

Installation, Operation, and Maintenance

Thintanks USA 300G Modular Water Tank

300 Gal USA - Shipping and Receiving

(94.29" x 11.22" x 77.95")

LTL (Less Than Truckload):

Unless otherwise specified, LTL shipments of 300G Thintanks are secured on 8' x 4' pallets. Up to three 300G Thintanks may be shipped on a single pallet, and order quantities in excess of three will arrive on additional pallets. Make necessary arrangements to receive shipments of this size prior to delivery, Thintanks USA is not responsible for delay or damage of shipment due to improper handling or unloading. See shipping weights below.

Consult Thintanks USA for all other shipping methods.

Qty, 300G Thintanks	Shipping weight (lbs)
1	318
2	541
3	764

Caution: Tanks are top-heavy! Take the following precautions to avoid injury or damage:

- Tanks shipped, transported, and stored upright MUST be properly secured to prevent them from falling over.
- Secure tanks as soon as delivered to prevent unexpected winds from knocking them over. Tanks may be laid on their side on non-abrasive surface temporarily, while awaiting installation.
- If receiving where a forklift or loading dock is not available, a truck with liftgate MUST be requested in advance.
- Have a plan to move tanks from where they are unloaded to the installation location. Where material handling equipment is not available, individual tanks may only be moved short distances by team lift.

Winterizing Your Tank

If Thintanks are installed in an area where there is a threat of sustained freezing temperatures, the tanks and surrounding system must be winterized to prevent damage or premature failure. Thintanks USA recommends draining all tanks and any surrounding inlet, outlet or overflow plumbing. Take care that water does not remain trapped in areas such as valves, coiled tubing or hoses, pumps, elbows, 'p' traps, or 's' traps. To prevent refilling of tank or system until risk of freezing weather has passed, keep all drainplugs removed, outlet valves open and remove downspouts from tank inlets.

300 Gal USA - Installation Against the Wall

(94.29" x 11.22" x 77.95")

STEP 1

Prepare tank foundation at base of wall by laying concrete slab or installing pavers. Ensure the foundation is plumb, level, and square against the wall.

See FIGURE 1.

Caution: Installation against structures of insufficient strength may pose a safety hazard. Exterior structural walls of framed or masonry construction is recommended to secure the tank from falling.

STEP 2

Position the tank on the prepared foundation against the wall, with the tank outlet ports oriented. Ensure that the tank outlet ports remain accessible. Verify the top of the tank is plumb and level, and the back of the tank is flush against the base of the wall.

Orient the tank against the wall with the outlet ports accessible.

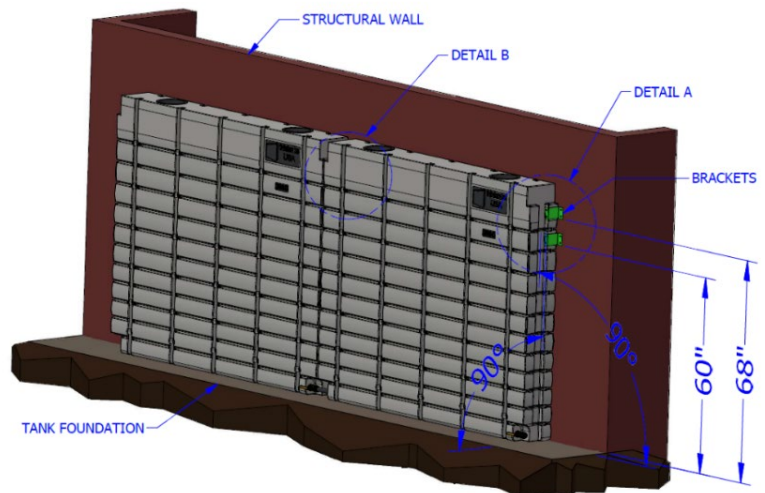


FIGURE 1
TWO 300G TANKS SHOWN WALL MOUNTED IN SERIES

WARNING

Read this Manual BEFORE using this equipment. Failure to read and follow all safety and use information can result in death, serious personal injury, property damage, or damage to the equipment.

