

O'REILLY CONCRETE GROUP

INSTALLATION GUIDELINES

FOR PRECAST TANKS



PRECAST TANKS

Rev. #



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Project:

Revision:

#

Issued:

January, 2009

1. Site.

The installation site must be accessible to large heavy crane equipment. A firm, flat and level area of sufficient size to allow maneuvering room for this type of equipment must be provided. This area must be free of overhead wires, tree limbs, or other above-grade obstructions which could affect normal crane operation.

2. Excavation.

Excavation length and width should allow for a minimum of 300 mm clearance on all sides of the precast. More space must be allowed if any work is to be done on the outsides of the unit after installation. To minimize stress on a tank or chamber, it should be placed on a base of gravel or crushed stone, minimum 150 mm thick. Soil conditions must be firm and stable.

3. Soil Conditions.

Most of our precast tanks, manholes and chambers are designed for installation in firm stable soil. Unless designed for such use our product warranty is void where an installation involves saturated/unstable soils. Regardless of any design enhancements the precast structure must always be placed on a flat, firm supporting surface. Please consult the factory before specifying precast elements for use in unfavourable soil conditions.

4. Back Filling.

Back fill material must be free of boulders and large stones. Back fill must be placed in layers progressively against the four sides of the precast structure. When back filling with an excavator do not drop back fill onto the precast or into the excavation from a height greater than one metre. The wheels or tracks of back filling equipment must be kept at least one metre away from the tank or chamber. At no time should heavy equipment come in contact with any part of the precast.

5. Compaction of Back Fill.

Compaction of fill around a precast tank can impose stresses sufficient to cause failure of the walls. Discretion must be used in this operation. Naturally tanks with comparatively thin walls are more susceptible to damage than some of the heavier designs.

6. Buoyancy.

Although concrete tanks are very heavy, they will float in a fairly shallow depth of water. If the tank or chamber must remain free of back fill for testing purposes etc., for any appreciable length of time, measures must be taken to ensure that water does not accumulate in the excavation.

Warning:

Improper installation especially in saturated soil can result in the structural failure of the tank.