TANK PAD PREPARATION
URBAN STEEL TANKS

This guide for pad preparation should be followed to ensure correct foundation is laid for your AQUAPLATE® tank. Damage to your tank due to erosion and/or subsidence of the tank pad, due to incorrect pad preparation, is not covered by the warranty. Please keep in mind that 1000L of water weighs 1000kg, and this is a significant force. Soft ground (i.e. uncompacted fill) 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 installed in direct contact with the tank pad and will not corrode. Hence there is no reason to elevate the tank above ground level or place any additional material between tank and tank pad (i.e. geofabric, etc.).

All tank pads are required to be flat and levelled to within ± 1.0 degrees slope.

While this pad preparation guide should be followed to guarantee a correct tank pad preparation, the site selection and all related specific details (i.e. unfirm soil due to excessive fill, lack of retaining structures, proximity to structures, presence of underground services, etc) should be referred to an accredited engineer for formal advice. Kingspan Water & Energy accepts no responsibility for the failure of a tank pad resulting from poor site conditions and/or not following this guide.

Do not fill tank above 2 corrugations for at least 48 hours.

Please note that our product warranty will be void if this pad preparation guide has not been followed. Please contact Kingspan or your reseller to confirm that the pad you have selected will meet terms & conditions.

TANK STYLE v PAD TYPE

	Pad Type			
Tank Style	Stand	Paver	Concrete Pad	Crusher Dust
Slimline	✓	✓	✓	✗
Modline	✓	✓	✓	✗
Square	✓	✓	✓	✗
Round (diameter)				
≤1900mm	✓	✓	✓	✗
≤2500mm	✗	✓	✓	✓
≥ 2600mm*	✗	✓	✓	✓

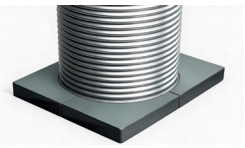
If during the delivery of your tank our team determines that your pad does not comply with these instructions, we reserve the right to charge a re-delivery fee once the pad is rectified.

CONCRETE PAD - RECOMMENDED CHOICE

A concrete slab pad is the most suitable pad for your AQUAPLATE® water tank.

Construction of a concrete pad for a water tank 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 accordingly and the mesh to be a higher grade.

The slab is required to be flat, smooth, and level with no more than a 1° slope. Finish with a metal trowel is advisable. Slabs should be at least 100mm longer and wider than the tank.



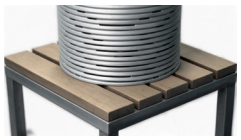
Slabs are required to cure for at least five days prior to placing tank on slab.

TANK STAND

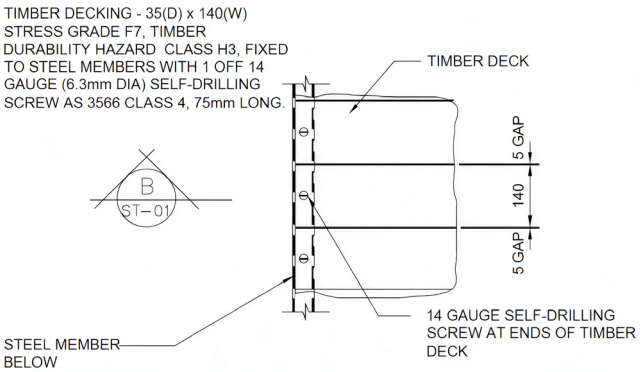
Construction of tank stands must be certified for structural adequacy to support the tank's weight.

Kingspan can provide tank stands engineered to Australian Standards and certified by an independent accredited structural engineer. Kingspan tank stands are available to suit a range of tank models and sizes.

If you intend to supply your own tank stand, consult a structural engineer to ensure the construction and footing is adequate for the chosen tank.



The top of the stand should be flat, smooth, and level. Tank stands may be designed to accommodate a sloping site (i.e. with different leg lengths).



