



DELIVERY & INSTALLATION



Installation Guide for Round Tanks

N.B. The Purchaser must acquire professional assistance when, preparing a base for the tank, preparing a tank stand, placing the tank on a stand, preparing a pad in the ground, and placing a tank in the ground.

1. Prepare Base

Every site must be checked to ensure that the surface is flat, level, and free of any sharp or protruding objects such as tree roots or stones.

CONCRETE

- Prepare a reinforced concrete pad that is flat, level and 200mm wider than the diameter of tank. The thickness of the slab should consider the soil material that you are preparing the base on and the weight of the tank when full. The weight of a full water tank can be calculated roughly with the equation 1 Litre = 1 Kilo.
- The reinforced concrete slab must be at least 25mpa and 100mm (4") thick with F62 mesh halfway through the mix. The surface should be finished smooth, and level and it is recommended that the slab be swept prior to the tank being put in position.
- The base should have some sort of retainment to prevent erosion such as retaining beams.
- The tank can be tipped onto pad from the Nu-Tank delivery truck or trailer (access permitting) ONLY according to Nu-Tank systems OR manoeuvred by equipment (equipment hire at the Purchaser's expense) if truck access to site is denied due to area conditions.
- It is essential that the tank be filled with at least 2.5cm of water or tied down to prevent movement or the tank blowing away.

CRUSHER DUST

- Prepare an earth ring approx. 300mm to 400mm wider than the diameter of the tank.
- Remove approximately 100mm (4") of earth out of the earth ring always ensuring the base is flat and level.
- Re-fill the dugout area with 100mm (4") of crusher dust thoroughly mixed with dry cement powder (about 2-3 bags).
- Ensure the area is uniformly compact with compacting equipment, not by any other means. Re-Check the pad is flat and level. If there are any low spots add more material in required areas and re-compact.
- Ensure the area is screeded flat and level and free from any sharp or protruding objects such as rocks, tree roots etc.
- Once the pad is flat and level do not add water, place the tank on pad and let natural moisture set the cement.
- It is important to check base regularly to ensure it has settled level and flat. It is important to make sure the pad is flat and level at all times.
- The tank can be tipped onto pad from the Nu-Tank delivery truck or trailer (access permitting) ONLY according to Nu-Tank systems OR manoeuvred by equipment (Equipment hire at the Purchaser's expense) if truck access is denied due to area conditions.
- It is essential that the tank be filled with at least 2.5cm of water or tied down to prevent movement or the tank blowing away.

PLEASE NOTE: Sand is not acceptable as it is washed away easily with heavy downpours and animals can undermine the base.

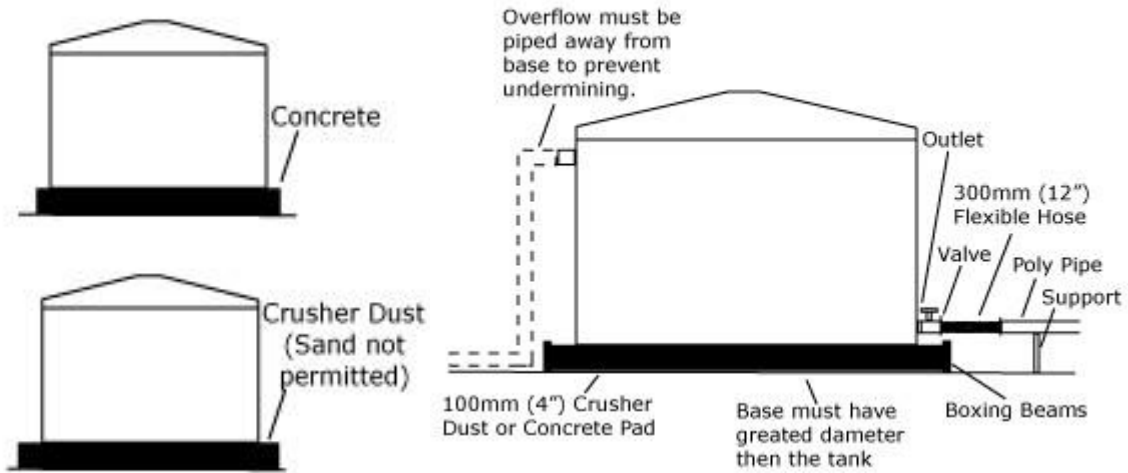


FIGURE 1

FIGURE 2

TANK STAND

- The tank stand must be constructed to hold the weight of a full tank. The weight of the tank when full can be calculated roughly with the equation 1 Litre = 1 Kilo + weight of the tank.
- Use a base of hardwood decking with gaps no greater than 10mm. Decking must be supported structurally by bearers strong enough to prevent any sagging of decking when tank is full.
- The empty tank must be lifted into place by crane (Equipment hire at the Purchaser's expense).
- Pipe work for tanks on stands must be supported by the stand, not the tank. Flexible hose should be used to allow for any movement.
- It is essential that the tank be filled with at least 2.5cm of water or tied down to prevent movement or the tank blowing away.

