

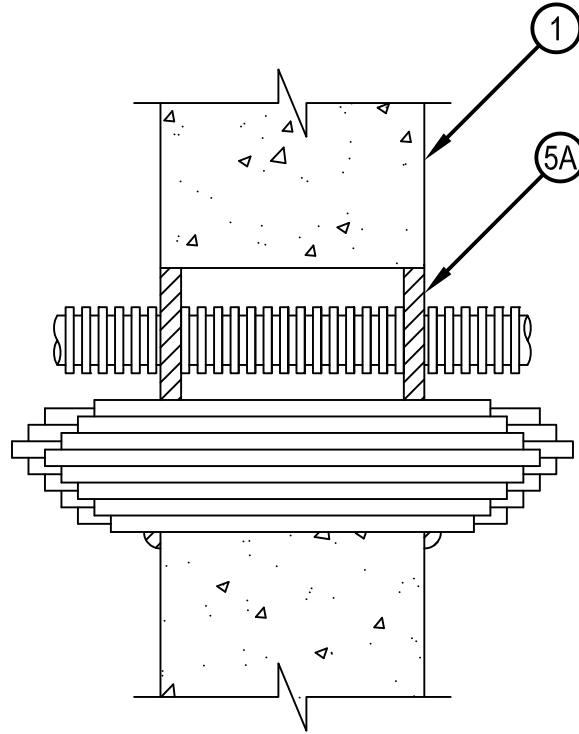
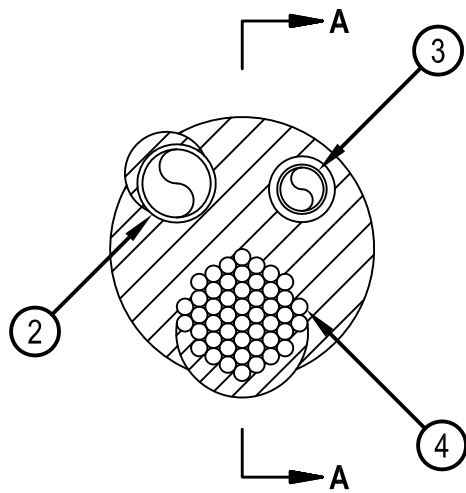


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to UL 1479

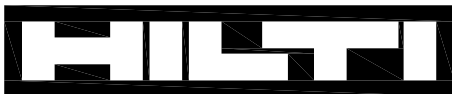
System No. W-J-8039

WJ 8039

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 2 Hr	F Rating — 2 Hr
T Rating — 1/2 Hr	FT Rating — 1/2 Hr
	FH Rating — 2 Hr
	FTH Rating — 1/2 Hr



SECTION A-A



Hilti Firestop Systems

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January 21, 2015

System No. W-J-8039

WJ 8039

1. Wall Assembly — Min 6 in. (152 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. Metallic Penetrants — One or more metallic pipes, conduits or tubing installed concentrically or eccentrically within the opening. Annular space between metallic penetrants and periphery of opening to be min 0 in. (point contact) to max 2 in. (51 mm). Annular space between metallic penetrants, nonmetallic penetrant and cables to be min 1/2 in. (13 mm) to max 1-1/2 in. (38 mm). Metallic pipes, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be installed within the opening:
 - A. Steel Pipe — Nom 2 in. (51 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - B. Iron Pipe — Nom 2 in. (51 mm) diam (or smaller) cast or ductile iron pipe.
 - C. Conduit — Nom 2 in. (51 mm) diam (or smaller) rigid steel conduit or electrical metallic tubing (EMT).
3. Electrical Nonmetallic Tubing (ENT)+ — Nom 2 in. (51 mm) diam (or smaller) ENT formed of PVC, installed in accordance with Article 331 of the National Electrical Code (NFPA No. 70). Max one ENT installed concentrically or eccentrically within the opening. Annular space between ENT and periphery of opening to be min 1/4 in. (6 mm) to max 2 in. (51 mm). Annular space between ENT and metallic penetrants or cables to be min 1/2 in. (13 mm) to max 1-1/2 in. (38 mm). ENT to be rigidly supported on both sides of the wall assembly.
See Electrical Nonmetallic Tubing (FKHU) in UL Electrical Construction Materials Directory for names of manufacturers.
4. Cables — Nom 4 in. (102 mm) diam (or smaller) tight bundle of cables. Cable bundle spaced 0 in. (point contact) to 2 in. (51 mm) from periphery of opening. Cable bundle to be rigidly supported on both sides of wall assembly. Any combination of the following types and sizes of cables may be used:
 - A. Max 200 pair No. 24 AWG (or smaller) copper conductor with polyvinyl chloride (PVC) insulation and jacket materials.
 - B. Max 1/C No. 500 kcmil (or smaller) copper conductor cable with cross-linked polyethylene (XLPE) jacket.
 - C. Max 3/C with ground No. 2/0 AWG (or smaller) aluminum conductor SER cables with PVC insulation and jacket.
 - D. Max 3/C No. 8 AWG (or smaller) copper conductor metal clad cable.
 - E. Max 4 pair No. 24 AWG (or smaller) copper conductor communication cable.
 - F. Max RG/U coaxial cable with fluorinated ethylene insulation and jacket.
5. Firestop System — The firestop system shall consist of the following:
 - A. Fill, Void or Cavity Material* - Sealant — Min 5/8 in. (16 mm) thickness of fill material applied within annulus flush with both surfaces of wall. At point contact locations, apply a min 1/2 in. (13 mm) diam bead of fill material at the penetrant/wall interface.
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.

+Bearing the UL Listing Mark



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