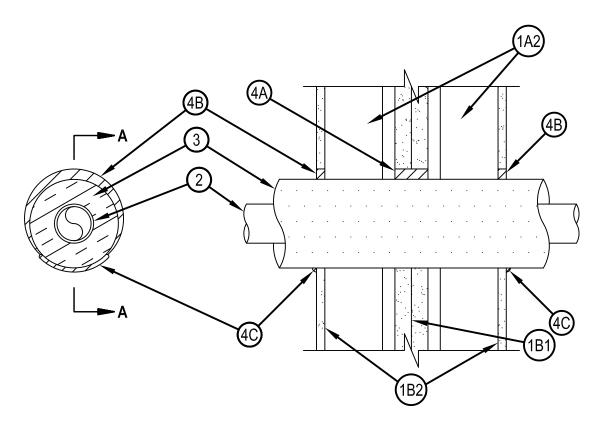


System No. W-L-5259

| ANSI/UL1479 (ASTM E814) | CAN/ULC S115 | | |
|---|---|--|--|
| F Rating —2 Hr | F Rating —2 Hr | | |
| T Rating —2 Hr | FT Rating —2 Hr | | |
| L Rating At Ambient — Less Than 4 CFM/sq ft | FH Rating —2 Hr | | |
| L Rating At 400 F — Less Than 1 CFM/sq ft | FTH Rating —2 Hr | | |
| | L Rating At Ambient — Less Than 4 CFM/sq ft | | |
| | L Rating At 400 F — Less Than 1 CFM/sq ft | | |



- 1. Wall Assembly The 2 hr fire-rated gypsum board, steel and wood stud wall assembly shall be constructed of the materials and in the manner described in the U300 designs in the UL Fire Resistance Directory and shall include the following construction features:
 - A. Studs —
 - 1. Framing shall consist of steel members formed from No. 25 MSG galv steel having "H" shaped flanged spaced 24 in. (610 mm) OC.
 - 2. Framing shall consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced max 24 in. (610 mm) OC. Studs cross braced at mid-height where necessary for clip attachment.
 - B. Gypsum Board
 - 1. Gypsum board shall consist of two layers of 1 in. (25 mm) thick gypsum board liner panels, supplied in nom 24 in. (610 mm) widths.
 - 2. Gypsum board shall consist of Classified or Unclassified Min 1/2 in. (13 mm) thick, 4 ft. (1219 mm) wide, applied either horizontally or vertically.

Max diameter of opening is 6 in. (152 mm).



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- 2. Through Penetrant One metallic pipe or tubing installed 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:
 - A. Steel Pipe Nom 2 in. (51 mm) diam (or smaller) Schedule 5 (or heavier) steel pipe.
 - B. Iron Pipe Nom 2 in. (51 mm) diam (or smaller) cast or ductile iron pipe.
 - C. Copper Tubing Nom 2 in. (51 mm) diam (or smaller) Type L (or heavier) copper tubing.
 - D. Copper Pipe Nom 2 in. (51 mm) diam (or smaller Regular (or heavier) copper pipe.
- 3. Pipe Covering* Nom 1-1/2 in. (38 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. The annular space between the insulated pipe or tubing and periphery of the opening shall be min. 0 in. (point contact) to max 7/8 in. (22 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 Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.
- 4. Firestop System The firestop system shall consist of the following:
 - A. Fill, Void or Cavity Material*— Sealant Min 2 in. (51 mm) depth of fill material applied within annulus on outer gypsum liner sides flush with outer layers of gypsum liner.
 - B. Fill, Void or Cavity Material* Sealant Min 1/2 in. (13 mm) depth of fill material applied within annulus flush with outer surfaces of gypsum board.
 - C. Fill, Void or Cavity Material*— Sealant Min 1/4 in. (6 mm) bead of fill material applied at interface of outer layers of gypsum board and penetrant (point contact).

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant or FS-ONE MAX Intumescent Sealant

| Indicates such products shall bear the UL or cUL | Certification Mark for | jurisdictions (| employing the UI | _ or cUL (| Certification | such as | Canada) |
|--|------------------------|-----------------|------------------|------------|---------------|---------|---------|
| espectively. | | | | | | | |

