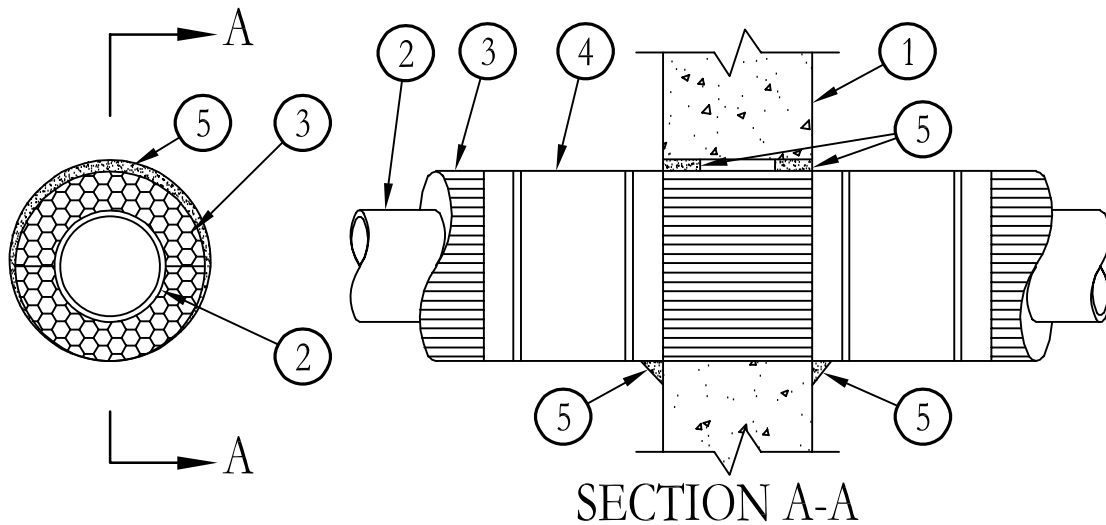


System No. W-J-5015

May 19, 2005

F Ratings – 1 and 2 Hr (See Item 5)

T Ratings – 1/2, 1 and 1-1/2 Hr (See Item 3)



- Wall Assembly** – Min 4-1/2 in. (114 mm) thick 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 20 in. (508 mm).
See **Concrete Blocks** (CAZT) category in the Fire Resistance Directory for names of manufacturers.

- Through Penetrants** – One metallic pipe or tubing installed either concentrically or eccentrically within the firestop system. Pipe, 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 used:

- Steel Pipe** – Nom 12 in. (305 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
- Copper Tubing** – Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing.
- Copper Pipe** – Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.

- Pipe Covering Materials*** – **Cellular Glass Insulation** – Nom 1-1/2 in. or 3 in. (38 mm by 76 mm) thick cellular glass units supplied in nom 24 in. (610 mm) long half sections or nom 18 in. (457 mm) long segments. Pipe insulation installed on pipe in accordance with the manufacturer's instructions. **T Rating is 1/2 hr when nom 1-1/2 in. (38 mm) thick pipe insulation is used in 1 hr and 2 hr fire-rated wall assemblies. T Rating is 1 hr when nom 3 in. (76 mm) thick pipe insulation is used in 1 hr fire-rated wall assemblies. T Rating is 1-1/2 hr when nom 3 in. (76 mm) thick pipe insulation is used in 2 hr fire-rated wall assemblies.**

PITTSBURGH CORNING CORP – FOAMGLAS

- Metal Jacket** – Min 12 in. (305 mm) long jacket formed of min 0.010 in. (0.25 mm) thick steel or aluminum sheet cut to wrap tightly around the pipe insulation with a min 2 in. (51 mm) lap. Jacket secured with min 1/2 in. (13 mm) wide stainless steel hose clamps or bands located within 2 in. (51 mm) of each end of the jacket and spaced a max of 10 in. (254 mm) OC. Jacket to be installed with edges abutting surface of fill material (Item 5) on both surfaces of wall.
- Fill, Void or Cavity Materials* – Caulk or Sealant** – Min thickness of 5/8 in. and 1-1/4 in. (16 mm and 32 mm) of caulk or putty for 1 and 2 hr rated wall assemblies, respectively, applied within annulus between pipe covering and periphery of the opening, flush with both surfaces of wall assembly. A min 1/2 in. (13 mm) diam bead of caulk shall be applied to the pipe covering/wall interface at the point contact location on both sides of wall.

3M COMPANY – IC 15WB+, CP 25WB+ caulk or FB-3000 WT sealant

- Packing Material** (Optional, not shown) – Mineral wool or fiberglass insulation or polyethylene backer rod firmly packed into opening as a permanent form. Packing material to be recessed from both surfaces of wall as required to accommodate the required thickness of caulk fill material.

*Bearing the UL Classification Marking

This material was extracted and drawn by 3M Fire Protection Products from the 2007 edition of the UL Fire Resistance Directory. 