THINK SAFETY FIRST

Keep this Manual for future reference.

STEP 3

On both ends of the tank, mark the position where the brackets will mount to the wall between 5' and 6' above the base. Install anchors suitable for wall construction on the bracket position marks. Brackets holes will accept fastener up to 3/8". See DETAIL A.

STEP 3a (tanks mounted in series only)

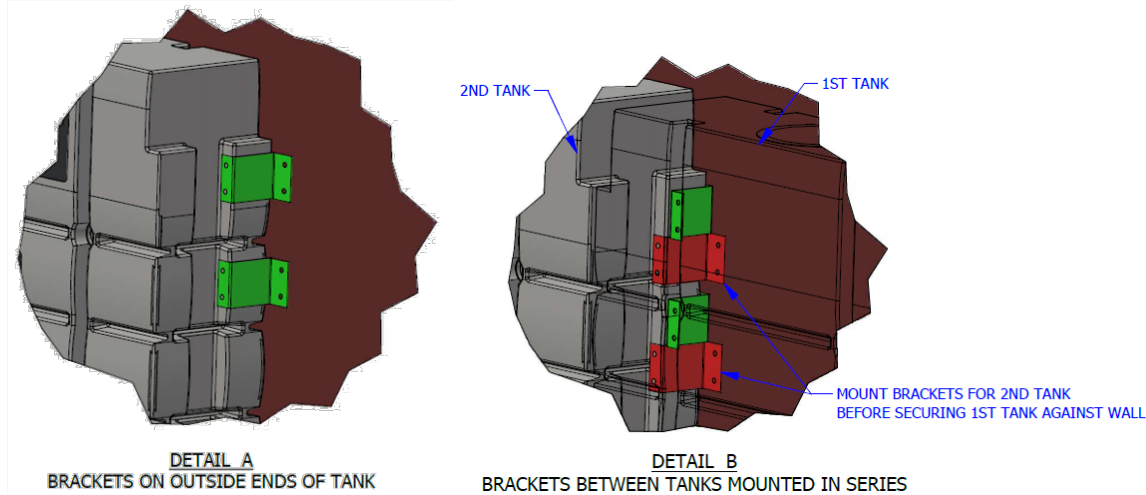
For seamless appearance of two or more tanks mounted end to end, brackets for the next tank end in series must be mounted prior to securing previous tank to wall. Follow step 3 & 4 for the next tank-end in series and with those brackets secured, proceed to step 4 to secure previous tank. See DETAIL B.

STEP 4

Secure brackets to the wall using fasteners appropriate for anchoring method. Perform final check to ensure the tank remains plumb, level and flush against wall and that brackets fit tightly against tank.

STEP 5 (tanks mounted in series only)

Important: Tanks **MUST** be properly secured with brackets or posts.



300 Gal USA - Freestanding

(94.29" x 11.22" x 77.95")

STEP 1

Mark the position of two support posts and excavate holes for 8 ft long posts. Post holes should be a minimum of 12" in diameter and 24" inches deep. Tank will fit between 4x4" timber posts mounted at least 94.8" on center, and not greater than 96" on center. Manufactured steel fence posts with a nominal width of 3.5" may also be used. See FIGURE 2

Caution: Post type, hole depth and hole diameter may not be sufficient in all soil types or for anticipated wind loads in all areas. Consult local building codes and licensed professionals.

STEP 2

Prepare tank foundation between post holes by removing topsoil and pouring a concrete slab, installing pavers or laying crushed stone. Ensure the foundation is level, tanks must not be mounted on an inclined surface.

