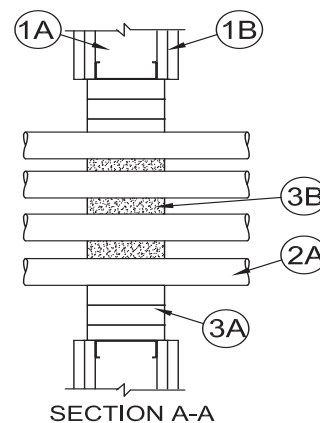
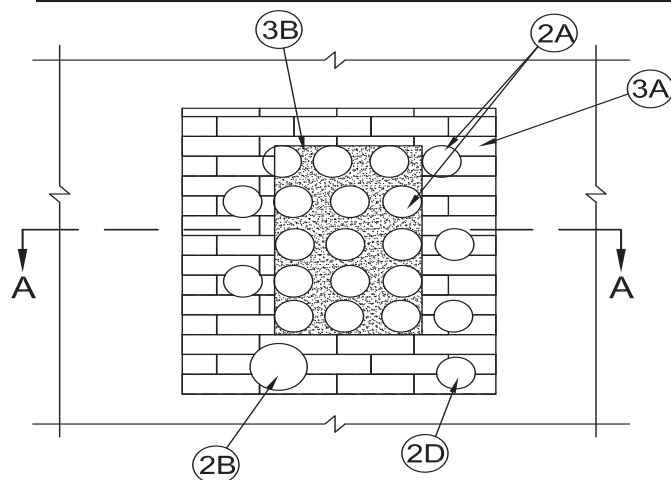


System No. W-L-1526

June 03, 2016

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 1/4 Hr (See Item 2)	FT Ratings — 0 and 1/4 Hr (See Item 2)
L Rating At Ambient — Less Than 1 CFM/sq ft	FH Ratings — 1 and 2 Hr (See Item 1)
L Rating At 400 F — Less Than 1 CFM/sq ft	FTH Ratings — 0 and 1/4 Hr (See Item 2)
	L Rating At Ambient — Less Than 1 CFM/sq ft
	L Rating At 400 F — Less Than 1 CFM/sq ft



1. **Wall Assembly** — The 1 or 2 hr fire rated wallboard/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 shall consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 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. Additional framing members shall be used to frame all sides of opening.
- B. **Gypsum Board*** — The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual Wall and Partition Design in the UL Fire Resistance Directory. Max size of opening is 1296 in.2 (0.836 m2) with a max dimension of 36 in. (914 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. The hourly T, FT and FTH Ratings are 1/4 hr when installed in 2 hr rated walls, and 0 hr when installed in 1 hr rated walls.

2. **Through Penetrants** — One or more pipes, conduit or tubing to be installed within the opening. The space between the pipes, conduit or tubing shall be min 1/2 in. (13 mm) to max 9-1/2 in. (241 mm), except that for copper penetrants, the min annular space shall be 2 in. (51 mm). The space between pipes, conduit or tubing and periphery of opening shall be min 3/4 in. (19 mm) to max 14 in. (356 mm), except that for copper penetrants, the min annular space shall be 2 in. (51 mm). Pipe, conduit or tubing to be rigidly supported on both sides of floor or wall. The following types and sizes of metallic pipes, conduits or tubing may be used:

- A. **Conduit** — Nom 4 in. (102 mm) diam (or smaller) electrical metallic tubing or steel conduit. A maximum of twenty conduit may be installed within the opening.
- B. **Copper Tubing or Pipe** — Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tubing or Regular (or heavier) copper pipe. A maximum of one copper penetrant may be installed within the opening.
- C. **Steel Pipe** — Nom 8 in. (203 mm) diam (or smaller) Schedule 5 (or heavier) steel pipe. A maximum of one penetrant exceeding 4 in. (102 mm) diam may be installed within the opening.
- D. **Iron Pipe** — Nom 4 in. (102 mm) diam (or smaller) cast or ductile iron pipe.

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

- A. **Fill, Void or Cavity Material*** — Blocks to be firmly packed to fill the opening area between the grouping of conduit (Item 2A) and periphery of opening, and between and around all other individual penetrants to the periphery of the opening. Blocks installed with 5 in. (127 mm) dimension projecting through opening, centered within thickness of wall. In walls greater than 6 in. (152 mm) thick, additional blocks shall be installed or blocks shall be installed with 8 in. (203 mm) dimension projecting through opening, such that blocks are recessed max 1/2 in. (13 mm) from both surfaces of wall. Blocks can be cut to fit around penetrants and within smaller annular spaces.

3M COMPANY 3M FIRE PROTECTION PRODUCTS — 3M™ Fire Barrier Block B258, 3M™ Fire Barrier Plank PK39

- B. **Fill, Void or Cavity Materials*** — **Foam** — Fill material installed to fill the entire annular space within and around the grouping of conduit penetrating items to a min thickness of 5 in. (127 mm). Fill material to be forced between blocks and periphery of opening to the max extent possible. Fill material to be injected in-between blocks and penetrants to the full depth of the blocks, as well as in any visible voids/openings between blocks (Item 3A).

3M COMPANY 3M FIRE PROTECTION PRODUCTS — Fire Barrier Rated Foam, FIP 1-Step

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

