

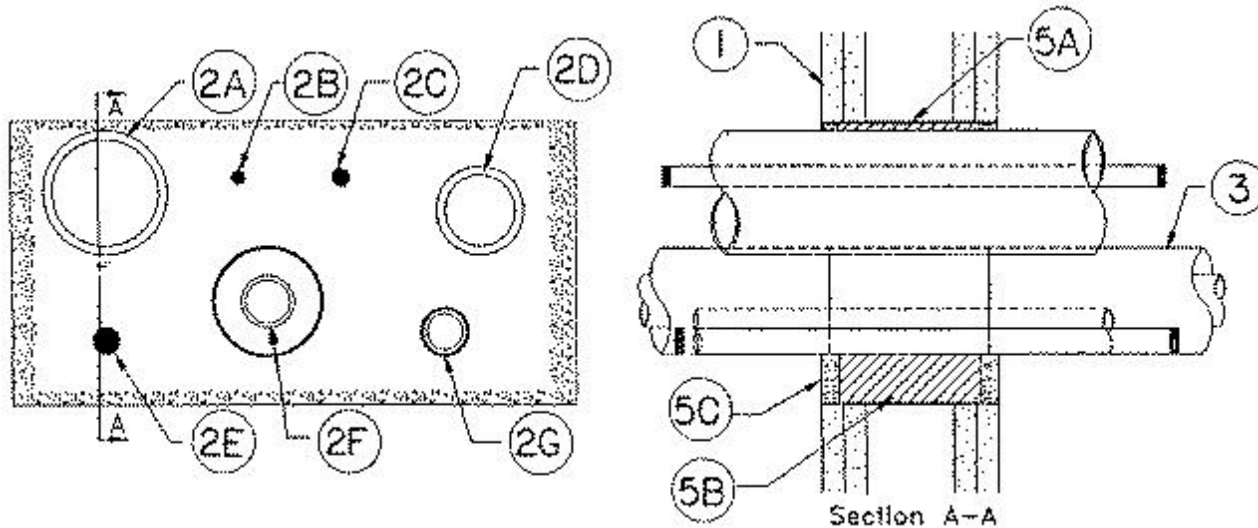
System No. W-L-8001

December 20, 2000

(Formerly System No. 445)

F Rating — 2 Hr

T Rating — 1/4 Hr



1. **Wall Assembly** — The fire-rated gypsum wallboard/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. lumber spaced 16 in. OC. Steel studs to be min 2-1/2 in. wide and spaced max 24 in. OC.

B. **Gypsum Board*** — Two layers of nom 5/8 in. thick gypsum wallboard, as specified in the individual Wall and Partition Design. Max area of opening is 128 sq in. with max dimension of 16 in. Max width of opening in wood stud walls is limited to 14-1/2 in.

2. **Through Penetrants** — The following types and sizes of pipes, conduits, tubing or cables may be used:

A. Nom 3 in. diam (or smaller) electrical metallic tubing (EMT).

B. Max 25 pair — No. 24 AWG (or smaller) telephone cable with polyvinyl chloride (PVC) insulation and jacket.

C. Max 3/C with ground — No. 10 AWG (or smaller) Type NM cable with PVC insulation and jacket.

D. Nom 2 in. diam (or smaller) Schedule 40 PVC pipe for use in closed (process or supply) piping systems only.

E. Nom 2 in. diam (or smaller) SDR 17 CPVC pipe for use in closed (process or supply) piping systems.

F. Max 300 kcmil (or smaller) power cable with PVC insulation and nylon jacket.

G. Nom 1-1/2 in. diam (or smaller) Type L (or heavier) copper pipe.

H. Nom 1 in. diam (or smaller) Schedule 40 polybutylene pipe for use in closed (process or supply) piping systems only.

The through penetrating items to be rigidly supported on both sides of wall assembly and located as shown in the table below:

Item No.	Max Distance Between Adjacent Pen. Item In.	Min Distance Between Adjacent Pen. Item In.	Max Distance From Through Opening In.	Min Distance From Through Opening In.
2A	7-7/16	1-11/16	7-7/16	1/2
2B	7-7/16	1-11/16	7-7/16	1/2
2C	7-7/16	1-11/16	7-7/16	1/2
2D	7-7/16	1-11/16	7-7/16	1/2
2E	7-7/16	1-11/16	7-7/16	1/2
2F	7-7/16	1-11/16	7-7/16	1-1/2
2G	7-7/16	1-11/16	7-7/16	1/2
2H	7-7/16	1-11/16	7-7/16	1/2

3. Tube Insulation — Plastics + — Nom 1/2 in. thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing or sheets with skin.

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. Fill, Void or Cavity Material* — Wrap Strip — (Not Shown) — One layer of nom 1/4 in. thick by 1 in. wide intumescent wrap strip wrapped around pipe (Item 2H) or Tube Insulation (Item 3) with ends butted. Wrap strip secured with one soft No. 20 AWG steel wire. One wrap strip to be installed on each side of wall, such that approx 3/8 in. of wrap strip protrudes from each surface of wall.

RECTORSEAL — Metacaulk Wrap Strip

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

A. Steel Wire Mesh — No. 8 steel wire mesh having a min 1 in. lap along the longitudinal seam. Length of steel wire mesh to be 4-3/4 in., centered and formed to fit periphery of through opening.

B. Packing Material — Min 4.0 in. thickness of min 3.5 pcf mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from both surfaces of wall as required to accommodate the required thickness of fill material.

C. Fill, Void or Cavity Material* — Caulk — Min 1/2 in. thickness of fill material applied within the annulus, flush with both surfaces of wall.

RECTORSEAL — Metacaulk 950

+ Bearing the UL Recognition Marking

*Bearing the UL Classification Mark