ABSOLUTE CONCRETE

Water Tanks

A Precast Concrete Fortress™ water tank from Absolute Concrete is New Zealand’s Toughest Water Tank and at 22500 litres of actual storage (5000 gallons) will satisfy all your water storage requirements.

APPLICATION

Rainwater from your roof is the most common and best method of water collection in Northland.

In Northland a 120m² roof should collect approximately 110,000 litres of water in a dry year. For a four-person household this equates to around 75 litres per day and the average usage is about 150 litres. This sounds like a lot but we all know conserving water is important especially when you throw in a particularly dry Northland summer! Absolute Concrete Fortress™ tanks will meet your storage requirements.

Tanks may be partially or fully buried, completely out of site so as not to disturb play areas or views.
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FEATURES

- Made with high slump certified concrete, it is a one piece moulded concrete tank that can be partially or fully buried up to 200mm underground.
- Our Fortress Tanks are made using special high tensile welded reinforcing mesh through the entire structure. This means that unlike fibre reinforced concrete, we have the ability to engineer more strength where it’s needed most and our steel is spaced within the confines of the concrete minimising any likelihood of rusting and creeping tank failure in years to come.
- Because of the structural integrity of steel mesh reinforcing, should your tank be hit by a vehicle or damaged in some way, the tank will still hold together and effective repairs can be easily achieved.
- Concrete tanks are designed to keep your water cold (up to 9° cooler than other storage methods)
- Concrete tanks keep the water in the dark. This helps prevent algae growth present in some other tanks.
- Concrete water tanks are a reliable and convenient water storage in the event of fire.
- Concrete water tanks do not require additional restraints in high wind zones.
- An Absolute Concrete Water Tank does not require a building consent.
- A drive over Tank option is available suitable for light vehicle traffic.

MANUFACTURING STANDARDS

Absolute Concrete Water Tanks are manufactured to standards NZS 3106 and use material that conform to NZS 3422 and NZS 3109:1997. They are manufactured using high strength concrete and fabricated circular steel reinforcement (welded steel mesh) not fibre like some other manufacturers. This helps to achieve a water tank suitable for a range of installations. The tanks have lifting anchors cast into the concrete walls.
Standard water tank lids may be installed to ground line and concealed with a maximum of 100mm of light free draining material such as bark, scoria or mulch. (Optional lid seals and manhole risers are required for this kind of installation). Standard lids are designed for pedestrian traffic only.

Heavy Duty Tank Lids are optional and a heavy-duty lid may be completely buried up to 200mm underground and still take light loads such as pedestrian traffic and mowers. We do also have options for vehicle surcharge if required. The HD lids are assembled and sealed on delivery.

After installation of a buried water tank we advise that you make sure it is at least half filled with water before backfilling. Where there is enough fall, tank holes should be permanently drained to avoid floatation. Anti-floatation bases can be provided where high water tables are present.
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Water Tank Dimensions

<table>
<thead>
<tr>
<th>Code</th>
<th>Dimension A (Riser)</th>
<th>Dimension B manhole</th>
<th>Dimension C Height with Lid</th>
<th>Dimension D Height to top of wall</th>
<th>Dimension E Height to Inlet/Outlet</th>
<th>Dimension F Width</th>
<th>Approx Weight</th>
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</table>

As you can see above, we have two slightly different mould sizes.

When preparing your tank site you should allow approximately 4.0m x 4.0m for each tank pad.

For a two-tank site we need to either ‘Tee’ the truck onto the length of it (Good ground required) or we will need to access from either end.

Instances where the ground or access is problematic and we can only access from one end, each hole may need to be prepared and tank installed separately as we cannot reach two tank lengths from one end of an 8.0m hole.

In these instances, please allow for additional site time to be charged.

Each tank pad should be on level good ground with roughly 75mm of evenly spread uncompacted bedding fines such as Pap7. (Sand should only be used if it is captive or it will likely wash out and undermine the tank over time). If good ground cannot be achieved, a base of compacted aggregate will need to be installed before the bedding fines are added.
Siting Instructions for Water Tanks

Our tanks are delivered using rear mount crane trucks positioned at the back of the deck. The site for the truck to park and offload must be level and allow for the truck to back up to the tank site.

The truck must then be able to put out the outrigger/stabilising legs to extend a total of 8.5 metres (3.0m either side of the 2.5m wide deck) as per the photo below. The stabiliser legs cannot be put onto fresh or uncompacted fill, they must be supported by solid ground. The truck cannot unload off the side or on uneven ground.

The crane is able to reach out approximately 3.0m with the std lid on or up to a maximum of 5.5m with the lid removed; this is taken from the rear of the truck. The smaller the tank, the further the reach.

Please make sure:

1. There are no overhead wires, branches, gate posts, etc. blocking the access of the loaded Tank and Truck. The driver will take as much care as possible not to damage property but will not be held accountable for damage due to restricted access.

2. The ground is firm enough for the truck. Make sure there are no holes, drains etc to fall into. If you have a wet site please have a good-sized digger or appropriate machinery on site.

3. Siting requires a level site and a good foundation so that all the weight is distributed evenly on solid ground. The truck will not be stable on fill. Please ensure the digging material has been placed so that the truck can access the tank site with room for the stabiliser legs.

4. Your tank site needs to be flat and level. It is advisable to set the tank onto a base of fines of 7mm granular material and this should be on a Good Ground base (NZS 3604) If there is any doubt that the fines may be washed out over time, it is advisable to box them in. The area should be free of rocks, tree roots and other protrusions that may cause pressure points. For fully buried tanks or tanks with vehicle surcharge, a compacted hardfill base may be required.

Please have your site prepared for our truck as we allow 30 minutes per tank on site. Please note: Site preparation is the purchasers’ responsibility however we can carry out a site visit prior to delivery to assist in your preparation. You will be liable for any site work carried out by our staff.