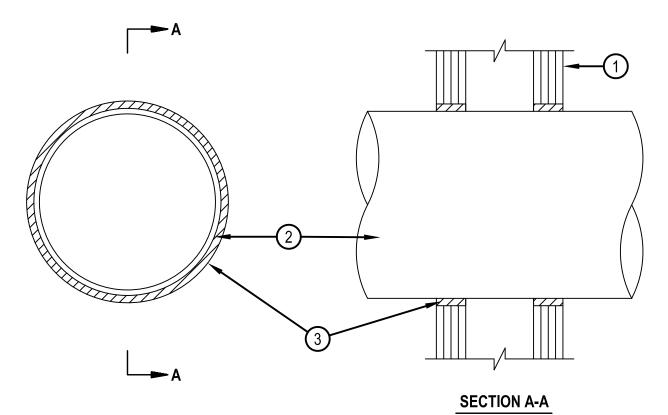


Classified by Underwriters Laboratories, Inc. to UL 1479 and CAN/ULC-S115

## System No. W-L-1111

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 4 Hr	F Rating — 4 Hr
T Rating — 0 Hr	FT Rating — 0 Hr
	FH Rating — 4 Hr
	FTH Rating — 0 Hr



- 1. Wall Assembly The fire-rated gypsum wallboard/stud wall assembly shall be constucted of the materials and in the manner specified in Design No. U435 in the Fire Resistance Directory and shall include the following construction features:
  - A. Studs Wall framing shall consist of channel shaped steel studs, min 3-5/8 in. (92 mm) wide, fabricated from min 25 MSG galv steel, spaced max 24 in. (610 mm) OC.
  - B. Gypsum Board\* Four layers of nom 1/2 in. thick gypsum wallboard as specified in Design No. U435. Max diam of opening is 13-5/8 in. (346 mm).
- 2. Through Penetrants One metallic pipe, conduit or tubing to be installed concentrically within the firestop system. Pipe, conduit or tubing to be rigidly supported on both sides of the wall assembly. The annular space between pipe, conduit or tubing and the periphery of the opening shall be minimum 3/8 in. to 1/2 in. (10 mm to 13 mm) maximum. The following types and sizes of metallic pipes, conduits or tubing may be used:
  - A. Steel Pipe Nom 12 in. (305 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
  - B. Conduit Nom 4 in. (102 mm) diam (or smaller) steel electric metallic tubing or 6 in. (152 mm) diam steel conduit.
  - C. Copper Tubing Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing.
  - D. Copper Pipe Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.
- 3. Fill, Void or Cavity Material\* Sealant Min 2 in. (51 mm) thickness applied within annulus flush with both surfaces of wall. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC FS-ONE Sealant or 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.

