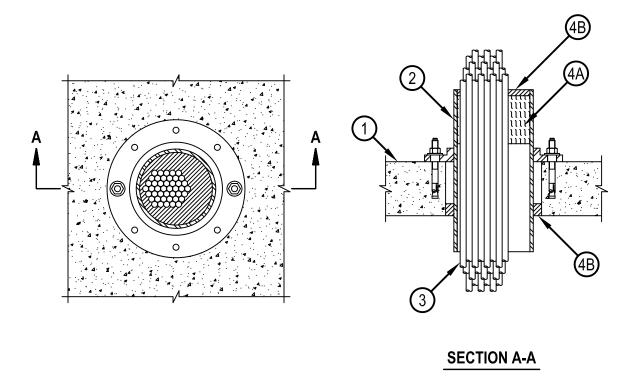


## System No. C-AJ-3209

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



- 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. Wall may also be constructed of any UL Classified Concrete Blocks\*. Max diam of opening is 8 in. (203 mm).
  See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
- 2. Steel Sleeve Nom 6 in. (152 mm) diam (or smaller) Schedule 40 (or heavier) steel pipe with welded flange. Sleeve installed concentrically or eccentrically within opening to extend max 6 in. (152 mm) beyond each surface of floor or wall. Sleeve bolted to the top side of the floor or one side of wall assembly to completely cover opening. The annular space between sleeve and periphery of opening shall be min 1/4 in. (6 mm) to max 1-1/8 in. (29 mm).



## System No. C-AJ-3209



- 3. Cables Aggregate cross-sectional area of cables in opening to be max 45 percent of the aggregate cross-sectional area of the opening. Cables to be rigidly supported on both sides of floor or wall assembly. The annular space between bundle and sleeve shall be min 1/4 in. (6 mm) to max 1-3/4 in. (44 mm). Any combination of the following types and sizes of metallic conductor or fiber optic cable may be used:
  - A. Max 500 kcmil single copper connector power cable with thermoplastic insulation and polyvinyl chloride (PVC) jacket.
  - B. Max 300 pair No. 24 AWG copper conductor telecommunication cables with polyvinyl chloride (PVC) insulation and jacket material.
  - C. Max 7/C copper conductor No. 12 AWG multiconductor power and control cables with polyvinyl chloride (PVC) or cross-linked polyethylene (XLPE) insulation and PVC jacket.
  - D. Multiple fiber optical communication cables jacketed with PVC and having a max outside diam of 1/2 in. (13 mm).
  - E. Max 3/C copper conductor No. 12 AWG with bare aluminum ground, polyvinyl chloride (PVC) insulated steel, Metal-Clad cable.
  - F. Max 3/C with ground 2/0 AWG copper conductor SER cable with cross-linked polyethylene (XLPE) insulation and polyvinyl chloride (PVC) jacket.
  - G. RG/U coaxial cable with polyethylene (PE) insulation and polyvinyl chloride (PVC) jacket having a max outside diameter of 1/2 in. (13 mm).
- 4. Firestop System The firestop system shall consist of the following:
  - A. Packing Material Min 4 in. (102 mm) thickness of min 4 pcf (64 kg/m3) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top end of sleeve for floors or from both ends of sleeve for walls to accommodate the required thickness of fill material.
  - B. Fill Void or Cavity Materials\* Sealant Min 1 in. (25 mm) thickness of fill material applied within the annulus between sleeve and periphery of opening, flush with the bottom side of floor or with one side of wall. Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with the top end of the sleeve for floors, or with both ends of the sleeve for walls.

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.

