1. **Wall Assembly** – The 2 hr fire rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features.
   A. **Studs** – Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide spaced max 24 in. (610 mm) OC.
   B. **Gypsum Board** – Two layers of nom 5/8 in. (16 mm) thick gypsum board, as specified in the individual Wall and Partition Design. Max diam of opening is 12-3/4 in. (324 mm).

2. **Through-Penetrant** – One metallic pipe or tubing installed concentrically or eccentrically within opening. Annular space between penetrant and periphery of opening shall be min of 0 in. (0 mm) (point contact) to max 2 in. (51 mm). Penetrant to be rigidly supported on both sides of wall assembly. The following types and sizes of penetrants may be used:
   A. **Steel Pipe** – Nom 10 in. (254 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. **Iron Pipe** – Nom 10 in. (254 mm) diam (or smaller) cast or ductile iron pipe.
   C. **Copper Tubing** – Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tubing.
   D. **Copper Pipe** – Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.

The Hourly T Rating is 2 Hr for penetrants A and B. The Hourly T Rating is 1-1/4 Hr for penetrants C and D.

3. **Firestop System** – The firestop system shall consist of the following:
   A. **Fill, Void or Cavity Materials** – Min 5/8 in. (16 mm) thickness of caulk or putty applied within the annulus, flush with both surfaces of wall.
      3M COMPANY – CP 25WB+ caulk, MP+ putty or FB-3000 WT sealant
   B. **Duct Wrap Material** – Nom 2 in. (51 mm) thick duct wrap tightly wrapped around penetrant, butted to wall and extending 24 in. (610 mm) beyond both surfaces of wall. Longitudinal seams sealed with foil tape.
      3M COMPANY – FireBarrier Duct Wrap 20A, 615 or 615+

*Bearing the UL Classification Mark*