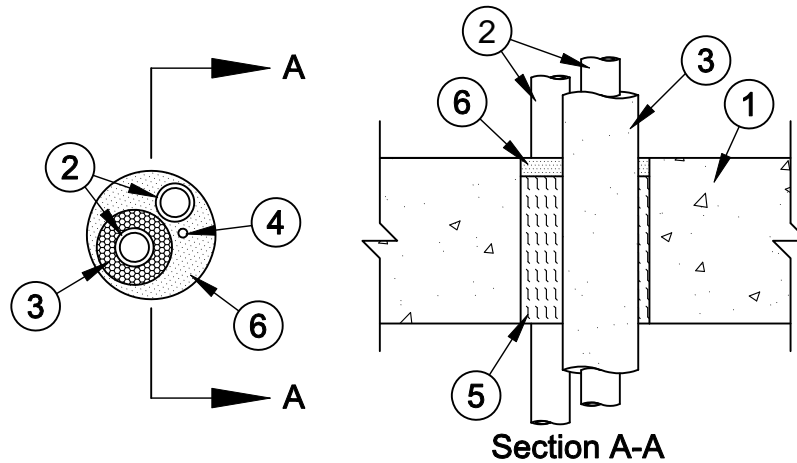


System No. C-AJ-8168

F Rating - 2 Hr
T Rating - 0 Hr
W Rating - Class 1



1. **Floor or Wall Assembly** - Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete floor or min 5 in. (127 mm) thick reinforced lightweight or normal weight concrete wall. Floor may also be constructed of any min 6 in. (152 mm) thick UL Classified hollow-core **Precast Concrete Units***. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max diam of opening is 3-1/2 in. (89 mm).

See **Concrete Blocks** (CAZT) and **Precast Concrete Units** (CFTV) categories in the Fire Resistance Directory for names of manufacturers.

2. **Through Penetrants** - A max of two pipes, conduits or tubing to be installed within the opening. The annular space between the pipes, conduits or tubing and the periphery of the opening shall be min 1/8 in. (3 mm) to max 1-1/2 in. (38 mm). Pipes, conduits or tubing to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
 - A. **Steel Pipe** - Nom 3/4 in. (19 mm) diam (or smaller) Schedule 5 (or heavier) steel pipe.
 - B. **Iron Pipe** - Nom 3/4 in. (19 mm) diam (or smaller) cast or ductile iron pipe.
 - C. **Copper Tubing** - Nom 3/4 in. (19 mm) diam (or smaller) Type L (or heavier) copper tubing.
 - D. **Copper Pipe** - Nom 3/4 in. (19 mm) diam (or smaller) Regular (or heavier) copper pipe.
 3. **Tube Insulation - Plastics+** - Nom 1/2 in. (13 mm) thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing. The tube insulation may be installed on a max of one pipe or tubing. The annular space between the insulated penetrating item and the periphery of the opening shall be min 1/8 in. (3 mm) to max 1 in. (25 mm).
- See **Plastics+** (QMFZ2) category in the Recognized Component Directory for names of manufacturers. Any Recognized Component tube insulation material meeting the above specifications and having a UL 94 Flammability Classification of 94-5A may be used.
4. **Cable** - Max four pair No. 18 AWG (or smaller) thermostat cable with polyvinyl chloride (PVC) insulation and jacket materials. Cable to be spaced min 0 in. (0 mm, point contact) from tube insulation or min 1/4 in. (6 mm) from the other penetrants. The annular space between the cables and the periphery of the opening shall be min 1/8 in. (3 mm) to max 1 in. (25 mm). Cable to be rigidly supported on both sides of floor or wall assembly.
 5. **Packing Material** - Min 4 in. (76 mm) thickness of min 4 pcf (64 kg/m³) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall as required to accommodate the required thickness of fill material.
 6. **Fill Void or Cavity Materials* - Sealant** - Min 1/2 in. (13 mm) thickness of fill material applied within annulus, flush with both surfaces of floor or wall assembly. Fill material to be forced into interstices of through penetrants to max extent possible.

SPECIFIED TECHNOLOGIES INC - Pensil 300 Sealant or SpecSeal Series SIL300 Sealant for floors and walls and Pensil 300 S/L Sealant or SpecSeal Series SIL300SL Sealant for floors only.

+ Bearing the UL Recognized Component Mark

*Bearing the UL Classification Mark



Specified Technologies Inc. 210 Evans Way Somerville, NJ 08876

Reproduced courtesy of Underwriters Laboratories, Inc.
Created or Revised: November 26, 2008

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



C-AJ-8168
PAGE 1 OF 1