## Best Practices Vertical Water Tanks



## GENERAL INFORMATION

Plastic vertical water storage tanks are used for multiple purposes, including:
Farm irrigation Emergency potable water storage
Rainwater harvesting Long-term water storage
Fire protection water tank Above-ground storage of residential safe drinking water
Plastic vertical tanks are colorized to reduce sun and heat exposure, therefore, reducing algae growth inside the tank. It also makes them more attractive and lets them blend in with your landscape. Valencia Pipe Company Tanks come in black and green. They are UV-stabilized for long-term outdoor usage and are extremely durable. Plastic water tanks are capable of withstanding a wide range of temperatures and weather conditions, so they can be used indoors or outdoors all year round. Water tanks have flat bottoms, so they do not require additional structural support. They are lightweight and can be moved manually when necessary.

Vertical water tanks are for above ground use only. DO NOT BURY, not even partially.
This installation is best done with 2-3 people.

## SITE PREPARATION \& PLACEMENT OF TANK

- Select a suitable location for your vertical water tank that will facilitate easy installation and downstream serviceability.
- If used indoors (such as in a basement) . . .
- Make sure floor drainage exists in case of an unexpected rupture and/or if servicing is needed that requires draining the tank.
- Ensure access is provided to remove the tank if necessary.
- Clear the selected site of all vegetation, roots, other in-ground debris, and rocks over $1 / 23$ in diameter.
- Make the site 2-3 feet larger than the outside diameter of the tank.
- Best practice: Construct a flat, level concrete foundation.
- Be sure it can withstand the weight of a completely full tank. A 3000 gallon tank, for instance, will weigh in excess of 25,000 pounds when full of water.
- If not constructing a concrete foundation, one may be made of natural soil and/or sand or pea gravel. Clear and level the site being sure to remove roots, debris, and rocks over $1 / 2 "$ in diameter.
- Level and compact native soil.

- Place a layer of sand or smooth pea gravel 2-3" thick.
- Compact the sand or pea gravel as much as possible. Check to ensure it is level.


Trailer or roll the tank into place Get the tank in a suitable position to raise it into a vertical position somewhat near the prepped foundation.

Tip: If you're working alone and cannot raise the tank into a vertical position, place a ladder on the ground, roll the tank on to the ladder, and use the leverage of the ladder to put the tank into a vertical position.


## ADDING BULKHEAD FITTING(S)

Valencia Pipe Company vertical tanks are equipped with a $1 / 1 / 2$ bulkhead fitting on the top of the tank and a 2 " bulkhead fitting at the bottom of the tank. Both can be plumbed with a variety of off-the-shelf standard IPS fittings. Specialized water tank fittings are also available via our "Quick Ship" program at your local Home Depot store.

What if you want to add another fitting at the bottom of the tank? Here's how:

1. Make sure the tank is empty.

2. Gather the necessary tools and supplies:

Hole drill the same size as the fitting body diameter The fitting(s) to be installed Open end adjustable wrench and/or channel locks

Hoe or small garden rake
Fish tool
Needle nose pliers
Teflon thread sealing tape Clear silicone sealant (if desired)
3. Once determining the location of the desired additional fitting, drill a pilot hole in the tank. Then use the hole saw to enlarge the opening.
4. Using the fish tool, place all outside fittings (washer(s), nut) over the fish line to simplify use later. Make sure they're set in the proper orientation position for installation.
5. Place the fish line into the tank allowing plenty of line to grab it with a hoe or rake.
a. Secure the fish line with a heavy object so it doesn't slide out of the opening.
6. After removing the lid from the top of the tank, use the hoe or rake to pull the fish line out of the top of the tank.
7. Insert all inside-the-tank parts on to the fish line (in proper orientation) and gently lower the line back into the tank.
8. From outside, gently pull the fish line out of the opening.
9. Use the needle nose pliers to pull the body of the fitting through the hole.

10. Use Teflon tape and tighten the nut and washer. If desired, use silicone sealant around the fitting body (under the washer) before final tightening.
11. Install PVC parts, valves, etc., as desired.


## USES FOR YOUR TANK

Vertical water tanks can be plumbed for a number of applications.


Transfer from your larger storage tank to a smaller tank to water livestock.


Plumb for use with other tanks to increase total water storage capacity.

Install a 2 " to $3 / 4$ " garden hose adapter to water your garden with a hose.


TANK ACCESSORIES \& PARTS

| Model \# | Description | Image |
| :---: | :---: | :---: |
| $89-64482$ | 3/4 in. MPT x GHT <br> Valve with Adapter |  |
| $89-61244$ | 2 in. Male Adapter x 2 <br> in. Male Thread |  |
| $89-61861$ | 2" King Nipple 2" <br> MPT x 2" Bulk Head |  |
| $89-62195$ | 2 in. x 3/4 in. Reducer <br> Bushing (current bottom <br> fitting for vertical tanks) |  |
| $89-63485$ | 16" Lid and Ring with <br> Blue Snap In Vent <br> (current lid for vertical <br> tanks) |  |


| Model \# | Description | Image |
| :---: | :---: | :---: |
| $89-60548$ | 2 in. Poly Nipple |  |
| $89-61276$ | 2 in. Female Coupler x 2 <br> in. Hose Shank |  |
| $89-61291$ | $2^{\prime \prime}$ Male Adapter x 2" <br> Male Thread 90․ Elbow |  |
| $89-61122$ | 2 in. Standard Port F x F <br> Bolted Ball Valve with <br> Yellow Handle |  |

