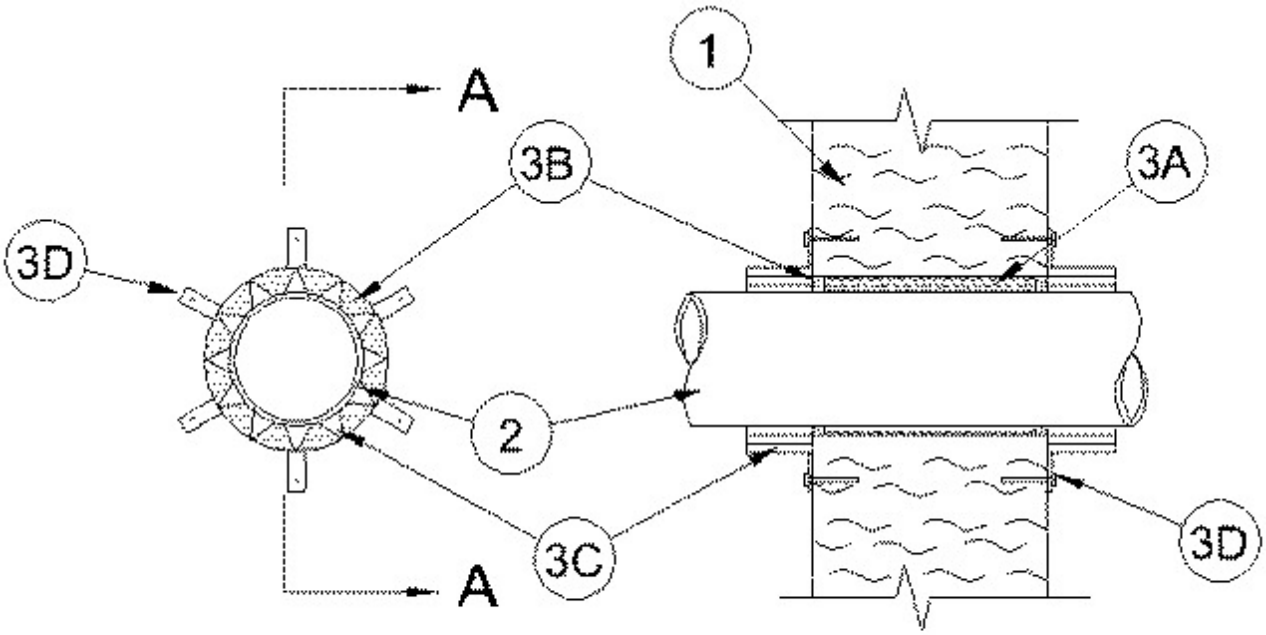
System No. W-N-2001

September 16, 2005

F Ratings — 1 and 2 Hr (See Item 1)

T Ratings — 1 and 2 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 7-5/8 in. (194 mm). Opening can be located on or off panel unit joints.

The F and T Ratings of the firestop system are equal to the hourly fire rating of the wall assembly in which it is installed.

METL-SPAN L L C — ThermalSafe Partition Units

2. **Through-Penetrants —** One nonmetallic pipe or tube to be installed eccentrically or concentrically within the opening. The annular space between the penetrant and the periphery of the opening shall be min 1/4 in. (6 mm) to max 1/2 in. (13 mm). Pipe or tube to be rigidly supported on both sides of the wall assembly. The following types and sizes of nonmetallic pipes or tubing may be used:

A. **Polyvinyl Chloride (PVC) Pipe —** Nom 6 in. (152 mm) diam (or smaller) Schedule 40 solid or cellular core PVC for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

B. **Chlorinated Polyvinyl Chloride (CPVC) Pipe —** Nom 6 in. (152 mm) diam (or smaller) SDR 13.5 CPVC pipe for use in closed (process or supply) piping systems.

C. **Acrylonitrile Butadiene Styrene (ABS) Pipe —** Nom 6 in. (152 mm) diam Schedule 40 solid or cellular core ABS pipe for use in closed (process or supply) or vented (drain, waste or

vent) piping systems.

D. **Flame Retardant Polypropylene (FRPP) Pipe —** Nom 4 in. (102 mm) diam Schedule 40 FRPP pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

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

A. **Packing Material —** Min 4 pcf (64 kg/m^3) 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 3B).

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. Layers of wrap strip are individually or continuously wrapped around the 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. See Table below for number of layers of wrap strip required.

RECTORSEAL — Metacaulk Wrap Strip

Max Pipe Diam, In. (mm)	No. of Layers of Wrap Strip Required
6 (152)	4
4 (102)	3
2 (51)	2

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 hose 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.

*Bearing the UL Classification Mark