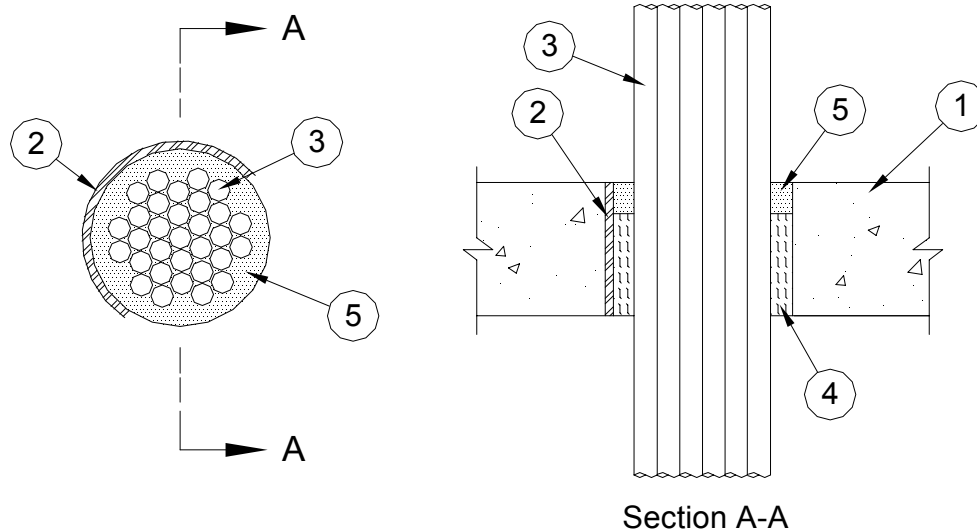


**Through-penetration Firestop Systems**  
**UL System No. C-AJ-3274**  
**F Rating - 2 Hr**  
**T Ratings - 0, 1/2 and 1 Hr (See Item 3)**



1. **Floor or Wall Assembly** - Min. 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf (1600-2400 kg/m<sup>3</sup>)) concrete. Wall may also be constructed of any UL Classified **Concrete blocks\***. Floor may also be constructed of any UL Classified hollow-core **Precast Concrete Units\***. Max. dia. of opening is 6 in. (152 mm)

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

2. **Sleeve** - (Optional) - Nom 6 in. (152 mm) dia. (or smaller) Schedule 10 (or heavier) steel pipe sleeve cast or grouted into floor or wall flush with floor or wall surfaces.
3. **Cables** - Aggregate cross-sectional area of cables in opening to be max. 40 percent of the cross-sectional area of the opening. Tight bundle of cables to be installed in the opening. The annular space within the firestop system shall be a min. of 1/2 in. (13 mm) to a max. of 1 in. (25 mm). Cables to be rigidly supported on both sides of the floor or wall assembly. Any combination of the following types and sizes of cables may be used:
  - A. Max. 3/C No. 2/0 AWG (or smaller) aluminum or copper conductor service entrance cable with PVC insulation and jacket. **When 3/C-2/0 AWG cable is used, T Rating is 0 Hr.**
  - B. Max. 150 pair No. 24 AWG (or smaller) copper conductor cable with polyvinyl chloride (PVC) jacketing and insulation. **When 150 pair No. 24 AWG cable is used, T Rating is 1/2 Hr.**
  - C. Max. 1/C 350 kcmil (or smaller) copper conductor power cable with XLPE or PVC insulation and XLPE or PVC jacket. **When 1/C-350 kcmil cable is used, T Rating is 1/2 Hr.**
  - D. Max. 62.5/48 fiber optic cable with PVC insulation and jacketing. **When 62.5/48 fiber optic cable is used, T Rating is 1 Hr.**
4. **Packing Material** - Min. 3-1/2 in. (89 mm) thickness of min. 4 pcf (64 kg/m<sup>3</sup>) density mineral-wool batt insulation tightly packed into opening as a permanent form. Packing material to be recessed from top or bottom surface of cast concrete floor assemblies or from one side of cast concrete wall assemblies to accommodate the required thickness of fill material. Packing material to be recessed from both surfaces of assembly in walls constructed of concrete block and in floors constructed with hollow-core precast concrete units to accommodate the required thickness of fill material.

**UL System C-AJ-3274 continued...**

5. **Fill, Void or Cavity Material\* -Putty** - Min. 1 in. (25 mm) thickness of fill material applied within the annulus. In solid concrete floors, fill material to be installed flush with top or bottom surface of floor. In solid concrete walls, fill material to be installed flush with either side of wall. In floors constructed of hollow-core precast concrete units and in walls constructed of concrete blocks, fill material to be installed flush with both surfaces of assembly.

**A/D FIRE PROTECTION SYSTEMS INC - A/D FIREBARRIER Putty II**

\*Bearing the UL Classification Mark