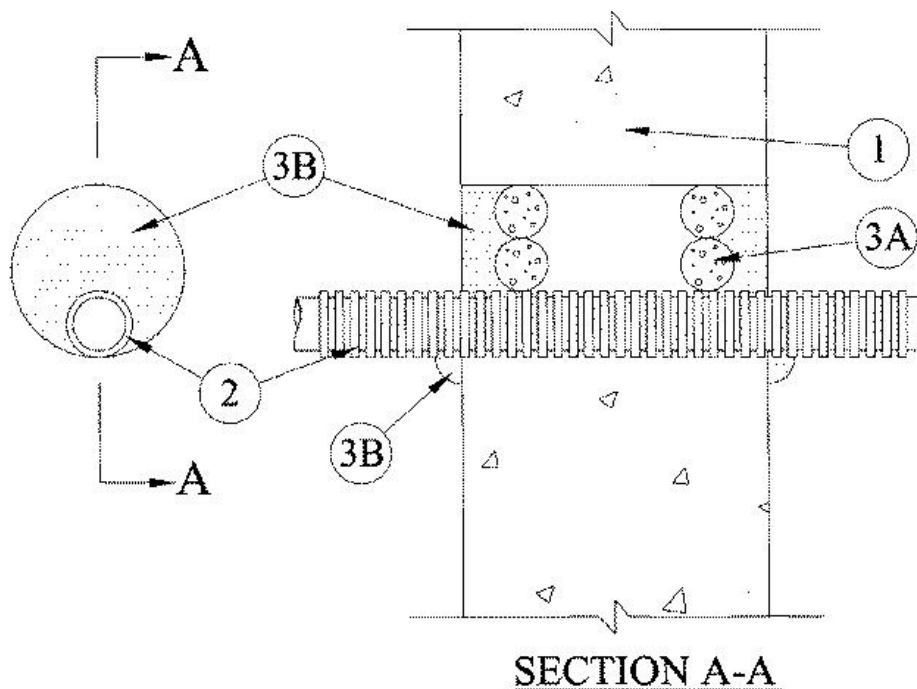


**F Rating — 2 Hr**  
**T Ratings — 1-3/4 and 2 Hr (See Item 2)**



**1. Wall Assembly** — Min 6 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks\***. Max diam of opening is 4 in. **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. larger than the outside diam of the penetrant.**

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. 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. diam (or smaller) **Electrical Nonmetallic Tubing**. ENT installed in accordance with Article 331 of 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. 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.

**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 as required to accommodate the required thickness of fill material.

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

**RECTORSEAL** — [Metacaulk 1000](#)

+ Bearing the UL Listing Mark

\*,+ Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

Reprinted from the Online Certifications Directory with permission from UL. ©UL LLC