

- 1. Wall Assembly Min 8-1/2 in. (216 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 7-3/8 in. (187 mm).
 - See Concrete Blocks (CAZT) in Volume 1 of 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 min 0 in. (point contact) to max 3/4 in. (19 mm) for nom 6 in. (152 mm) diameter pipes and min 0 in. (point contact) to max 1/2 in. (13 mm) for nom 4 in. (102 mm) diam (or smaller) pipes. 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 6 in. (152 mm) diam (or smaller) Schedule 40 solid or cellular PVC core pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
 - B. Chlorinated Polyvinyl Chloride (PVC) Pipe Nom 6 in. (152 mm) diam (or smaller) SDR13.5 CPVC pipe for use in closed (process or supply) piping systems.

The T Rating is dependent upon the diam of pipe used in the firestop system. For nom 4 in. diam (or smaller) pipes, the T Rating is 4 hr. For pipes greater than nom 4 in. diam, the T Rating is 2 hr.

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

A. Fill, Void or Cavity Material - Sealant* — Min 1-1/2 in. (38 mm) thickness of fill material applied within annulus, flush with surface of wall. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant or FS-ONE MAX Intumescent Sealant

B. Firestop Device - Firestop Collar — The firestop collar shall be installed in accordance with the accompanying installation instructions. The collar shall be installed and latched around the pipe and secured to the concrete wall with the anchor hooks provided with the collar. (Min 2 anchor hooks for 1-1/2 and 2 in. (38 and 51 mm) diam pipes, 3 anchor hooks for 3 and 4 in. (76 and 102 mm) diam pipes and 4 anchor hooks for 6 in. (152 mm) diam pipes). The anchor hooks are to be secured to the wall with 1/4 in. (6 mm) by 1-1/2 in. (38 mm) long steel expansion bolts, in conjuction with steel nuts and min 3/4 in. (19 mm) diam steel washers with one anchor bolt in each anchor hook.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 643 50/1.5"N, CP 643 63/2"N, CP 643 90/3"N, CP 643 110/4"N or CP 643 160/6"N Firestop Collar.

* 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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