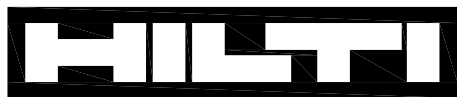
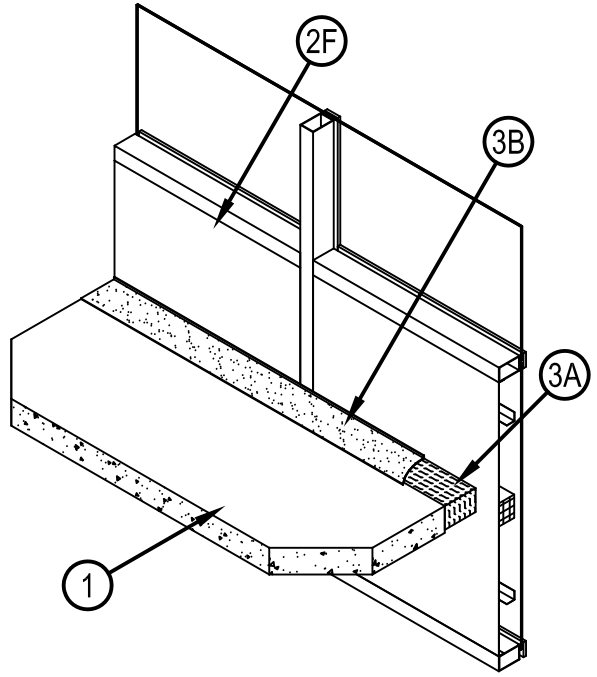
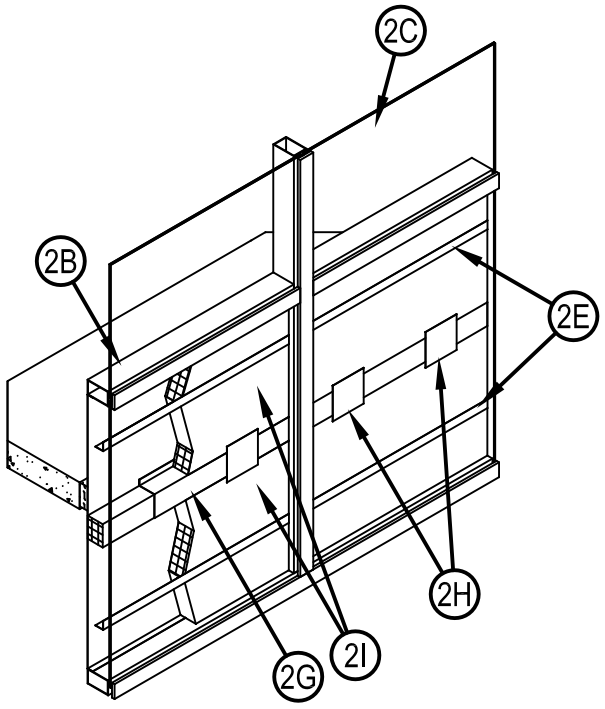


**Design No. HI/BPF 120-09**  
**PERIMETER FIRE BARRIERS**  
**Firestop Joint Spray CFS-SP WB**  
**ASTM E 2307**

**Table 1.**

	Firestop Joint Spray CFS-SP WB	Silicone Joint Spray CFS-SP SIL
F-Rating	2 Hour	2 Hour
T-Rating	1 Hour	1 Hour
Application Thickness	1/8 in. wet film (1/16 in. dry)	2 mm (0.079 in.) wet film

