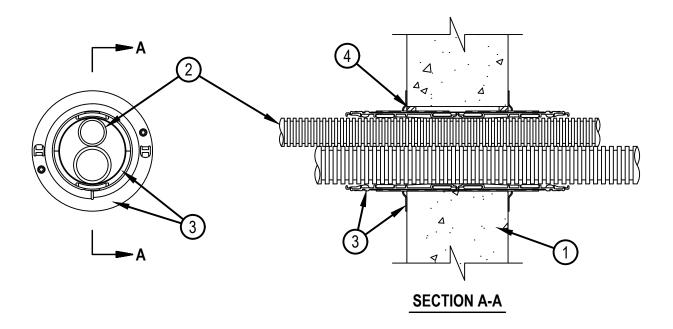


System No. W-J-2230

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 2 Hr	F Rating — 2 Hr
T Ratings — 0 and 3/4 Hr (See Item 3)	FT Ratings — 0 Hr
	FH Rating — 2 Hr
	FTH Ratings — 0 Hr





System No. W-J-2230

System tested with a pressure differential of 2.5 Pa between the exposed and the unexposed surfaces with the higher pressure on the exposed side.

- 1. Wall Assembly Min 5-5/8 in. (143 mm) 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*. Opening in wall to be 2-1/2 in. (64 mm) diam for nominal 2 in. (51 mm) firestop device and 4 1/2 in. (114 mm) diam for nominal 4 in. (102 mm) firestop device.
 - See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
- 2. Through Penetrant Nom 2 in. (51 mm) diam (or smaller) Electrical Nonmetallic Tubing+ formed from polyvinyl chloride (PVC) and installed in accordance with the National Electrical Code (NFPA No. 70). One or more tubes to be installed within the firestop system. Tubing to be rigidly supported on both sides of wall.
 - See Electrical Nonmetallic Tubing (FKHU) category in the Electrical Construction Materials Directory for names of manufacturers.
- 3. Firestop Device* Firestop device consists of a corrugated steel tube with an inner plastic housing, intumescent material rings, tightly twisted inner fabric smoke seal, flanges and gasketing material (not shown). Firestop device to be installed in accordance with the accompanying installation instructions. Device slid into wall such that ends project an equal distance from the approximate centerline of the wall assembly. The annular space between the device and the periphery of the opening shall be min 0 in. (point contact). Device provided with flanges that are spun clockwise onto device threads, over gasketing material butting tightly to both sides of wall. As an alternate to gasketing material, sealant (Item 4) may be used.
- HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC CP 653 and CP 653 BA 2" Speed Sleeve, CP 653 and CP 653 BA 4" Speed Sleeve, CFS-SL GA L Speed Sleeves, CP 653 4" BA ILS and CFS-SL GA L ILS Speed Sleeves
- The CFS-SL GA L and CFS-SL GA L ILS Speed Sleeves shall only be used in wall thickness of 8 in. (203 mm) or greater.
- 4. Fill, Void or Cavity Material* Sealant As an alternate to gasket material (see Item 3), min 1/2 in. (13 mm) thickness of fill material applied within the annulus between firestop device and wall, flush with both surfaces of wall. An additional 1/4 in. (6 mm) bead shall be applied around periphery of device on each side of wall prior to securing device flanges.
- HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC CP 606 or FS-ONE MAX Intumescent Sealant.
- +Bearing the UL Listing Mark
- * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

