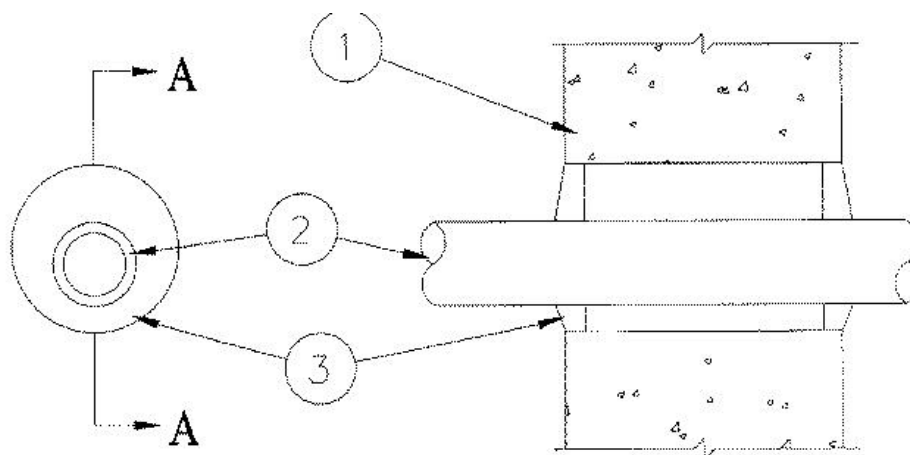


F Rating — 2 Hr
T Ratings — 0 and 1 Hr (See Item 2)



SECTION A-A

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 4 in. See **Concrete Block** (CAZT) category in the Fire Resistance Directory for names of manufacturers.

2. Nonmetallic Pipe — One nonmetallic pipe or conduit to be installed either concentrically or eccentrically within the firestop system. The annular space between the through penetrant and the periphery of the opening is dependent upon the diam of through penetrant. If the nom diam of the through penetrant is 1-1/2 in. (38 mm) or less, the annular space shall be a min 3/8 in. (10 mm) to max 1-1/8 in. (29 mm). If the nom diam of the through penetrant is greater than 1-1/2 in. (38 mm), the annular space shall be a min 5/8 in. (16 mm) to max 1 in (25 mm). Pipe or conduit to be rigidly supported on both sides of wall assembly. The following types of nonmetallic pipes or conduits may be used:

A. Polyvinyl Chloride (PVC) Pipe — Nom 2 in. (51 mm) diam (or smaller) Schedule 40 solid or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste, or vent) piping systems.

B. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 2 in. (51 mm) diam (or smaller) SDR 17 CPVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

C. Rigid Nonmetallic Conduit+ — Nom 2 (51 mm) in. diam (or smaller) Schedule 40 PVC conduit installed in accordance with the National Electrical Code, (NFPA No. 70).

D. Acrylonitrile Butadiene Styrene (ABS) Pipe — Nom 1-1/2 in. (38 mm) diam Schedule 40 cellular or solid core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

E. Electrical Nonmetallic Tubing (ENT)+ — Nom 1-1/2 in. (38 mm) diam (or smaller) PVC tubing installed in accordance with the National Electrical Code (NFPA No. 70).

F. Cross Linked Polyethylene (PEX) Tubing — Nom 1-1/2 in. (38 mm) diam (or smaller) SDR 9 cross linked polyethylene (PEX) tubing for use in closed (process or supply) piping systems.

The hourly T Rating of the firestop system is dependent on the type and max diam of through penetrant as tabulated below:

Type of Through Penetrant	Max Diam of Through Penetrant, In	F Rating, Hr	T Rating, Hr
PVC Pipe, CPVC Pipe or PVC Conduit	2	2	1
PVC ENT	1-1/2	2	1
ABS Pipe or PEX Tubing	1-1/2	2	0

3. 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. Additional fill material to be installed such that a min 1/4 in. (6 mm) thick crown is formed around the penetrating

item.

RECTORSEAL — FlameSafe FS1900, FS1901, FS1905, FS1929, [Metacaulk 1000](#), [Metacaulk 350i](#), Biostop 350i or Biostop 500+

*Bearing the UL Classification Marking

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

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