

**Paneltim® Tank (with riser spigots)****Below-Ground Tank Installation Guidelines**

December 2018

The information provided herein is informative only and it applies to the below-ground installation of 'Paneltim®' fabricated Trade Waste Pre-Treatment Tanks manufactured by Viking Plastics Engineering P/L. As rules and regulations differ from region to region, prior to proceeding we recommend the installer verify the procedures mentioned in this document satisfy the requirements of Water Corporation and any other local Authorities and you follow appropriate and approved excavation practices.

**Siting Considerations**

1. The tank should be located as close as practical to source of contaminated water.
2. Ease of accessibility for maintenance.
3. Water tap for the purpose of wash-down should be located nearby and must be fitted with backflow prevention device.
4. The access cover must suit the tank application and be adequate for the expected traffic conditions.
5. For some excavations you may require a geotechnical report for ground stability and off-sets from buildings. Also determine the location of underground services before you dig.

**Excavation & Preparation**

6. The ideal excavation size will be at least 150mm clear of the tank base and all four sides.
7. Allow for thickness of access cover height when excavating.
8. In the event that the sub-surface earth is particularly wet or soft, the earth under the tank should be compacted and, if necessary, filled with a layer of 20mm crushed rock at least 150mm deep. (additional to 150mm back-fill material)
9. For tanks over 5,000lt in capacity a 100mm thick concrete slab will need to be poured for the tank to be placed on. (instead of aggregate base)
10. Verify that inlet, outlet and vent pipe levels match the level of the pipe spigots on the tank.

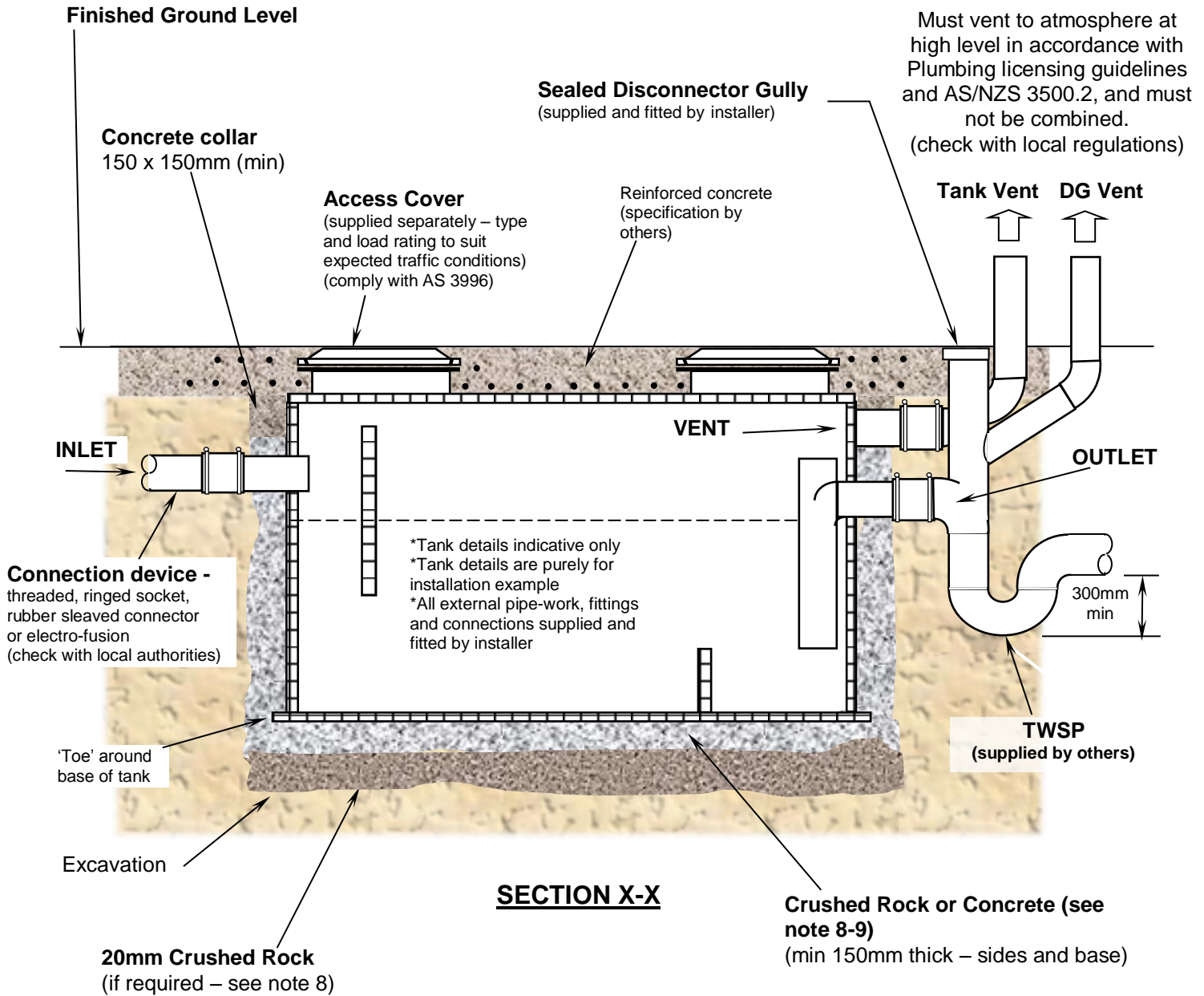
**Placing Tank**

11. Fill bottom of excavation with a minimum of 150mm crushed rock \*see note8-9 (6mm – 20mm aggregate) (or concrete for tanks over 5,000lt).
12. Place tank on top of crushed rock base (or concrete).
13. Ensure tank is plumb and pipe tails are connected appropriately and according to local regulation.
14. Backfill with 6mm aggregate evenly around the tank to prevent lateral movement.
15. *Progressively fill tank with water during installation.*
16. Backfill in layers approx. 150mm deep and lightly compact (by foot is acceptable).
17. Backfill to 150mm from top of tank. (remaining portion of the tank and access covers are to be concreted in place).
18. Lightly compact crushed rock – do not over compact. Over-compacting may cause tank walls to bulge inward.

**Access Covers (AS3996)**

19. The access covers must suit the tank application and be adequate for the expected traffic conditions.
20. Place cast iron access covers and incorporated frame onto the short riser spigots.
21. Best practice suggests applying 'Denso' grease to the 'mating' surfaces of the cover sections. This prevents corrosion, assists lid removal and helps create a gas tight seal.
22. The entire top of the tank to be covered in steel mesh or reinforcing bar to suit expected traffic conditions.
23. Steel reinforcing, concrete MPA and thickness to be determined by others to suit expected traffic conditions.
24. If the covers are concrete infill type, pour concrete into the cover and trowel off to the required level.

*Installation and approval conditions may vary from region to region. This information is provided as a guide only for a typical below-ground tank installation. Viking Plastics reserves the right to alter or change information at any time and without notice.*



*Note: Baffle and internal pipe configurations vary according to tank type, capacity and/or customer requirements.  
Note: Tank shown is an example only and details vary for different tank designs.*