

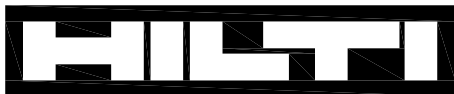
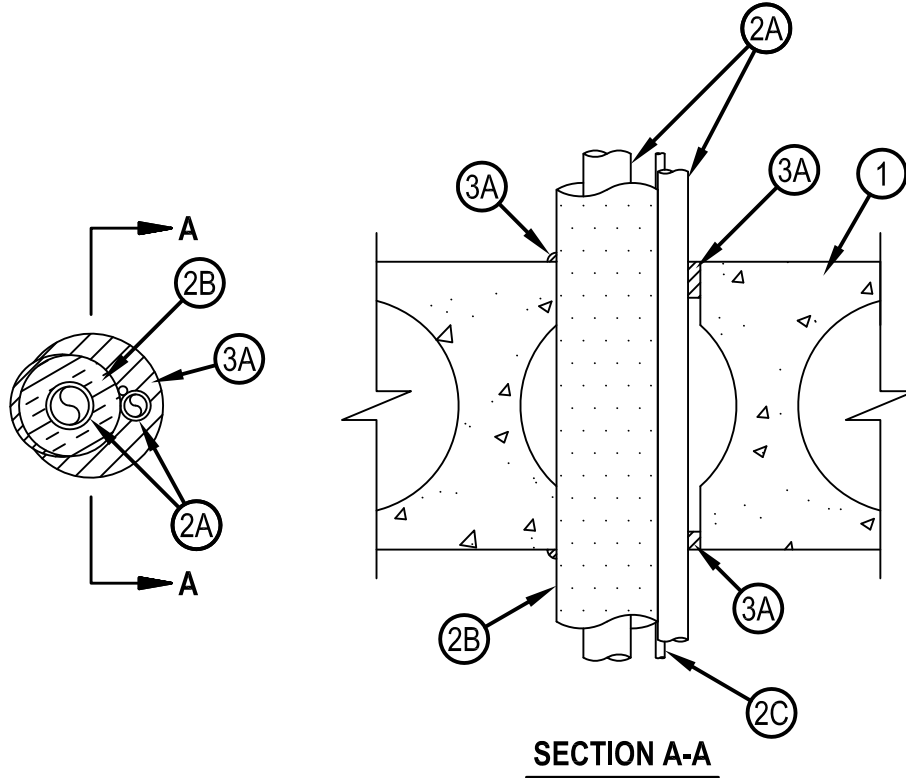


Classified by Underwriters Laboratories, Inc. to UL 1479 and CAN/ULC-S115

# System No. C-BJ-8027

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 3 Hr	F Rating — 3 Hr
T Rating — 1 Hr	FT Rating — 1 Hr
	FH Rating — 3 Hr
	FTH Rating — 1 Hr

CBJ 8027



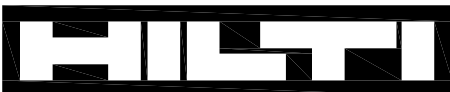
**Hilti Firestop Systems**

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## System No. C-BJ-8027

CBJ 8027

1. Floor or Wall Assembly — Min 8 in. (203 mm) thick floor or wall made from reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m<sup>3</sup>) concrete. Floor assembly may also be constructed of any 8 in. (203 mm) thick UL Classified hollow-core Precast Concrete Units\*. Wall may also be constructed of any UL Classified Concrete Blocks\*. Max diameter of opening is 4 in. (102 mm).  
See Concrete Blocks (CAZT) and Precast Concrete Units (CFTV) category in the Fire Resistance Directory for names of manufacturers.
  2. Air Conditioning (AC) Line Set — One tightly bundled AC line set installed within opening. AC line set consists of two metallic penetrants (Item 2A), tubing insulation (Item 2B) and a thermostat cable (Item 2C). The annular space between the AC line set and the periphery of the opening shall be min 0 in. (point contact) to max 1-1/2 in. (38 mm). The AC line set shall be rigidly supported on both sides of the floor or wall assembly.
    - 2A. Metallic Penetrants — A max of two pipes, tubes or conduit to be installed in the AC line set. Of the two pipes, tubes or conduits, only one may have a nom diam greater than 1/2 in. (13 mm). The following types and sizes of through penetrants may be used:
      - A. Steel Pipe — Nom 1 in. (25 mm) diam (or smaller) Schedule 5 (or heavier) steel pipe.
      - B. Conduit — Nom 1 in. (25 mm) diam (or smaller) steel electrical metallic tubing or nom 1 in. (25 mm) diam (or smaller) steel conduit.
      - C. Iron Pipe — Nom 1 in. (25 mm) diam (or smaller) cast or ductile iron pipe.
      - D. Copper Pipe — Nom 1 in. (25 mm) diam (or smaller) Regular (or heavier) copper pipe.
      - E. Copper Tube — Nom 1 in. (25 mm) diam (or smaller) Type L (or heavier) copper tube.
    - 2B. Tube Insulation - Plastics — Nom 3/4 in. (19 mm) thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing. The tube insulation may be installed on one max 1 in. (25 mm) diam pipe or tube in the AC line set.  
See Plastics (QMFZ2) category in the Plastics Recognized Component Directory for names of manufacturers. Any Recognized Component tube insulation meeting the above specifications and having a UL 94 Flammability Classification of 945VA may be used.
    - 2C. Cable — One 4 pair No. 18 AWG (or smaller) thermostat cable with polyvinyl chloride (PVC) insulation and jacket materials may be installed with the AC line set.
  3. Firestop System — The firestop system shall consist of the following:
    - A. Fill, Void or Cavity Materials\*- Sealant — In floors, min 1 in. (25 mm) thickness of fill material applied within annulus flush with top surface of floor and min 1/2 in. (13 mm) thickness of fill material applied within annulus flush with bottom surface of floor. In walls, min 1 in. (25 mm) thickness of fill material applied within annulus flush with both surfaces of wall. In addition, min 1/4 in. (6 mm) bead of fill material applied at all point contact locations at penetrants/concrete interface, on both sides of floor or 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.



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