

System No. C-AJ-2140

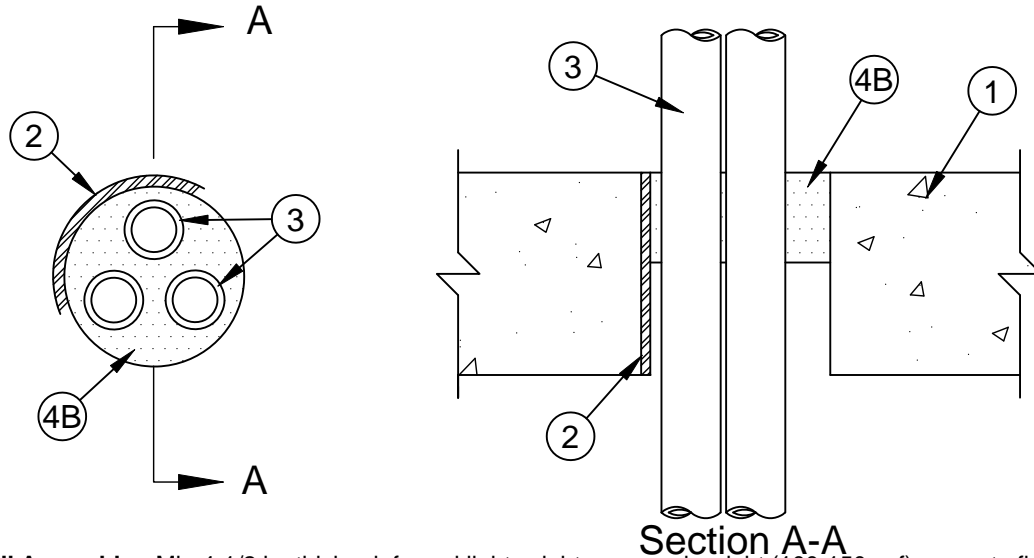


F Rating - 2 Hr

T Ratings - 0, 1, 1-1/2 and 2 Hr (See Item 4B)

L Rating At Ambient - Less Than 1 CFM/sq ft

L Rating At 400 F- Less Than 1 CFM/sq ft



1. **Floor or Wall Assembly** - Min 4-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete floor or min 5 in. thick reinforced lightweight or normal weight concrete wall. Floor may also be constructed of any min 6 in. thick UL Classified **Precast Concrete Units***. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max diam of opening is 4 in.

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

2. **Metallic Sleeve** - (Optional) - Nom 4 in. diam (or smaller) Schedule 10 (or heavier) steel pipe cast or grouted into floor or wall, flush with floor or wall surfaces.
3. **Through Penetrants** - One or more pipes, conduits or tubing to be installed within the opening. The annular space between pipes, conduits or tubing and the periphery of the opening shall be a min of 1/4 in. to a max 13/16 in. The annular space between the pipes, conduits or tubing shall be a nom 1/4 in. Pipes, conduits or tubing to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of nonmetallic pipes, conduits or tubing may be used:
 - A. **Polyvinyl Chloride (PVC) Pipe** - Nom 2 in. diam (or smaller) Schedule 40 cellular or solid core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
 - B. **Rigid Nonmetallic Conduit (RNC)+** - Nom 2 in. diam (or smaller) Schedule 40 PVC conduit installed in accordance with Article 347 of the National Electrical Code (NFPA No. 70).
 - C. **Chlorinated Polyvinyl Chloride (CPVC) Pipe** - Nom 2 in. diam (or smaller) SDR17 CPVC pipe for use in closed (process or supply) systems.
 - D. **Electrical Nonmetallic Tubing (ENT)+** - Nom 2 in. diam (or smaller) PVC tubing installed in accordance with Article 331 of the National Electrical Code (NFPA No. 70).
 - E. **Optical Fiber Raceway (OFR)+** - Nom 1 in. diam (or smaller) optical fiber raceway formed from either polyvinylidene fluoride (PVDF) or polyvinyl chloride (PVC). Raceway to be installed in accordance with Article No. 770 of the National Electrical Code (NFPA No. 70). Multiple 62.5/48 micron fiber optical cables with PE or PVC jacket to be installed within each raceway.

See **Optical Fiber Raceway (QAZM)** category in the Electrical Construction Materials Directory for names of manufacturers.



Specified Technologies Inc. 210 Evans Way Somerville, NJ 08876

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F. **Cross Linked Polyethylene (PEX) Tubing** - Nom 1 in. diam (or smaller) SDR 9 PEX tubing for use in closed (process or supply) piping systems.

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

A. **Packing Material** - (Not Shown, Optional) - Polyethylene backer rod, mineral wool batt insulation or fiberglass batt insulation friction fitted into annular space. Packing material to be recessed from top surface of floor or both surfaces of wall as required to accommodate the required thickness of fill material.

Type of Penetrant	Max Diam of Penetrant In.	Steel Sleeve	Piping System	Min fill Mat'l Thkns In.	T Rating Hr
PVC, CPVC Pipe	2	Yes	Vented	2++	0
PVC, CPVC Pipe	2	No	Vented	2++	1
PVC, CPVC Pipe	2	Yes	Closed	2++	1
PVC, CPVC Pipe	2	No	Closed	2++	2
RNC	1	Yes	-	2	1
RNC	1	No	-	2	2
ENT	1	Yes	-	2	1
ENT	1	No	-	2	2
ENT	2	No	-	1	1-1/2
OFR	1	Yes	-	2	1
OFR	1	No	-	2	2
OFR	1	No	-	1-1/2	0
PEX Tubing	1	Yes	Closed	2	1
PEX Tubing	1	No	Closed	2	2
PEX Tubing	1	No	Closed	1+++	2

++-When vented PVC or CPVC pipes are used in hollow-core precast concrete floor, the fill material thickness installed at both the top and bottom surfaces of the floor may be reduced to 1 in .

+++--When min 1 in. depth of fill material is used, a min 1 in depth of tightly-packed mineral wool batt packing material is required to be used as a form within the annular space .

SPECIFIED TECHNOLOGIES INC - SpecSeal Series SSS Sealant or SpecSeal LCI Sealant

+Bearing the UL Listing Mark

*Bearing the UL Classification Marking



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