

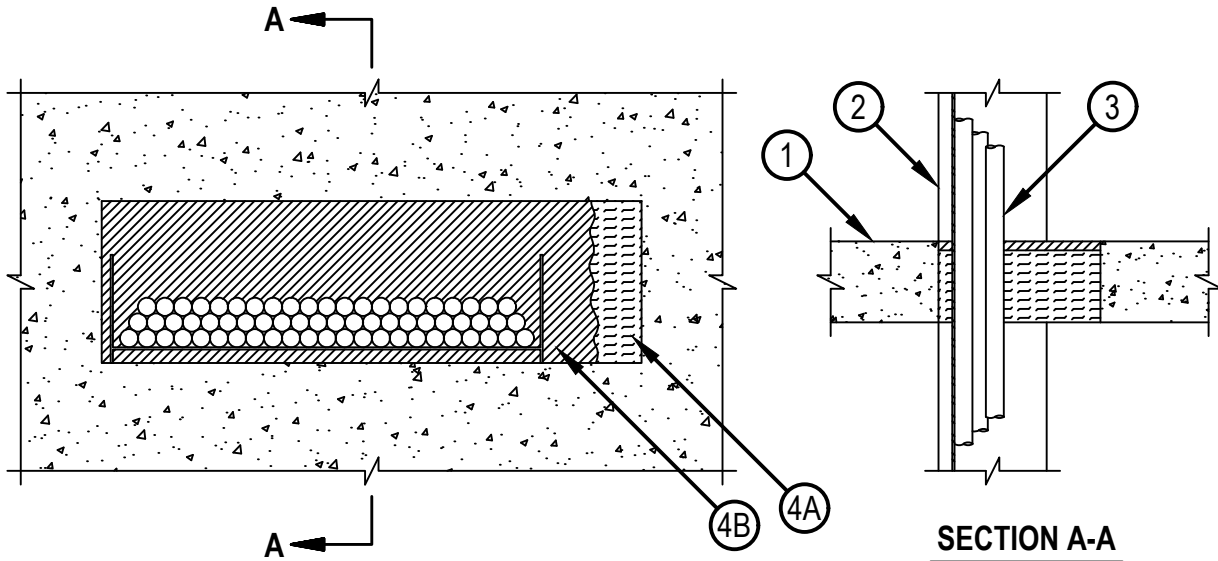


Classified by
Underwriters Laboratories, Inc.
to UL 1479 and CAN/ULC-S115

System No. C-AJ-4071

CAJ 4071

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 2 Hr	F Rating — 2 Hr
T Rating — 0 Hr	FT Rating — 0 Hr
L Rating At Ambient — 5 CFM/sq ft (See Item 4B)	FH Rating — 2 Hr
L Rating At 400 F — 2 CFM/sq ft (See Item 4B)	FTH Rating — 0 Hr
	L Rating At Ambient — 25.4 L/s/m ² (See Item 4B)
	L Rating At 204°C — 10.2 L/s/m ² (See Item 4B)



1. Floor or Wall Assembly — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete floor. Min 5 in. (127 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete wall. Wall may also be constructed of any UL Classified Concrete Blocks*. Max size of opening is 30 by 9 in. (762 by 229 mm).
See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Cable Tray* — Max 24 in. (610 mm) wide by 6 in. (152 mm) deep open-ladder steel or aluminum cable tray. The annular space between cable tray and periphery of opening shall be min 0 in. (0 mm) (point contact) to max 6 in. (152 mm). Cable tray to be rigidly supported on both sides of floor or wall assembly.
3. Cables — Aggregate cross-sectional area of cable tray to be max 67 percent of the cross-sectional area of the cable tray. Any combination of the following types and sizes of cables may be used:
 - A. Max 300 pair No. 24 AWG telephone cable with polyvinyl chloride (PVC) insulation and jacket.
 - B. Max 500 kcmil single conductor copper or aluminum power cable with PVC jacket material.
 - C. Multiple fiber optical communication cable with PVC jacket and having a max OD of 1/2 in. (12 mm).
 - D. Max 3/C No. 12 AWG copper conductor steel clad cable with PVC insulation.
 - E. Max 7/C No. 12 AWG copper conductor cable jacket with PVC.
4. Firestop System — The firestop system shall consist of the following:
 - A. Packing Material — Min 4 in. (102 mm) thickness of 4 pcf (64 kg/m³) mineral wool batt insulation tightly packed into the opening as a permanent form. Packing material to be recessed from top surface of floor or both surfaces of wall to accommodate the required thickness of fill material.
 - B. Fill, Void or Cavity Material - Sealant* — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus flush with the top surface of the floor or both surfaces of the wall. For L-Rating, fill material to be forced into interstices of cables and between cables and cable trays to max extent possible on both surfaces of the penetration.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — 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.

