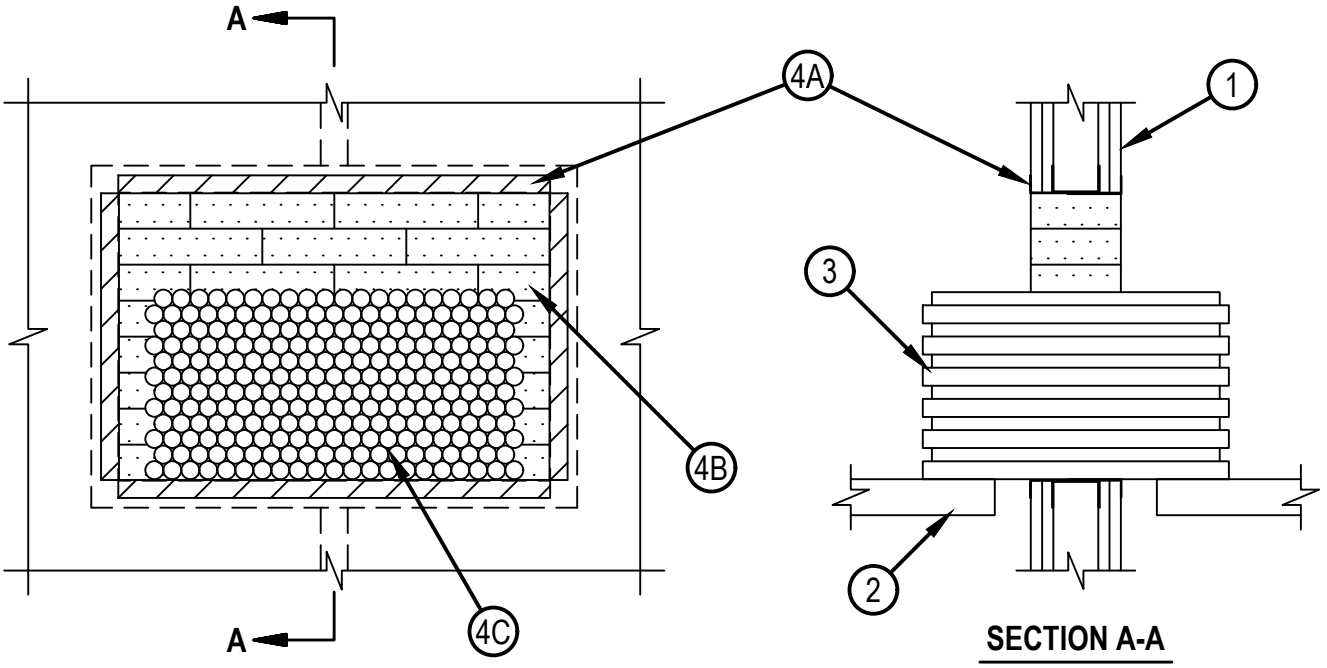
System No. W-L-3382

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

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 and 1/2 Hr (See Item 2)	FT Ratings — 0 and 1/2 Hr (See Item 2)
	FH Rating — 1 and 2 Hr (See Item 1)
	FTH Ratings — 0 and 1/2 Hr (See Item 2)



SECTION A-A

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 if the individual U300, U400, V400 or W400 Series Wall and Partition Designs in the Fire Resistance Directory and shall include the following construction features:
   A. Studs — Wall framing shall consist of either woods studs or channel shaped steel studs. Wood studs to consist of 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide, fabricated from min 25 MSG galvanized steel, spaced max 24 in. (610 mm) OC. Additional framing members shall be used to completely frame around opening.
   B. Gypsum Board* — Nom 5/8 in. (16 mm) thick with square or tapered edges. The gypsum board type, number of layers and sheet orientation shall be as specified in the individual Wall and Partition Design Number. Max area of opening is 384 in2 (0.25 m2) with max dimension of 24 in. (610 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. Cable Rack — Max 20 in. (508 mm) wide cable rack, fabricated from min 1/4 in. (6 mm) thick by 1-1/2 in. (38 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 (not shown) or discontinuous through wall assembly. When the rack is continuous through wall, the T, FT and FTH Ratings are 0 hr.
3. Cables — Aggregate cross-sectional area of cables in opening 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 12 in (305 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 jackets.

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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 — For walls incorporating max 3-5/8 in. (92 mm) steel studs or max 2 by 4 in. (51 by 102 mm) wood studs, fire block installed with 5 in. (127 mm) dimension projecting through and centered in opening. For walls constructed of larger steel or wood studs, fire block installed with long dimension passing through and centered in opening. Blocks may or may not be cut flush with both surfaces of wall. When multiple layers of gypsum board are used, blocks may be recessed 1/2 in. (13 mm) from surface of wall. Blocks to be firmly packed within the opening.

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

C. Fill, Void or Cavity Material* — Fill material to be forced into interstices of cables, between cables and cable tray and in any voids 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

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