

- 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 floor or min 5 in. (127 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete wall. Floor may also be constructed of any min 6 in. (152 mm) thick UL Classified hollow core Precast Concrete Units\*. Wall may also be constructed of any UL Classified Concrete Blocks\*. Max diam of opening is 2-3/8 in. (19 mm).
- See Concrete Blocks (CAZT) and Precast Concrete Units (CFTV) categories in the Fire Resistance Directory for names of manufacturers. 2. Through Penetrants — One nonmetallic pipe to be installed concentrically or eccentrically within the firestop system. The annular space between the pipe and the periphery of the opening shall be a minimum of 0 in. (point contact) to a max of 5/8 in. (16 mm). Pipe to be rigidly supported on both sides of the floor or wall assembly. The following type and sizes of nonmetallic pipe may be used:
  - A. Polypropylene (PP) Pipe Nom 2 in. (50 mm) diam (or smaller) Aquatherm Fusiotherm SDR 11 PP pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.
  - B. Polypropylene (PP) Pipe Nom 2 in. (63 mm OD) diam (or smaller) Orion PolystarTM CT-White SDR 11, SDR 9 or SDR 7.4 PP pipe for use in closed (process or supply) piping systems.
- 3. Firestop System The firestop system shall consist of the following:
  - A. Fill, Void or Cavity Material\* Sealant Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with bottom surface of floor or both surfaces of wall assembly.
    - HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC FS-One Sealant or FS-ONE MAX Intumescent Sealant
    - B. Firestop Device\* Firestop Collar Firestop collar shall be installed in accordance with the accompanying installation instructions. Collar to be installed and latched around the pipe and secured to underside of floor or both sides of wall floor using the anchor hooks provided with the collar. (Minimum two anchor hooks for nom 1-1/2 and 2 in. (38 and 51 mm). The anchor hooks are to be secured with min 1/4 in. (6 mm) diam by min 1-1/4 in. (32 mm) long steel expansion bolts. As alternates to the anchors specified above, Hilti 1/4 in. (6 mm) diam by 1-1/4 in. (32 mm) long KWIK-CON II+ concrete screw anchor or Hilti 1/4 in. (6 mm) diam by 1-3/4 in. (45 mm) long KWIK-BOLT 3 steel expansion anchor may be used.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC - CP 643 50/1.5"N or CP643 63/2".

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



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