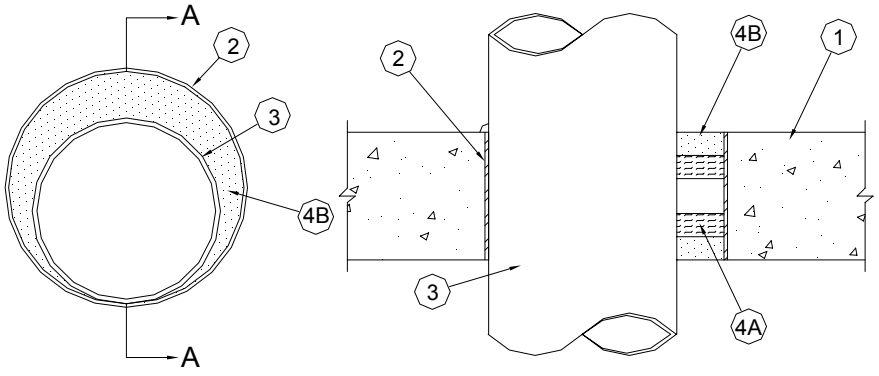
Through-penetration Firestop Systems
UL System No. C-AJ-1561
F Rating - 3 Hr
T Rating - 1/4 Hr
L Rating at Ambient - Less Than 1 CFM/sq ft



SECTION A-A

1. **Floor or Wall Assembly -** Min. 5-1/2 in. (140 mm) thick reinforced lightweight or normal weight (100-150 pcf (1600-2400 kg/m^3)) concrete. Floor may also be constructed of any min 6 in. (152 mm) thick UL Classified hollow core **Precast Concrete Units***. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max. dia. of opening is 10-7/8 in. (276 mm). When precast concrete units are used, the max. dia. of opening is 7 in. (178 mm).

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

2. **Metallic Sleeve -** (Optional) Nom. 10 in. (254 mm) dia. (or smaller) Schedule 10 (or heavier) steel sleeve cast or grouted into floor or wall assembly, flush with floor or wall surfaces.

3. **Through Penetrants -** One metallic pipe or tube to be installed within the firestop system. The annular space between the through penetrant and the periphery of the opening shall be min. 0 in. (point contact, 0 mm) to max. 1-7/8 in. (48 mm). Pipe or tube to be rigidly supported on both sides of the floor or wall assembly. The following types and sizes of metallic pipes and tubes may be used:
   A. **Steel Pipe -** Nom. 8 in. (203 mm) dia. (or smaller) Schedule 10 (or heavier) steel pipe.
   B. **Iron Pipe -** Nom. 8 in. (203 mm) dia. (or smaller) cast or ductile iron pipe.
   C. **Copper Tubing -** Nom. 4 in. (102 mm) dia. (or smaller) Type L (or heavier) copper tubing.
   D. **Copper Pipe -** Nom. 4 in. (102 mm) dia. (or smaller) Regular (or heavier) copper pipe.

4. **Firestop System -** The firestop system shall consist of the following:
   A. **Packing Material -** Min. 1 in. (25 mm) thickness of min. 4 pcf (64 kg/m^3) mineral wool batt insulation firmly packed into each side of opening as a permanent form. Packing material to be recessed from both surfaces of floor or wall to accommodate the required thickness of fill material.
   B. **Fill, Void or Cavity Material* -** Min. 1 in. (25 mm) thickness of fill material applied within the annular space, flush with both surfaces of floor or wall. Min. 3/8 in. (10 mm) bead of fill material applied at point contact location between pipe and sleeve or concrete at both surfaces of floor or wall.

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

   *Bearing the UL Classification Mark