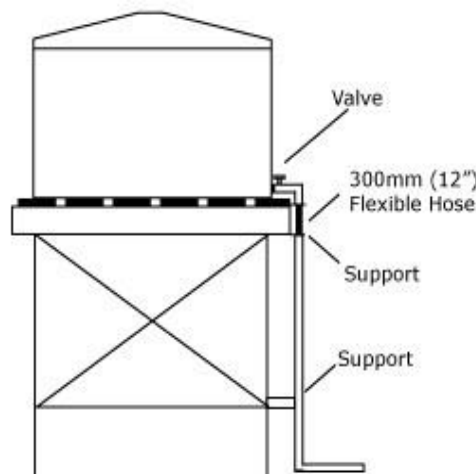


FIGURE 3

IN GROUND

- The depth of the hole (once bedding in place) must not be any greater than 1/3 of the tank wall height or 1 meter into the ground whichever is less.
- The hole must be dug 300mm wider than the diameter of the tank. A separate hold must be dug for each tank.
- Ensure that the surrounding soil left in the walls of the hole is solid, leaving a 300mm gap to allow positioning of tanks and backfilling with sand. (If there is major water seepage into the hole from the surrounding soil this site will not be suitable).
- Prepare a tank base as per concrete or crusher dust base installation guide (on page 1).

- The empty tank must be lifted into the hole squarely and level by a crane (Equipment hire at the Purchaser's expense).
- The tank must then be filled completely, and hole back filled with bedding sand. The top 150mm can be filled with fresh soil.
- Ensure that the tank is buried evenly on all sides to ensure pressure is evenly distributed against the walls.
- It is essential that the tank be filled with at least 2.5cm of water or tied to prevent movement or the tank blowing away. Nu-Tank suggest that the Purchaser erect a fence surrounding the inground tank for safety reasons.

2. Before Plumbing Up

- While care is taken in protecting any openings during the delivery process, it is possible that traces of dust/debris may have entered your tank. It is recommended upon placing your tank on its base to fill your tank to just above the bottom outlet and flush out any immediate contaminants that may have settled once unloaded.
- When connecting your tank to a pump please refer to the pump manufacturers specifications and connect a pre-filter.

3. Water Outlet / Fittings

A Flexible hose **MUST** be fitted to each outlet to validate the warranty.

- Flexible hose 300mm (12") in length must be placed between the valve and other plumbing including pumps and pipes.
 - Support all pipe to minimise strain on fitting and tank wall (see figure 4).
- When pipe is exposed over a long distance, insert a flexible hose between the fittings and pipe to absorb any movement (see figure 5).
- Take the pipe directly into ground to avoid running over the pipe and breaking any fittings (see figure 6).
- Overflow must be piped away from the tank to prevent undermining (see figure 2).
- When fitting pipe to a tank stand the pipe must be supported by the tank stand, not the tank (see figure 3).
- When pipe work is exposed over long distances, insert a length of flexible hose to absorb shock and movements.
- Pipe must be supported. If not, this may cause water leakage and damage to the tank.
- The size of the overflow must be the same or greater than the inlet. If using a 1 x 90mm overflow in the tank you cannot have any more the 1 x 90mm downpipe inlet filling the tank.

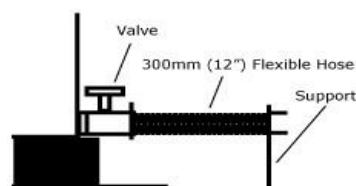


FIGURE 4

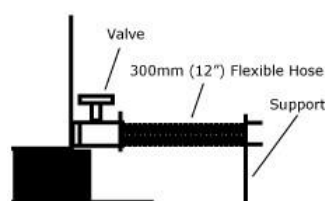


FIGURE 5

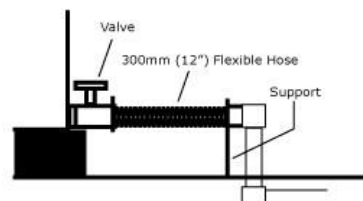


FIGURE 6

4. Inspect Regularly

- It is the Purchaser's responsibility to maintain the tank and ensure it is kept clean. The roof of the tank must be kept free of leaves or other debris and the strainer inlet must be kept free of obstructions. Overflow caps must also be kept clean.
- Regular inspections must be conducted to check for any undermining, cracks, or burrowing (mice and toads etc). Check pad is flat and level and has not sunk. NOTE: The pad must be flat and level at all times.

5. DO NOT -

- Place tanks on rocky or uneven surfaces with little preparation, this causes undermining of the tank base and sharp objects can protrude through tank.
- Allow overflow to spill down the side of the tank as this will cause undermining of tank base.
- Use corrugated iron decking, timber sleepers, bricks, tyres, and other as a tank base. This type of base should not be used under any circumstance. It is unsuitable and dangerous.

