

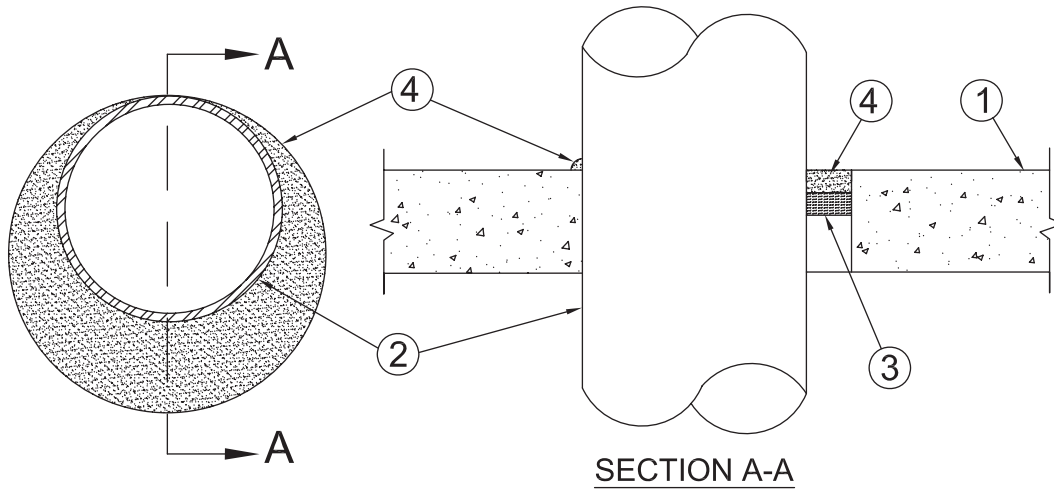
# System No. C-AJ-1001

March 05, 2007

F Rating – 3 Hr

T Rating – 0 Hr

W Rating – Class 1 (See Item 4)



1. **Floor or Wall Assembly** – Min 4-1/2 in. (114 mm) thick lightweight or normal weight (100-150 pcf or 1600-2400 kg/m<sup>3</sup>) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks\***. Max diam of circular through opening is 32-1/2 in. (826 mm). See **Concrete Blocks** (CAZT) category in the Fire Resistance Directory for names of manufacturers.
- 1A. **Steel Sleeve** (Optional, not shown) – Nom 12 in. (305 mm) diam (or smaller) Schedule 40 (or heavier) steel pipe sleeve cast into concrete floor or wall. Sleeve to be flush with or project max 2 in. (51 mm) from top surface of floor or from both surfaces of wall. As an alternate, nom 12 in. (305 mm) diam (or smaller) sleeve fabricated from nom 0.019 in. (0.48 mm) thick galv steel cast or grouted into floor or wall assembly flush with floor or wall surfaces.
2. **Through Penetrant** – One metallic pipe, conduit or tubing installed either concentrically or eccentrically within the firestop system. The annular space between pipe, conduit or tubing and periphery of opening shall be min of 0 in. (0 mm, point contact) to max 1-3/8 in. (35 mm). 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 30 in. (762 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
  - A1. **Iron Pipe** – Nom 30 in. (762 mm) diam (or smaller) cast or ductile iron pipe.
  - B. **Conduit** – Nom 6 in. (152 mm) diam (or smaller) rigid steel conduit.
  - C. **Conduit** – Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing.
3. **Packing Material** – Polyethylene backer rod or nom 1 in. (25 mm) thickness of tightly-packed ceramic (alumina silica) fiber blanket, mineral wool batt or glass fiber insulation material used as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of solid concrete or concrete block wall as required to accommodate the required thickness of caulk fill material (Item 4). As an alternate when max pipe size is 10 in. (254 mm) diam and when max annular space is 1 in. (25 mm), a min 1 in. (25 mm) thickness of tightly-packed ceramic fiber blanket or mineral wool batt packing material may be recessed min 1/2 in. (13 mm) from bottom surface of floor or from either side of solid concrete wall.
4. **Fill, Void or Cavity Materials\* – Caulk or Sealant** – Applied to fill the annular space to the min thickness shown in the following table:

Max Pipe Diam In. (mm)	Max Annular Space In. (mm)	Packing Mtl Type (a)	Min Caulk Thkns In. (mm)
10 (254)	1 (25)	BR, CF, GF or MW	1/2 (13) (b)
10 (254)	1 (25)	CF or MW	1/2 (13) (c)
30 (762)	2-1/2 (64)	BR, CF, GF or MW	1 (25) (b)

(a) BR = Polyethylene backer rod.

CF = Ceramic fiber blanket.

GF = Glass fiber insulation.

MW = Mineral-wool batt.

(b) Caulk installed flush with top surface of floor or both surfaces of wall.

(c) Caulk installed flush with bottom surface of floor or one surface of solid (non-concrete block) wall.

**3M COMPANY** – CP 25WB+ or FB-3000 WT

(Note: W Rating applies only when FB-3000 WT is used on top surface of floor and when it laps onto concrete for sleeved opening.)

\*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. 