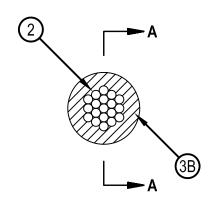
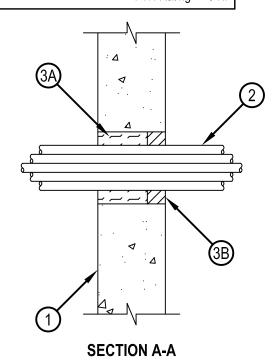


Underwriters Laboratories, Inc. to UL 1479 and CAN/ULC-S115

System No. W-J-3061

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 1 and 2 Hr (See Item 3)	F Rating — 1 and 2 Hr (See Item 3)
T Rating — 0 Hr	FT Rating — 0 Hr
	FH Rating — 1 and 2 Hr (See Item 3)
	FTH Rating — 0 Hr





- 1. Wall Assembly Min 3-3/4 in. (95 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diameter of opening 4 in. (102 mm). See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
- 2. Cables Aggregate cross-sectional area of cable in opening to be max 33 percent of the cross-sectional area of the opening. The annular space between the cable bundle and the periphery of the opening to be min 1/4 in. (6.4 mm) to max 3/4 in. (19 mm). Cables to be rigidly supported on both sides of the wall assembly. Any combination of the following types and sizes of copper conductor cables may be used:
 - A. Max 7/C No. 12 AWG with polyvinyl chloride (PVC) insulation and jacket.
 - B. Max 25 pair No. 24 AWG telephone cable with PVC insulation and jacket.
 - C. Type RG 59/U coaxial cable with polyethylene (PE) insulation and PVC jacket.
 - D. Multiple fiber optical communication cable jacketed with PVC and having a max OD of 5/8 in. (16 mm).
 - E. Max 3/C No. 12 AWG copper conductor steel clad cable.
 - F. Max 1-1/4 in. (32 mm) diam single conductor or multi conductor Type MI cable. A min 1/8 in. (3 mm) separation shall be maintained between MI cables and any other types of cable. When the Type MI cable is used, the T Rating is 0 hr.
- 3. Firestop System The firestop system shall consist of the following:
 - A. Packing Material Min 2-1/8 in. or 2-3/4 in. (54 mm or 70 mm) thickness of min 4 pcf (64 kg/m3) mineral wool batt insulation firmly packed into opening on one side of the wall as permanent form for 1 and 2 Hr walls, respectively. Packing material to be recessed from one side of wall to accommodate the required thickness of fill material.
 - B. Fill, Void or Cavity Material Sealant* Min 1 in. (25 mm) thickness of fill material applied within opening, flush with one surface 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.