These recommendations are only a guide only and Nu-Tank does not warrant that these are relevant and accurate to all customers and all tanks. The Purchaser must seek professional assistance when preparing a site for the tank. Nu-Tank accepts no responsibility negligence or otherwise for the loss or damage to tanks during or as result of movement and installation notwithstanding that the Purchaser has relied upon and followed the recommendations contained herein.

DELIVERY

Your Nu-Tank will be delivered to most areas on site free of charge, access permitting. Nu-Tank delivery drivers require a clear, flat area to unload your tank/s. It is your responsibility to ensure Nu-Tank have clear uninterrupted access to the site. Maximum access required for the delivery truck is 16.5T vehicle, 19m long, 3.45 wide and 5m high. Nu-Tank delivery truck will need a minimum of 50m turning space for your delivery. Nu-Tank request to be informed prior to delivery if sufficient access is unavailable. Products are delivered on a truck or a truck and trailer, depending on loads required for your region at the time. Please check that all gates, roundabouts, and overgrown bush life are accessible so that we are able to deliver your products to the required location without damage occurring. Roads should be checked to ensure they will accommodate the size and weight of our vehicles. Please inform us immediately if roads are not accessible for any reason including but not limited to wet weather, narrow or low bridges or fencing. Products are only delivered free of charge once, the supply of incorrect information regarding road and accessibility conditions resulting in the product being brought back to the factory will incur a delivery charge for all future deliveries of that product. Supply of incorrect information regarding roads and accessibility resulting in damage caused to property will not be warranted by Nu-Tank or QLD Transporters and the company will hold no liability as a result. You must let us know if you cannot accommodate a semi-trailer at your property so we can arrange delivery appropriately. If delivery cannot be made to site for any reason, the product will be unloaded at the closest possible location.

ASSISTANCE REQUIRED: Please note that if other equipment must be used during delivery, hire of this equipment is at the purchaser's expense. The delivery driver is not responsible for the positioning of the tank. Nu-Tank and QLD Transporters will unload the tank from the delivery vehicle as close as possible to the customer's desired location as it is safe to do so. Movement of the product from that point forward is the customer's responsibility. The customer shall be liable for any additional, cost, charge, damage, or injury incurred to any party present due to the movement of the product. The company recommends that you acquire professional assistance when moving tanks although, the following recommendations in the table below may be observed if you intend to position and/or move your tanks yourself. When positioning Molasses Tanks we recommend at least 1 extra person to that listed below to assist in the positioning of each size.

ALL PRODUCTS DELVIERED REQUIRE AT LEAST 1 PERSON TO BE PRESENT FOR DELIVERY. FOR ANY MOVEMENT OF TANKS, WE RECOMMEND THE FOLLOWING NUMBER OF PEOPLE TO ASSIST:

30Gal - 2,200Gal	= 1 Person
3,300Gal - 5,500Gal	= 3 People
6,200Gal	= 4 People
10,200Gal	= Machine Assistance.

Positioning Round Poly Tanks: When rolling or moving the tank into position beside the slab or stand, take care not to roll over any objects that may cause damage to the tank and/or tank fittings. Nu-Tank and QLD Transporters take no responsibility for any damaged caused to the tank and its fittings whilst positioning.

NOTES

1. The driver has the final decision to assess suitability of the site and will place the tank as near to the pad as safely possible. The driver may consider the site to be unsafe if not found to be easily accessible.
2. The driver will attempt to contact you prior to delivery although failure to answer these calls will result in the tank being dropped off at the delivery location supplied to the company or taken back to the factory (delivery is only free of charge once per tank).

3. Nu-Tank and/or its agents do not take any responsibility for the preparation of the tank base or the installation of its products. It is the sole responsibility of the purchaser, or their agent to ensure that the product is installed in accordance with these instructions and maintained on an ongoing basis.

CHANGES: Dimensions and capacities given are approximate only; natural variations in shrinkage can vary some dimensions by ± 40 mm, depending on the size of the tank. In the interests of continually improving our products, and service we reserve the right to change specifications on our products, guides, and warranties without notice.

LIFTING POINT: Each tank is to be lifted through the breather at the top of the tank, pre-moulded lifting lugs or if none present (as is on smaller tanks/products) through the inlet.

You indemnify us against any loss, damage, cost, expense, claim, proceeding or liability of any kind that we (or our personnel) may incur, that arises out of or in connection with, the delivery of your product (including all person's present failure to comply with delivery instructions listed on the installation guide), incidents arising from your instruction or direction or the lawful exercise of our rights pursuant to these Delivery Instructions.

The company will not be held responsible for damage caused to the product or property by these factors and other factors, which are beyond our control.

Please do not place objects on the top of the tank, do not screw anything to the tank. Do not sit, stand, or walk on top of the tank.

DEFINITION

Equipment/Machinery can be defined to include items such as crane, 4WD tractor hire, backhoe hire, front end loader etc.

*****INCORRECT INSTALLATION WILL RESULT IN WARRANTY BEING MADE VOID*****

Call the Nu-Tank office on (07) 4923 1111 if you have any questions or concerns about the installation guide.