

System No. C-AJ-2885

System tested with a pressure differential of 2.5 Pa between the exposed and the unexposed surfaces with the higher pressure on the exposed side.

- Floor or Wall Assembly Min 4-1/2 in. (114 mm) thick 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 area of opening 900 sq in. (5806 cm2) with max dimension 30 in. (762 mm). See Concrete Blocks (CAZT) in the Fire Resistance Directory for names of manufacturers.
- 2. Nonmetallic Penetrants One or more pipes or conduits may be installed within the opening. Only one seam shall exist in the composite sheet to accommodate penetrating items. The space between pipes or conduits shall be at least 2 in (51 mm), or as required to accommodate a min 1/2 in. (13 mm) spacing between firestop collars. The space between pipes or conduits and the periphery of the opening may be min 0 in or greater.
- The following types and sizes of nonmetallic pipes or conduits may be used:
 - A. Polyvinyl Chloride (PVC) Pipe Nom 6 in. (152 mm) diam (or smaller) Schedule 40 cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems, or solid core PVC pipe for use in closed (process or supply) piping systems.
 - B. Chlorinated Polyvinyl Chloride (CPVC) Pipe Nom 6 in. (152 mm) diam (or smaller) SDR13.5 solid core CPVC pipe for use in closed (process or supply) piping systems.
 - C. Rigid Nonmetallic Conduit (RNC)+ Nom 6 in. (152 mm) diam (or smaller) Schedule 40 PVC conduit installed in accordance with the National Electrical Code (NFPA No. 70).
 - Fill, Void or Cavity Materials* One layer of 1 by 1/8 in. (25 by 3 mm) thick putty strips or min 1/2 in. (13 mm) diameter bead of sealant positioned under composite sheet around entire perimeter of through opening.
 HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC CP 619T Firestop Putty Roll, CP 617 Firestop Putty Pad or FS-ONE MAX
- 4. Fill, Void or Cavity Materials* Composite Sheet Rigid aluminum foil-faced intumescent sheet with steel backer. Sheets cut to tightly follow
- 4. Fin, Void of Cavity Materials Composite Sheet Rigid autimut holi-laced intumescent sheet with steel backet. Sheets cut to lightly follow the contour of the through-penetrants with an annular space equal to or less than 1/4 in. (6 mm). Sheets cut to lap a min of 2 in. (51 mm) onto floor or wall surfaces. Sheet installed on bottom surface of floor or both surfaces of wall. Sheet to be installed with the steel backer exposed (aluminum foil facing against floor or wall surface) and secured to floor or wall surface with min 3/16 in. (4.8 mm) diam by 1-1/4 in. (32 mm) long steel anchor screws, in conjunction with min 1-1/4 in. (32 mm) diam steel fender washers. As an alternative concrete anchors, when composite sheet overlaps a min of 3 in. (76 mm) onto floor or wall surfaces, 1-1/16 in. (27 mm) long Hilti X-GN 27 MX nails in conjunction with min 1-1/4 in. (32 mm) and max 2 in. (51 mm) from ends with additional fasteners located on each side of butted seams or slits (see Item 6) made to permit installation or the sheet around through-penetrants.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC - Hilti CFS-COS Firestop Composite Sheet

- 5. Cover Strip Min 2 in. (51 mm) wide strip of min 0.021 in. (0.53 mm) thick (26 ga) stainless steel centered over entire length of the butted seam or slit made in the composite sheet (Item 5). Steel cover strip secured to steel backer of composite sheet with steel sheet metal screws or steel rivets spaced max 3 in. (76 mm) OC on each side of seam or slit.
- 6. 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 CFS-COS Firestop Composite Sheet at the underside of floor or both sides of wall using the anchor hooks provided with the collar. Collar may also be attached into concrete floor at those locations where the hook overlaps onto the floor a min of 1 in. (25 mm). Min two anchor hooks for nom 1-1/2 and 2 in. (38 and 51 mm) diam pipes. Min three anchor hooks required for nom 3 and 4 in. (76 and 102 mm) diam pipes. Min four anchor hooks required for nom 6 in. (152 mm) diam pipes. When attaching to Composite Sheet, the anchor hooks are to be secured with No. 10 (or heavier) self-drilling screws with 3/4 in (19 mm) washers. When attaching to concrete, 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, Hilti 1/4 in. (6 mm) diam by 1-3/4 in. (45 mm) long KWIK-BOLT 3 steel expansion anchors may be used.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC - CP 643N 50/1.5", CP 643N 63/2", CP 643N 90/3", CP 643N 110/4", CP 643 160/6"

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



Reproduced by HILTI, Inc. Courtesy of Underwriters Laboratories, Inc. June 8, 2023

Page: 2 of 2