

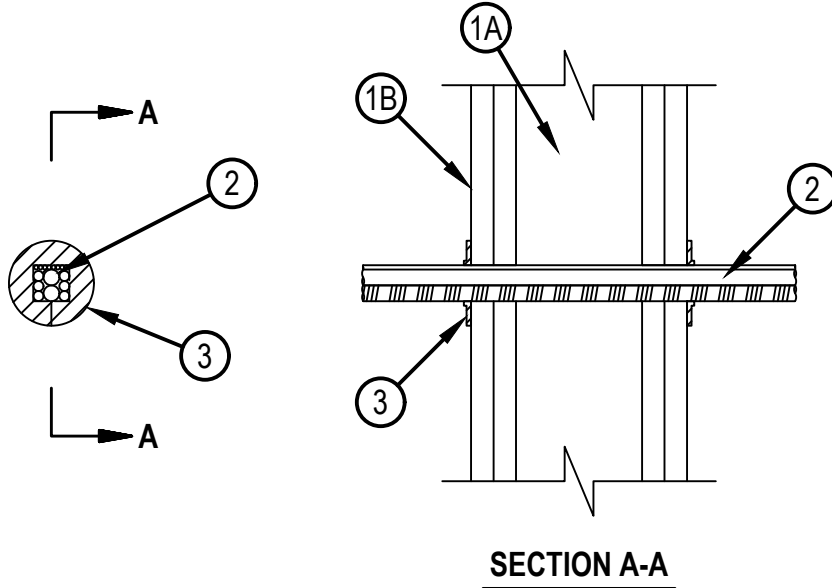


Classified by
Underwriters Laboratories, Inc.
to UL 1479 and CAN/ULC-S115

System No. W-L-3414

WL 3414

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings — 1 and 2 Hr (See Item 1)	F Ratings — 1 and 2 Hr (See Item 1)
T Ratings — 0, ½, 1 and 2 Hr (See Item 2)	FT Ratings — 0, ½, 1 and 2 Hr (See Item 2)
L Rating at Ambient — Less than 1 CFM/Opening	FH Ratings — 1 and 2 Hr (See Item 1)
L Rating at 400 F — Less than 1 CFM/Opening	FTH Ratings — 0, ½, 1 and 2 Hr (See Item 2)
	L Rating at Ambient — Less than 1 CFM/Opening
	L Rating at 400 F — Less than 1 CFM/Opening



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1. Wall Assembly — The 1 or 2 hr fire rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400, V400 or W400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

- A. Studs — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 in. (51 mm) by 4 in. (102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC.
- B. Gypsum Board* — 5/8 in. (16 mm) thick, 4 ft (1219 cm) wide with square or tapered edges. The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual Wall and Partition Design. Opening may be round, rectangular or irregular with a max diam or dimension of 1 in. (25 mm).

The hourly F and FH Ratings of the firestop system are equal to the hourly fire rating of the wall assembly in which it is installed.

2. Cables — Single or tight bundle of cables to be installed within the opening. Aggregate cross-sectional area of cables in opening to have a visual fill of min 0% to max 100%. The annular space between the cable bundle and the periphery of the opening to be min 0 in. (point contact). Cables to be rigidly supported on both sides of the wall assembly. Any combination of the following types and sizes of cables may be used:

- A. Max 3/C No. 8 AWG NM copper conductor cable (Romex) with PVC insulation and jacket.
- B. Max 7/C-No. 12 AWG copper conductor control cable with PVC or XLPE insulation and jacket.
- C. Max 100 pair No. 24 AWG (or smaller) copper conductor telecommunication cable with PVC or plenum rated insulation and jacketing.
- D. Max 4 pr No. 22 AWG (or smaller) Cat 5 or Cat 6 computer cables with PVC or plenum rated insulation and jacketing.
- E. Type RG/U coaxial cable with fluorinated ethylene or PVC insulation and jacketing having a max outside diameter of 1/2 in. (13 mm).
- F. Max 24 fiber optic cable with polyvinyl chloride (PVC) or polyethylene (PE) jacket and insulation.
- G. Through Penetrating Product* — Max two copper conductor No. 18 AWG (or smaller) Power or Non-Power Limited Fire Alarm Cable with or without a jacket under a metal armor.

AFC CABLE SYSTEMS INC

H. Maximum 3/C No. 10 AWG copper conductor metal-clad cable.

The hourly T, FT and FTH Ratings of the firestop system are dependent on cable type and hourly wall rating as specified in Table below.

Cable Type	Hourly Wall Rating	Hourly T, FT and FTH Rating
None (Blank Opening)	1 and 2	1 and 2
A	1 and 2	1 and 2
B	1	0
	2	1/2
C	1	0
	2	1/2
D	1 and 2	1 and 2
E	1 and 2	1 and 2
F	1 and 2	1 and 2
G	1 and 2	1 and 2
H	1 and 2	1 and 2

3. Fill, Void or Cavity Material* — Nom 60 mm diam by 3 mm thick putty disc with one seam at radius. Paper-backer of disc to be removed and disc firmly pressed around the cable/cable bundle lapping nom 5 mm onto cables to completely cover opening and firmly pressed to lap onto the wall around periphery of opening. Disc seam to be firmly pressed and sealed tight, Disc to be installed at both surfaces of wall.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CFS-D 1" Firestop Cable Disc

* 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

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