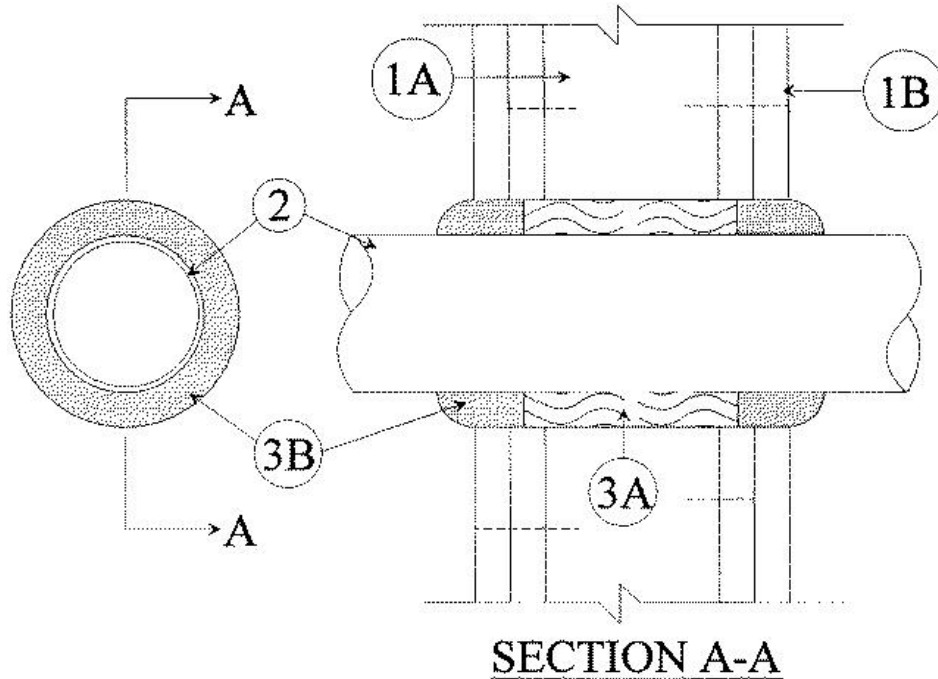


ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings — 1 and 2 Hr (See Item 1)	F Ratings — 1 and 2 Hr (See Item 1)
T Ratings — 0, 1/2 and 1-1/2 Hr (See Item 2)	FT Ratings — 0, 1/2 and 1-1/2 Hr (See Item 2)
	FH Ratings — 1 and 2 Hr (See Item 1)
	FTH Ratings — 0, 1/2 and 1-1/2 Hr (See Item 2)



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 described 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 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. In 2 hr fire-rated assemblies, steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC. In 1 hr fire-rated assemblies, steel studs to be min 3-5/8 in. (92 mm) wide and spaced max 24 in. (610 mm) OC.

B. Gypsum Board* — 5/8 in. (16 mm) thick, 4 ft (1.2 m) wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual Design in the UL Fire Resistance Directory. Max diam of opening is 5 in. (127 mm).

The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.

2. Through Penetrant — One metallic pipe or conduit to be centered within the firestop system. A nom annular space of 1/4 in. (6 mm) is required within the firestop system. Pipe or conduit to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes or conduits may be used:

A. Steel Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.

B. Conduit — Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing or 4 in. (102 mm) diam steel conduit. The T Rating of the firestop system is dependent upon the max diam of the through-penetrant and hourly rating of the wall assembly as shown in the table below:

Max Diam of Through Penetrant	Rating of Wall Hr	T Rating Hr
1/2 (13)	2	1-1/2
1/2 (13)	1	1
2 (51)	2	1/2



2 (51)	1	1/2
4 (102)	2	0
4 (102)	1	0

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

A. Packing Material* — In 2 hr fire-rated assemblies, min 3 in. (76 mm) thickness of min 4 pcf (64 kg/m³) mineral wool insulation firmly packed into opening as a permanent form. In 1 hr fire-rated assemblies, min 2-7/8 in. (73 mm) thickness of min 4 pcf (64 kg/m³) mineral wool insulation firmly packed into opening as a permanent form. Packing material to be recessed from both surfaces of wall as required to accommodate the required thickness of fill material.

B. Fill, Void or Cavity Material* — Sealant — In 2 hr fire-rated assemblies, min 1 in. (25 mm) thickness of fill material applied within annulus, flush with both surfaces of wall. Additional fill material to be installed such that a min 1/2 in. (13 mm) thick crown is formed around the penetrating item. In 1 hr fire-rated assemblies, min 5/8 in. (16 mm) thickness of fill material applied within annulus, flush with both surfaces of wall. Additional fill material to be installed such that a min 1 in. (25 mm) thick crown is formed around the penetrating item.

RECTORSEAL — FS900, FS901, FS903, FS903CG, FS905, FS905CG, FS929, FST901, FST903, FST905, [Metacaulk 150+](#)

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

Reprinted from the Online Certifications Directory with permission from UL. ©UL LLC