

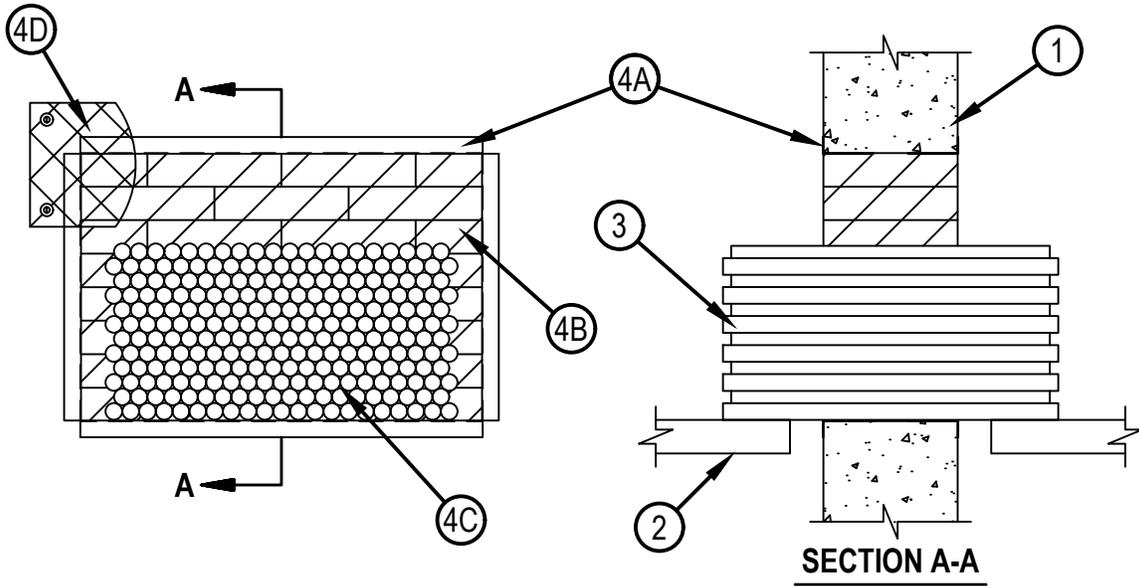


Classified by
Underwriters Laboratories, Inc.
to UL 1479 and CAN/ULC-S115

System No. W-J-3074

WJ 3074

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 2 Hr	F Rating — 2 Hr
T Ratings - 0 and 1/2 Hr (See Item 2)	FT Ratings - 0 and 1/2 Hr (See Item 2)
	FH Rating — 2 Hr
	FTH Ratings - 0 and 1/2 Hr (See Item 2)



Reproduced by HILTI, Inc. Courtesy of
Underwriters Laboratories, Inc.
January 25, 2016

System No. W-J-3074

WJ 3074

1. Wall Assembly — Min 5 in. (127 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Wall may also be constructed of any solid or filled UL Classified Concrete Blocks*. Max diam of opening is 384 in² (0.25 m²) with max dimension of 24 in. (610 mm).

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

2. Cable Rack — Max 20 in. (508 mm) wide cable rack, fabricated from min 1/4 in. (6 mm) thick by 1/2 in. (13 mm) wide steel bar side rails and 3/16 in. (5 mm) thick by 1 in. (25 mm) wide C-shaped rungs spaced 9 in. (229 mm) OC. Cable rack may be continuous or discontinuous through wall assembly. When the rack is continuous, the T, FT and FTH Ratings are 0 hr.

3. Cables — Aggregate cross-sectional area of cables in cable tray to be max 35 percent of the cross-sectional area of the opening. The annular space between cables and the periphery of the opening to be min 0 in. (point contact) to max 8 in. (203 mm). Any combination of the following types and sizes of copper conductor cables may be used:

A. 1/C, 750 kcmil (or smaller) power cable with polyvinyl chloride (PVC) insulation and jacket.

B. 300 pair - No. 24 AWG telephone cable with PVC insulation and jacket.

C. 24 fiber optic cable with PVC outer and subunit jacket.

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

A. Steel Framing — (Optional) - Min 1 in. (25 mm) by 3 in. (76 mm) by 0.039 in. (1 mm) zinc coated or painted steel angles fitted within opening to frame all four sides of opening on each side of wall. Angles are placed with the 1 in. (25 mm) legs resting flush against each face of the wall and the 3 in. (76 mm) legs flush against the sides of the opening and overlapping at the center of the wall thickness. Angles are friction fit within opening. Steel fasteners may be used to secure 1 in. (25 mm) leg of angle to wall.

B. Fill, Void or Cavity Material*—Fire Blocks — Blocks installed with 5 in. (127 mm) dimension projecting through and centered within the opening. Blocks to be firmly packed and completely fill height and width of opening. Either one or a combination of the block types specified below may be used.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS657 Fire Block or CFS-BL Firestop Block

C. Fill Void or Cavity Materials* — Fill material to be forced into interstices of cables, between cables and cable tray and in any obvious openings between blocks and between blocks and the periphery of the opening to the max extent possible on both surfaces of wall.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant, FS-ONE MAX Intumescent Sealant, CP618 Firestop Putty Stick, CP 660 Firestop Foam or CP 620 Fire Foam

D. Wire Mesh — When the annular space exceeds 4 in. (102 mm) to the periphery, a nom 2 by 2 in. (51 by 51 mm) wire fencing shall be used to keep the blocks in place. The wire fencing shall be fabricated from min No. 16 SWG (0.060 in. or 1.5 mm) galv steel wire. The wire mesh shall begin 2-1/2 in. (64 mm) from the penetrant and overlap min 3 in. (76 mm) beyond the periphery of the opening. Wire fencing secured to both surfaces of the wall assembly by means of 1/4 in. (6 mm) diam long by 1 in. (25 mm) steel concrete anchors and 1/4 in. (6 mm) by 1-1/2 in. (38 mm) diam steel fender washers spaced max 8 in. (203 mm) OC.

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



Hilti Firestop Systems

Reproduced by HILTI, Inc. Courtesy of
Underwriters Laboratories, Inc.
January 25, 2016

Page: 2 of 2