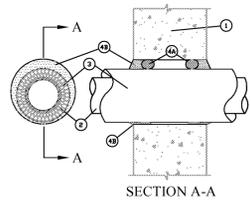
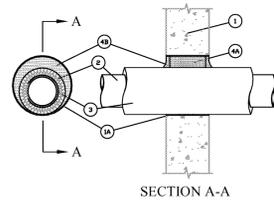


System No. W-J-5096
November 30, 2004
F Rating -- 2 Hr
T Ratings -- 0, 1/2 and 1 Hr (See Item 5)
Leakage Rating at Ambient -- Less Than 1 CFm/sq ft

SECTION A-A
CONFIGURATION A SECTION A-A
CONFIGURATION B

- Wall Assembly -- Min 6 in. (152 mm) thick reinforced lightweight or normal weight (100–150 pcf (1600–2400 kg/m³) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 12 in. (305 mm).
See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
1A. Steel Sleeve -- (See Table in Item 4.) Nom. 8 in. (203 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe sleeve friction fit in wall assembly, or max 12 in. (305 mm) diam cylindrical sleeve fabricated from min 0.013 in. (0.33 mm) to max 0.056 in. (1.4 mm) thick galv steel sheet and having a min 1 in. (25 mm) lap along the longitudinal seam. Length of sleeve flush with both walls. Cylindrical sleeve to be installed by coiling the sheet metal to a diam smaller than the through opening, inserting the coil through the opening and releasing the coil to let it uncoil against the circular cutout in 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 of 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 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.
- Pipe Covering* -- Nom 1 in. (25 mm) thick hollow cylindrical heavy density (min 3.5 pcf or 56 kg/m³) 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. See Table in Item 4 for annular space required between insulated penetrant and periphery of opening.
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 Classification 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:
A. Packing Material -- (Optional, See Table in Item 4) -- Foam backer rod firmly packed into the 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.
A1. Packing Material -- (See Table in Item 4) Min 4 pcf (64 kg/m³) 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.
B. Fill, Void or Cavity Material* -- Caulk -- Fill material applied within the annulus, flush with both surfaces of wall or overlapping min 1/4 in. onto wall surfaces when the steel sleeve is used. See Table below for min. thickness of fill material. Additional fill material to be installed such that a min. 3/8 in. (10 mm) crown is formed around the penetrating item.

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See UL Fire Resistance Directory for additional information. (UL/CUL)

1 INSULATED STEEL, IRON OR COPPER PIPE PENETRATION THROUGH CONCRETE OR CMU WALL (1 of 2)
SCALE: NONE

System No. W-J-5096
November 30, 2004
F Rating -- 2 Hr
T Ratings -- 0, 1/2 and 1 Hr (See Item 5)
Leakage Rating at Ambient -- Less Than 1 CFm/sq ft

Sleeve	Packing Matl	Min Annular	Max Annular	Min Fill Matl Thick	T Rating
None	Opt Foam Backer	1/4 in.	1–1/4 in.	1 in.	1 hr
Sch 10	Mineral Wool	0 in. (point contact)	1–9/16 in.	1/2 in.	0 hr
Cylindrical	Mineral Wool	0 in. (point contact)	1–9/16 in.	1/2 in.	0 hr
Cylindrical	Opt Foam Backer	0 in. (point contact)	1–3/8 in.	5/8 in.	1/2 hr

*Bearing the UL Classification Mark

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See UL Fire Resistance Directory for additional information. (UL/CUL)

1 INSULATED STEEL, IRON OR COPPER PIPE PENETRATION THROUGH CONCRETE OR CMU WALL (2 of 2)
SCALE: NONE



REVISIONS:

DATE:
AUGUST 28, 2012

DRAWN BY:
AMB

SHEET TITLE:
DETAILS –
PLUMBING

SHEET NO:

P3.4