

These guidelines cover the installation of large above ground water tanks. Please ensure that you have read and understood the entire document before attempting to install the tank. If you have any questions, please call us on 01763 261781.

**Please note:** *responsibility for the tank passes to the buyer once unloading commences; it is therefore important that the buyer accepts the condition of the tank on arrival before attempting to move it. Inspect for damage before delivery is accepted. If problems are noted, contact your supplier immediately*

These large water tanks are designed to be lifted and manoeuvred only when empty. Under no circumstances should they be lifted or manoeuvred when containing water.

These tanks can be unloaded, moved around site and lowered into position by attaching lifting chains and appropriately sized D-shackles to the lifting points provided, or by use of lifting straps around the whole tank. However, some initial swing should be anticipated. This must be stabilised before the tank is moved further. To stabilise the tank when moving around the site, guide-ropes should be attached to the chains, enabling operatives to control the load from a safe distance. The use of extended forks is also recommended, but be careful to guard against damage caused by forklift blades.

## THE BASE

Install tanks on a smooth, level concrete base built in accordance with good building standards and engineering principles. A **reinforced concrete base** is strongly recommended. The base should be adequate for the weight of the tank and large enough to extend beyond all sides of the tank. Polyethylene tanks may contract or expand due to temperature changes, atmospheric conditions. The tank must not be sited tight against a wall or similar structure. Leave a gap of at least 300mm all around the tank. If the tank is inadequately supported, the tank itself can be weakened. During the life of an installation of a storage tank, the base will need to provide continual structural support, even though ground conditions may alter from season to season and year to year.

We recommend that your tank base is a minimum of 600mm (24") larger than the dimensions of the tank and has a minimum depth of:

- 152mm (6") for 10,000 litres
- 204mm (8") for tanks over 10,000 litres

Please remember:

- You will need enough room to carry out any maintenance activities
- Consider the work activities that will take place in the vicinity of the tank and take precaution against accidental contact with the tank. Impact with the tank, especially at low temperatures, may result in tank failure.
- Your tank is not designed to support the weight of machinery, equipment or any heavy load. Do not mount items like this on the top of the tank or on its fittings.
- If it is necessary for workers to enter the tank, great care should be taken to guard against asphyxiation or breathing of hazardous vapours and fumes.

## BEFORE DELIVERY

Please ensure that

- suitable access and parking arrangements have been made for the delivery vehicle
- plant is available to unload the tank
- a clear route has been designated between the delivery vehicle and the installation site
- a risk assessment and method statement for unloading and manoeuvring have been prepared and signed off
- the installation site is level and clear of obstacles and site debris

## FITTINGS AND ACCESSORIES

- Be aware of the type of fittings used on your tank. Hand tighten bulkhead fittings. If they are over-tightened, the fittings may leak.
- It is important that fittings, valves, pipes and other accessories are fully supported. Fittings and tank attachments should not carry any weight.
- All rotationally moulded tanks will expand and contract as they are filled and emptied. The connection between any fixed pipework and the tank (or tank outlet) must allow for this movement.
- Care must be taken with the installation of accessories. Consult the documentation for the accessory for more detailed installation information

### Installing the brass male tank connector

- Lay the tank on its side.
- Drill a hole for the male tank connector on one of the flat recessed areas at the bottom of the tank. For the standard 2" tank connector, the hole should be 57mm diameter. The bottom of this hole should be approximately 60mm up from the bottom of the tank to allow for the thickness of the base and the internal curvature between the base and the wall of the tank. Check that the internal surface is flat enough to provide a waterproof seal
- The brass tank connector must be threaded through from the inside. Remove the brass nut and the washer. The rubber gasket must be on the inside of the tank.
- If you wish to enter the tank to push the outlet through, a confined space risk assessment will be required.
- Alternatively push a length of hose through the hole you have drilled and out through the lid. Push the top end of the hose through the outlet and let it drop down until it can be pulled through from the outside. Put the brass washer on first and then tighten using the brass nut on the outside of the tank. Be aware of the type of fittings used on your tank. Hand tighten plastic bulkhead fittings. If they are over-tightened, they may leak.

## BEFORE USE

Test your installation by filling the tank with water before you put the unit into use. Verify the integrity of the tank and its fittings.

## TANK USE

- Use your tank only for the purpose for which it was created. Do not apply contents under pressure or create a vacuum.
- Make sure that the materials you store in the tank are appropriate for the properties of the tank, fittings, gaskets and accessories.
- These tanks are designed to store water and for the specific gravity of water. Using the product for applications other than those they were designed for will invalidate the warranty.

## TANK MAINTENANCE

Tanks should be inspected regularly (at least annually). This inspection should include:

- the fill point arrangement (for soundness and leaks)
- outlet valves (for leaks and operation - open and close successfully)
- a visual inspection of the whole tank with emphasis on the base of the tank (check for deformation of the surface of the tank i.e. excessive bulging, change in colour due to chemical attack, crazing or stress fractures)

The base should also be checked for signs of stress or damage.