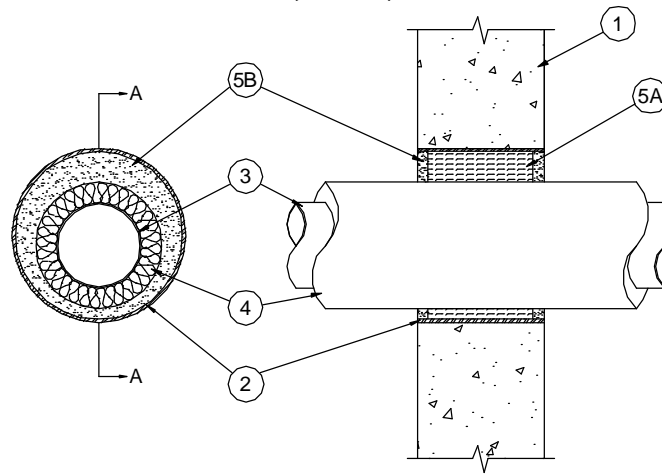


## System No. W-J-5091

August 2008  
F Rating — 2 Hr  
T Rating — 3/4 Hr  
(UL/cUL)



SECTION A-A

- Wall Assembly** — Min 5 in. (127 mm) thick reinforced lightweight or normal weight (100-150 pcf (1600-2400 kg/cu meter)) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks\***. Max diam of sleeved opening is 8 in. (203 mm).  
See **Concrete Blocks (CAZT)** category in the Fire Resistance Directory for names of manufacturers.
- Steel Sleeve** — Schedule 10 (or heavier) steel pipe sleeve cast or grouted into opening, flush with both surfaces of the wall.
- Through Penetrants** — One metallic pipe or tubing to be installed either concentrically or eccentrically within the firestop system. Pipe or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes or tubing may be used:
  - Steel Pipe** — Nom 6 in. (152 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
  - Iron Pipe** — Nom 6 in. (152 mm) diam (or smaller) cast or ductile iron pipe.
  - Copper Tubing** — Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tubing.
  - Copper Pipe** — Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.
- Pipe Covering\*** — Nom 1 in. (25 mm) thick hollow cylindrical heavy density (min 3.5 pcf (56 kg/cu. meter)) glass fiber units jacketed on the outside with an all-service jacket. Longitudinal joints sealed with metal fasteners or factory applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product. The annular space between pipe covering and steel sleeve shall be min 1/4 in. (6 mm) to max 1-1/2 in. (38 mm).  
See **Pipe and Equipment Covering Materials (BRGU)** category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classified Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.
- Firestop System** — The firestop system shall consist of the following:
  - Packing Material** — Min 4 in. (102 mm) thickness of min 4 pcf (64 kg/cu. meter) mineral wool batt insulation firmly packed into the opening as a permanent form. Packing material to be recessed from both surfaces of wall to accommodate the required thickness of fill material.
  - Fill, Void or Cavity Materials\* - Sealant** — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with both surfaces of the wall.**TREMCO INC** — TREMstop Acrylic, TREMstop Intumescent Acrylic, Fyre-Sil, FyreCaulk, or TREMstop IA+

\*Bearing the UL Classification Mark



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