

- 1. Floor or Wall Assembly Min 2-1/2 in. (64 mm) thick lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Max diam of opening is 12-1/2 in. (318 mm).
- 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 1/2 in. (13 mm) to max 3-3/8 in. (86 mm). Pipe, conduit or tubing to be rigidly supported on both sides of floor. The following types and sizes of metallic pipes, conduits or tubing may be used:
 - A. Steel Pipe Nom 8 in. (203 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - B. Iron Pipe Nom 8 in. (203 mm) diam (or smaller) service weight (or heavier) cast iron soil pipe, nom 12 in. diam (or smaller) or Class 50 (or heavier) ductile iron pressure pipe.
 - C. Conduit Nom 6 in. (152 mm) diam (or smaller) steel conduit or nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing.
 - D. Copper Tubing Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tubing.
 - E. Copper Pipe Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.
- 3. Fill, Void or Cavity Material* Foam Min 1-1/2 in. (38 mm) thickness of fill material applied within the annulus, flush with top surface of floor or both surfaces of wall.

3M COMPANY - Fire Barrier Rated Foam, FIP 1-Step

*Bearing the UL Classification Mark

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Through Penetrations

Pipes

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1000 Series