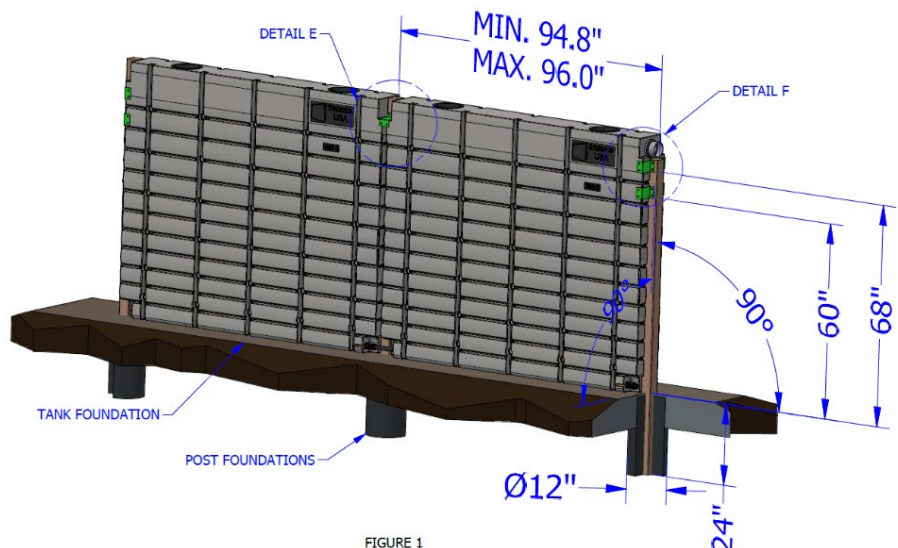


FIGURE 1
TWO 300G TANKS SHOWN MOUNTED BETWEEN POST

WARNING

Read this Manual BEFORE using this equipment. Failure to read and follow all safety and use information can result in death, serious personal injury, property damage, or damage to the equipment.

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STEP 3

Position the tank on-center between holes and place posts into the hole at either end of tank. Level posts and temporarily secure posts against the tank. When correctly positioned, the tank should sit flush with the post and be held in place by the end recess.

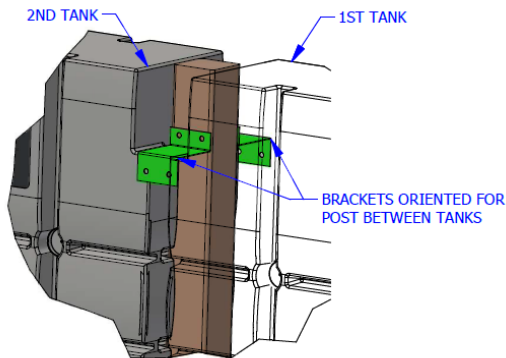
STEP 4

With posts and tank positioned appropriately, pour concrete around the first post, check position, then repeat on the second post and allow concrete to set.

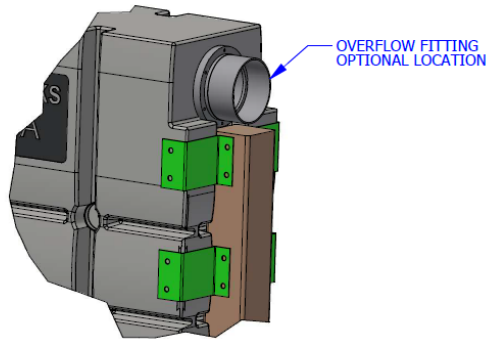
STEP 5

After the concrete has been set, you may remove any temporary fixturing. If timber fence posts are used, install mounting brackets to retain posts at tank end and to retain posts between tanks mounted in series if applicable. See DETAILS E & F

Important: Tanks **MUST** be properly secured with brackets or posts



DETAIL E
BRACKETS BETWEEN TANKS MOUNTED IN SERIES



DETAIL F
BRACKETS ON OUTSIDE ENDS OF TANK

300 Gal USA - Operation and Maintenance

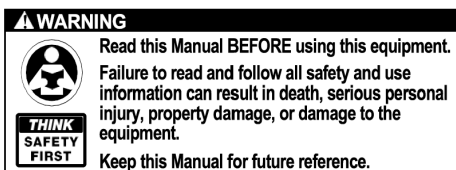
(94.29" x 11.22" x 77.95")

Regular Tank Inspection Checklist

It is important to inspect your roof or catchment area including gutters and any inlet and outlet points on the tank, added accessories, and screens on a regular 6 monthly basis.

