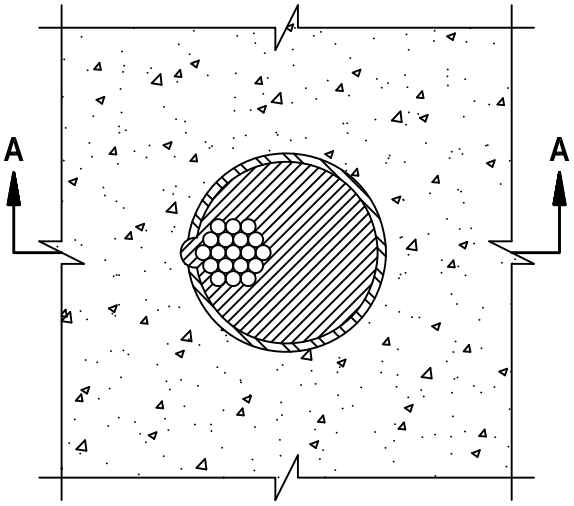
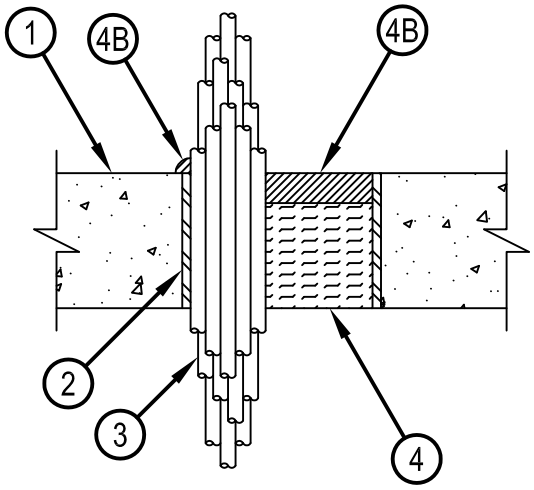
Classified by
Underwriters Laboratories, Inc.
to UL 1479 and CAN/ULC-S115

System No. C-AJ-3208

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





SECTION A-A

1. Floor or Wall Assembly -- Min 4-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diameter of opening is 6 in.
   See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Nonmetallic Sleeve -- (Optional)--Nom 6 in. diam (or smaller) Schedule 40 (or heavier) solid or cellular core polyvinyl chloride (PVC) sleeve cast or grouted into floor or wall assembly, flush with floor or wall surfaces.
3. Cables -- Aggregate cross-sectional area of bundled cables in opening to be max 60 percent of the cross-sectional area of the opening. The annular space between the cable bundle and the periphery of the opening or sleeve to be min 0 in. (point contact) to max 1 in. Cables to be rigidly supported on both sides of the floor or wall assembly. Any combination of the following types and sizes of cables may be used:
   A. Max 300 pair No. 24 AWG telephone cable with polyvinyl chloride (PVC) insulation and jacket.
   B. Max 750 kcmil single copper connector power cable with thermoplastic insulation and PVC jacket.
   C. Max 7/C No. 12 AWG multiconductor power and control cable with PVC or cross-linked polyethylene (XLPE) insulation and PVC jacket.
   D. Multiple fiber optical communication cable jacketed with PVC and having a max outside diameter of 1/2 in.
   E. Max 3/C No. 12 AWG with bare aluminum ground, PVC insulated steel Metal-Clad cable.
   F. Max 1 in. diam metal clad TEK cable with PVC jacket.
   G. Max 3/C with ground 2/0 AWG copper conductor SER cable with cross-linked polyethylene (XLPE) insulation and polyvinyl chloride (PVC) jacket.
   H. RG/U coaxial cable with polyethylene (PE) insulation and polyvinyl chloride (PVC) jacket having a max outside diameter of ½ in.
4. Firestop System -- The firestop system shall consist of the following:
   A. Packing Material -- Min 3-1/2 in. thickness of min 4 pcf mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or both sides of wall as required to accommodate the required thickness of fill material.
   B. Fill Void or Cavity Materials* -- Putty -- Min 1 in. thickness of fill material applied within the annulus, flush with top surface of floor and both surfaces of wall. At point contact location between penetrant and sleeve or concrete, min ½ in. diam bead of fill material applied at bundle/sleeve or bundle/concrete interface on top surface of floor or both surfaces of wall.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC -- CP618 Firestop Putty Stick

*Bearing the UL Classification Mark