

Above Ground Water Tank Installation Instructions

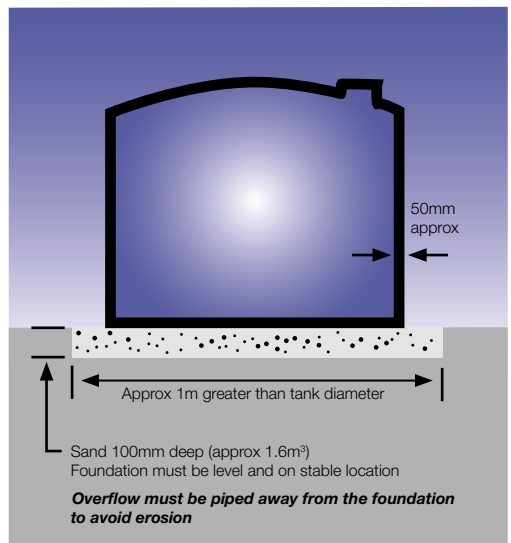
Please read these
guidelines before
installation begins

Failure to prepare and
install your tank correctly,
or continue with ongoing
maintenance, will void
your warranty.

FOR THE INSTALLATION OF ROTOMOULDED PLASTIC WATER TANKS

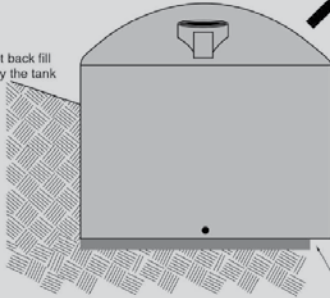
Site Preparation

- Locating your tank in a shady area will help keep the water cool and extend the life of the tank.
- Select a site that is flat, level and free from protrusions (rocks, stones or roots) or any pipes, cables or other utility connections that may require servicing.
- Do not install tanks over underground structures such as cellar, septic tanks, sewage canals etc.
- Do not install water tanks where they could pose a potential hazard to life or property
- Do not bury the tank
- In areas prone to rabbit or other burrowing animals it is advisable to bury wire mesh to a minimum depth of 600mm in a narrow trench around the foundation perimeter.
- In areas prone to strong or gusty winds (e.g. hilltop locations), stabilising wires must be located through the lifting eyes in the top ribs and secured to the ground, particularly where the water level in the tank may vary considerably. **DO NOT** over tighten as damage may occur.
- In areas where livestock have access to the tank, the area surrounding the tank must be fenced to a minimum of 1.0 metre from the tank, to avoid any damage to the tank wall.
- Ensure the platform for the tank is on solid (compacted), stable (free draining) ground, at least 500mm greater in diameter than the tank
- A uniform compacted sand or concrete bedding of 100mm depth is recommended
- The sand bedding must be contained such that it cannot be washed away. A concrete or timber containing strip is advisable.
- On sloping ground ensure that the actual tank site and surrounding area is level and that the area will remain free from any possible erosion damage in the future. **DO NOT** backfill against the tank.
- Placing the Tank on a concrete base pad is acceptable however; the pad must be constructed such that it will support the tank (full of water) without the possibility of cracking and ultimately presenting an uneven surface to the bottom of the tank. Substantial sheering in the concrete base will cause significant stress to the tank bottom, which could ultimately result in its failure. This occurrence will not be covered by the warranty.
- Should you be required to locate the tank on an elevated structure (ie. deck or tower) an engineer's report must be obtained, prior to installation.



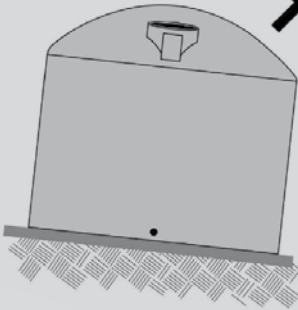
Tank Installation

Do not back fill
or bury the tank



Make sure the base
is fully supported

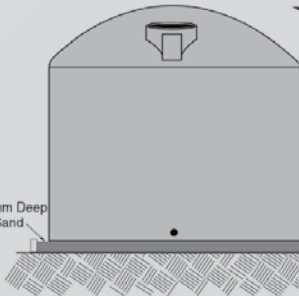
Make sure the base is level



100mm Deep
Sand

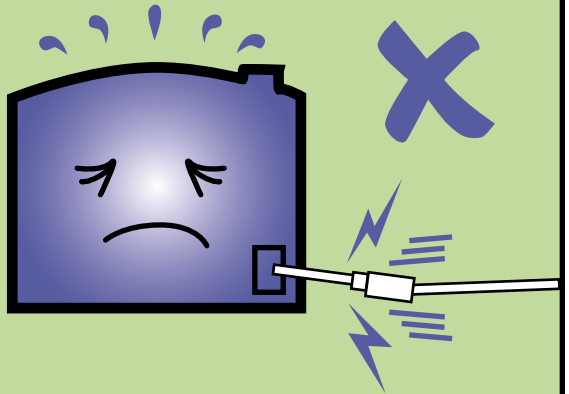
4x2 Timber Boxing

Firm level
ground

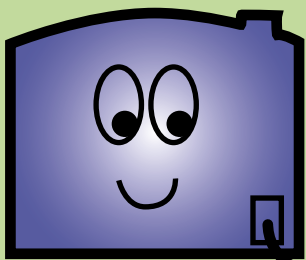
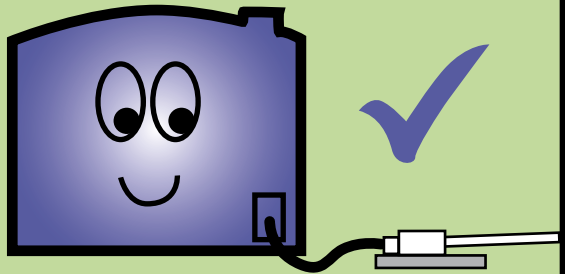


