

TANK BASE PREPARATION

This guide for base preparation should be followed to ensure a correct foundation is laid for your AQUAPLATE® tank. **Damage to your tank due to failure or movement of the tank base is not covered by the warranty.** Please keep in mind that 1000L of water weighs 1000kg, and this is a significant force. Soft ground may subside under the weight of a full tank.

The base of your tank is made with double sided AQUAPLATE® i.e. the inside and outside of the tank base is coated with a polymer film to prevent corrosion. The tank may be in direct contact with the tank base and the tank will not corrode. Hence there is no reason to elevate the tank above ground level.

All tank bases need to be flat and level. Pad levelness needs to be in range of +/- 1.5 degrees.

This base preparation guide should be taken as a guide only. Specific details on the construction of a tank base should be referred to an engineer for formal advice. Kingspan Water & Energy accept no responsibility for the failure of a tank base.

STAND

Stand construction must be certified as strong enough to support the tank's weight. Consult a structural engineer to ensure the construction and footing is sufficient for the tank. The top of the stand must be flat, smooth and level. Tank stands may be made with varying leg lengths to accommodate a sloping site. Kingspan tank stands are available to suit a range of tanks.



The platform must be in contact with greater than 95% of the area of the base of the tank with gaps no greater than 5mm between supports.

CONCRETE PAVER BASE

To use a concrete paver base, the area must be cleared down to firm earth. A paver base installed on soft ground (i.e. a garden bed) will subside over time, and is

not advisable. Once dug down to a firm surface, spread sand and cement mix 75mm thick over the entire base, level out then proceed to place concrete pavers flat on top. Once laid, shower the pavers with water to set the sand and cement off. Paver base is to be large enough to support all edges of the tank. Tank may be placed on to paver base straight away. Do not fill tank above 2 corrugations for at least 48 hours.

CONCRETE BASE

A concrete slab base is the most suitable base for your AQUAPLATE® rainwater tank. Construction of a concrete base needs a minimum of 100mm thick concrete and F62 mesh, on a flat level area. If the tank is to be positioned in an area that is on a slope then the thickness of the slab is to be increased and the mesh to be a higher grade. The slab must be flat, smooth and level. Finish with a metal trowel is advisable. Slabs must be large enough to support all edges of the tank, and should be at least 100mm longer and wider than the tank. Slabs must be allowed to cure for at least five days prior to placing tank on slab.



CRUSHER DUST BASE

Crusher dust bases are only suitable for larger diameter round tanks. The crusher dust must have no particles larger than 5mm diameter. The crusher dust is to be 100mm thick. It must be compacted, level and flat. A border must be placed around the crusher dust to ensure it does not erode over time or is undermined by heavy rain or burrowing animals. The base should be large enough to support all edges of the tank. Tank may be filled straight away. Coarse aggregate should be spread over any exposed crusher dust, after the tank is positioned, to prevent erosion.

Note: Care must be taken when positioning the tank on a crusher dust base to ensure it does not dig in and create an uneven surface.

