

- 1. Wall Assembly The 2 Hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U400, V400 or W400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:
 - A. Studs "C-T" shaped studs 1-5/8 in. (41 mm) wide by 2-1/2 in. (64 mm) deep, fabricated from 25 MSG galv steel, spaced max 24 in. (610 mm) OC.
 - B. Wallboard Gypsum* One layer of nom 1 in. (25 mm) thick, 24 in. (610 mm) wide gypsum liner and 5/8 in. (16 mm) thick, 4 ft. (122 cm) wide gypsum wallboard with square or tapered edges. The 5/8 in. (16 mm) thick gypsum board type, number of layers, fastener type and sheet orientation shall be as specified in the individual Wall and Partition Design. Max diam of opening in gypsum liner is 6 in. (152 mm). Max diam of opening in gypsum board is 5 in. (127 mm).
- 2. Metallic Sleeve Max 6 in. (152 mm) to 5 in. (127 mm) diam conical sleeve fabricated from min 0.016 in. (0.4 mm) thick (28 gauge) galv sheet steel and having a min 1 in. (25 mm) lap along the longitudinal seam. Length of steel sleeve to be equal to thickness of wall. Sleeve installed by coiling the sheet steel to a diam smaller than the through opening, inserting the coil through the opening and releasing the coil to let it uncoil against the circular cutouts in the gypsum wallboard layers. Sleeve may also be formed of No. 8 steel wire mesh having a min 1 in. (25 mm) lap along the longitudinal seam.
- 3. Nonmetallic Pipe Nom 4 in. (102 mm) diam (or smaller) solid or cellular Schedule 40 polyvinyl chloride (PVC) pipe for use in vented (drain, waste or vent) piping systems. One pipe to be installed either concentrically or eccentrically within the firestop system. The annular space shall be min 0 in. (point contact) to max 1/2 in. (13 mm). Pipe to be rigidly supported.
- 4. Metallic Pipe Nom 4 in. (102 mm) diam (or smaller) cast iron pipe to be installed either concentrically or eccentrically within the firestop system. An annular space of min 0 in. (point contact) to max 1 1/2 in. (38 mm) is required within firestop system. Pipe to be rigidly supported.
- 5. Connector Nom 4 in. (102 mm) diam (or smaller) 32 gauge (or heavier) corrugated stainless steel shielded rubber No-Hub connector, approved for installation cast iron vented (drain, aste or vent) piping systems.
- 6. Firestop System The firestop system shall consist of the following:
 - A. Packing Material Min 2-1/4 in. (57 mm) thickness of min 4 pcf (64 kg/m3) mineral wool batt insulation firmly packed into opening on the liner side of the wall as permanent form. Packing material to be recessed from the room side of wall as required to accommodate the required thickness of fill material.
 - B. Fill, Void or Cavity Material Sealant* Min 1-1/2 in. (38 mm) thickness of fill material applied within sleeve, flush with surface of wall. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant or FS-ONE MAX Intumescent Sealant
- 7. 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 5/8 in. (16 mm) thick gypsum board 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 and 3 anchor hooks for 3 and 4 in. (76 and 102 mm) diam pipes). The anchor hooks are to be secured to the wall with 3/16 in. (5 mm) by 2-1/2 in. (64 mm) toggle bolts along with min 3/4 in. diam steel washers. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC CP 643 50/1.5" N , CP643 63/2" N , CP643 90/3" N or CP 643 110/4" 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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