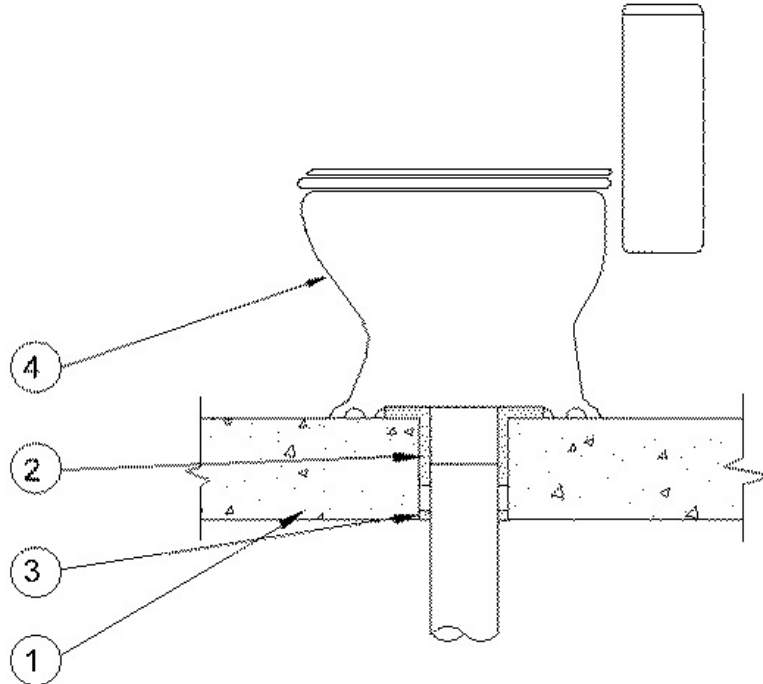


F Rating — 2 Hr
T Rating — 2 Hr
L Rating at Ambient - Less than 1 CFM/sq ft
L Rating at 400° F - Less than 1 CFM/sq ft



1. **Floor Assembly** — Min 4-1/2 in. (114 mm) thick lightweight or normal weight concrete (100-150 pcf or 1600-2400 kg/m³). Max diam of opening is 6 in. (152 mm).

2. **Nonmetallic Pipe** — One nonmetallic drain pipe with max 4 in. (102 mm) diam toilet flange installed either concentrically or eccentrically within the firestop system. The annular space between drain pipe and periphery of opening shall be min 0 in. (point contact) to max 1-1/2 in. (38 mm). Pipe to be rigidly supported on underside of floor assembly. The following types and sizes of nonmetallic pipes, fittings and flanges may be used:

A. **Polyvinyl Chloride (PVC) Pipe** — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 solid core or cellular core PVC pipe for use in vented (drain, waste or vent) piping system.

B. **Acrylonitrile Butadiene Styrene (ABS) Pipe** — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 cellular core or solid core ABS pipe for use in vented (drain, waste or vent) piping systems.

3. **Fill, Void or Cavity Material* - Caulk or Sealant** — Min 1 in. (25 mm) thickness of fill material applied within the annulus, flush with bottom surface of floor. At point contact location between concrete and pipe, a min 1/2 in. (13 mm) diam bead of fill material shall be applied at the pipe/concrete interface on bottom surface of floor assembly. A min 1/2 in. (13 mm) diam bead of fill material shall also be applied around top edge of toilet flange.

RECTORSEAL — FlameSafe FS900+, FlameSafe FS 1900, [Metacaulk 1000](#), [Metacaulk MC 150+](#), Biostop 500+, Biostop BF 150+, [Metacaulk 350i](#) or Biostop 350i

4. **Water Closet** — Floor mounted vitreous china water closet.

*,+ 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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