

## Newmarket Precast Installation Guidelines 2016

- **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.

Newmarket Pre-Cast can quite often offer the service of placing our products in properly prepared excavations. Please contact the factory about what is involved.

- **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.

- **Joint Seal:**

- The mating surfaces of the joint should be clean and dry. The lower section of tank should be placed in its final position in the excavation. The joint of this section should be made clean and dry, then mastic strips of sealant applied.
- Using lifting equipment that is safely adequate for the job, hoist the upper section of the tank a few feet above the ground in an open area away from the excavation. The joint surface of this section must now be inspected. A broom should be used to sweep away adherent debris. Care must be taken that the people doing this part of the job have ample room to maneuver and do not at any time work directly under the hanging load.
- Should it prove impossible to clean the joint properly in this way, the upper section must be safely blocked up in position allowing access from underneath.
- Once both joint surfaces are clean, dry and free of debris and extra mastic has been applied in areas where the male or female joint might have been chipped or broken in handling, the upper section can be carefully set directly onto the lower section.
- Allow the tank to stand until the mastic is completely crushed into all parts of the joint and it stops extruding from the sides. The ambient Temperature will affect the time required, twelve hours not being uncommon. Backfilling could take place immediately after the tank is installed, however, we recommend to ensure an absolutely water-tight seal that the joint be grouted both inside and out. This should not be done until mastic stops extruding from the joint and the top has settled into its final position. Water should not be allowed to come into contact with the joint from the time of assembly until after the grout has cured.
- Grouting the joint requires that excess mastic extruded from the sides be removed. Grout should be pushed into any gaps where sealant does not extrude. A cap of grout approximately 20 mm thick at the joint seam and tapering back 150 mm above and below the joint should be applied.