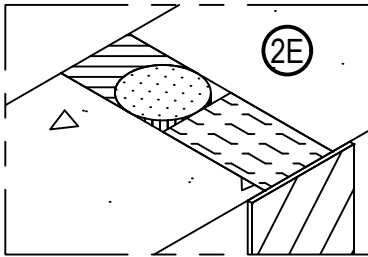


Hilti Corporation
 Design No. HI/BPF 120-25
 Perimeter Fire Barrier System
 Edge of Slab QuickSeal CFS-EOS QS
 ASTM E 2307, CAN/ULC-S115, UL 2079

Table 1.

	Edge of Slab QuickSeal, CFS-EOS QS
F-Rating	2 Hour
T-Rating	2 Hour
Cycling	None
Air Leakage	<2.0 SCFM/LF

VERTICAL JOINT



HORIZONTAL JOINT

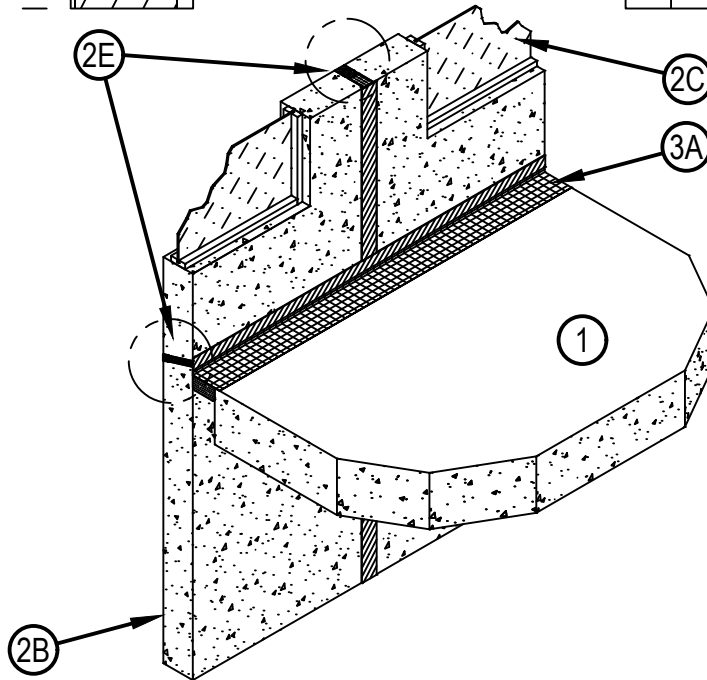
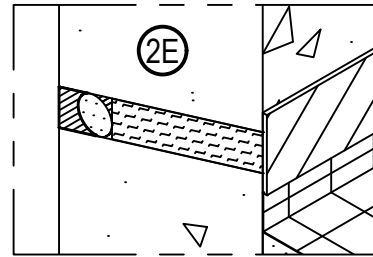


Table 2.

Product	Nominal Joint Width	
	Minimum	Maximum
CFS-EOS QS Small	1-1/2 in.	2-1/2 in.
CFS-EOS QS Medium	2 in.	3 in.

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1. **CONCRETE FLOOR ASSEMBLY:** Min. 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 8 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 8 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)** - Mounting attachments to consist of steel angle or steel tube. Mounting attachments are to be secured to precast concrete panels (Item 2B) and to concrete floor assembly (Item 1) per the exterior wall manufacturer's instructions. Mounting attachments to be located at the top and bottom of the concrete floor assembly. Alternatively, when horizontal joints (Item 2E) are located a min. of 24 in. from top and bottom of concrete floor, mounting attachments may be located at only the top, or only the bottom, of the concrete floor assembly per the exterior wall manufacturer's instructions.
 - B. **CONCRETE PANELS** - Precast Concrete panel panels (min. 6 in. thick) made from either lightweight or normal weight concrete with a density of 100 to 150 pcf. Openings in the precast panels are allowed to accommodate windows or louvers. Window or louver openings to be spaced a min. of 16 in. above the top of concrete floor assembly (Item 1) and a min. of 6 in. below the bottom of the concrete floor assembly. There shall be a min. horizontal separation of 24 in. between window openings in precast concrete panels (Item 2B).
 - C. **GLASS PANELS** - Size and install into the window openings in accordance with the exterior wall manufacturer's instructions. Use min. 1/4 in. thick, clear, heat strengthened glass (HS) or tempered glass and secure into concrete panel (Item 2B) openings using steel or aluminum framing.
 - D. **LOUVER (Optional, Not Shown)** - In lieu of glass panels (Item 2C) metallic louvers may be installed in the precast concrete panel (Item 2B) openings per the exterior wall manufacturer's instructions. Louvers to be mechanically secured within precast panel openings.
 - E. **PRECAST CONCRETE PANEL JOINTS** - The precast concrete panels (Item 2B) may have horizontal and vertical joints between panels. Horizontal joints to be a max. 1 in. wide, with the bottom of horizontal joints located a min. of 1-1/2 in. above top of concrete floor and a min. of 6 in. below the bottom of the concrete floor. Vertical joints to be a max. 1-1/2 in. wide and may be continuous through the perimeter fire barrier joint system. Locate center of vertical joint min. 12 in. to adjacent openings (window or louver) in precast concrete panels. Space the vertical joints min. 60 in. oc. The exterior side of each precast panel joint shall be treated with polyethylene or polyurethane foam backer rod sized to accommodate the joint width. The backer rod shall be recessed to accommodate a min. 1/2 in. thickness of exterior grade silicone sealant approved by the exterior wall manufacturer. Either one or multiple layers of backer rod and exterior sealant may be used with the requirement that at least one layer be flush with the exterior side of the precast concrete panels and any inner layers are recessed a min. 3 in. from the interior face of the precast concrete panels. On the interior face of each precast panel joint, min. of 3 in. thick packing material (mineral wool safing, min. 4 pcf) shall be installed within the joint, flush with the interior side of the precast concrete panel. Packing material to be tightly packed within joints. Packing material to be continuous through the face of the concrete floor, extending a min. 72 in. above top of concrete floor assembly (Item 1) and a min. of 6 in. below bottom of concrete floor assembly.
Using only Hilti Corporation CFS-SP WB Firestop Joint Spray or CFS-SP SIL Silicone Spray bearing an Intertek Certified Label, apply a min 1/8 in. thick layer of the sealant to cover packing material with a min. 1/2 in. overlap onto the interior face of the precast concrete panels (Item 2B) beyond the joint. Sealant material to be flush with top of concrete floor assembly (Item 1), extending a min. of 24 in. above the top of the floor, and shall be flush with the bottom of the concrete floor, extending a min. of 6 in. below the floor. Sealant material may be discontinuous at the concrete floor face.



