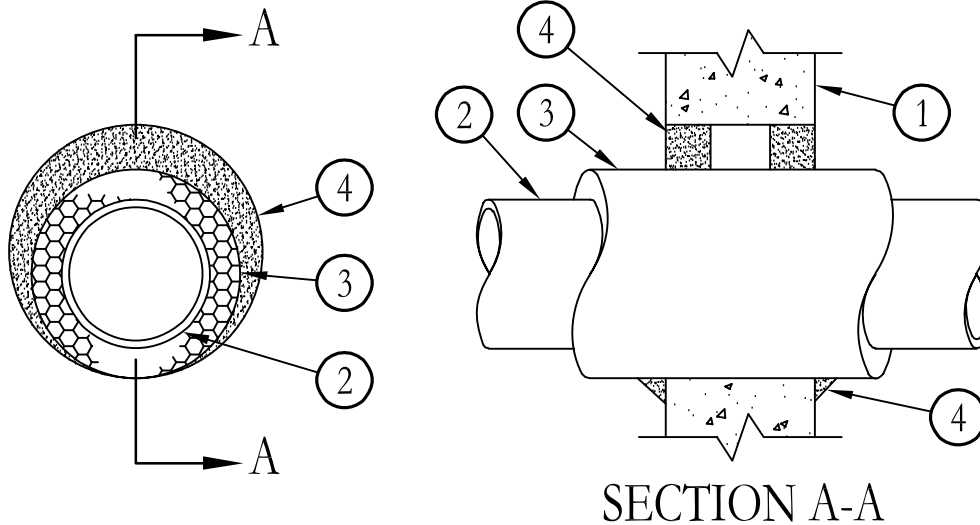


System No. W-J-5013

September 08, 2004

F Ratings – 1 and 2 Hr (See Item 4)

T Ratings – 1 and 1-1/2 Hr (See Item 4)



1. **Wall Assembly** – Min 4-1/2 in. thick lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max diam of opening is 8-1/2 in.
See **Concrete Blocks (CAZT)** category in the Fire Resistance Directory for names of manufacturers.
 2. **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:
 - A. **Steel Pipe** – Nom 4 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - B. **Copper Tubing** – Nom 4 in. diam (or smaller) Type L (or heavier) copper tubing.
 - C. **Copper Pipe** – Nom 4 in. diam (or smaller) Regular (or heavier) copper pipe.
 3. **Pipe Covering*** – Nom 1-1/2 in. thick hollow cylindrical heavy density glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied SSL tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product. The annular space between the insulated pipe and the edge of the through opening shall be min zero in. (continuous point contact) to max 1-1/4 in.
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. **Fill, Void or Cavity Materials* – Caulk or Sealant** – Min thickness of 5/8 in. and 1-1/4 in. 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. diam bead of caulk shall be applied to the pipe covering/wall interface at the point contact location on both sides of wall. **The hourly F and T Ratings of the firestop system are 1 hr when installed in 1 hr fire rated wall assemblies. The hourly F Rating of the firestop system is 2 hr when installed in 2 hr fire rated wall assemblies. When installed in 2 hr fire rated wall assemblies, T Rating is 1 hr when copper tube is used and 1-1/2 hr when steel pipe is used.**
3M COMPANY – CP 25WB+ caulk or FB-3000 WT sealant
 5. **Packing Material (Optional)** – 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 2006 edition of the UL Fire Resistance Directory. 