

Hilti Corporation
Design No. HI/JF 120-05
Linear Joint Seal System for Vertical Application
CFS-NVB E120 FB & CFS-NVB E120
EN 1366-4, EN 13501-2
Fire Rating: Integrity (E): 120 Minutes,
Insulation (I): 30 Minutes with Galvanized Steel Brackets (Item 5) or
60 Minutes with Stainless-Steel Brackets (Item 5)
Maximum Joint Width – 400 mm

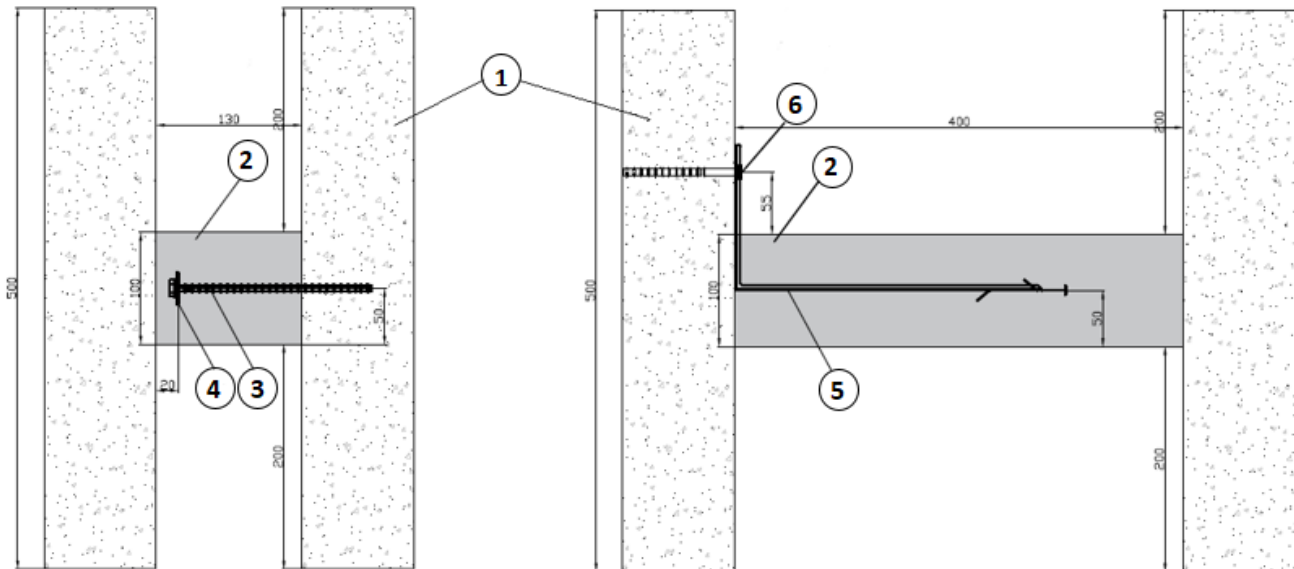


Figure 1

Figure 2

1. SUPPORTING CONSTRUCTION: Joints constructed between aerated concrete, concrete, blockwork, and masonry separating elements with min. thickness of 500 mm and min. density of 550 kg/m³.

2. LINEAR JOINT SEALANT SYSTEM:

CERTIFIED APPLICANT: Hilti Corporation

CERTIFIED PRODUCT: CFS-NVB E120 FB or CFS-NVB E120

FIRE JOINT SEAL: Install CFS-NVB E120 FB (Full board) or CFS-NVB E120 (Prefabricated) fire joint seal made of 100 mm thick, 70 kg/m³

density, aluminum foil faced mineral wool slab, with or without splice, in center of min. 500 mm depth wall supporting construction as shown in Figures 1 and 2. CFS-NVB E120 FB (Full board) is cut according to joint width on site. CFS-NVB E120 is supplied prefabricated, cut to size according to joint width and one edge finished with PE tape.

Installation of the product on joint widths up to 130 mm is done using screws (Items 3 and 4) with 5 mm compression.

Installation of the product on joint widths up to 400 mm is done using brackets (Items 5 and 6) with 10 mm compression.



- 3. SCREW:** As shown in Figure 1, min. 6 mm thick and 80 mm to 180 mm long zinc-coated steel screws (e.g. Hilti HUS 6x80 or HUS 6x180) are fixed to the supporting blockwork construction with min. 55 mm penetration, through the fire joint seal at mid-thickness and recessed in the fire joint seal by min. 10 mm to match the compression rate. Min. two screws with max. on center (oc) distance of 940 mm and 130 mm from the ends are required for insulation board length of up to 1200 mm. One screw can be used on an insulation board length of 250 mm.
- 4. WASHER:** 2 mm thick galvanized steel washers (e.g. Hilti A2K 8.4x28x2) are used between the screws (Item 3) and the fire joint seal insulation boards (Item 2).
- 5. BRACKET:** 0.7 mm thick, galvanized steel or stainless-steel, L-brackets (ref: Bracket CFS VB/NVB S, M, or L Galvanized Steel or Stainless Steel) with 30 mm width and 130 mm height are used to install the fire joint seal for joint widths up to 400 mm as shown in Figure 2. A min. 62% penetration into the fire joint seal must be maintained. Min. two brackets with max. oc distance of 940 mm and 130 mm from the ends are required for barrier lengths up to 1200 mm. One bracket can be used on a barrier length of 250 mm.
- 6. ANCHOR:** Stainless-steel anchors, min. 6 mm thick and 70 mm long (e.g. Hilti HUS4-HR 6x70 40/35/15) are used to fix the brackets (Item 5) to the supporting construction through integrated holes in the brackets.

Consult the listing report on the Directory of Building Products (<https://bpdirectory.intertek.com>) for the edition of the standard(s) evaluated.

Compliance of the assembly described in this Design Listing with the referenced standard relies on verification that the assembly constructed in the field is consistent with that described herein. Intertek certified products may be verified by the approved Intertek label; other products must be verified by the Authority Having Jurisdiction as meeting the specifications stated herein.