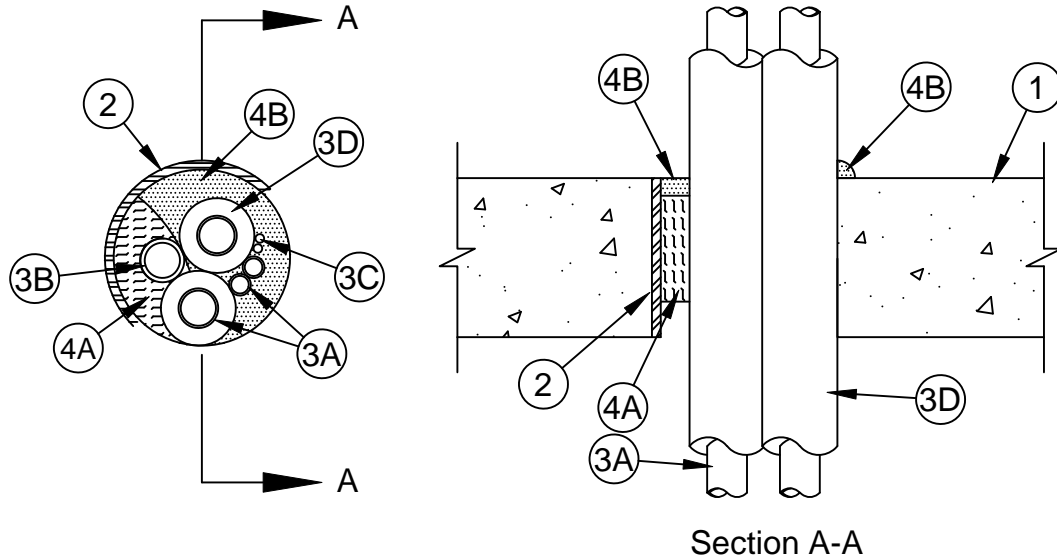


System No. C-AJ-8009

F Rating - 2 Hr
FT Rating - 1/4 Hr
FH Rating - 2 Hr
FTH Rating - 1/4 Hr



- 1. Floor or Wall Assembly** - Min 114 mm (4-1/2 in.) thick reinforced lightweight or normal weight (1600-2400 kg/m³ or 100-150 pcf) concrete floor or wall assembly. Floor may also be constructed of any min 152 mm (6 in.) thick hollow core UL Classified **Precast Concrete Units***. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max diam of opening is 127 mm (5 in.).
See **Concrete Blocks (CAZT)** or **Precast Concrete Units (CFTV)** categories in the Fire Resistance Directory for names of manufacturers.
- 2. Steel Sleeve** - (Optional) - Nom 127 mm (5 in.) diam (or smaller) Schedule 10 (or heavier) steel pipe sleeve cast or grouted into concrete flush with floor or wall surfaces.
- 3. Through Penetrants** - Pipes, conduits, tubing or cables to be bundled within opening such that the aggregate cross-sectional area of penetrants in opening to be max 54 percent of the cross-sectional area of the opening in floor or wall. The space between the penetrants and between the penetrants and the periphery of the opening shall be min 0 mm (0 in., point contact) to max 38 mm (1-1/2 in.). Penetrants to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of penetrants may be used:
 - A. Metallic Penetrants** - The following types and sizes of metallic pipes, conduits or tubing may be used:
 - A1. Steel Pipe** - Nom 19 mm (3/4 in.) diam (or smaller) Schedule 5 (or heavier) steel pipe.
 - A2. Iron Pipe** - Nom 19 mm (3/4 in.) diam (or smaller) cast or ductile iron pipe.
 - A3. Conduit** - Nom 19 mm (3/4 in.) diam (or smaller) rigid steel conduit, steel electrical metallic tubing (EMT), or flexible steel conduit.
 - A4. Copper Pipe or Tubing** - Nom 19 mm (3/4 in.) diam (or smaller) Type L (or heavier) copper tube or Regular copper pipe.



Specified Technologies Inc. 210 Evans Way Somerville, NJ 08876

Reproduced courtesy of Underwriters Laboratories, Inc.
Created or Revised: May 29, 2008

(800)992-1180 • (908)526-8000 • FAX (908)231-8415 • E-Mail:techserv@stifirestop.com • Website:www.stifirestop.com



C-AJ-8009
PAGE 1 OF 2

- B. **Nonmetallic Penetrants** - The following types and sizes of nonmetallic pipes, conduits or tubing may be used:
 - B1. **Polyvinyl Chloride (PVC) Pipe** - Nom 32 mm (1-1/4 in.) diam (or smaller) Schedule 40 PVC pipe for use in closed (process or supply) piping systems.
 - B2. **Chlorinated Polyvinyl Chloride (CPVC) Pipe** - Nom 32 mm (1-1/4 in.) diam (or smaller) SDR13.5 CPVC pipe for use in closed (process or supply) piping systems.
 - B3. **Rigid Nonmetallic Conduit+** - Nom 32 mm (1-1/4 in.) diam (or smaller) Schedule 40 PVC conduit installed in accordance with the National Electrical Code (NFPA 70).
- C. **Cables** - 4 pair No. 18 AWG copper conductor thermostat cable with PVC jacket and insulation.
- D. **Pipe Covering** - The following types of pipe covering materials may be installed on one or more of the metallic pipes or tubing:
 - D1. **Tube Insulation##** - Nom 13 mm (1/2 in.) thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing.

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 94-5VA may be used.

- D2. **Pipe Covering*** - Nom 13 mm (1/2 in.) thick hollow cylindrical heavy density (min 56 kg/m³ or 3.5 pcf) glass fiber units jacketed on the outside with an all service jacket. Longitudinal seams sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints sealed with metal fasteners or with butt tape supplied with the product.

See **Pipe and Equipment Covering Materials** (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.

4. **Firestop System** - The firestop system shall consist of the following:

- A. **Packing Material** - Min 102 mm (4 in.) thickness of 64 kg/m³ (4 pcf) density mineral wool batt insulation tightly-packed into annular space. In floors constructed of hollow-core precast concrete units, mineral wool packing material to extend below exposed cores in precast concrete units. Packing material recessed from top surface of floor or from both surfaces of wall as required to accommodate sealant (Item 4C).
- B. **Fill, Void or Cavity Material* - Sealant** - Min 13 mm (1/2 in.) thickness applied flush with top of floor or with both sides of wall. Fill material forced into grouped penetrant interstices to max extent. Min 6 mm (1/4 in.) diam bead of sealant applied at point contact location.

SPECIFIED TECHNOLOGIES INC - SpecSeal 100, 101, 102, 105, 120 or 129 Sealant, SpecSeal LCI Sealant

*Bearing the UL Classification Mark

##Bearing the UL Recognized Component Marking

+Bearing the UL Listing Mark



Specified Technologies Inc. 210 Evans Way Somerville, NJ 08876

Reproduced courtesy of Underwriters Laboratories, Inc.
Created or Revised: May 29, 2008

