1. **Floor or Wall Assembly** Min 4-1/2 in. thick lightweight or normal weight (100-150 pcf) concrete floor or min 5-1/2 in. thick reinforced lightweight or normal weight concrete wall. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 4 in.

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

2. **Non-metallic Tubing** Nom 1 in. diam (or smaller) SDR 9 crosslinked polyethylene (PEX) tubing for use in closed (process or supply) piping systems. Max 5 tubes to be bundled together within opening. Tubing to be installed either concentrically or eccentrically within the firestop system. The annular space between tubing and periphery of opening shall be min 0 in. (point contact) to max 2-7/8 in.

3. **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 surfaces of wall as required to accommodate the required thickness of fill material (Item 3B).

   B. **Fill, Void or Cavity Material* - Sealant** - Min 1 in. thickness of fill material applied within annulus, flush with top surface of floor or both surfaces of wall. Sealant to be forced into interstices of tubing group to max extent possible. At point contact location between tubing and concrete, a min 1/2 in. diam bead of fill material shall be applied at tubing/concrete interface on top surface of floor or both surfaces of wall.

   TREMCO INC – TREMstop Intumescent Acrylic, FyreCaulk, or TREMstop IA+

   *Bearing the UL Classification Mark

---

Reprinted from the Online Certifications Directory with permission from Underwriters Laboratories Inc. Copyright © 2019 Underwriters Laboratories Inc. ®