



SEPTIC TANK INSTALLATION GUIDE

Concrete septic tanks are a very durable product when installed properly. An improperly installed tank may not only create immediate problems before the job is even completed, but may have long term consequences that others will pay for later.

The following installation instructions must be followed to ensure that the tank is not damaged and the end user receives a quality system.

Excavation

1. The length and width of the excavation should be dug a minimum of one foot bigger than the septic tank around all sides (measured at the bottom of the hole).
2. The depth of the hole should be over-dug 4 inches to 6 inches below the tank bottom elevation to allow for bedding material. All loose material should be removed or compacted. If large boulders are encountered and removed, the hole left by the boulder should be filled and compacted.

Hole Size for Installation

| HOLE SIZE FOR INSTALLATION | | | |
|----------------------------|-------|-------|--------|
| Tank Size (Gallons) | Depth | Width | Length |
| 1000 | 6'2" | 7'6" | 10'0" |
| 1250 | 6'2" | 7'6" | 12'6" |
| 1500 | 6'2" | 8'0" | 13'0" |
| 2000 | 7'0" | 8'0" | 14'0" |
| 2500 | 6'0" | 9'0" | 18'0" |
| 4000 | 8'4" | 9'0" | 18'0" |
| 5500 | 10'8" | 9'0" | 18'0" |

Bedding

1. Acceptable bedding materials: sand, pea-gravel, ¾ inch or less gravel or cinders, screened decomposed granite. Loam, clay and aggregate base material (ABC), are not acceptable bedding materials.
 2. Bedding material should be placed 4 to 6 inches thick.
 3. Screed the bedding flat, and level to within ½ inch each way.
- For 1500 gallon tanks and smaller; screed the surface of the bedding with a straight-edge tool that is longer than the width of the tank down the length of the hole, and then screed the other direction with a straight-edge tool that is longer than the length of the tank. Repeat this process as many times as is necessary to ensure that the surface of the bedding is flat and level as noted above. The following instructions for 1700 gallon tanks or bigger is a more ideal screeding method and may also be used.



- For 2000 gallon tanks and bigger; set straight screed rails down both of the long sides of the excavation as close to the side-wall as possible. Make sure that the rails are set level and checked for level across the hole at both ends of the screed rails. Screed rails should be firmly affixed to wooden or metal form stakes. The screed rails should be at least 8 inches from where the side-wall of the tank will rest. Place the bedding material into the hole and screed across the top of the screed rails with a straight-edge tool. The area where the tank will rest should now be perfectly flat and level. Pull out the screed rails and fill the void created by the rails with bedding material.

Back-Filling & Water Testing

1. Back-fill materials should be the same as the bedding materials noted above but with a few other alternatives. Aggregate base material (ABC) and most native soils (except clay) may also be used for back-fill. All back-fill materials should be less than 3 inches in diameter. Native soils and ABC should be compacted with a plate compactor (the size of the excavation may have to be enlarged to accommodate this process). Do not water-settle the back-fill around the tank and do not use mud to fill around the tank.
2. On any tank larger than 2500 gallons, back-fill evenly to 4 to 6 inches below the first joint. Fill with water for leak-testing the tank to 4 to 6 inches above the joint. If no water leakage is detected repeat this process until the tank is completely water-tested and completely back-filled.
3. 2500 gallon tanks and smaller may be water-tested without the support of back-fill if the tank is to be back-filled within 12 hours of placing water in the tank.
4. If a leak is discovered, back-filling and water-testing should be halted, and Yavapai Precast notified of the problem immediately.
5. **Do not free stand tanks full of water without backfill for more than 12 hours-This could void your warranty if the tank is damaged.**

General Conditions

1. The excavation should not have water in it unless the water is clear enough to be able to determine that the bedding material has not been damaged and that no rocks or sloughing has fallen in on top of the bedded area where the tank is to be placed.
2. The job site and tank setting location must be accessible for our trucks without towing or pushing of the vehicle or other equipment.
3. Stand-by time as a result of improper hole preparation or site accessibility will be charged for at the current dollar per hour rate.
4. The customer is responsible for all excavation, back-filling and testing of tanks.
5. Any product of our manufacture, not installed according to the above instructions, handled, moved or installed by others nullifies the responsibility of Yavapai Precast.
6. **Do not drive over the top of the tank at any time.**