

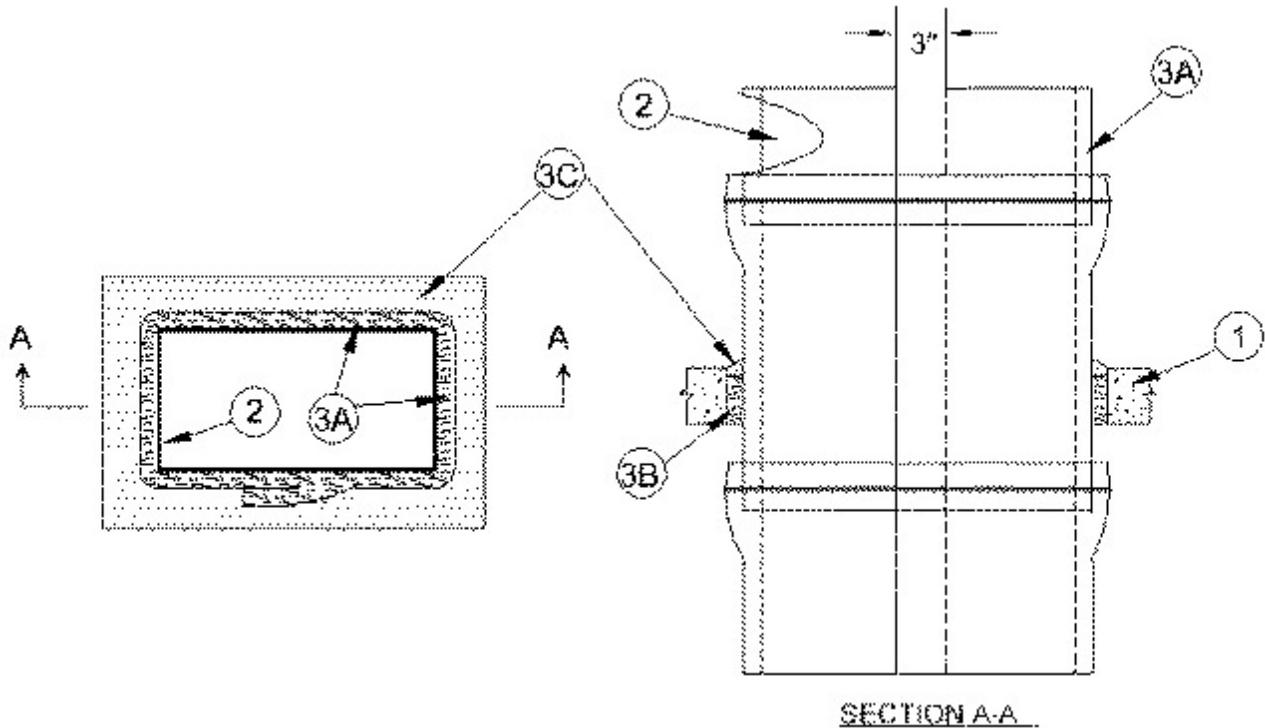


System No. C-AJ-7095

June 03, 2008

F Rating — 2 Hr

T Rating — 2 Hr



1. **Floor or Wall Assembly** — Min 4-1/2 in. thick reinforced normal weight (140-150 pcf) concrete floor or min 4-3/4 in. thick reinforced normal weight concrete wall. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max area of opening is 912 sq in. with max dimension of 48 in.

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

2. **Through-Penetrant** — One steel duct to be installed within the firestop system. Duct to rigidly supported on both sides of floor or wall assembly. The following types of through-penetrants may be used:

A. **Steel Air Duct** — Min 0.030 in. (22 gauge) thick (or heavier) steel duct having a max width to height ratio of 4 to 1 with max individual dimension of 39 in and constructed in accordance with SMACNA HVAC Duct Construction standards. The sections shall be assembled using bolted flanges or SMACNA approved Transverse Joint Reinforcements. Reinforcement to consist of min 1-1/2 by 1-1/2 by 1/8 in. thick transverse stiffening angles, approximately 2 in. less in length than the max dimension, screw attached 8 in. OC to the duct 3 in. beyond the top surface of the floor and both surfaces of the wall.

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

A. **Duct Wrap Materials*** — Nom 1-1/2 in. thick, 6 pcf, ceramic blanket totally encapsulated within foil-scrim facers. The steel duct shall be wrapped with one layer of duct wrap installed in accordance with the Ventilation Assembly No. V-19. See Ventilation Duct Assemblies in Vol. 2 of the Fire Resistance Directory. A nom annular space of 3 in. is required between the insulated duct and the periphery of the opening.

THERMAL CERAMICS INC — FireMaster FastWrap+ or FireMaster FastWrap XL

B. Packing Material — Min 4 in. thickness of unfaced scrap duct wrap material or min 3 pcf mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from the top surface of the floor or both surfaces of wall as required to accommodate the required thickness of fill material.

C. Fill Void or Cavity Material* — Sealant — Min 1/4 in. thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall.

HILTI CONSTRUCTION CHEMICALS, DIV OF

HILTI INC — FS ONE Sealant

RECTORSEAL — 835+ Sealant

SPECIFIED TECHNOLOGIES INC — Pensil 300

TREMCO INC — Fyre-Sil Sealant or Fyre-Sil S/L Sealant (for floor assemblies only)

*Bearing the UL Classification Mark