

Guidelines for Provision of Hardstand Foundations for Transtank Installations

1. General

These guidelines are intended to provide general guidance for the provision of hardstand foundations for the installation of Transtank equipment in areas where stable soil conditions apply. Users of these guidelines should consider individual site soil conditions and obtain independent advice based on the soil types at each location.

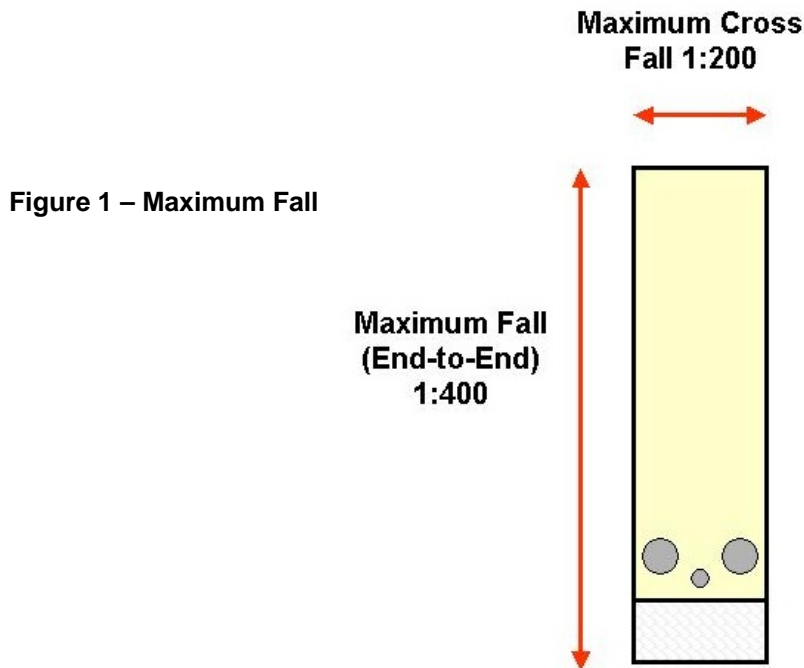
It is very important that the tanks be installed on a stable foundation which will adequately support the tanks. Where multiple tanks are installed and piped together, it is particularly important that there is no significant differential settlement between tanks.

2. Falls and Tolerances

The tanks should be installed on a **level**, slightly raised platform, such that any water will drain away from the tank foundation. If a level platform is not possible, any falls should not exceed the maximum falls as shown below. Any deviation in the finished surface should not exceed 10mm from a 3 m long straight edge placed at any point on the surface.

In all cases, the tanks must rest on all 4 corners when placed on the finished foundation.

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3. Hardstand Foundation Construction

3.1 Sub-grade

The area should be prepared by removing any grass or other vegetation, and trimmed to obtain a level base generally as above.

The existing sub-grade should then be compacted by rolling until the dry density is not less than 100% of the material's maximum dry density in accordance with AS1289 (Standard compaction). Should any wet or soft patch appear, they should be cut out and filled with selected refilling material and similarly compacted.

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3.2 Top Course

Once the sub-grade has been prepared, the top-course layer should be installed.

Typical 150-200mm compacted thickness is required, but this is dependant on the soil conditions and bearing capacity of the sub-grade material.

The top-course should be CBR45 roadbase type material, placed in moist 150-200mm layers and compacted to 95% modified compaction.

Compaction should follow immediately after placing and spreading the material and under no circumstances should the materials be allowed to dry out before compaction. If during the course of compaction, surface drying occurs, the surface shall be lightly sprayed with water.

Any irregularities or depressions that develop during rolling may be corrected by loosening the material at these places and adding or removing material as necessary until the surface is smooth and uniform. Re-compacted layers shall be not less than 50 mm compacted thickness.

After compaction, the whole of the surface should be graded, trimmed and finished to give a hard, tight, dense, even surface, free of lenses and caking, in accordance with the levels and tolerances listed in section 2 above, and as specified in the site set-out drawings (where applicable).

