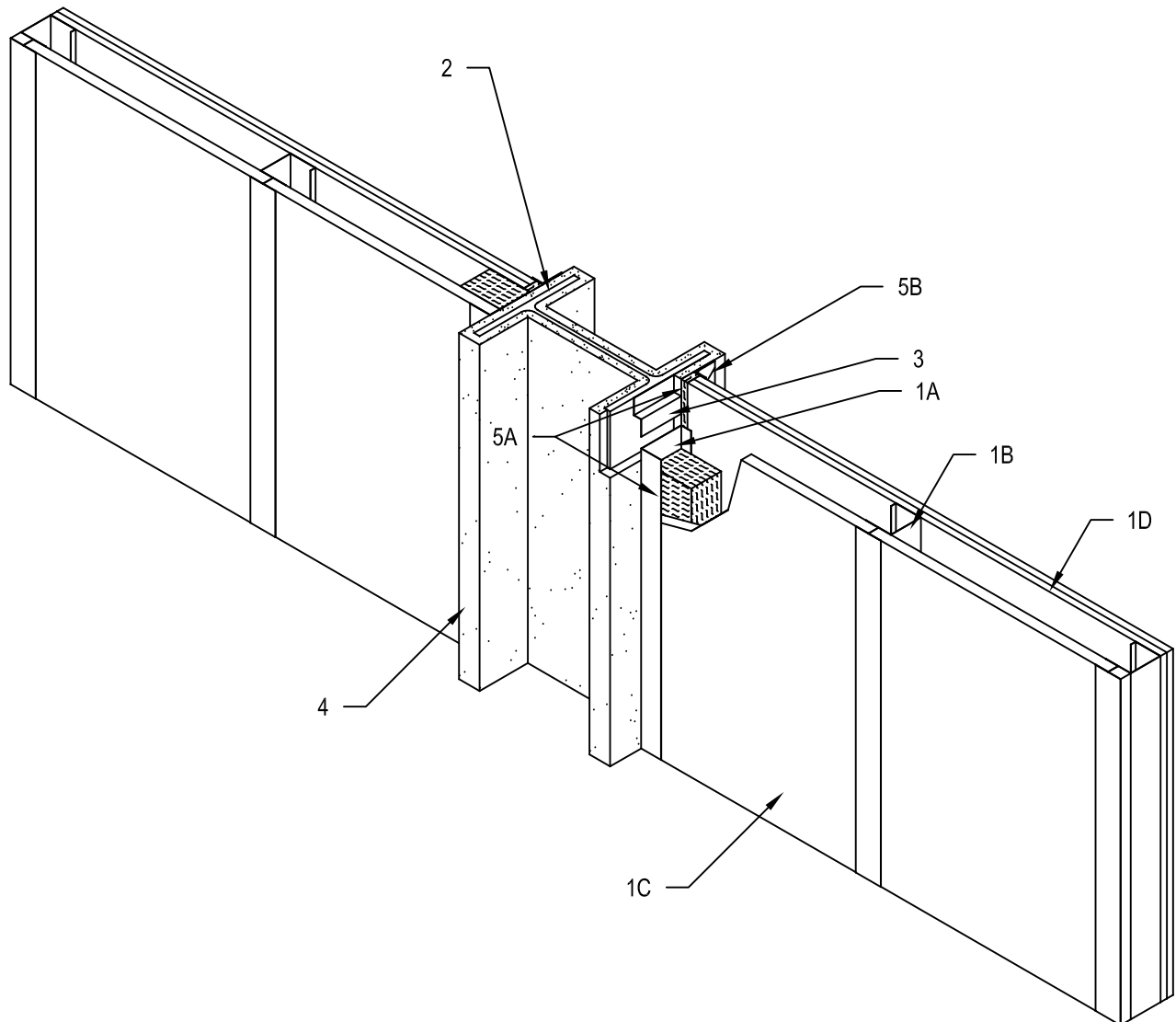


**Design Number HI/JF 120-03**  
**Non-Load Bearing Vertical Joint System**  
**Hilti Corporation**  
**CFS-SP WB Firestop Joint Spray**  
**ASTM E 1966**  
**Rating: 2 Hours**  
**Cycling: None**  
**Superimposed Load: None**

