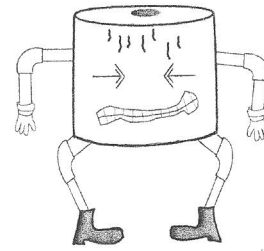


## FRANKLIN PRECAST

20 Park Drive, Franklin, NJ 07416

973-827-7563



## FRANKLIN PRECAST

### CONCRETE SEPTIC / PUMP TANK

### TESTING FOR WATER TIGHTNESS

#### Tank Testing

Each plant must develop a quality control program that includes testing. Define the test procedures clearly prior to tank fabrication and installation. Consider whether tests will be conducted in the plant or on the job site (prior to or after backfilling). Use the following testing method:

#### Vacuum Testing

The recommended procedure is to introduce a minimum vacuum of 4 inches (100 mm) of mercury and hold this pressure for five minutes. Depending upon the tank configuration, it may take some time to stabilize the vacuum level due to various factors (compression of sealant, temperature variations). It is permissible to apply vacuum until the vacuum level stabilizes at 4 inches (100 mm). Once vacuum is stabilized, remove the vacuum source and hold the vacuum for 5 minutes. If the tank fails the test, it may be repaired and retested. The suggested range of the gauge is 0-10 inches (0-250 mm) of mercury. In lieu of a vacuum gauge, a water manometer can be used to measure inches (mm) of water equal to inches (mm) of mercury.

For purposes of NJDEP compliance, vacuum testing in the field for water tightness proof, we follow the testing guidelines of ASTM C1227. Seal the empty tank and apply a vacuum of 4 inches of mercury. The tank is approved if 90% of vacuum is held for 2 minutes.

**WARNING:** Testing with negative pressure involves potentially hazardous conditions. It is recommended that the negative air pressure testing of concrete tanks not exceed 7 inches (175 mm) of mercury, which is the recognized maximum requirement for structural strength proof testing. Take precautions to minimize potential risks by incorporating safety devices that will prevent excessive vacuum levels (such as safety release valves).