



- 1. Floor Assembly Min 6 in. (152 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete.
- 2. Penetrants One nonmetallic drain pipe and one toilet flange to be fitted and cemented within the appropriately sized firestop device (Item 2) using PVC cement. The following types and sizes of nonmetallic pipes, fittings and flanges may be used:
 - A. Polyvinyl Chloride (PVC) Pipe Nom 4 in. (102mm) diam (or smaller) Schedule 40 solid core or cellular core PVC pipe for use in vented (drain, waste or vent) piping system.
 - B. Chlorinated Polyvinyl Chloride (CPVC) Pipe Nom 4 in. (102mm) diam (or smaller) SDR17 CPVC pipe for use in vented (drain, waste or vent) piping systems.
- 3. Firestop Device* Closet Stub Cast in coupling sized to accommodate nom 3 or 4 in. (76 or 102 mm) diam pipe. Device provided with closet flange to be cemented into top socket of cast in coupling at the time of the installation of the closet stub. Device installed in accordance with accompanying installation instructions.
- HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC 3" Closet stub, 4" Closet Stub, 3" and 4" CFS-CID-CS Firestop Closet Stub.
- 4. Water Closet Floor mounted vitreous china water closet.





System No. F-B-2045 F Rating — 2 Hr T Rating — 0 and 2 Hr (See item 7)

- 5. Compression Coupling Compression type high pressure pipe coupling with elastomeric gasket and a stainless steel jacket. Secured to pipes with stainless steel band clamps.
- 6. Drain Pipe Nominal 3 in. (76 mm) or 4 in. (102 mm) diam cast iron.
- 7. Firestop Device* Firestop Collar (Optional) 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 using the anchor hooks provided with the collar. Minimum three anchor hooks required. 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 or min 0.145 in. (3.7 mm) diam by 1-1/4 in. (32 mm) long powder actuated fasteners utilizing a 1-7/16 in. (37 mm) diam by 1/16 in. (1.6 mm) thick steel washer. 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 anchor or Hilti X-DNI 27 P8 S15 powder actuated floor pin with integral nom 9/16 in. (15 mm) diam washer may be used. When firestop collar is employed, T-Rating is 2 Hr. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC CP 643N 90/3", CP 643N 110/4".
- * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

