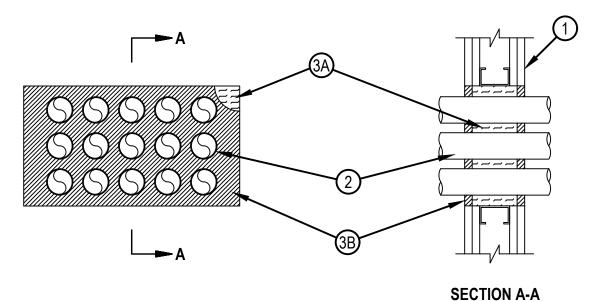


System No. W-L-1176

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 1 and 2 Hr (See Items 1 and 3A)	F Rating — 1 and 2 Hr (See Items 1 and 3A)
T Rating — 1/2 Hr	FT Rating — 1/2 Hr
	FH Rating — 1 and 2 Hr (See Itema 1 and 3A)
	FTH Rating — 1/2 Hr



- 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 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC.
 - 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. Max area of opening is 180 sq. in. (0.116 m2) with max dimension of 18 in. (457 mm). Max width of openings in wood stud walls is limited 14-1/2 in. (368 mm).
 - 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.
- 2. Through Penetrant One or more steel electrical metallic tubing to be installed within the opening. The space between tubing shall be min 1/2 in. (13 mm) and max 5/8 in. (16 mm). Tubing to be rigidly supported on both sides of wall assembly. The space between tubing and periphery of opening shall be min 1/2 in. (13 mm) to max 2-3/8 in. (60 mm). The following types and sizes of metallic tube may be used:
 - A. Conduit Nom 2 in. (51 mm) diam (or smaller) steel electrical metallic tubing or 2 in. (51 mm) diam steel conduit.
- 3. Firestop System The firestop system shall consist of the following:
 - A. Packing Material Min 2-1/2 or 3-3/4 in. (64 or 95 mm) thickness of min 4 pcf (64 kg/m3) mineral wool batt insulation, firmly packed into the opening as a permanent form for 1 or 2 hr rated walls, respectively. Mineral wool to be recessed from both sides of the assembly to accommodate the required thickness of fill material (Item 3B).
 - B. Fill, 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.
 - 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.

