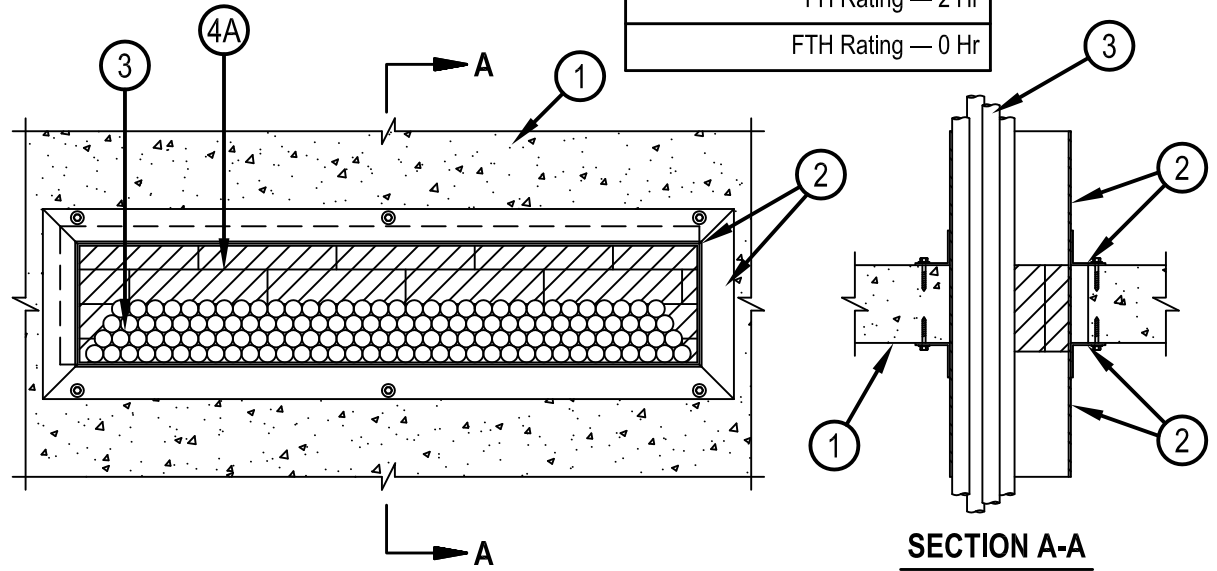




Classified by Underwriters Laboratories, Inc. to UL 1479 and CAN/ULC-S115

### System No. C-AJ-3232

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 2 Hr	F Rating — 2 Hr
T Rating — 0 Hr	FT Rating — 0 Hr
	FH Rating — 2 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/m<sup>3</sup>) concrete. Wall may also be constructed of any UL Classified Concrete Blocks\*. Max size of opening is 37 by 8 in. (940 by 203 mm).  
See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Through Penetrating Products\* - Metallic Sleeve — Max 36 in. (914 mm) by max 7 in. (178 mm) by max 20 in. (508 mm) high steel sleeve. The annular space between the sleeve and the periphery of opening shall be min 0 in. (0 mm) (point contact) to max 1 in. (25 mm). The metallic sleeve consists of a rectangular shaped sleeve and a cover plate both fabricated from 14 gauge (or heavier) galv steel. The rectangular shaped sleeve is provided with a 2-3/4 in. (70 mm) wide mounting plate. The cover plate consists of a 2-3/4 in. (70 mm) wide leg and 1-1/2 in. high flange. The rectangular shaped sleeve to be inserted into the opening from either side of floor or wall. Cover plate to be surface mounted on opposite side of floor or wall. Both rectangular shaped sleeve and cover plate secured to floor or wall by means of steel masonry anchors installed in pre-drilled holes in all four corners and spaced a max of 18 in. (457 mm) OC along the mounting plate and cover plate.
- CABLOFIL INC — Type P-W
3. Cables — Max 45% fill of cables installed within the opening and rigidly supported on both sides of floor or wall assembly. The space between the cables and sleeve shall be 0 in. (point contact) to max 5 in. (127 mm). 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 power cable with PVC jacket material.
  - C. Multiple fiber optical communication cable jacketed with PVC and having a max OD of 1/2 in. (12 mm).
  - D. Max 3/C No. 12 AWG steel clad cable with copper conductors and PVC insulation material.
  - E. Max 7/C 12 AWG copper power cable with PVC jacket material.
4. Firestop System — The firestop system shall consist of the following:
  - A. Fill, Void or Cavity Materials\* - Fire Blocks — Fire blocks installed with 5 in. (127 mm) dimension projecting through opening, flush with the top surface of floor or either surface of wall. Blocks to be firmly packed to completely fill the entire area of the opening. Either one or a combination of the block types specified below may be used.  
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS 657 Fire Block or CFS-BL Firestop Block
  - B. Fill, Void or Cavity Material - Putty or Sealant — (Not Shown) - Min 1/2 in. (13 mm) thickness of fill material applied within all openings between cables and fire blocks, flush with the top surface of the floor or both surfaces of wall.  
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP618 Putty, 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.



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