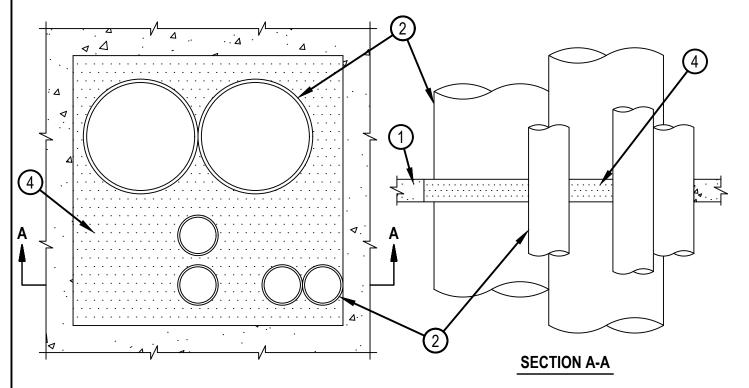


Classified by Underwriters Laboratories, Inc. to UL 1479 and CAN/ULC-S115

System No. C-AJ-1140

F Rating -- 3 Hr T Rating -- 0 Hr





- 1. Floor or Wall Assembly Min 2-1/2 in. (63 mm) thick reinforced lightweight or normal weight (100-150 pcf or1600-2400 kg/m3) concrete. Wall may also be constructed of any UL Classified Concrete Blocks *. Max area of opening is 1024 sq in. (.66 sq m) with max dimension of 32 in. (81.3 cm).
 - See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
- 2. Through Penetrants One or more penetrants to be installed in opening. Min clearance between pipes, conduits or tubing is 0 in. (0 mm). (point contact). Min clearance between pipes, conduit or tubing and periphery of through opening is 1 in. (25 mm). Min clearance between pipes, conduit or tubing and periphery of any single surface of through opening is 0 in. (point contact). Pipe, conduit or tubing to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
 - A. Steel Pipe Nom 12 in. (305 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - B. Conduit Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing or steel conduit.
 - 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.
- 3. Forms (Not Shown) Used as a form to prevent leakage of fill material during installation. Forms to be a rigid sheet material, cut to fit the contour of the penetrating item and positioned as required to accommodate the required thickness of fill material. Forms may be removed after fill material has cured.
- 4. Firestop System The details of the firestop system shall be as follows:
 - A. Packing Material (Optional, Not Shown) For floors greater than 2-1/2 in. (63 mm) thick, mineral wool batt insulation firmly packed into opening as a permanent or temporary form and recessed from the top surface of floor to accommodate the required thickness of the fill material.
 - B. Fill, Void or Cavity Material* Mortar Min 2-1/2 in. (63 mm) thickness of fill material applied within the annulus. Fill material is mixed at a rate of 2.5 parts dry mix to one part water by weight in accordance with the installation instructions supplied with fill material. HILTI CONSTRUCTION CHEMICALS, DIV OF
 - HILTI INC Type CP636 or CP637
- *Bearing the UL Classification Mark

