All wood framed bases shall be designed with a maximum deflection of 1/240 of the span, including live and dead loads.

- **3.4.1** Note: Two stages of construction are covered the reinforced concrete shell and the wire reinforced tile lining over the water-proof membrane.
- 3.4.2 Approved waterproofing membrane, mortar bed and finish construction shall conform to the general requirements of the Uniform Plumbing Code. Exception: In short sections where there is no foot traffic, the finished floor may exceed 1/2 inch per foot (12.7 mm/m) slope.
- 3.4.3 Each concrete shell shall be filled to its overflow rim with water and shall remain watertight for not less than twenty-four (24) hours before inspection and before the finish surface is installed.
- 3.4.4 The finish surface shall be ceramic tile installed with portland cement mortar mixed to a proper consistency in the proportion of one (1) part cement and four (4) parts mortar sand by volume and having an approved waterproofing admixture\* included. Ceramic tile joints shall be thoroughly grouted with approved waterproofing grout containing an admixture.
- 3.4.5 The concave interior surfaces shall be such as to permit ready cleansing and all corners shall be rounded or at angles not in excess of 45°. Grout is not acceptable for rounding corners. See details below on approved corners.
- **3.4.6** Concealed overflow or built-in waste stopper may be used if designed and approved for this application.
- **3.4.7** For reinforcement in center of pour, use #30 @ 8 inch (203 mm) O.C. both ways.
- 3.4.8 2000 P.S.I. (13,780 kPa) compressive strength concrete shall be poured monolithically and shall have an approved waterproofing admixture included\*. Concrete to have not less than six (6) sacks of portland cement per batch.
- **3.4.9** Reinforcing wire, as specified under materials in this standard or equal, shall be wired together in a self-supporting manner. Nails shall not be used through the waterproofing membrane to fasten wire reinforcing.

\*Quantities of several approved waterproofing admixtures required per sack of cement:

Anti-Hydro – 1 qt. (0.95 l) per sack of cement. Plastiment – 1 lb. (0.5 kg) of powder per sack of cement.

Plastiment – 2 oz. (56.7 g) of fluid per sack of cement.

Sika 3A – 1 qt. (0.95 l) per sack of cement. Suconem (Red Label) – 1 pint (0.47 l) per sack of cement.

ADOPTED: 1966

REVISED: 1977, 1982, 1990, 2003, 2006

