



Classified by  
Underwriters Laboratories, Inc.  
to CAN/ULC-S115

## System No. W-J-1299

F Rating - 2 Hr

FT Rating - 0 Hr

FH Rating - 0 Hr

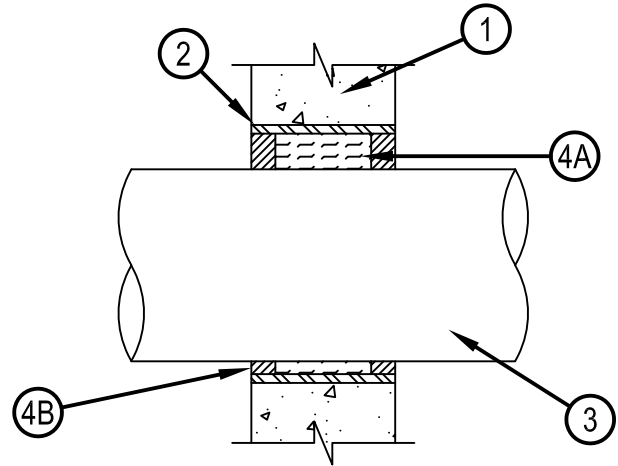
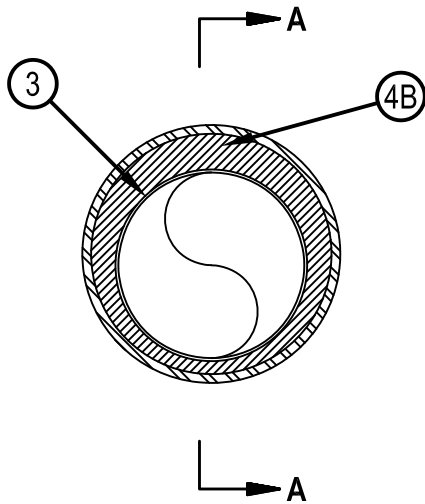
FTH Rating - 0 Hr

L-RATING AT AMBIENT = LESS THAN 5.1 L/s/m<sup>2</sup>

L-RATING AT 204 C = LESS THAN 5.1 L/s/m<sup>2</sup>



WJ 1299



**SECTION A-A**

1. Wall Assembly — Min 6 in. (152 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m<sup>3</sup>) concrete Wall may also be constructed of any UL Classified Concrete Blocks\*. Max diam of opening is 10 in. (254 mm).  
See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Steel Sleeve — (Optional) — Max 10 in. (254 mm) cylindrical sleeve fabricated from min 28 gauge galv sheet steel and having a min 2 in. (51 mm) lap along the longitudinal seam. Length of steel sleeve to be equal to the overall thickness of the wall. Sleeve installed by coiling the sheet steel to a diam smaller than the through opening, inserting the coil through the openings and releasing the coil to let it uncoil against the circular cutouts.
3. Through Penetrants — One nom 8 in. (203 mm) aluminum tubing with a min 0.060 in. wall thickness to be installed either concentrically or eccentrically within the firestop system. Tubing to be rigidly supported on both sides of wall assembly. The annular space between the tubing and sleeve or wall shall be min 1/2 in. (13 mm) to max 1-1/2 in. (64 mm).
4. Firestop System — The firestop system shall consist of the following:
  - A. Packing Material — Min 4 in. thickness of min 4.0 pcf (64 kg/m<sup>3</sup>) 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\* — Sealant — Min 1 in. (25 mm) thickness of tightly packed fill material applied within the annulus, flush with the ends of the steel sleeve or wall assembly.  
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE MAX Intumescent Sealant

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.



**Hilti Firestop Systems**

Reproduced by HILTI, Inc. Courtesy of  
Underwriters Laboratories, Inc.  
September 10, 2018