

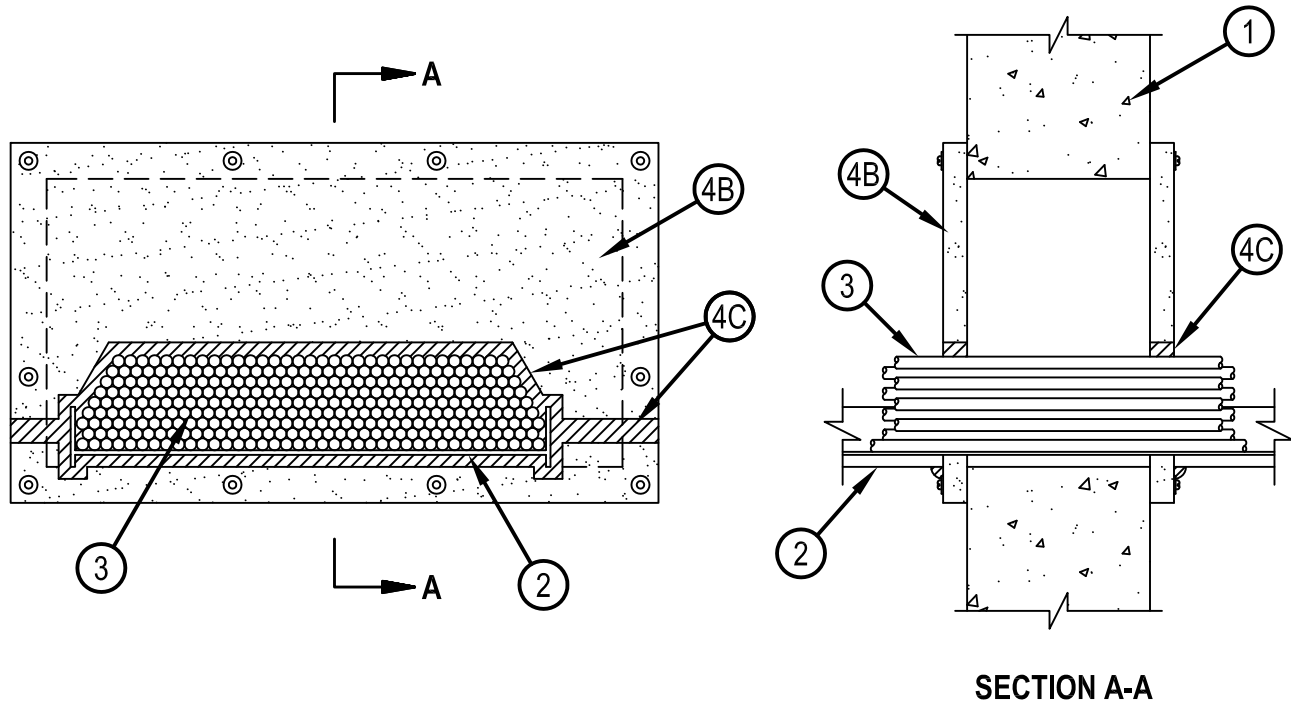


Classified by  
Underwriters Laboratories, Inc.  
to UL 1479 and CAN/ULC-S115

## System No. W-J-4048

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 2 Hr	F Rating — 2 Hr
T Rating — 1/4 Hr	FT Rating — 1/4 Hr
	FH Rating — 2 Hr
	FTH Rating — 1/4 Hr

WJ 4048



1. Wall Assembly — Min 6 in. (152 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m<sup>3</sup>) concrete. Wall may also be constructed of any UL Classified Concrete Blocks\*. The max area of opening shall be 6 sf ft (0.46 m<sup>2</sup>) with max dimension of 36 in. (914 mm). See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Cable Rack — Max 20 in. (508 mm) wide open-ladder steel cable rack with nom 2 in. (51 mm) by 3/8 in. (10 mm) solid steel side rails. Cable rack to be rigidly supported on both sides of wall assembly. The spacing between the cable rack and the periphery of the opening shall be min 0 in. (0 mm, point contact) to max 34 in. (864 mm).
3. Cables — Max 4 in. (102 mm) cable loading depth on 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 3/C No. 12 AWG metal-clad cable.
  - C. Max 300 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.
  - F. Max 3/C No. 2/0 AWG (or smaller) copper conductor PVC jacketed aluminum clad or steel clad TECK 90 cable.
  - G. Through Penetrating Product\* — Any cables, Armored Cable+ or Metal Clad Cable+ currently Classified under the Through Penetrating Product category.  
See Through Penetrating Product (XHLY) category in the Fire Resistance Directory for names of manufacturers.



**Hilti Firestop Systems**

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January 21, 2015

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

A. Fill, Void or Cavity Material\* — Sealant — (Not Shown) — Min 1/4 in. (6 mm) diam bead of sealant applied to wall surface around perimeter of opening prior to attaching board (Item 4B) to wall.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant or FS-ONE MAX Intumescent Sealant

B. Firestop Device\* — Board — Board cut in two pieces (top and bottom). Bottom piece cut to tightly follow the contours of cable rack with a min 0 in. (0 mm) to max 1 in. (25 mm) space between board and cable rack on each side of wall. Top piece cut to tightly-follow the contours of cable rack and cable fill on each side of wall with a min 1/8 in. (3 mm) to max 1 in. (25 mm) space between board and cable rack and a min 1/4 in. (6 mm) to max 1 in. (25 mm) space between board and cables. Boards cut to lap a min of 1 in. (25 mm) onto the gypsum board around the perimeter of the opening on both sides of wall. Boards to be secured using min 3/16 in. diam by 2-1/4 in. long steel concrete screw anchors with 1-1/4 in. (32 mm) OD steel fender washers at each corner and spaced maximum 8 in. (203 mm) OC around perimeter of opening. Additional fasteners to be located on each side of butted seams of top and bottom pieces.

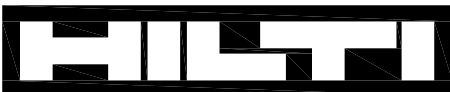
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 675T Firestop Board

C. Fill, Void or Cavity Material\* — Putty — As an alternate to Item 4A, a min 1/8 in. (3 mm) thick by 1 in. (25 mm) wide strip of putty applied to wall surface around perimeter of opening prior to attaching board to wall. Min 1 in. depth of putty applied in annular space between cables and board and between the cable rack and the board. Min 1 in. (25 mm) depth of putty to be applied in seam between top and bottom pieces of board. Min 1/2 in. crown of putty shall be applied where annular space between the board and the cable rack is less than 1/4 in. (6 mm).

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

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

+Bearing the UL Listing Mark.



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