



# **Installation Instructions**

## 2000 or 2500 Below Ground Holding Tank

### **1. EXCAVATION**

- Excavate to a depth that will provide a minimum of 6" and a maximum of 24" of cover over the top of the tank.
- Allow 18" to 24" on both sides and both ends of the tank.
- Bed the tank in well-compacted sand 6" minimum in soil terrain, 12" minimum in rock terrain.

## 2. CONNECTIONS TO TANK

- Install fittings in any location required for holding tank use.
- Contact factory for approval if multiple fittings are installed in close proximity.
- Tank must be vented.
- For water-tight seal, lid should be sealed with silicone or urethane caulking. Re-use stainless steel screws supplied with lid to re-attach lid to tank.

## **3. MANHOLE EXTENSION**

- Install manhole extension before you backfill.
- Norwesco manhole extensions are supplied with gaskets and screws. Re-use the stainless steel screws to attach the lid at the top of the manhole extension.

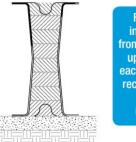
## **4. BACKFILLING EXTERIOR**

- Backfill with 12" layers and compact each layer. Always compact ends first.
- Each of the interior support cones must be filled and compacted in 6" layers; the bottom half of the cones are tapered and must have the soil compacted to provide to provide structural support. See diagram.
- Maximum backfill over the top of the tank is 24". Mound soil over the top to provide positive drainage.

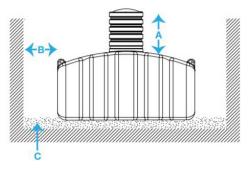
## **5. BACKFILL MATERIALS**

- The preferred material for backfilling, surrounding and covering the tank is a sand and gravel mixture 100% smaller than 11/2" and approx. 50% smaller than 1/4". Native soil can be used if this mixture is not available.
- All fill must be free of any wood, masonry debris, silt or clay. Sharp objects must not come in contact wit the wall of the tank.

This document contains proprietary information. It is intended solely for use of potential clients involved or to be involved in a transaction with BARR Plastics Inc.









# CAUTION

## Failure to comply with the points below voids warranty

**A.** Maximum burial depth is 24 inches.

**B.** Do not install tank in water-saturated clay or in high water table.

**C.** Do not install tank across the path of vehicles or heavy equipment.

**D.** Protect tank from sharp objects which could puncture it and cause leakage.

E. Tanks are not fire-resistant. Do not store them near an open flame or in heat in excess of 180°F.

**F.** Do not lift tank by lugs unless tank is empty. Always lift using 4 lugs simultaneously.

Norwesco advises against the use of a plastic underground tank for any other uses! Such uses would void any Norwesco product warranty either stated or implied. In no event shall Norwesco be held liable for any consequential damages.

### WARRANTY

The Norwesco underground tanks, when installed in accordance to manufacturer's instructions, are warranted against defective materials and/or workmanship for a full three (3) years from date of manufacture. Should a defect appear within the warranty period, Norwesco will supply a new, equivalent tank in replacement thereof. Norwesco's liability is limited to the value of the tank itself and specifically excludes the cost of installation and/or removal and consequential damages.



### Standard and Bruiser Septic and Cistern tank Additional Install Guidelines

During dry conditions, place the tank back in the hole exactly where it needs to go and add 6" -1' of water in it so it is still moveable then rotate the tank slightly back and forth to get the ribs to fully bed into the sand. After bedding, ensure the tank is level side to side and end to end. Then, fill the tank as you backfill so it will not move during backfilling. Follow main instructions for backfilling process. Ensure that manways and lids are all fastened in place during the backfilling process.

### <u>VERY IMPORTANT</u>: Below Ground Tanks should never be placed in low-lying areas where surface water is draining toward and into the tank area as this can create high ground water levels directly around the tank which can collapse or otherwise damage the tank or the fitting connections.

Backfill tank with the material listed in the installation instructions and 1 foot at a time while keeping water approx.. at the same level as the backfill (or a bit ahead of) height throughout the entire backfill process. Compact each foot starting with the end first and then sides as equal as possible and again – 1 foot at a time. Foot compact – avoid use of compacting equipment.

#### Ensure that absolutely no clay or mucky soil is used or mixed in with the backfill material.

Ground water should be kept away from tank area by drainage at base level of tank and ground cover should be sloped away from the top of the tank - ie: approx. 6" higher over center of tank than the surrounding area so ground is sloped away in all directions to direct water away from the tank area.

A vertical inspection pipe (4" - 8" dia. with removable cap on top) or sump tube can be installed next to the tank if necessary for inspection of ground water level before pump-outs or dewatering with a pump if ever necessary.

Following the main Installation Instructions as well.

**In case of partial collapse** of tank from allowing water to fill in the tank excavation area after tank has been freshly back-filled - ie: install tank on Fri. and rain over weekend fills into tank hole:

Best things to do at this point is to excavate the tank out fully and remove it from the hole (remove only if necessary to re-excavate and re-bed the tank as below) Will likely be necessary to reshape the tank back to normal by placing on firm level surface and fill ½ to 2/3 with water and pry up under ends to get bottom ribs to stretch back out from their compression and leave tank for a half day or so.



#### Standard and Bruiser Septic and Cistern tank Additional Install Guidelines - Continued

Redo the base elevation leveling with minimum 6" of coarse, loose and levelled sand (no sharp stones) to bed the tank back into. Ensure excavation is 18 – 24" wider and longer than the tank all the way around the tank.

Lisule excavation is 10 - 24 while and longer than the tank an the way around the tank.

If the tank is free from buckling and creasing then it **may** be OK to reuse but will no longer be covered by the manufacturer's warranty.

Contact Barr with any questions.