

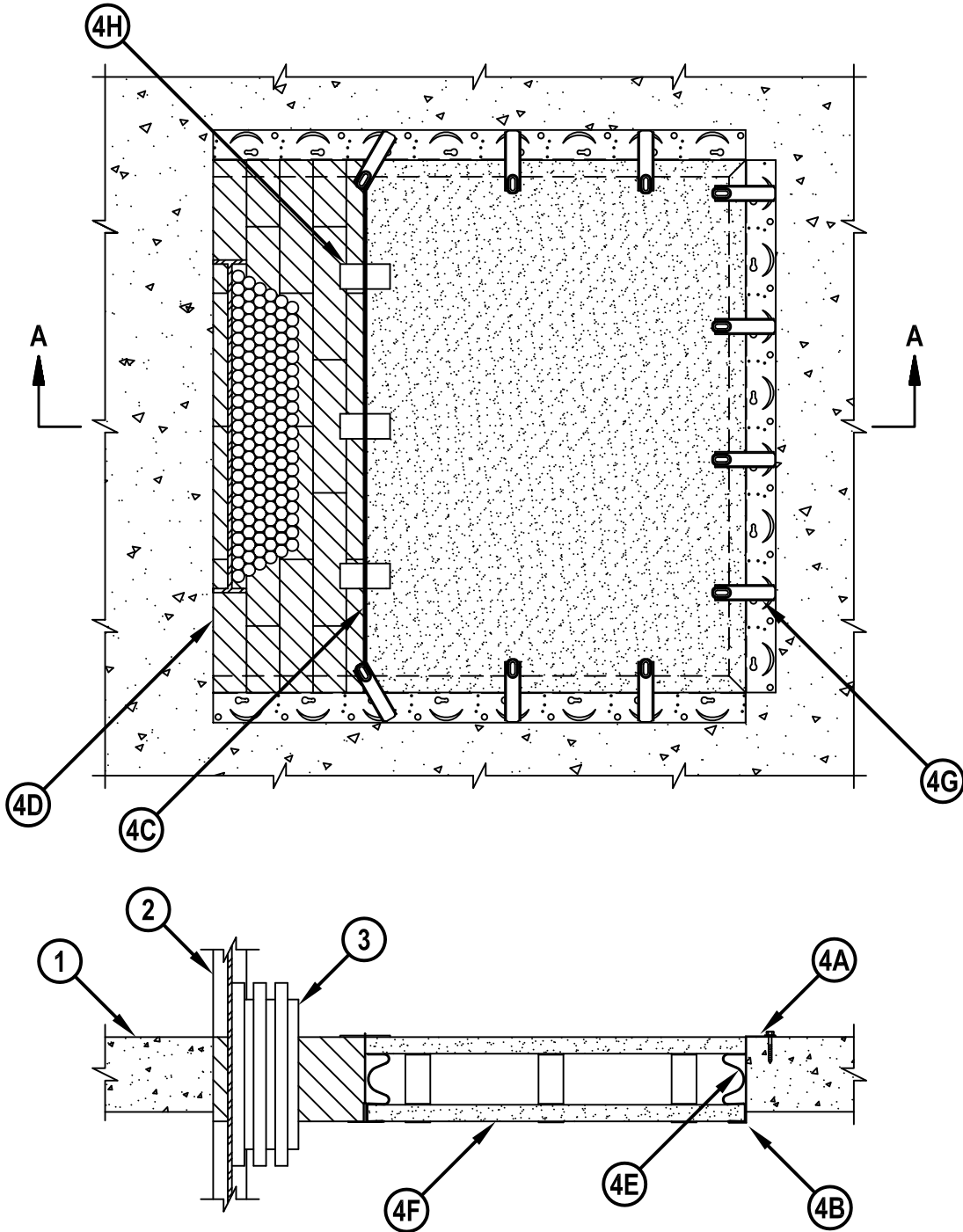


Classified by
Underwriters Laboratories, Inc.
to UL 1479 and CAN/ULC-S115

System No. C-AJ-4077

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 2 Hr	F Rating — 2 Hr
T Rating — 1/2 Hr	FT Rating — 1/2 Hr
	FH Rating — 2 Hr
	FTH Rating — 1/2 Hr

CAJ 4077



Hilti Firestop Systems

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December 12, 2011



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1. Floor or Wall Assembly — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max area of opening is 900 sq. in. (5806 cm²) with maximum dimension of 30 in. (762 mm).

