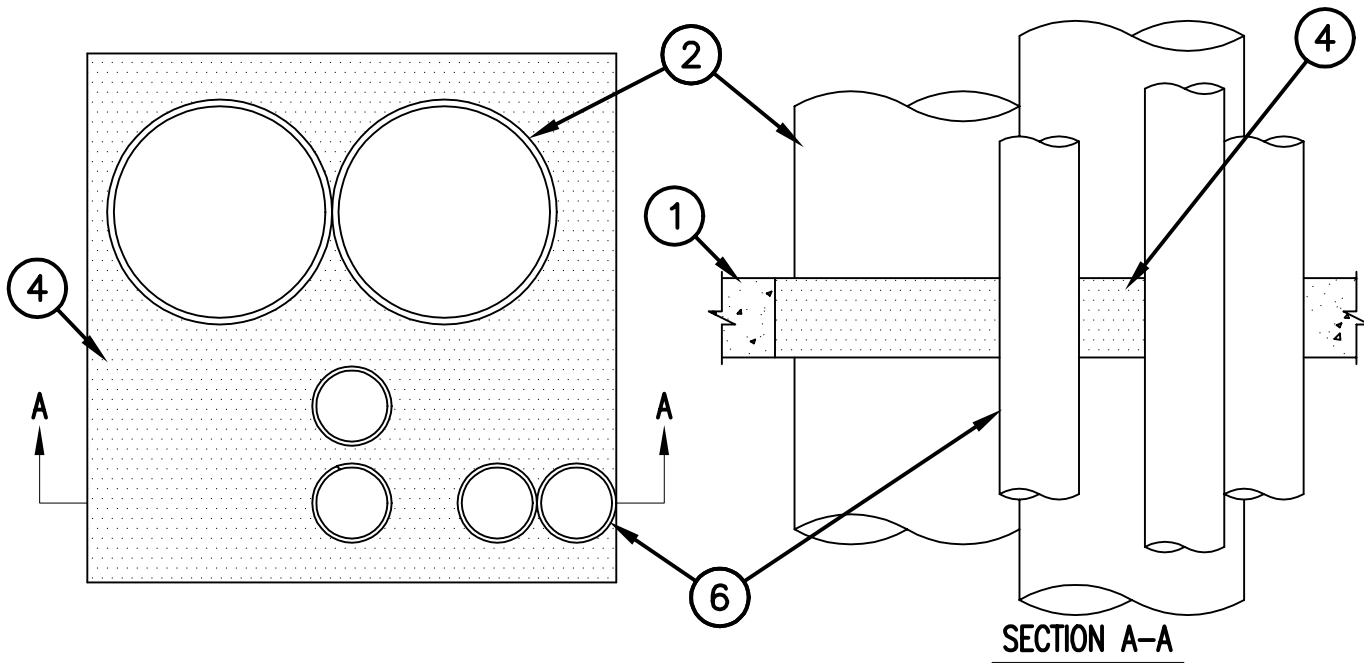


System No. C-AJ-1140

F Rating - 3 Hr

T Rating - 0 Hr



1. Floor or Wall Assembly -- Min 2-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified Concrete Blocks *. Max area of opening is 1024 sq in. with max dimension of 32 in.
See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Through Penetrants -- Min clearance between pipes, conduits or tubing is 0 in. (point contact). Min clearance between pipes, conduit or tubing and periphery of through opening is 1 in. 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. diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - B. Conduit -- Nom 4 in. diam (or smaller) steel electrical metallic tubing or steel conduit.
 - C. Copper Tubing -- Nom 4 in. diam (or smaller) Type L (or heavier) copper tubing.
 - D. Copper Pipe -- Nom 4 in. 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. Fill, Void or Cavity Material* -- Mortar -- Min 2-1/2 in. 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 FS635, CP636 or CP637
*Bearing the UL Classification Mark



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