Hilti Firestop Systems

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3. PERIMETER JOINT PROTECTION: Do not exceed a 3 in. nominal joint width (joint width at installation) between the interior face of precast concrete panels (Item 2B) and the face of the concrete floor assembly (Item 1). Incorporate the following construction features for the perimeter joint protection (also known as the perimeter fire barrier system) :

A. CERTIFIED MANUFACTURER : Hilti Corporation

CERTIFIED PRODUCT : Perimeter Fire Barrier System

CERTIFIED MODEL : Edge of Slab QuickSeal CFS-EOS QS Compress the appropriately sized Edge of Slab QuickSeal product (per Table 2) into the perimeter joint. Except at mounting attachment locations, remove paper from adhesive flaps and adhere to top side of concrete floor assembly (Item 1) and interior face of precast concrete panels (Item 2B). At each mounting attachment location, adhesive flaps are not required to be attached to the floor or curtain wall if the mounting attachments would interfere. Splices (butt joints) in the length of Edge of Slab QuickSeal are to be tightly compressed together (1/4 in. compression). Splices (butt joints) to be located a min. 6 in. from vertical joints in the precast concrete panels. At the vertical joint locations, a piece of 8 pcf, min. 3 in. x 12 in. x 12 in. mineral wool board, shall be mechanically fastened to the precast concrete panels (Item 2B) under the perimeter joint and centered on the vertical wall joint.

B. EDGE OF SLAB WATERSTOP CFS-EOS WS (Optional, Not Shown) Use only Hilti Corporation CFS-EOS WS bearing an Intertek Certified Label. Apply 2 mm wet thickness over any seams and overlap a min 1 in. onto Edge of Slab QuickSeal, the adjacent curtain wall assembly (Item 2) and concrete floor assembly (Item 1).

C. JOINT COVER (Not Shown) Install min. 0.05 in. (1.29 mm) thick aluminum L-shaped joint cover extending the entire length of the Edge of Slab QuickSeal CFS-EOS QS (Item 3A). The joint cover shall be installed with 8 pcf mineral wool, 12 in. wide, placed into the joint cover cavity (filled but not compressed) at the vertical joint locations. The vertical leg of the joint cover must be a min. of 2.5 in. high and the horizontal leg must extend a min. 1 in. beyond the joint. When a butted joint cover splice is used, ensure it is offset a min. of 12 in. from an Edge of Slab QuickSeal CFS-EOS QS splice (butt joint). Joint cover to be continuously connected to transom via integrated keying function per curtain wall manufacturer's instructions. Alternatively, a knee wall (min. 12 in. high above the perimeter joint protection), made of steel stud and track framing construction, gypsum board sides, and top cover consisting of gypsum board, aluminum sheet/plate, stainless steel sheet/plate, or steel sheet/plate, with 3 in. thick, 8 pcf mineral wool installed above and below the floor slab at the location of the vertical joint may be substituted as a joint cover. Use only mineral wool bearing an Intertek Certified label, consisting of a min. 3 in. thick x 12 in. x 12 in., 8 pcf mineral wool board, mechanically fastened to the Pre-Cast Concrete wall (Item 2). Aluminum sheet/plate top cover shall be a min. of 0.05 in. (1.29 mm) thick. Alternatively, 18 GA stainless steel sheet/plate or 18 GA carbon steel sheet/plate may be used for the top cover of the knee wall.



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