See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.

2. Cable Rack — One cable rack installed in the opening. Max 20 in. (508 mm) wide open-ladder steel cable rack with nom 2 in. (51 mm) by 3/8 in. (9.5 mm) solid steel side rails. Cable rack to be rigidly supported on both sides of floor or wall assembly. The spacing between the cable rack and the periphery of the opening shall be min 0 in. (point contact) to max 28 in. (711 mm).

3. Cables — Max 4 in. (102 mm) cable loading depth within the cable rack. Any combination of the following types and sizes of copper conductor cables may be used:

- A. Max 750 kcmil RHW/RHH type power cable or with polyvinyl chloride (PVC) jacket.
- B. Max 300 pair No. 24 AWG telephone cable with PVC jacket.
- C. Max 150 pair No. 24 AWG telephone cable with PVC jacket.
- D. Max 24 fiber, fiber-optic cable with PVC jacket.
- E. Max 7/C No. 12 AWG cable with PVC jacket.

4. Firestop System — The firestop system shall consist of the following:

A. Firestop Device* — Z-Frame — Z-frame cut to length for three sides of the opening. Each piece of Z-frame fastened to the floor or wall at each end and no greater than 12 in. (305 mm) OC along its length with 3/16 in. (4.8 mm) by 1-1/4 in. (32 mm) long steel concrete screw anchors.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 675T Z-Frame

B. Fill, Void or Cavity Material* — Putty — Nom 1/4 in. (6 mm) thick by 1 in. (25 mm) wide strip of putty material applied on the back lip of the Z-frame.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 619T Firestop Putty Roll or CP 618 Firestop Putty Stick or CP 617 Firestop Putty Pad

C. Firestop Device* — T-Bar — T-Bar cut 1/4 in. (6 mm) shorter than opening dimension. T-Bar located nom 4 in. (102 mm) from cables and directly adjacent to the fire blocks (Item 4D). T-Bar held in position with one Z-Frame Latch (Item 4G) at each end.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 675T T-Bar

D. Fill, Void or Cavity Material* — Block — Min 5 in. (127 mm) depth to fill area between cable rack/cables, floor or wall, and T-bar. Max three rows of blocks between the cable and T-Bar and max three rows of blocks beside the cable rack. Blocks installed with 5 in. (127 mm) dimension projecting through openings flush with back lip of Z-Frame (item 4A). Either one or a combination of the block types specified below may be used.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS 657 Fire Block or CFS-BL Firestop Block



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- E. Firestop Device* — Distance Holder — Distance holders clipped over perimeter of first layer of board (item 4F1), spaced 8 in. (203 mm) OC.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 675T Distance Holders
- F. Firestop Device* — Board — Board cut to fit within opening with max 1/4 in. (6 mm) gap around perimeter. Board layers installed as described in items 4F1 and 4F2. When gap between board and opening is 1/8 in. (3 mm) to 1/4 in. (6 mm), the gap shall be filled to a 1 in. (25 mm) depth with one of the materials specified in Item 4B.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 675T Firestop Board
- F1. Board - First Layer — First layer of board placed into opening with distance holders (item 4E) against back lip of Z-frame (item 4A) and putty (item 4B).
- F2. Board - Second Layer — Second layer of board placed into opening against back of distance holders (item 4E).
- G. Firestop Device* — Z-Frame Latch — Secured to Z-frame with integral fasteners, and rotated to locked position over second layer of board (item 4F2) and T-Bar. Z-Frame latches shall be located 8 in. (203 mm) OC, with a minimum of two latches per side. The meeting edges between the frame and the board (up to and in between the Z-Frame latches) shall be covered with a strip of putty (Item 4B).
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 675T Z-Frame Latch
- H. Firestop Device* — T-Bar Latch — Min two T-bar latches spaced max 10 in. (254 mm) OC slid into T-bar (item 4C) at each interface of board (Item 4F2) and block (Item 4D).
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 675T T-Bar Latch

*Bearing the UL Classification Mark

+Bearing the UL Listing Mark



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