

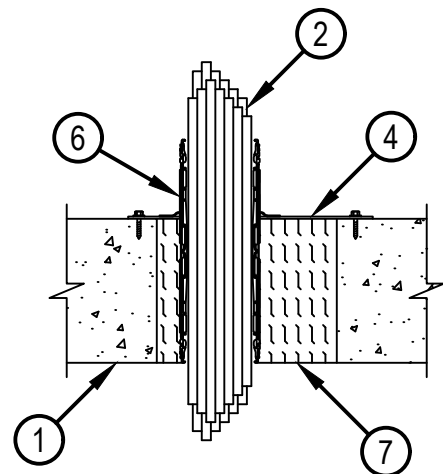
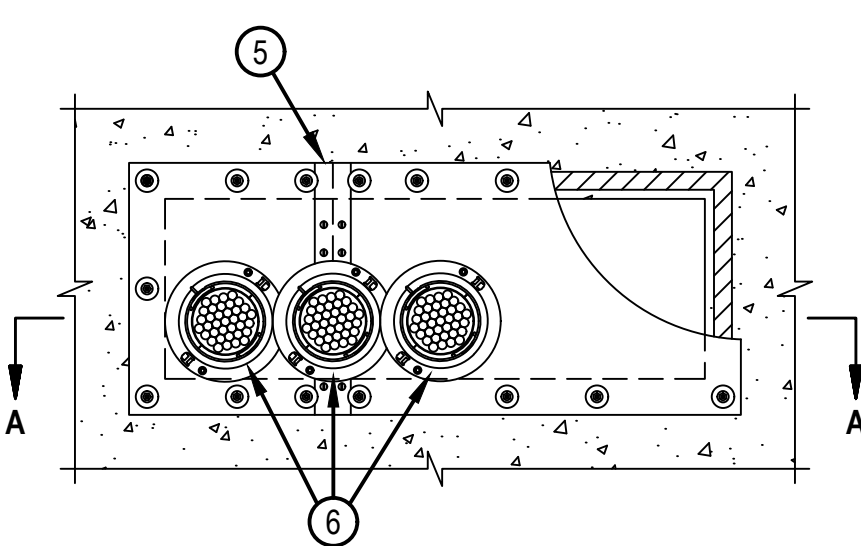


Classified by  
Underwriters Laboratories, Inc.  
to UL 1479 and CAN/ULC-S115

# System No. C-BJ-3042

C-BJ-3042

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 2 Hr	F Rating — 2 Hr
T Ratings — 0, 1-3/4 and 2 Hr (See Item 2)	FT Ratings — 0, 1-3/4 and 2 Hr (See Item 2)
L Rating At Ambient — Less Than 1 CFM/ft <sup>2</sup> and 7 CFM/ft <sup>2</sup> (See Item 2)	FH Rating — 2 Hr
L Rating At 400°F — 2 and 7 CFM/ft <sup>2</sup> (See Item 2)	FTH Ratings — 0, 1-3/4 and 2 Hr (See Item 2)
	L Rating At Ambient — Less Than 5.1 L/s/m <sup>2</sup> and 35.7 L/s/m <sup>2</sup> (See Item 2)
	L Rating At 204°F — 10.2 and 35.7 L/s/m <sup>2</sup> (See Item 2)