**Static Joint**  
**L-Rating <1.0 SCFM/LF at Ambient Conditions**



**Hilti Firestop Systems**

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 May 26, 2015



1. CONCRETE FLOOR ASSEMBLY: 2 hour rated concrete floor assembly made from either lightweight or normal weight concrete with a density of 100 to 150 pcf, having a min. thickness of 4-1/2 in. at the joint face. When a longitudinal recess (blockout) is required to contain an architectural joint system, increase concrete floor assembly thickness to maintain a min. thickness of 4 1/2 in. and accommodate depth of blockout formed in the concrete: blockout width unrestricted.
2. CURTAIN WALL ASSEMBLY: The curtain wall assembly shall incorporate the following construction features:
  - A. Mounting Attachment (Not shown): Attach aluminum framing (Item 2B) to the structural framing according to the curtain wall manufacturer's instructions. Connect the mounting attachments to the joint face of the concrete floor assembly (Item 1) according to the curtain wall manufacturer's instructions.
  - B. Aluminum Framing: Use hollow rectangular aluminum extruded tubing with min. overall dimensions of 0.100 in. thick, 4 in. high and 2-1/2 in. wide. Locate mullions (vertical aluminum framing) min. 60 in. oc and locate transoms (horizontal aluminum framing) a min. 48-1/2 in. oc. For the spandrel region, locate the upper transom (horizontal aluminum framing) a min. 20 in. above the concrete floor assembly (Item 1) as measured from the top surface of the concrete floor assembly (Item 1) to the underside of the transom (horizontal aluminum framing).
  - C. Glass Panels: Sized and installed into aluminum framing (Item 2B) in accordance with the curtain wall manufacturer's instructions. Use min. 1/4 in. thick, clear, heat strengthened (HS) or tempered glass with a max. width and height less than the aluminum framing (Item 2B) oc spacing. OC spacing shall allow glass to be secured to the aluminum framing (Item 2B) between the notched shoulders. Secure glass panels with a thermal break (rubber extrusion), pressure bar (aluminum extrusion), min. 1/4-20 by 5/8 in. long screws, and a snap face (aluminum extrusion).
  - D. Aluminum Anchor Brackets (Not shown): Use min 1/2 in. thick aluminum anchor brackets to serve as part of the mounting attachment (Item 2A) rigidly secured to the aluminum framing (Item 2B) and the concrete floor assembly (Item 1).
  - E. Steel Retainer Angle: Place a min. 22 GA, 1-1/2 in. by 1-1/2 in. angle with 1 in. tabs at the ends horizontally 12 in. above and below the floor line in the spandrel area and secured to the aluminum framing (Item 2B) with two No. 10 sheet metal screws on either end. Orient the angle so that the horizontal flange is below the vertical flange and situate the horizontal flange to fully embed into the curtain wall insulation (Item 2H) of the steel back pan (Item 2E).
  - F. Steel Backpan: Install min. 22 GA, galvanized steel backpan with 1 in. lip flush with interior face of framing and screw-attached to mullions and transom along all sides with 1/2 in. long No. 10 self-drilling, self-tapping steel screws spaced a min. of 8 in. oc. Perimeter of pan sealed with Hilti CP 606 Flexible Firestop Sealant.
  - G. Backpan Stiffener: Secure min. 18 GA, galvanized, hat-shaped, stiffener placed horizontally, stuffed with nominal 3 in. thick, 8 pcf density mineral wool batt insulation faced on one side with aluminum foil scrim, and measuring 4 in. wide by 3 in. deep and having 1 in. flanges to the backpan with No. 10, sheet steel screws max. 12 in. oc. Position the lower flange of the stiffener at the center-line of the packing material (3A).
  - H. Steel Patches: Where required, horizontally place 6 in. wide, 22 GA, galvanized steel C-shaped patches measuring 6 in. wide and 1-1/2 in. deep, centered on the outside of the backpan stiffener (2G) and secure patches to the stiffener with four No. 10, sheet steel screws in a rectangular pattern with nominal 2 in. spacing vertically and nominal 4 in. spacing horizontally.
  - I. Curtain Wall Insulation: Fill the cavity of the steel backpan (Item 2E) with nominal 3 in. thick, 8 pcf density, mineral wool batt insulation faced on one side with aluminum foil scrim (vapor retarder), which faces the room interior. Tightly fit, compress at least 1/8 in. in all directions. Use only Intertek certified products meeting the above minimum requirements.



3. PERIMETER JOINT PROTECTION: Do not exceed a 6 in. nominal joint width (joint width at installation). Incorporate the following construction features for the perimeter joint protection (also known as perimeter fire barrier system):

A. Packing Material: Use only mineral wool bearing an Intertek certified product label and meeting the following min. requirements. Use a min. 4 in. thick, 4-pcf density, mineral wool batt insulation installed with the fibers running parallel to the edge of concrete floor assembly (Item 1) and curtain wall assembly (Item 2). Cut packing material width to achieve 33% compression when installed in the nominal joint width and use no more than three adjacent strips. Compress the packing material into the perimeter joint. Tightly compress together splices (butt joints) in the lengths of packing material by using min. 1/4 in. compression per piece of packing material. Use only Intertek certified products meeting the above min. requirements. Locate the top surface of the packing material flush with the top surface of the concrete floor assembly (Item 1).

B. CERTIFIED MANUFACTURER: Hilti Corporation

CERTIFIED PRODUCT: Firestop Joint Spray CFS-SP WB or Silicone Joint Spray CFS-SP SIL

Fill, Void or Cavity Material: Apply over the packing material (Item 5A) as discussed below.

Apply at the thickness specified in Table 1 and overlap the material 1/2 in. onto the adjacent curtain wall assembly and concrete floor slab assembly. When the spraying process is stopped and the applied liquid cures to an elastomeric film before application is restarted, overlap the edge of the cured material at least 1/8 in. with the spray. Reference Product Section of the Intertek Directory for more details on the Listed product.



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