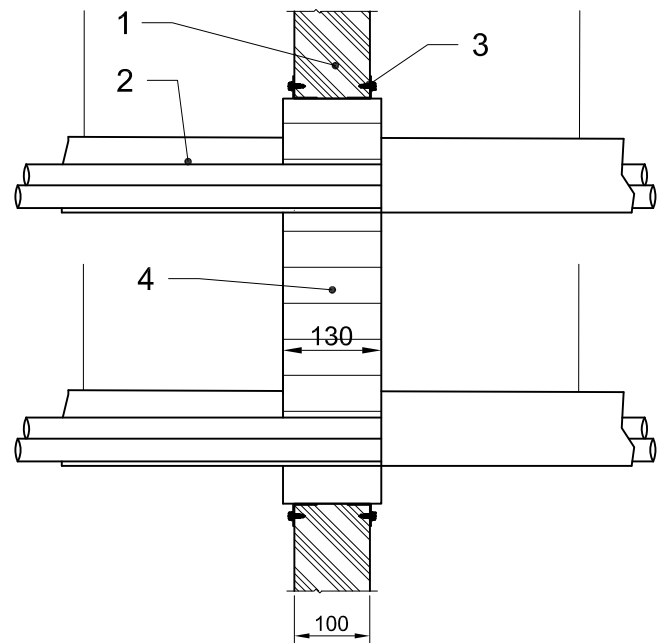
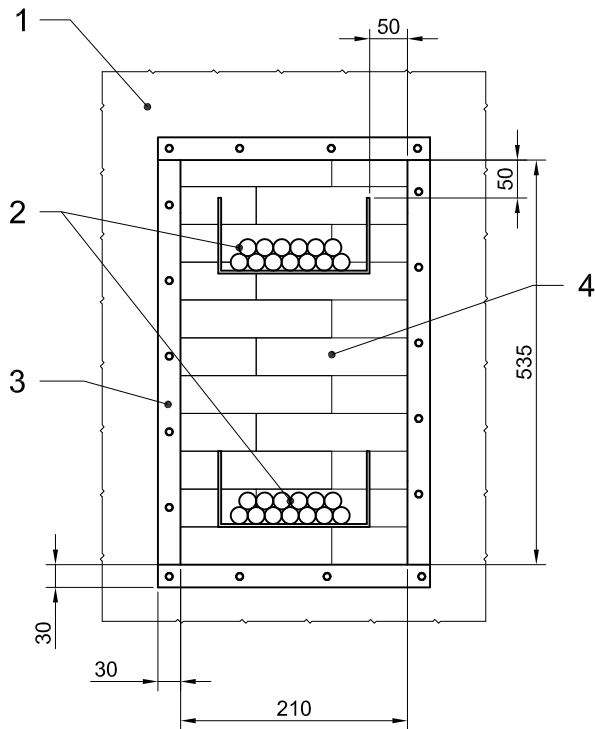
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Firestop seals according to : Fire resistance of the Hilti CFS-BL Firestop Block

Rating : EI 90

**Details:**


1. Wall assembly - Sandwich panel with mineral wool core, 100 mm thickness, fire rated min. EI 90.
2. Steel cable tray - size 200 x 100 mm, cables of max. diameter 21 mm. QTY: 2
3. Steel angle (L-shape) 30x30x2mm around perimeter of the opening sealed with CFS-S ACR. Sealant between steel angle and wall, and affixed with self-drilling screws every 100mm.
4. Hilti Firestop Block CFS-BL - seal depth min. 130 mm, installed according installation instructions.

Note: - Opening size: (W x H) 300 x 535 mm

- Gaps between services and Hilti Firestop Blocks CFS-BL are filled with Hilti Firestop Filler CFS-FIL, depth 20 mm.

- Service rigidly fixed on each side of wall - first support  $\leq$  250 mm

**Note:**

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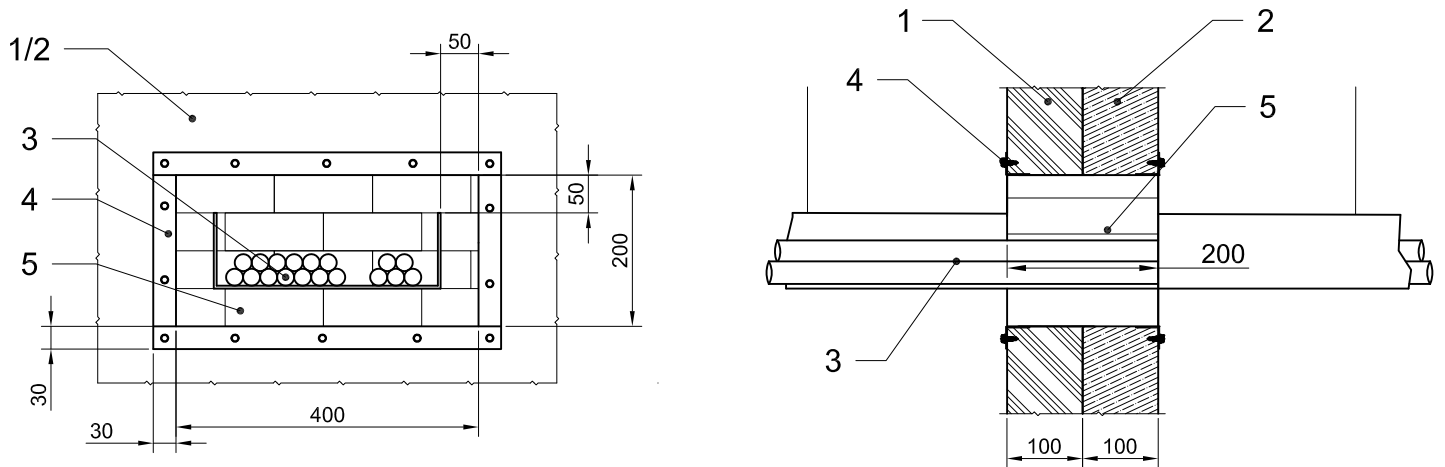
1. only original Hilti products as defined in this specification are used.
2. these specific products are used and installed only by a competent and experienced user in a manner which represents the state of the art and by strictly obeying the calculations and conditions mentioned in this specification as well as all relevant technical instructions, the operating manual, the setting manual and the installation manual and other data sheets of Hilti.
3. the proposed performance, the listed prerequisites and criteria conform with the conditions actually existing on the jobsite and have been checked and agreed by the user.

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Firestop seals according to : Fire resistance of the Hilti CFS-BL Firestop Block

Rating : EI 90

Details:



1. Existing wall - Sandwich panel with mineral wool core, 100 mm thickness, fire rated min. EI 90.
2. New wall - ACH Sandwich panel (DoP No: PM1-e100-M), 100 mm thickness, fire rated min. EI 90.
3. Steel cable tray - size 300 x 100 mm, cables of max. diameter 21 mm.
4. Steel angle (L-shape) 30x30x2mm around perimeter of the opening sealed with CFS-S ACR. Sealant between steel angle and wall, and affixed with self-drilling screws every 100 mm.
5. Hilti Firestop Block CFS-BL - seal depth min. 200 mm, installed according installation instructions.

- Note: - Opening size: (W x H) 400 x 200 mm  
 - Gaps between services and Hilti Firestop Blocks CFS-BL are filled with Hilti Firestop Filler CFS-FIL, depth 20 mm.  
 - Service rigidly fixed on each side of wall - first support ≤ 250 mm

Note:

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