

Guidance Note 2 – Typical Storage Tank Installation Method



Example shows the use of AquaCell Prime. However, a storage tank can also be installed as shown using any of the other versions of AquaCell units (Eco, Core or Plus) as appropriate.

* For large scale, deep installations a 1mm thick geomembrane is recommended and joints should be sealed using proprietary welding techniques. For further details contact Wavin Technical Advice.

Typical Installation Procedure

- 1. Excavate the trench to the required depth ensuring that the plan area is slightly greater than that of the AquaCell units.
- 2. Lay 100mm bed of coarse sand, level and compact.
- 3. Lay the geotextile over the base and up the sides of the trench.
- 4. Lay the geomembrane on top of the geotextile over the base and up the sides of the trench.
- 5. Lay the AquaCell units parallel with each other. In multiple layer applications, wherever possible, continuous vertical joints should be avoided. AquaCell units can be laid in a 'brick bonded' formation (i.e. to overlap the joints below). For single layer applications use the AquaCell Clips and for multi layers use the AquaCell Clips and the AquaCell Shear Connectors (vertical rods).
- 6. Wrap the geomembrane around the AquaCell structure and seal to manufacturers recommendations.*
- 7. If side connections into the AquaCell units is required, (other than the preformed socket), use the appropriate Flange Adaptor (6LB104 or 6LB106). Fix the flange adaptor to the unit using self-tapping screws. Drill a hole through the Flange Adaptor and connect the pipework. (6LB106 should not be used with AquaCell Eco).
- 8. In order to prevent silt from entering the tank, clogging inlet pipework and reducing storage capacity, it is recommended that the Domestic Silt Trap (6LB300) or the standard Silt Trap (6LB600) is installed prior to the inlet pipework.
- 9. Wrap and overlap the geotextile covering the entire AquaCell structure, to protect the geomembrane.
- 10. Lay 100mm of coarse sand between the trench walls and the AquaCell units and compact.
- 11. Lay 100mm bed of coarse sand over the geotextile and compact. Backfill with suitable material.

NB: A storage tank must be vented, and it is recommended that one vent pipe, 110mm in diameter is provided per 7,500 square metres of impermeable catchment area on a site, see Guidance Note 3 for design.

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