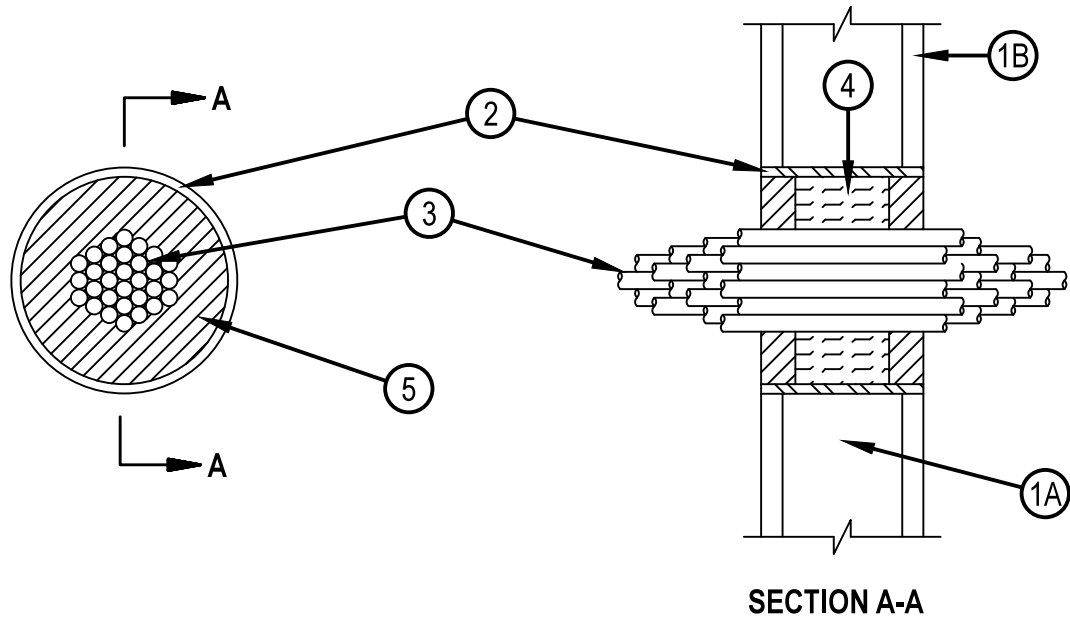


System No. W-L-3046

WL 3046

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



1. Wall Assembly — The fire-rated gypsum 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 may 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.
 - B. Gypsum Board* — One layer of 5/8 in. (16 mm) thick gypsum wallboard, as specified in the individual Wall and Partition Design. Max diam of opening is 6 in. (152 mm).
 2. Metallic Sleeve — Nom 6 in. (152 mm) diam (or smaller) Schedule 40 (or thinner) steel pipe cast into wall assembly with joint compound and installed flush with wall surface.
 3. Cables — Max 7/C No. 12 AWG cables with polyvinyl chloride jacket and insulation. Aggregate cross-sectional area of tightly bundled cable group to be 33 percent of the aggregate cross-sectional area of the opening. Cables to be rigidly supported on both sides of wall assembly.
 4. Packing Material — Min 2-3/4 in. (70 mm) thickness of min 4.0 (64 kg/m³) pcf mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from both surfaces of wall as required to accommodate the required thickness of fill material.
 5. Fill, Void or Cavity Material* — Sealant — Min 1 in. (25 mm) thickness of fill material applied within the 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.