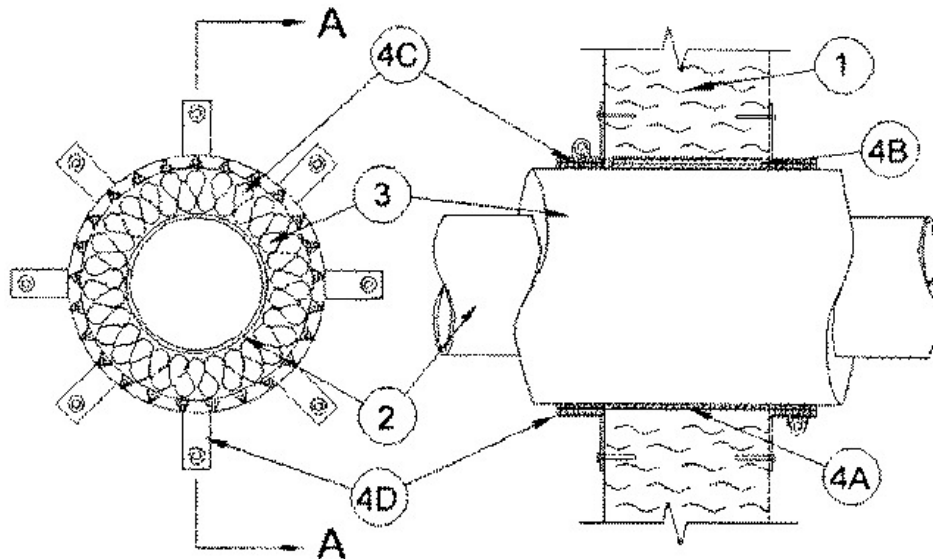


F Ratings — 1 and 2 Hr (See Item 1)  
T Ratings — 0 and 3/4 Hr (See Item 1)



**Section A-A**

**1. Wall Assembly** — The 1 or 2 hr fire rated composite wall assembly shall be constructed of nom 4 in. (102 mm) or 7 in. (178 mm) thick, respectively, galvanized steel or painted galvanized steel faced **Partition Panel Units\*** (CJMR) installed in the manner specified in Wall and Partition Design No. U050 in the Fire Resistance Directory. Max diam of opening is 11-3/4 in. (298 mm). Opening can be located on or off panel unit joints.

**The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed. The hourly T Rating of the firestop system is 0 hr for 1 hr fire rated walls and 3/4 hr for 2 hr fire rated walls.**

**MBCI** — Eco-Ficient Partition Units

**METL-SPAN, A DIVISION OF NCI GROUP, INC.** — ThermalSafe Partition Units

**2. Through-Penetrants** — One metallic pipe or tube to be installed eccentrically or concentrically within the opening. Pipe or tube to be rigidly supported on both sides of the wall assembly. The following types and sizes of metallic pipes 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) cast or ductile iron pipe.
- C. **Copper Tubing** — Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing.
- D. **Copper Pipe** — Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.

**3. Tube Insulation - Plastics+** — Nom 1 in. (25 mm) thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing. The annular space shall be min 1/4 in. (6 mm) to max 1/2 in. (13 mm).

See **Plastics+** (QMFZ2) category in the 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 pcf (64 kg/m<sup>3</sup>) mineral wool batt insulation firmly packed into opening as a permanent form. Min 3-1/4 in. (83 mm) and min 6-1/4 in. (159 mm) thickness required for 1 hr and 2 hr fire rated walls, respectively. Packing material may be recessed from one or both surfaces of wall to accommodate the thickness of the optional fill material (Item 4B).

B. **Fill, Void or Cavity Material\* — Sealant** — (Optional) - Nom 3/8 in. (10 mm) thickness of fill material applied within the

annulus, flush with one or both wall surfaces.

See **Fill, Void or Cavity Material** (XHHW) category in the Fire Resistance Directory for the names of manufacturers. Any sealant or caulk material meeting the above specification and bearing the UL Classification Marking may be used.

**C. Fill, Void or Cavity Material\* — Wrap Strip** — Nom 1/4 in. (6 mm) thick by 2 in. (51 mm) wide intumescent wrap strip. Two layers of wrap strip are individually or continuously wrapped around the insulated through-penetrant. Ends of individual layers are butted and held in place with masking tape, and butted ends in successive layer shall be offset. Wrap strip butted tightly against both surfaces of wall.

**RECTORSEAL** — [Metacaulk Wrap Strip](#)

**D. Steel Collar** — Collar fabricated from coils of precut min 0.016 in. (0.41 mm) thick (No. 28 gauge) galv steel available from wrap strip manufacturer or field assembled. Collar shall be nom 2 in. (51 mm) deep with 1 in. (25 mm) wide by 1-1/2 in. (38 mm) long anchor tabs on 4 in. (102 mm) centers for securement to both surfaces of wall. In addition, collars contain retainer tabs 1/2 in. (13 mm) wide by 3/4 in. (19 mm) long, located opposite the anchor tabs. Collar shall be wrapped over the wrap strip, overlapping min 1 in. (25 mm) and secured with a nom 1/2 in. (13 mm) wide stainless steel band clamp. The retainer tabs are folded 90 deg towards the pipe to maintain the annular space around the pipe and to retain the wrap strip. Collar secured to both surfaces of wall at each anchor tab by means of min No. 12 sheet metal screws in conjunction with 1-1/4 in. (32 mm) diam fender washers.

\*,+ 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