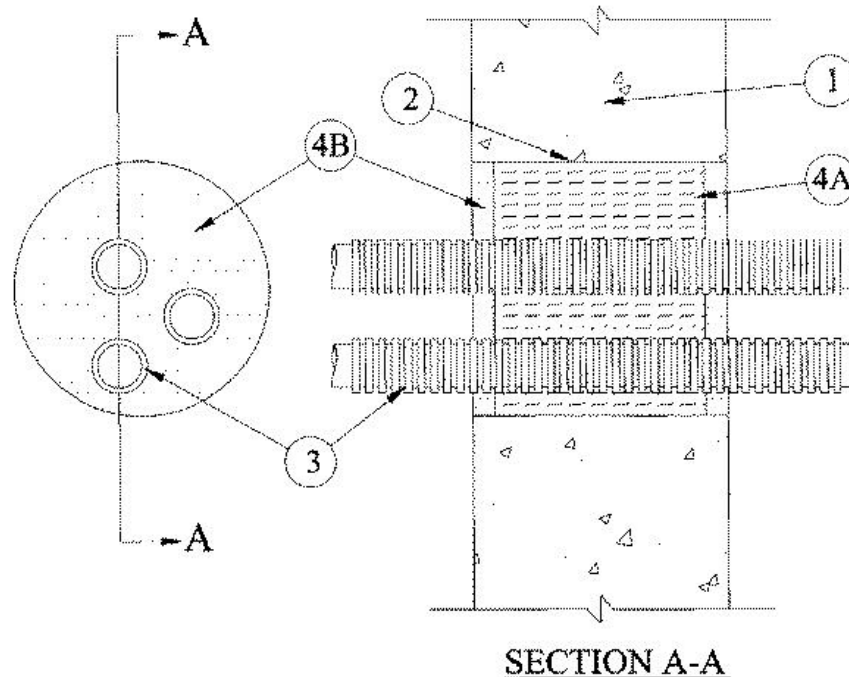


F Rating — 2 Hr  
T Rating — 2 Hr



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 6 in.

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

2. **Steel Wire Mesh** — Cylindrical sleeve fabricated from No. 8 steel wire mesh and having a min 2 in. lap along the longitudinal seam. Length of steel mesh to be 1/2 in. less than thickness of wall. Steel wire mesh to be centered and formed to fit periphery of through opening.

3. **Nonmetallic Penetrants** — A max of three nonmetallic penetrants may be installed within the opening. Min separation between nonmetallic penetrants is 1 in. The annular space between nonmetallic penetrants and periphery of opening shall be min 1 in. to max 2 in. Through-penetrants shall be rigidly supported on both sides of wall assembly. Any combination of 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 raceways installed in accordance with Article 770 of the National Electrical Code (NFPA No. 70).

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

4. **Firestop System** — The Firestop system shall consist of the following:

A. **Packing Material** — Min 5 in. thickness of min 4 pcf mineral wool batt insulation 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.

**RECTORSEAL** — [Metacaulk 1000](#)

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



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