

NATURAL RESOURCES CONSERVATION SERVICE  
CONSERVATION PRACTICE SPECIFICATION

**WATERING FACILITIES**

CODE 614

**SPECIFICATIONS**

**CONCRETE TROUGHS OR TANKS**

**LIFE.** Concrete troughs or tanks shall provide a minimum of 10 years of service without significant deterioration of the concrete surface due to weather exposure.

**DIMENSIONS.** Concrete troughs or tanks shall have an inside taper of 4 inches from top to bottom. The largest dimension shall be at the top. The minimum thickness shall be 4 inches at any point on the sides and bottom.

**REINFORCING.** Reinforcing steel as a minimum shall be No. 3 (3/8" diameter) reinforcing bars spaced on 6-inch centers or 6-inch x 6-inch, #6 or #8 gage welded wire fabric.

**MIX DESIGN.** The concrete shall have a minimum compressive strength of 4000 psi. Set retardant shall be used to prevent premature set and Air entrainment Admixture shall be used to maintain air entrainment between 4% and 6%.

**CURING AND FINISHING.** The temperature of the concrete mixture shall be maintained between 50 and 80° F for a minimum of three days after pouring.

The raw concrete mix shall be well consolidated with a vibrator. The concrete shall have a smooth surface

finish and be well consolidated and finished around fittings. The concrete shall be protected during curing from sunlight, wind, and excessive drying conditions.

**FITTINGS.** All fittings such as inflow and outflow pipes, lifting lugs, etc., shall be of corrosion resistant, durable materials such as PVC, Stainless Steel, Galvanized Steel, etc. The fittings must be readily adaptable to locally available conveyance pipes.

**INSTALLATION.** Pre-manufactured concrete troughs or tanks shall be installed in strict accordance with the manufacturer's recommendations. Those poured on site shall be installed in a workmanlike manner. All sites shall have a neat appearance when finished.

**OTHER TROUGHS OR TANKS**

**INSTALLATION.** Manufactured troughs or tanks such as Miraflo, or others, shall be installed in strict accordance with the manufacturer's recommendations.

All sites shall have a neat appearance when the job is complete.