HI/JF 120-03



**Hilti Firestop Systems**

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September 21, 2015



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1. SHAFT WALL ASSEMBLY: Construct 2 hour rated shaft wall assembly in accordance with its corresponding design listing and containing the following elements:
  - A. STEEL RUNNER: Install min. 4 in. wide 25 GA galvanized steel J-Track with 1 in. shorter and 2 in. longer legs along the perimeter of the shaft wall assembly. Install the shorter of the two legs toward the finished side of the shaft wall.
  - B. STEEL STUDS: Install min. 4 in. wide by 1-1/2 in. deep 25 GA galvanized steel C-H studs spaced max. 24 in. on center (oc).
  - C. SHAFT LINER: Install nominal 1 in. thick shaft wall liner into the H-shaped section of the C-H steel studs (Item 1B) and fastened to the steel runners (Item 1A) with 1-5/8 in. long, Type S fasteners spaced 12 in. oc. Install screws from the cavity side of the shaft liner prior to installation of the gypsum board (Item 1D).
  - D. GYPSUM BOARD: Install two layers of min 1/2 in. Type C gypsum board with the long dimension parallel to the steel studs (Item 1B) overlapping onto steel runner (Item 1A) a nominal 3/8 in., leaving a max. 5/8 in. by 1 in. opening between the gypsum and the coated column (Items 2 and 4). Secure base layer for the wall assembly to steel runner (Item 1A) and steel studs (Item 1B) using 1 in. long Type S self-drilling screws, spaced 16 in. oc around the perimeter and 16 in. oc in the field. Install face layer with joints offset 24 in. from the base layer and secured using 1-5/8 in. long Type S self-drilling screws spaced 16 in. oc around the perimeter and 16 in. oc in the field, staggered 8 in. from the base layer fasteners.
  - E. JOINT TAPE AND COMPOUND: (Not Shown) Apply a level 2 finish of vinyl or casein, dry or premixed joint compound as follows. Apply to gypsum board (Item 1D) to all exposed fastener heads and gypsum board joints. Embed min. 2 in. wide paper, plastic, or fiberglass tape in first layer of compound over joints in gypsum board (Item 1D).
2. COLUMN: Install min. 8 in. (width and depth) W Shape structural steel column in accordance with the applicable building code requirements. Install W shape column centered against the shaft wall assembly (Item 1).
3. Z-CLIPS: Secure steel runner (Item 1A) to steel column (Item 2) with Z-shaped clips formed from min. 20 GA galvanized steel. Clips shall not exceed the width/thickness of the wall and shall be sized to extend through the spray-applied fire-resistive coating (Item 4) on the flange of the steel column (Item 3) with 1-1/2 or 2 in. long upper and lower legs. Clips are to be fastened to the steel column (Item 2) before application of the spray-applied fire-resistive coating (Item 4). Secure the steel runner to clips with #10 self-drilling screws or 1/2 in. stitch welds spaced 12 in. oc max. Ensure that the steel runners (Item 1A) are in direct contact with the coated column (Items 2 and 4).
4. FIRE-RESISTIVE COATING: Apply Isolatak Cafco 300 or Grace Construction Products Monokote MK-6s® Fireproofing to the column per the manufacturer's installation instructions to maintain a min. 2 hour fire resistance rating.
5. FIRE-RESISTIVE JOINT SYSTEM: Install the fire-resistive joint system, containing the elements listed below, between the edge of the gypsum board (Item 1D) and column (Item 2). Maintain max. 5/8 in. separation between the edge of the gypsum board (Item 1D) and the coated column (Items 2 and 4).
  - A. PACKING MATERIAL: Install min. 4 in. by 4 in., nominal 4 pcf density mineral fiber insulation bearing the Intertek Certification Mark, into the wall cavity against the J-Track steel runner (Item 1A) prior to installation of gypsum board (Item 1D). Install 4 pcf density mineral fiber insulation into the 5/8 in. by 1 in. gap left between the gypsum board (Item 1D) and the fire-resistive coating (Item 4) at 50% compression.
  - B. CERTIFIED COMPANY:  
Hilti Corporation  
CERTIFIED PRODUCT:  
Fire Resistant Joint Sealants  
MODEL: Firestop Joint Spray CFS-SP WB  
Fill, Void, or Cavity Material: Apply min. 1/8 in. (wet film thickness) thick layer of fill material as part of the fire-resistive joint system ensuring min. 2 in. overlap onto fire-resistive coating (Item 4) and min. 1/2 in. onto face of gypsum board (Item 1D).



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