The platform should be large enough to support all edges of the tank. With reference to the picture above, the recommended gap between the timber decking boards is 5 mm and must never be greater than 25mm. The tank stand is required to be level with no more than a 1°slope.

The tank stands are required to be installed on concrete footings. All concrete footings supporting Tank Stands must be engineered and constructed in accordance with applicable Australian Standards.

Kingspan does not accept any responsibility for damages arising from use of inadequate tank stands and/or inadequate footings.

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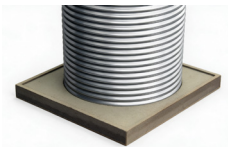
CONCRETE PAVER PAD

To use a concrete paver pad, the area is required to be cleared down to firm earth. A paver pad installed on soft ground (i.e. a garden bed) will subside over time and is not advisable.



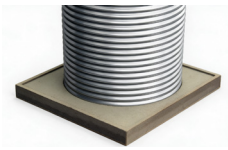
To achieve the best paver pad then follow the below proven steps:

1. Clear chosen site and dig down to firm, flat and leveled earth, remove vegetation and other debris.
2. Apply a retaining border 100mm larger than the tank size. Note - *Retaining border should be environmentally sustainable, H4 or equivalent treated pine 140 x 45mm.*
3. Spread sand and cement mix 75mm thick into the retaining border over the entire base.
4. Screed the sand mix and check that the material is level and flat. Excess slope/gradient can lead to an unstable tank.
5. Compact the base with a plate compactor. Ensure there is adequate compaction (minimum allowable bearing pressure of 120kPa) to avoid subsidence.
6. Lay the concrete pavers flat on top of the compacted base with a maximum gap of 25mm between the pavers.
7. Once laid, shower the pavers with water to set the sand and cement off.

The paver pad is required to be large enough the support all edges of the tank. The tank may be placed on the paver pad straight away.

CRUSHER DUST PAD - LARGE ROUND TANKS

Crusher dust pads are only suitable for larger diameter round tanks. The crusher dust must have no particles larger than 5mm diameter.



To achieve the best crusher dust pad, follow the below proven steps:

1. Clear chosen site and dig down to firm, flat and leveled earth, remove vegetation and other debris.
2. A retaining border is required to be placed around the crusher dust to ensure it does not erode over time or is undermined by heavy rain or burrowing animals.
3. Apply a retaining border 200mm larger than the tank size. *Note - Retaining border should be environmentally sustainable, H4 or equivalent treated pine 140 x 45mm.*
4. Spread the crusher dust 100mm thick into the retaining border over the entire base.
5. Screed the crusher dust and check that the material is level and flat with no more than 10mm variation across the pad. Excess slope / gradient can lead to an unstable tank.
6. Compact the pad with a plate compactor. Ensure there is adequate compaction (minimum allowable bearing pressure of 120kPa) to avoid subsidence.
7. Place the tank into position ensuring that the crusher dust pad is not disturbed during placement. The tank can and should be filled immediately upon placement up to at least 10% of its capacity.
8. Coarse aggregate (Blue Metal is our recommended choice) should be spread over any exposed crusher dust, after the tank is positioned, to prevent erosion.

Note: Care is required to be taken when positioning the tank on a crusher dust pad to ensure its initial flatness and compactness are preserved.

Scan the QR code to watch "How To: Build A Crusher Dust Pad"

IMPORTANT:

If during the delivery of your tank our team determines that your pad does not comply with these instructions, we reserve the right to either:

a) return the tank to our yard and charge a re-delivery fee once the pad is rectified.

b) If there is an available space that is suitable on the site we will leave the tank for storage only.
The Kingspan team will return, at an additional cost, to place the tank once the pad has been rectified.
If you decide to install the tank on the rectified pad yourself, the action may void your warranty if not done correctly.

We take every care to ensure that the information in this document is accurate at the point of publication. Information should not be taken as binding.
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