



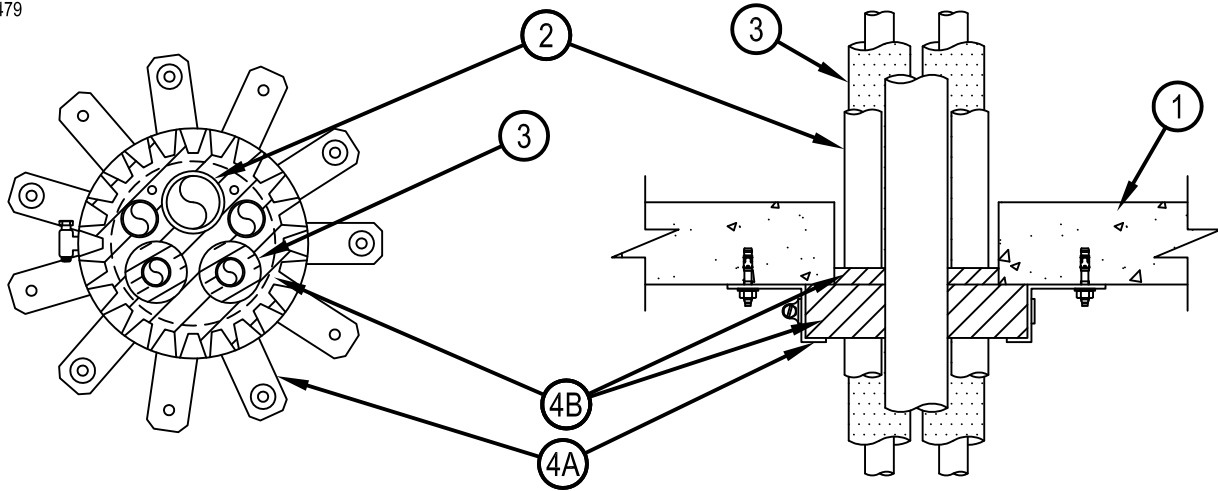
Classified by
Underwriters Laboratories, Inc.
to UL 1479

System No. C-AJ-8058

F Rating -- 2 Hr

T Rating -- 0 Hr

CAJ 8058



SECTION A-A

1. Floor or Wall Assembly — Min 2-1/2 in. (64 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 5 in. (127 mm).

See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.

2. Through Penetrants — The through penetrants shall consist of a max of two nom 1 in. (25 mm) diam copper tubes, a max of two nom 3/4 in. (19 mm) diam insulated copper tubes, one nom 1-1/2 in. (38 mm) diam PVC closed or vented pipe and two cables, all tightly bundled. The following types and sizes of penetrants may be used:

A. Copper Tube — Nom 1 in. (25 mm) diam (or smaller) Type L (or heavier) copper tube.

B. Copper Tube — Nom 3/4 in. (19 mm) diam (or smaller) Type L (or heavier) copper tube.

C. Polyvinyl Chloride (PVC) Pipe — Nom 1-1/2 in. (38 mm) diam (or smaller) Schedule 40 solid core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

D. Cables — 4 pair No. 18 AWG (or smaller) cable with PVC insulation and jacket.

3. Tube Insulation-Plastic+ — Nom 1/2 in. (13 mm) thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing.

See Plastics+ (QMFZ2) category in the Plastics Recognized Component Directory for names of manufacturers. Any Recognized Component tube insulation material meeting the above specifications and having a UL 94 Flammability Classification of 94-5VA may be used.

4. Firestop System — The firestop system shall consist of the following:

A. Steel Collar — Collar fabricated from coils of precut min 0.017 in. thick (No. 28 MSG) galv steel available from the sealant manufacturer.

Collar shall be nom 1-3/4 in. (44 mm) deep with 1 in. (25 mm) wide by 2 in. (51 mm) long anchors tabs on 2 in. (51 mm) centers for securement to floor or wall assembly. The opposite side incorporates retainer tabs, 1/2 in. (13 mm) wide by 3/16 in. (5 mm) long, prebent toward the pipe surface. Collar shall be 1 in. (25 mm) larger than diameter of opening, and overlapping min 1 in. (25 mm) at seam. Collar secured to concrete slab with 1/4 in. (6 mm) diam by 1-3/4 in. (44 mm) long steel expansion type masonry fasteners or 0.145 in. diam by 1-1/4 in. (32 mm) long powder actuated fasteners utilizing a 1-7/16 in. (36.5 mm) diam by 1/16 in. (1.6 mm) thick steel washer. In floor assemblies, one collar to be used at the bottom of the concrete floor only. In wall assemblies, a collar is used on both surfaces. After sealant is installed (Item 4B), the collar shall be compressed around the pipe using a 1/2 in (13 mm) wide by 0.028 in. thick stainless steel band clamp fastened at the collar mid-height.

B. Fill, Void or Cavity Material* — Sealant — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus flush with the bottom of floor or both surfaces of wall, with fill material forced into the interstices within the group of penetrating items to max extent possible. The steel collar shall also be completely filled with sealant.

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

*Bearing the UL Classification Marking

+Bearing the UL Recognized Component Mark



Hilti Firestop Systems

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