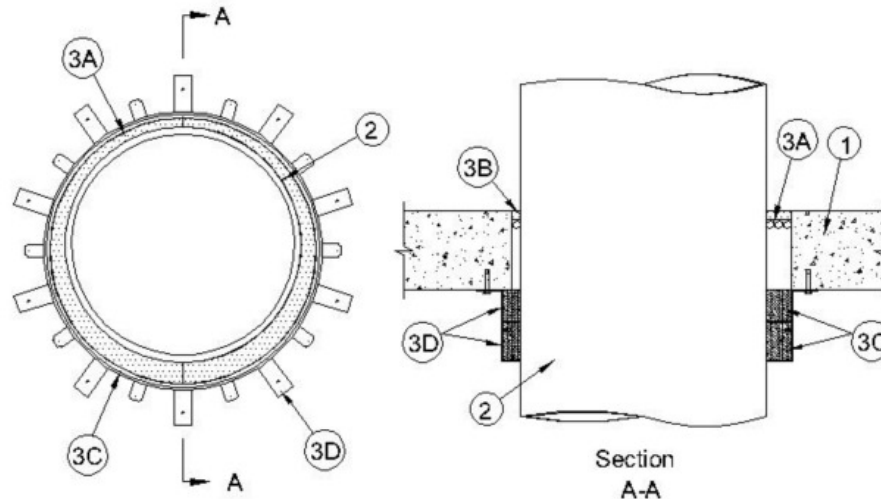


F Rating — 3 Hr
T Rating — 2-3/4 Hr
L Rating at Ambient — Less than 1 CFM/ft²
L Rating at 400° F — Less than 1 CFM/ft²



1. Floor or Wall Assembly — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Max diam of opening is 16 in. (406 mm).

2. Through Penetrant — One nom 14 in. (356 mm) diam (or smaller) Schedule 40 PVC pipe for use in closed (process or supply) or vented (drain, waste, or vent) piping systems. Pipe to be installed concentrically or eccentrically within the firestop system with a nom annular space of 1/2 in. (13 mm) to 1-1/2 in. (38 mm). Pipe to be rigidly supported on both sides of the floor or wall assembly.

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

A. Packing Material — Foam baker rod firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall to accommodate the required thickness of fill material.

B. Fill, Void or Cavity Material* — Sealant — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall.

RECTORSEAL — [Metacaulk 1000](#)

C. Fill, Void or Cavity Materials* - Wrap Strip — Two stacks of five layers each of nom 1/4 in. thick intumescent elastomeric material faced on one side with a plastic film, supplied in 2 in. wide strips. Strips tightly wrapped around nonmetallic pipe (film side exposed) with the edges butted against the underside of the concrete floor or both sides of wall surface. Butted ends in successive layers shall be offset. Wrap strip layers temporarily held in position using tape, wire or equivalent. Second stack of wrap strip to be tightly butted to first stack after the retaining tabs of the steel collar (Item 3D) over the first stack of wrap strip are bent 90 deg toward pipe.

RECTORSEAL — [Metacaulk Wrap Strip](#)

D. Steel Collar Assembly — One 1 in. (25 mm) and two 2 in. (51 mm) collars used for installation around the stacks of wrap strip layers. Collars fabricated from coils of precut min 0.016 in. (0.41 mm) thick (No. 30 MSG) galv sheet steel available from wrap strip. Collars provided with min 1 in. (25 mm) wide by 1-1/4 in. (32 mm) long anchor tabs on 4 in. (102 mm) centers for securement to underside of concrete floor and both sides of concrete wall. In addition, collars contain retainer tabs, 1/2 in. (13 mm) wide by 3/4 in. (19 mm) long located opposite the anchor tabs. The 1 in. (25 mm) wide collar shall be installed first over the wrap strip with ends overlapping min 1 in. (25 mm), flush with bottom of floor or both surfaces of wall. The retaining tabs on 1 in. (25 mm) wide collar are not to be bent. Collar secured to bottom surface of the floor or both surfaces of wall at each anchor tab by means of min 1/4 in. (6 mm) diam by 1-1/4 in. (32 mm) long steel expansion bolts or steel Tapcon® concrete anchors in conjunction with 1-1/4 in. (32 mm) diam fender washers. A 2 in. (51 mm) wide collar shall be wrapped over the 1 in. (25 mm) wide collar, flush with bottom surface of floor or both surfaces of wall, with ends overlapping min 1 in. (25 mm) secured with two 7/16 in. (11 mm) long steel screws. The retainer tabs are folded 90 deg towards the pipe to retain the first stack of wrap strip layers. The 2 in. (51 mm) wide collar to be fastened to the 1 in. (25 mm) collar with 7/16 in. (11

mm) long steel screws located approx 1/2 in. (13 mm) from floor or wall surface at the locations of each anchor tab on the 1 in. (25 mm) wide collar. The anchor tabs for the 2 in. (51 mm) wide collar are not secured to the floor. The other 2 in. (51 mm) wide is to be tightly wrapped around the second stack of wrap strip layers with ends overlapping min 1 in. (25 mm) secured with two 7/16 in. (11 mm) long steel screws. The retainer tabs are folded 90 deg towards the pipe to retain the second stack of wrap strip layers. The second 2 in. (51 mm) wide collar to be screwed to the first 2 in. (51 mm) collar with 7/16 in. (11 mm) long steel screws located through each anchor tab on the second 2 in. (51 mm) wide collar. A min 9/16 in. (14 mm) wide stainless steel hose clamp installed at base of the second 2 in. (51 mm) wide collar.

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

Reprinted from the Online Certifications Directory with permission from UL. ©UL LLC