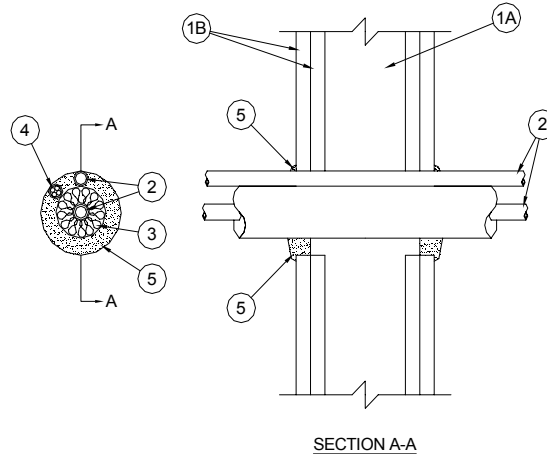


**Through-penetration Firestop Systems**  
**UL System No. W-L-8075**  
**F Rating - 1 and 2 Hr (See Item 1B)**  
**T Rating - 0 Hr**



1. **Wall Assembly** - The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:

- A. **Studs** - Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom. 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) O.C. with nom. 2 by 4 in. (51 by 102 mm) lumber end plates and cross braces. Steel studs to be min. 2-1/2 in. (64 mm) wide and spaced max. 24 in. (610 mm) O.C.
- B. **Gypsum Board\*** - 5/8 in. (16 mm) thick, 4 ft (1219 mm) wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max. dia. of opening is 3-1/2 in. (89 mm).

**The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.**

2. **Through Penetrant** - A max. of two pipes or tubing to be installed within the opening. Of the two pipes, or tubing, only one of the pipes or tubing shall have a nom dia. greater than 1/2 in. (13 mm). The annular space between pipes or tubing and periphery of opening shall be min. 0 in. (point contact) to max. 1/2 in. (13 mm). Pipes or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes or tubing may be used:

- A. **Steel Pipe** - Nom. 1 in. (25 mm) dia. (or smaller) Schedule 10 (or heavier) steel pipe.
- B. **Iron Pipe** - Nom. 1 in. (25 mm) dia. (or smaller) cast or ductile iron pipe.
- C. **Copper Tubing** - Nom 1 in. (25 mm) dia. (or smaller) Type L (or heavier) copper tubing.
- D. **Copper Pipe** - Nom. 1 in. (25 mm) dia. (or smaller) Regular (or heavier) copper pipe.

3. **Tube Insulation - Plastics+** - Nom. 3/4 in. (19 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 penetrating item and periphery of opening shall be min. 1/2 in. (13 mm) to max. 3/4 in. (19 mm). The space between pipes or tubing shall be 0 in. (point contact)

See **Plastics+** (QMFZ2) category in the Recognized Component Directory for names for manufacturers. Any Recognized Component tube insulation material meeting the above specifications and having a UL 94 Flammability Classification of 94-5VA may be used.

## **UL System W-L-8075 continued...**

4. **Cables** - One 4 pair No. 18 AWG (or smaller) thermostat cable with polyvinyl chloride (PVC) insulation and jacket materials. Cable to be spaced a min 0 in. (point contact) to max 1/2 in. (13 mm) from the other penetrants. The space between the cable and the periphery of the opening shall be a min. 0 in. (point contact) to max. 1/2 in. (13 mm) Cable to be rigidly supported on both sides of wall assembly.
5. **Fill, Void or Cavity Material\* - Sealant** - Min. 1/2 in. (13 mm) thickness of fill material applied within annulus, flush with both surfaces of wall. Additional fill material to be forced into intersties within groups of penetrating items to max extent possible and installed such that a min. 1/4 in. (6 mm) thick crown is formed around the penetrating items and lapping 1/4 in. (6 mm) beyond the periphery of the opening.

**A/D FIRE PROTECTION SYSTEMS INC - A/D FIREBARRIER Intumescent Sealant**

+Bearing the UL Recognized Component Mark

\*Bearing the UL Classification Mark