**SECTION A-A**



**Hilti Firestop Systems**

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June 8, 2023

# System No. C-BJ-3042

C-BJ-3042

1. Floor or Wall Assembly — Min 8 in. (203 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 area of opening 900 in.<sup>2</sup> (5806 cm<sup>2</sup>) with max dimension 30 in. (762 mm).  
See Concrete Blocks (CAZT) in the Fire Resistance Directory for names of manufacturers.
2. Cables — Within the loading area for the firestop device, the cables may represent a 0 to 100 percent visual fill. Cables to be tightly bundled within the device and rigidly supported on both sides of floor or wall assembly. Any combination of the following types of cables may be used:
  - A. Max 100 pair No. 24 AWG (or smaller) copper conductor telecommunication cable with polyvinyl chloride (PVC) jacketing and insulation.
  - B. Max 7/C No. 12 AWG copper conductor control cable with PVC or XLPE jacket and insulation.
  - C. Max 4/0 AWG Type RHH ground cable.
  - D. Max 4 pr No. 22 AWG Cat 6 computer cables.
  - E. Max RG 6/U coaxial cable with fluorinated ethylene insulation and jacketing.
  - F. Fiber optic cable with polyvinyl chloride (PVC) or polyethylene (PE) jacket and insulation having a max diam of 1/2 in. (13 mm).
  - G. Max 20/C No. 22 AWG shielded printer cable with PVC jacket.
  - H. Through-Penetrating Product\* — Two copper conductors No. 18 AWG (or smaller) Power or Non Power Limited Fire Alarm Cable with or without a jacket under a metal armor.  
AFC CABLE SYSTEMS INC
  - I. Max 1/4 in. (6 mm) diameter S-Video Cable consisting of 2 max 24 AWG 75 ohm coax or twisted pair cable with PE insulation and PVC jacket.
  - J. Through Penetrating Product\* — Any Cables, Metal-Clad Cable+ or Armored Cable+ currently Classified under the Through Penetrating Products category.  
See Through Penetrating Product (XHLY) category in the Fire Resistance Directory for names of manufacturers.
  - K. Max 3/C No 12 AWG MC Cable.The T, FT and FTH Ratings for the firestop system are 2 hr except that when cable type 2A is used, the T, FT and FTH Ratings are 1-3/4 hr and when cable types 2J or 2K are used, the T, FT and FTH Ratings are 0 hr.

L Rating		
Max Cable Fill Per Device	CFM/ft <sup>2</sup> (L/s/m <sup>2</sup> ) Ambient	400°F/204°C
0%	Less than 1 (5.1)	2 (10.2)
100%	7 (35.7)	7 (35.7)



Hilti Firestop Systems

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3. Fill, Void or Cavity Materials\* — Putty or Sealant — One layer of 1 by 1/8 in. (25 by 3 mm) thick putty strips or 1/2 in. (13 mm) diam bead of sealant positioned under composite sheet around entire perimeter of through opening.  
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 619T Firestop Putty Roll, FS-ONE MAX Intumescent Firestop Sealant
4. Fill, Void or Cavity Materials\* — Composite Sheet — Rigid aluminum foil-faced intumescent sheet with steel backer. Openings in composite sheet cut to accommodate firestop device. Max 3 in. (76 mm) opening for 2 in. (51 mm) device and max 4-1/2 in. (114 mm) opening for 4 in. (102 mm) device. Sheets cut to lap a min of 2 in. (51 mm) onto floor or wall surfaces. Sheet installed on top surface of floor or both surfaces of wall. Sheet to be installed with the steel backer exposed (aluminum foil facing against floor or wall surface) and secured to floor or wall surface with min 3/16 in. (4.8 mm) diam by 1-1/4 in. (32 mm) long steel anchor screws, in conjunction with min 1-1/4 in. (32 mm) diam steel fender washers. Max spacing of fasteners not to exceed 6 in. (152 mm) and max 2 in. (51 mm) from ends with additional fasteners located on each side of butted seams or slits (see Item 6) made to permit installation of the sheet around through-penetrants.  
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — Hilti CFS-COS Firestop Composite Sheet
5. Cover Strip — Min 2 in. (51 mm) wide strip of min 0.021 in. (0.5 mm) thick (26 ga) stainless steel centered over entire length of the butted seam or slit made in the composite sheet. Steel cover strip secured to galv steel sheet backer of composite sheet with 3/4 in. (19 mm) steel sheet metal screws spaced max 3 in. (76 mm) OC alternating on each side of seam or slit.
6. Firestop Device\* — One or more firestop devices may be installed in the composite sheet. Firestop devices consists of a corrugated steel tube with an inner plastic housing, intumescent material rings and an inner fabric smoke seal. The annular space between devices and the periphery of the opening is min 0 in. Openings to be spaced a min 1-7/8 in. apart to accommodate installation of devices. The firestop device is intended to be mounted to the top surface of the composite sheet in floors or each surface of the composite sheet on both sides of the wall. Each device shall be secured to the composite sheet with two No. 8 self-drilling/tapping steel screws through pre-made holes in device flanges. The device tube shall extend at least 8 in. (203 mm) below the bottom of the composite sheet, but it shall not extend below the bottom of the floor. The inner fabric seal of the device shall be twisted to close off any unused openings in the device.  
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, CP 653 4" BA ILS and CFS-SL GA L ILS Speed Sleeve
7. Packing Material — Min 8 in. (204 mm) thickness of min 4 pcf (64 kg/m<sup>3</sup>) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be flush with underside of composite sheet in floors or flush with the surface of one composite sheet on one side of a wall.

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

