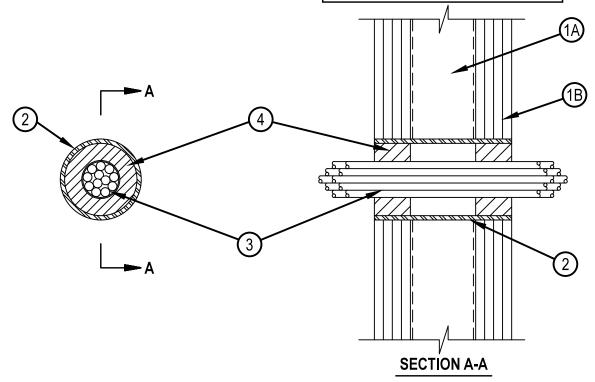


Classified by Underwriters Laboratories, Inc. to UL 1479 and CAN/ULC-S115

System No. W-L-3139

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 4 Hr	F Rating — 4 Hr
T Rating — 1 Hr	FT Rating — 1 Hr
	FH Rating — 4 Hr
	FTH Rating — 1 Hr



- 1. Wall Assembly The 4 hr fire rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U400, V400 or W400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:
 - A. Studs Wall framing shall consist of steel channel studs. Steel studs to be min 3-1/2 in. (89 mm) wide by 1-3/8 in. (35 mm) deep channels spaced max 24 in. (610 mm) OC.
 - B. Gypsum Board* The gypsum wallboard 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 diam of opening is 4 in. (102 mm).
- 2. Steel Sleeve Nom 4 in. (102 mm) diam (or smaller) Schedule 40 (or heavier) steel pipe sleeve friction fit in nom 4 in. (102 mm) diam circular opening cut through gypsum wallboard layers. Length of steel sleeve to be equal to thickness of wall.
- 3. Cables Aggregate cross sectional area of cables in opening to be max 33 percent of the cross sectional area of the opening. Cables installed either concentrically or eccentrically within the firestop system. The annular space between cables and the steel sleeve shall be min 1/4 in. (6 mm) to max 1 in. (25 mm). Cables to be rigidly supported on both sides of wall assembly. The following types and sizes of cables may be used:
 - A. Max 7/C (with ground) No. 12 AWG cable, with PVC insulation and outer jacket.
 - B. Max 25 pair No. 24 AWG (or smaller) copper conductor telephone cable with PVC insulation, with PVC jacket.
 - C. Max RG59/U (or smaller) coaxial cable with fluorinated ethylene insulation and jacketing.
 - D. Max 3/C (with ground) No. 10 AWG bare copper ground metal clad cable with a PVC jacket.
 - E. Multiple 24 fiber-optical communication cables jacketed with polyvinyl chloride and having a max outside diam of 1/2 in. (13 mm).
- 4. Fill, Void or Cavity Material*—Sealant Min 2 in. (51 mm) thickness of fill material applied within annulus, flush with both surfaces of the 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.

