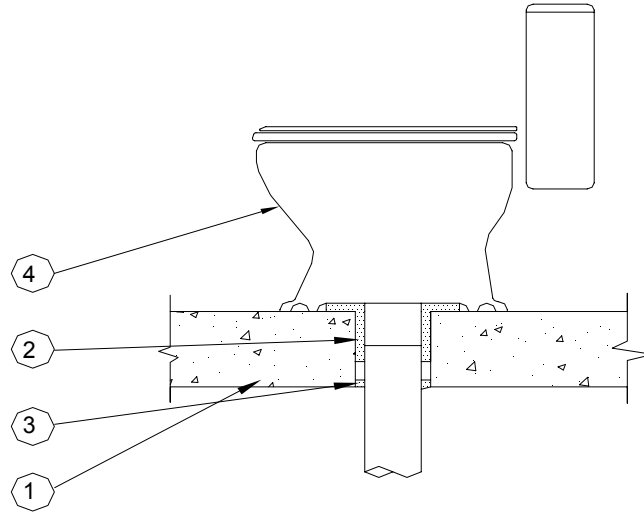


Through-penetration Firestop Systems
UL System No. F-A-2169
F Rating - 2 Hr
T Rating - 2 Hr



1. **Floor Assembly** - Min. 4-1/2 in. (114 mm) thick lightweight or normal weight concrete (100-150 pcf (1600-2400 kg/m³)). Max. dia. of opening is 6 in. (152 mm).
2. **Nonmetallic Pipe** - One nonmetallic drain pipe with max. 4 in. (102 mm) dia. 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 lower side 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) dia. (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) dia. (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* - 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) dia. 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) dia. bead of fill material shall also be applied around top edge of toilet flange. Prior to placement of water closet, a min. 1/2 in. (13 mm) dia. bead of fill material shall be applied to the bottom surface of the outer rim of the water closet.

A/D FIRE PROTECTION SYSTEMS INC - A/D FIREBARRIER Intumescent Sealant
4. **Water Closet** - Floor mounted vitreous china water closet.
*Bearing the UL Classification Mark