

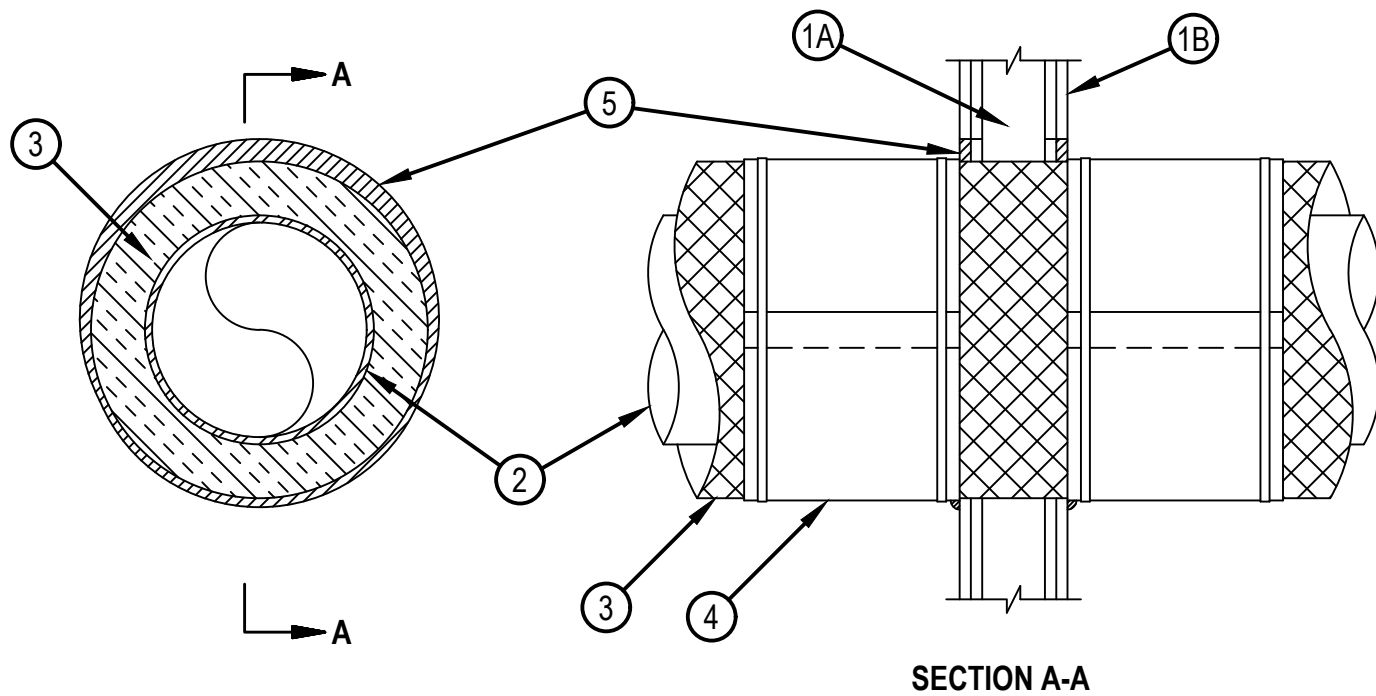


Classified by
Underwriters Laboratories, Inc.
to UL 1479 and CAN/ULC-S115

System No. W-L-5223

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

WL 5223



SECTION A-A

- 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.
 - 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.
 - Gypsum Board* — One or two layers of nom 5/8 in. (16 mm) thick gypsum board as specified in the individual Wall and Partition Design. Max diam of opening is 14-1/2 in. (368 mm) for wood stud walls and 20 in. (508 mm) for steel stud walls.

The hourly F, FH Ratings of the firestop system are equal to the hourly fire rating of the wall assembly in which it is installed.
- Through Penetrants — One metallic pipe or tubing to be installed within the firestop system. Pipe or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes or tubing may be used:
 - Steel Pipe — Nom 12 in. (305 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - Copper Tubing — Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing.
 - Copper Pipe — Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.



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December 21, 2017

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3. Pipe Covering Materials* — Cellular Glass Insulation — Nom 1-1/2 in. or 3 in. (38 to 76 mm) thick cellular glass pipe insulation sized to the outside diam of the pipe or tube and installed in accordance with the manufacturer's instructions. The annular space between the insulated pipe and the periphery of the opening shall be min 0 in. (point contact) to max 3/4 in. (19 mm).
4. Metal Jacket (Optional) — Min 12 in. (305 mm) long jacket formed of min 0.010 in. (0.25 mm) thick steel or aluminum sheet cut to wrap tightly around the pipe insulation with a min 2 in. (51 mm) lap. Jacket secured with min 1/2 in. (13 mm) wide stainless steel hose clamps or bands located within 2 in. (51 mm) of each end of the jacket and spaced a max of 10 in. (254 mm) OC. Jacket to be installed with abutting surface of sealant (Item 5) on both surfaces of wall. Metal jacket to be used in addition to any other jacketing material which may be required or desired on the pipe insulation.
5. Void or Cavity Material* - Sealant — Min 5/8 in. (16 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall. At the point contact location, a min 1/2 in. (13 mm) diam bead of fill material shall be applied at the pipe covering/gypsum board interface on both surfaces of wall.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE MAX Intumescent Sealant

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



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