



1. **Floor or Wall Assembly** — Min 5-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max area of opening is 128 sq in. with max dimension of 16 in. See **Concrete Blocks** (CAZT) category in the Fire Resistance Directory for names of manufacturers.

2. **Through Penetrants** — One or more metallic pipe, conduit or tubing to be installed within the firestop system. Pipes, conduit or tubing to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipes, conduit or tubing may be used.

A. **Steel Pipe** — Nom 3 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.

B. **Iron Pipe** — Nom 3 in. diam (or smaller) cast or ductile iron pipe.

C. **Copper Tubing** — Nom 2 in. diam (or smaller) Type L (or heavier) copper tubing.

D. **Copper Pipe** — Nom 2 in. diam (or smaller) Regular (or heavier) copper pipe.

3. **Tube Insulation—Plastics+** — Nom 3/4 in. thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing. The annular space between insulated through penetrant and periphery of opening shall be min 1/8 in. to max 2-1/8 in. The annular spaces between insulated through penetrants shall be min 1/8 in. to max 1/2 in.

See **Plastics** (QMFZ2) category in the Plastics Recognized Component Directory for names of manufacturers. Any Recognized Component tube insulation material meeting the above specifications and having a UL 94 Flammability Classification of 94-5VA may be used:

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

A. **Packing Material** — Min 4-1/2 in. thickness of min 4 pcf mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall as required to accommodate the required thickness of fill material.

B. **Fill, Void or Cavity Material*—Caulk** — Min 1 in. thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall.

RECTORSEAL — [Metacaulk 1000](#)

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