- Where lifting points are provided, ensure all lifting points are used to lift the tank.
- Tank must be empty prior to lifting. Occupational Safety and health regulations must be used when lifting tanks.
- Once the tank has been placed in position, ensure that there are no visible gaps between the bedding sand and bottom of the tank. If so, fill the gaps.
- All tanks must be fitted with an overflow pipe of not less than the diameter of the inlet. The overflow must be piped at least 300mm further away from the foundation (eg. Tank + 500mm diameter base) to where sand and soil are not likely to be eroded. Note: An overflow pipe is necessary even when a ball cock is fitted to the inlet.
- Adequate vents must be installed. The vent must at least be the same size as the outlet or inlet. Air and water must be able to exit the tank at the combined maximum rate that it can enter.
- Inlets and overflows of the tank are either marked out for cutting with the correct tools (a hole saw) or are pre drilled.
- No extra penetrations are to be cut into the walls of the tank without written approval of the manufacturer

Incorrect
Unsupported Pump &
Motor Unit with short
rigid plumbing



Correct
Pump & Motor Unit
supported on it's own mount
with flexible hose plumbing.
(See flexible hose details).



Water pumps can be mounted
further away from your water
tank, however a flexible hose is
still recommended at both ends.

Rigid plumbing

Water pump

Water Pump Installation and Location

Ongoing Maintenance

- All plumbing to the tank **MUST** be flexible (not polyethylene pipe) to compensate for the expansion/contraction of the tank and /or any pump vibration/surging and /or pressure variance.
- All external pipe work must be fully supported. Do not allow weight of suspended pipe work to rest on the wall of tank without being adequately supported.
- If using a water pump **DO NOT** install it directly to the side of your water tank. Support the pump on its own mount and connect it to the tank via flexible hose to isolate any vibration or movement.
- BSPT (tapered) fittings must be used when connecting to the outlet. It is recommended that a thread sealing tape be used on all threads to avoid leaks and subsequent foundation erosion. Care must be taken when tightening fittings. Do not over tighten. Always secure with a spanner when tightening other fittings into the main tank fitting. Any alterations to outlet size must be done by the manufacturer.
- Bungs are screwed in for Transport only. If used permanently please remove the bung and Teflon tape the threads and screw back in. **DO NOT** over tighten if they are to be re-fitted. This procedure must be completed before filling the tank.
- Fill with approximately 1500 litres of water to secure the tank and check the integrity of the fittings and pipe work prior to usage.
- Tanks, including their domes, are not designed to be walked on. Doing so could cause damage! Do not allow children to play on tank domes or lids.
- Should the foundation settle slightly, the polyethylene tank is sufficiently elastic to conform to the ground shape without damage to the tank. However erosion of the bedding sand from around the wall edges must be replaced and the cause of such erosion eliminated or minimised.
- Ensure that the overflow pipe never becomes blocked as excessive pressure could build up inside the tank.
- Ensure that the breather pipe in the top of the tank never become blocked as this can restrict flows out of the tank and cause damage to the tank.

Dos & Don'ts

Dos

Do select a site that is flat, level and free from protrusions.

Do ensure the platform for the tank is at least 500mm greater in diameter than the tank.

Do use uniform compacted sand or concrete bedding of 100mm+ depth.

Do use all lifting points provided when moving the tank.

Do ensure that the overflow is piped at least 300mm away from the foundations.

Do use adequate vents - must be at least same size as inlets/outlets.

Do support all external pipe work.

Do test the integrity of the fittings and pipe work prior to use.

Do ensure that the overflow pipe never becomes blocked.

Do ensure that the breather pipe (vent) is kept clean and free from debris.

Don'ts

Don't install tanks over underground structures.

Don't back fill against the tank.

Don't allow the base to be eroded away - use a containing strip.

Don't leave any visible gaps between the bedding sand and tank.

Don't cut extra penetrations into the walls of your tank.

Don't use rigid pipe fittings – flexibility is essential to allow for movement.

Don't allow the weight of suspended pipe work to rest on the wall of the tank.

Don't directly install a water pump to the side of your water tank – use flexible hose and securely mount.

Don't over tighten fittings.

Don't allow children to play or anyone to walk on the dome.

Checklist

Before you start to install your tank please acquaint yourself with the items on this checklist:

- Prior to installation
- After Installation
- Before filling your tank

- Have you selected and prepared your site foundations as per the installation instructions?
- Is your sand bedding, uniform, 100mm+ and is at least 500mm+ greater in diameter than the tank?
- Has the sand bedding been contained to prevent erosion?
- Are you using the correct tools and fittings for your tank?
- If used, is your water pump fitted correctly?
- Have you more than adequate venting and overflow for your operating conditions?
- Have you used flexible pipes and is all of your external plumbing supported, away from the walls of the tank?
- Is the overflow of adequate size and piped well away from the foundations?
- Are all joints and bungs well sealed?
- Have you tested your water tank to ensure the integrity of all fittings and pipe work?
- Is your water tank ready and safe to use?
- Have you filled in, signed and returned your warranty card to the manufacturer?

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