

1) Hole Preparation

Ensure hole is at least 12" longer and wider than the size of the tank, providing the excavated walls are straight up and down. If over digging depth occurs or you have unstable soils, you must use sand, crushed rock, or pea gravel, to bring up to grade. Grade from the house is ¼" per foot. From the bottom of said pipe, measure down the distance to the excavation, the same that is on the manufacturers card for inlet elevation. This would be the grade. Level from that point lengthwise, and crossways, to finish grading the bottom of the hole. All tanks shall be set level on a minimum 3-inch thick compacted ¾ minus, pea gravel or approved granular material overlying a firm uniform base.

2) Setting the tank

OSHA restrictions apply. Do not stand in hole while tank is being placed. Watch for water coming into the hole and walls sliding off in the hole. Stay away from edge of hole and watch the equipment operator. Be sure the tank is level. Check for proper alignment between inlet pipe and tank inlet. Mastic is required between tank halves. Place bottom tank half in place, apply mastic and set top of tank on bottom section.

3) Risers and Installation

Plastic Risers: Plastic risers are either poured into the concrete, or attached to a poured in flanged adapter, to facilitate the holding of a 24" diameter access riser. If a groove is in the concrete top around the manhole, a riser can be attached by using a 2-part epoxy (Weld-On 812). **Concrete Risers:** Concrete risers shall be cast in during tank manufacturing. An O-ring gasket will be supplied to place between the top of the riser and the lid.

4) Lid

The lid of the riser shall be attached with stainless steel bolts.

5) Pipe Connection

Pipe connection is done by applying ABS cement to the inside of the 4" coupler in the tank wall, and applying ABS cement to the pipe to be fitted; push together and hold for a few seconds. If PVC 3034 pipe is coming into the tank, an adapter (ASTM D2751) is supplied with the tank, and weld-on glue (Weld-On 794 ABS to PVC) is applied to the inside of the coupler in the tank and on the pipe coming in. This adapter makes up the difference in outside measurements of the two pipes. Neoprene couplers are also an appropriate form of connection.

6) Buoyancy Countermeasures

Installations with 25 inches or less ground cover may require additional buoyancy considerations. Shallower applications will require buoyancy calculations and counter measures by a professional engineer.

7) Test Procedures

If possible, backfill the tank to a point 10" down from the top of the tank. Fill the tank with water to point 2" above the top surface of the tank. No more than 2" of water into the riser. If water level drops in 24 hours--which may be due to concrete absorption, refill to the same mark for a re-test. The water level should not drop more than 1" in the riser.

8) Backfill Instructions

Backfill should be of proper size and gradation. No stones over 2 1/2" in diameter. No deleterious materials (i.e., any material that might puncture or damage the tank). Each layer should contain sufficient moisture to allow for proper compaction. If possible, the layers should be compacted with a hand tamper. Make sure inlet and outlet pipes have a compacted base under them to help provide support for the pipes. Ensure the final grade slopes away from the access riser.

9) Pumping Equipment

Follow equipment manufacturers guidelines for the proper installation of pumping equipment or siphons. OAR 73-0050(5) must also be followed for pumping equipment installation.

***Special Precautions**

When backfilling with loader or backhoe bucket, be especially careful not to disturb riser, inspection port, or any unit that may be attached to the tank.

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