

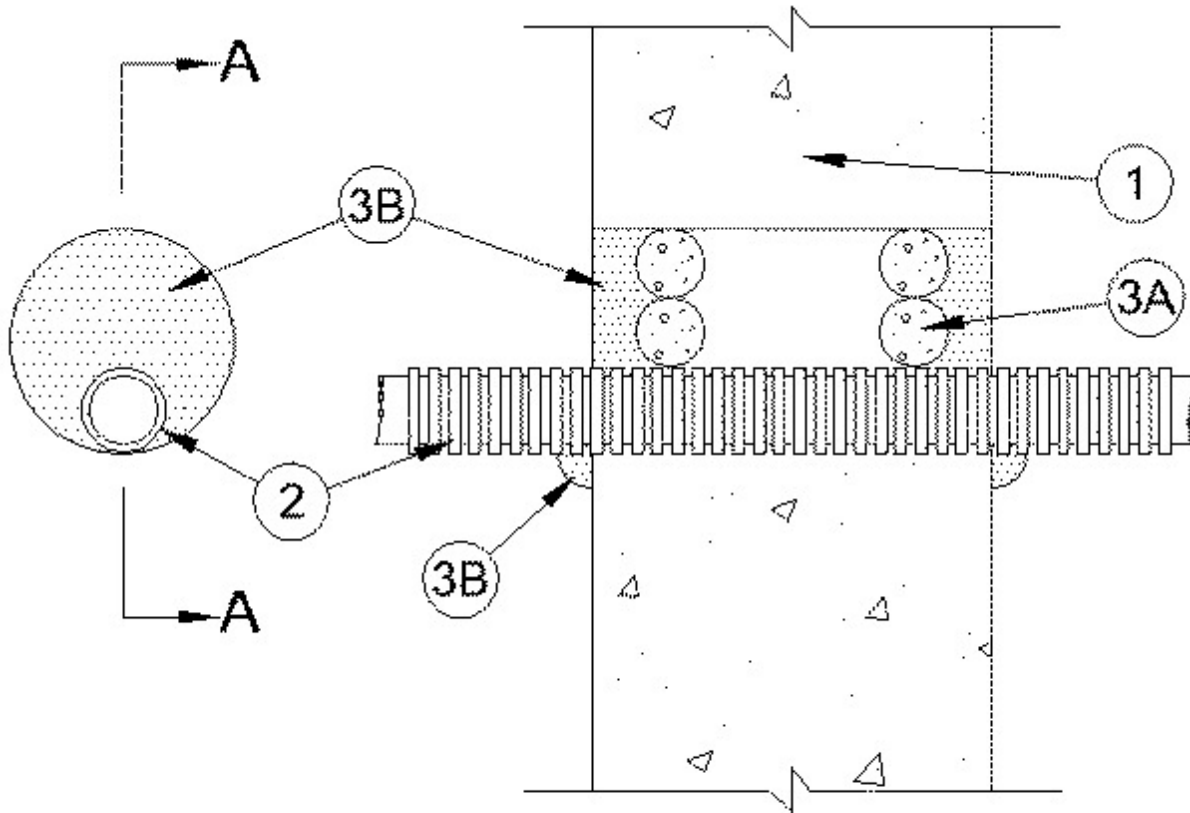


System No. W-J-2199

September 26, 2005

F Rating — 2 Hr

T Ratings — 1-3/4 and 2 Hr (See Item 2)



SECTION A-A

1. **Wall Assembly** — Min 6 in. (152 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max diam of opening is 4 in. (102 mm).

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

2. **Nonmetallic Penetrant** — One nonmetallic penetrant to be installed either concentrically or eccentrically within the firestop system. The annular space between nonmetallic penetrant and periphery of opening shall be min 0 in. (point contact) to max 2-1/16 in. (52 mm). Through-penetrant shall be rigidly supported on both sides of wall assembly. The following types and sizes of nonmetallic penetrants may be used:

A. **Electrical Nonmetallic Tubing (ENT)+** — Nom 1 in. (25 mm) diam (or smaller) **Electrical Nonmetallic Tubing**. ENT installed in accordance with the National Electrical Code (NFPA No. 70).

See **Electrical Nonmetallic Tubing** (FKHU) category in the Electrical Construction Material Directory for names of manufacturers.

B. **Optical Fiber Raceways+** — Nom 1 in. (25 mm) diam (or smaller) **Optical Fiber Raceways**. Optical fiber raceway installed in accordance with Article 770 of the National Electrical Code (NFPA No. 70).

See **Optical Fiber Raceway** (QAZM) category in the Electrical Construction Material Directory for names of manufacturers.

The T Rating of the firestop system is 1-3/4 hr when the diam of the opening is greater than 2-1/16 in. larger than the outside diam of the penetrant and 2 hr when the diam of the opening is less than or equal to 2-1/16 in. (52 mm) larger than the outside diam of the penetrant.

3. Firestop System — The firestop system shall consist of the following:

A. Packing Material — Foam backer rod firmly packed into opening as a permanent form. Packing material to be recessed from both surfaces of wall to accommodate the required thickness of fill material.

B. Fill, Void or Cavity Material* - Caulk — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall. At point contact location, a min 3/8 in. (10 mm) diam bead of fill material shall be applied to the wall/penetrant interface on both surfaces of the wall.

RECTORSEAL — Biostop 350i

*Bearing the UL Classification Mark