

**Hilti Corporation**  
**Design No. HI/MFF 60-02**  
**Open-State Cavity Fire Barrier**  
**CFS-VB E60 50 mm**  
**ASFP TGD-19**

**Fire Rating: Integrity: 60 Minutes, Insulation: 30 Minutes**  
**Cavity Closure Time: <5 Minutes**  
**Maximum Cavity Width – 400 mm, Airgap – 50 mm**

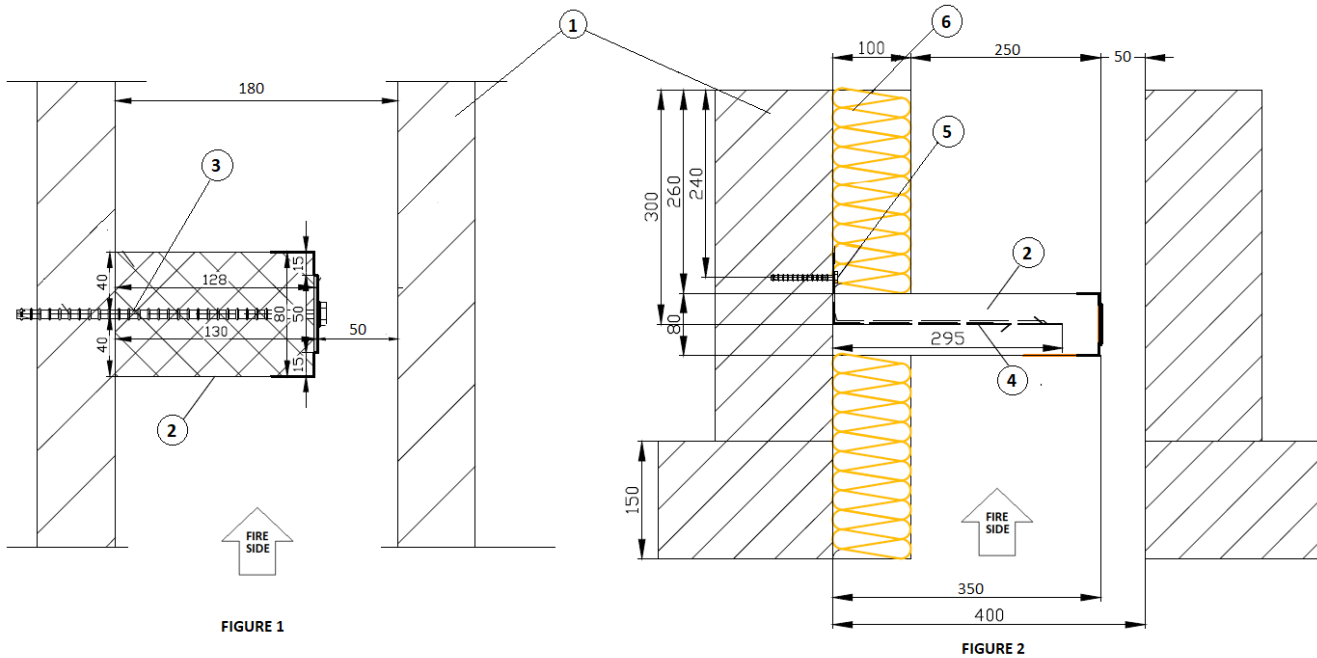


FIGURE 1

FIGURE 2

**1. SUPPORTING CONSTRUCTION:** Cavity barriers to be installed in between blockwork and non-combustible cladding.

**2. CAVITY BARRIER SYSTEM:**

**CERTIFIED APPLICANT:** Hilti Corporation

**CERTIFIED PRODUCT:** CFS-VB E60 50 mm

**CAVITY BARRIER:** Install CFS-VB E60 50 mm Cavity barrier made of 80 mm thick, 80 kg/m<sup>3</sup> density, aluminum foil-faced mineral wool slab

with three layers of 2 mm intumescent tape on the open edge, with or without splice, in between blockwork and non-combustible cladding with 50 mm airgap, without any compression, as shown in Figures 1 and 2.

Installation of the product on cavity width from 75 mm up to 180 mm is done using screws (Item 3).

Installation of the product on cavity width from 180 mm up to 400 mm is done using brackets (Items 4 and 5).



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. 50 mm penetration, through the cavity barrier at mid-thickness. A min. of three screws with max. on center (oc) distance of 470 mm and 130 mm from the ends are required for insulation board lengths of up to 1200 mm. One screw can be used on an insulation board length of 250 mm.
4. **BRACKET:** 0.7 mm thick, stainless-steel, L-brackets (ref: Bracket CFS VB/NVB S, M or L Stainless Steel) with 30 mm width and 130 mm height are used to install the cavity barrier seal for cavity widths between 180 mm and 400 mm as shown in Figure 2.

A min. 62% penetration into the cavity barrier must be maintained. A min. of three brackets with max. oc distance of 470 mm and 130 mm from the ends are required for insulation board lengths of up to 1200 mm. One bracket can be used on an insulation board length of 250 mm.

5. **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 4) to the supporting construction through integrated holes in the brackets.
6. **INSULATION (Optional):** Install 100 mm thick unfaced mineral wool insulation (ref: Knauf FKN Thermal or similar EN 13501-1 A1 classified non-combustible mineral wool insulation) to the wall substrate with metal dowels.

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.*