Areas to inspect:

- Tank -
Check the general structural integrity of the tank and its foundation including any mounting brackets, fasteners, or posts. Any damaged or deteriorating components must be repaired.
- Roof -
Check for the presence of accumulated debris, such as leaves or animal droppings. If the roof requires cleaning or repairs, first ensure that the water tank is disconnected from the downspout. All foreign materials should be cleared before reconnecting the tank.
- Gutters, leaf filters and first flush devices -
Check for and remove any accumulated debris. Flush clean water and clear any blockages from first flush device as necessary.
- Inlet and overflow screens -
Ensure screens around your tank and on any accessories are properly cleaned, secured and free of damage. These screens prevent mosquitoes and vermin from entering the tank. If broken or missing, check the inside of tank before replacing screens.
- Internal inspection -
Check for evidence of animals, mosquitoes, insects or algae. If present, identify and ensure all access points are properly sealed, and light entry is fully blocked.



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- Tank fittings, pumps, mains switch and pipes - All should be inspected to ensure they are in full working order and don't need repairs.

Important: Be sure to disconnect tank from pump whenever cleaning!

Tip for Reducing Maintenance

The most important and often neglected task when properly maintaining your tank is to ensure your roof, gutters and accessories are clean and free from leaves, bird droppings, dead insects and other debris. Take the following preventative actions to reduce maintenance and repairs over the lifetime of your system:

- Keep your inlet/outlet screens clean and secure. If you know rain is coming, give your screens a quick clean and replace them without delay. This takes less than a minute and will help ensure optimal water flow once the rain begins to fall.
- Cutting back trees or branches that are nearby or overhang the roof or catchment area. This will decrease leaf accumulation, and by removing access points for vermin, will reduce accumulation of their droppings.
- Equipment such as satellite dishes or TV antenna may invite birds to perch on your roof and the droppings they leave behind. If they have made a habit of perching on your roof, you may want to consider moving your equipment to overhang the side of your house.

Other than these tips, do your best to inspect and remove any other leaves and debris you see in your 6 month inspection.

ThinTanks Maintenance

Our rainwater storage units require very little maintenance provided they are correctly installed.

Typical maintenance requirements include:

- Cleaning of the first flush device every 3-6 months
- Removing leaf debris from gutters and roofs every 3-6 months
- Checking insect screens and other potential mosquito entry points at the onset of warm weather each year
- Ensuring that water is not pooling in the vicinity of your Thintank™
- Checking sediment levels every two years and cleaning out all the dirt accumulated from the roof and the sediment build-up (called "sludge") that has accumulated at the bottom. (While sludge is generally not harmful, it can cause problems if it enters your pump or household pipes (you don't want to ingest it).

You can clean inside our tank and remove any excess sludge by:

1. Hiring a water tank cleaning company, or
2. Hosing it out yourself:
 - Take off the inlet on top of the tank
 - Remove or disconnect the pump, drain plugs or ball valves at the bottom of the tank to allow water to flow freely
 - Use a pressure water cleaner/unit and hose out the bottom of the tank to remove the sediment and build up.
 - Once the sediment and build up has been cleared, rinse the tank interior from top to bottom and allow it to drain before reinstalling the inlet at the top of the tank and fittings at the bottom of the tank.

*Cleaning inside any rainwater tank is best carried out by your installer or local plumber and is done during summertime or when the tank is empty.

Did you know: 1mm of rain falling on 1m² of your roof provides 1 liter of water in your tank

Using the average suburban roof of 200m², if you receive 500mm of rain per year, then you will harvest 100,000L of rainwater. This is a conservative estimate - many houses are bigger today and some locations can collect up to 350mm+ of rain in Just one month.

Bigger is often better, but calculating what tank size you need is still an interesting exercise to do. So, multiply the length of your roof by its width to get its surface area then multiply this by your rainfall which you can discover in the United States using the National Weather Service: <https://www.weather.gov/wrh/climate>

Note: Depending on water restrictions, each person living on your property will use approximately 250L per day. So, you can even factor water usage into sizing and selection of your Thintank for rainwater harvesting.

