



## Recommended Installation Guidelines – Garden Angel System

Specific site conditions should be taken into consideration when designing concrete backfill and should be designed to bear any loads which may be applied during and after installation to prevent the tank from being subjected to these loads.

- In locations where the excavation will not safely maintain a vertical wall, it will be necessary to shore up the sidewalls of the excavation with a suitable trenching sheet system and bracing to maintain a vertical wall from the bottom to the top of the excavation.
- DO NOT completely remove the shoring system until the backfill is complete, but before the concrete fully hardens

### INSTALLATION MANUAL

- In areas where the water table is above the bottom of the excavation or where the excavation is liable to flood, the excavation should be dewatered using a suitable pumping method.
- During installation care must be taken to ensure that the body of the unit is uniformly supported so that 'point loads' on the unit are avoided.
- Excavate a hole of sufficient length and width to accommodate the tank and a minimum of 250mm thickness of concrete surround - and to a depth which allows for the depth of the unit plus concrete base slab and haunch. Also taking in account proposed inlet invert depth.
- Construct a suitable concrete base slab appropriate to site conditions. Ensure that the slab is flat and level.
- When the concrete base slab has set enough to support the unit, lay a concrete haunch along the middle of the cast slab to provide even support under the unit.
- Lower the unit onto the haunch using suitable lifting equipment. It is important that the unit is level after installation to allow correct operation of the internal components.
- Pour approximately 300mm depth of clean water into each chamber of the unit simultaneously. DO NOT OVERFILL.
- Pour concrete backfill to approximately 300mm depth under and to the sides of the tank ensuring good compaction to remove voids.
- DO NOT use vibrating rammers.
- Continue pouring concrete backfill, simultaneously keeping the internal water level no more than 300mm above the backfill level at all times until the backfill is just below the underside of the outlet connection, leaving sufficient room to connect the inlet and outlet pipework.
- Connect inlet and outlet drains and vent pipes when safe access to the backfill can be gained.
- Should you wish to connect in and outlet pipework that is not immediately compatible with the fittings on the unit, proprietary flex seal couplings can be obtained to fit over the outside of the site pipework and the outside of separator connection.



- Continue backfilling with concrete over the tank body to the required level. Build up a shell of concrete, minimum 250mm thick, around the access shaft(s). Temporarily strut the access shaft to avoid distortion.
- Vent sockets should be placed as high in the access shaft as possible. Consult with local building control on exact specification of vent installation. As a minimum the vent should terminate no less than 2.4m above the ground, and at least 1m away from any window.

**Add 250mm to the tank in questions dimensions, this will show calculate your minimum excavation size.**

**Please see the below example installation with tank with minimum 250mm full concrete surround**

