

System No. C-AJ-2020

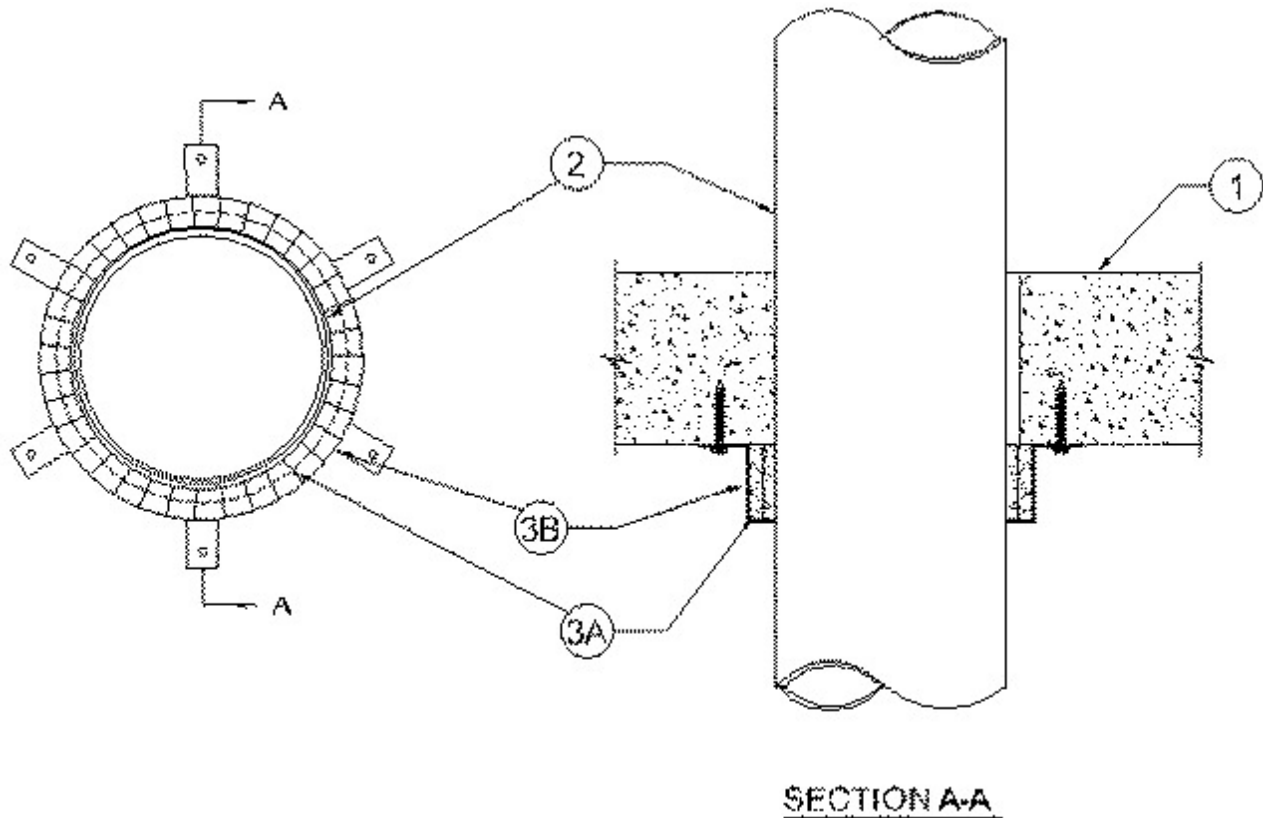
August 16, 2007

F Rating — 3 Hr

FT Rating — 3 Hr

FH Rating — 3 Hr

FTH Rating — 3 Hr



System tested with a pressure differential of 50 Pa between the exposed and the unexposed surfaces with the higher pressure on the exposed side.

1. **Floor or Wall Assembly** — Min 114 mm (4-1/2 in.) thick lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks***. Floor may also be constructed of any min 6 in. thick UL Classified hollow-core **Precast Concrete Units***. Max diam of opening 178 mm (7 in.).

See **Concrete Blocks (CAZT)** and **Precast Concrete Units* (CFTB)** categories in the Fire Resistance Directory for names of manufacturers.

2. **Through Penetrants** — One nonmetallic pipe to be installed eccentrically or concentrically within the firestop system. Pipe to be rigidly supported on both sides of wall assembly. The following types and sizes of nonmetallic pipes may be used:

A. **Polyvinyl Chloride (PVC) Pipe** — Nom 152 mm (6 in.) diam (or smaller) Schedule 40 cellular or solid core PVC pipe for use in vented (drain, waste or vent) piping systems.

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

A. **Fill, Void or Cavity Material*** — **Wrap Strip** — Nom 6 mm (1/4 in.) thick by 51 mm (2 in.) wide intumescent wrap strip individually wrapped around the outer circumference of the pipe with ends butted and held in place with masking tape. Butted ends in successive layers shall be

offset. Wrap strip tightly against the bottom surface of floor or both surfaces of wall. The pipe size, annular space and number of wrap strip layers are shown in the table below:

Nom Pipe Diam, mm (In.)	Annular Space, mm (In.)	No. of Wrap Strip Layers
153 (6) or smaller	0 to 8 (0-3/8)	3
102 (4) or smaller	0 to 13 (0-1/2)	2

RECTORSEAL — Biostop Wrap Strip

B. Steel Collar — Collar fabricated from coils of precut min 0.41 mm (0.016 in.) thick (No. 28 gauge) galv steel available from fill material manufacturer. Collar shall be nom 51 mm (2 in.) deep with 25 mm (1 in.) wide by 31 mm (1-1/4 in.) long anchor tabs on 4 in. centers for securement to the underside of floor or both surfaces of wall. In addition, collar contains retainer tabs 13 mm (1/2 in.) wide by 19 mm (3/4 in.) long, located opposite the anchor tabs. Collar shall be wrapped over the wrap strip, with ends overlapping min 25 mm (1 in.). For 152 mm (6 in.) diam pipes two revolutions of steel collar or 1 revolution of steel collar with a nominal 13 mm (1/2 in.) wide by 0.71 mm (0.028 in.) thick stainless steel hose clamp at mid-height is required. The retainer tabs are folded 90 deg towards the pipe to maintain the annular space around the pipe and to retain the wrap strip. Collar secured to bottom surface of the floor or both surfaces of wall at each anchor tab by means of min 6 mm (1/4 in.) diam by 31 mm (1-1/4 in.) long steel expansion bolts or steel Tapcon® concrete anchors in conjunction with 6 mm (1/4 in.) by 16 mm (5/8 in.) diam washers.

C. Fill, Void or Cavity Material* — Caulk — (Not Shown) - When hollow-core floors are used, a min 6 mm (1/4 in.) thickness of caulk shall be applied within the annulus, flush with the top surface of floor.

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* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.