



# AquaTank PRO Installation & Technical Details

## Twin Drainage Sump & Pump Installation Instructions and Technical Details

### Application

The AquaTank Pro is designed to evacuate water collected from Aqua Cavity Membrane Systems installed in basement applications. The AquaTank Pro is designed to protect against further water ingress to comply with BS8102. The AquaTank Pro can also be used for collecting waste water from light wells, baths, showers, wash-hand basins, sinks, dishwashers and washing machines. It is not possible to collect waste water from a W.C. Ground water in basement applications is collected via the cavity membrane system through the clear opening at the top of the chamber or can enter the chamber through a 110mm inlet that can be drilled on the side of the tank. It is important to note that groundwater is collected at slab level to prevent de-watering below this level.

### Maintenance

The AquaTank Pro is manufactured using high quality components designed to give a long trouble free life – with any type of mechanical equipment regular preventative maintenance is important to keep the product working efficiently on a day-to-day basis. We recommend this system is serviced twice yearly by specialist pump engineers.

### Discharge Pipe Work

The AquaTank Pro has been designed to accept 1¼" standard solvent weld drainage pipe, the tank is terminated in a 1¼" BSP male thread. For all pipe work and glue please see accessories page.

### Inlet

The AquaTank Pro is provided with a 110mm inlet seal, this is supplied loose. You only need to use this seal if you wish to add an inlet from a channel wall (as well as the clear opening at the top of the chamber). A 140mm hole-saw will be needed to fit the seal (please see accessories page). The 110mm inlet seal can be drilled anywhere on the chamber, but no lower than 200mm from the bottom of the chamber; this is to ensure that the pumps can operate correctly.

### Cable Duct Pipe Work

The AquaTank Pro has been designed to accept 40mm standard low pressure push fit pipe.

### Electrical Connections

The pumps and high level alarm (if ordered) are to be electrically connected to a non switch fused spur (total of three). These spurs should have their own dedicated supply from the main fuse board. One no. 10amp spur for each pump and 1 no. 10amp spur for high level alarm (total of three).

It is advisable to leave 500mm of the pump electrical cable in the sump to allow for servicing of the pump outside of the sump.

### Pump Float

Ensure the float does not foul the chamber sides. It may be necessary to rotate pipe work on pump to achieve this as there may have been some movement during transit.

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### Installation Instructions

It is important to read these instructions which are for guidance only as it is the contractor's responsibility to satisfy himself that the installation procedure is in accordance with the prevailing ground conditions and good building practice, to eliminate any potential damage to the pump station either during or after installation.

AquaTank Pro Pump Stations are manufactured from high density polyethylene and are extremely robust. However as with any pre-formed chamber they are susceptible to floatation and hydrostatic pressure exerted in high water table conditions.

1. Select a suitable location for the AquaTank Pro
2. In all instances the pump station must be positioned on a flat level surface: set on a concrete base of dimensions sufficient to support the base of the chamber. The thickness of the base should be adequate for the ground conditions and of a minimum of 150mm thickness.
3. Carefully position the AquaTank Pro onto the base slab, ensuring that no loose debris is inadvertently knocked onto the base slab under the pump station during this procedure.
4. The AquaTank Pro must be backfilled with a mass concrete mix of a minimum of 150mm thickness and must be used in accordance with the ground conditions and be as dry as practicable to prevent additional floatation pressure being exerted on the chamber. The AquaTank Pro must be ballasted with water at the same rate as backfilling such that the level difference between the water and backfill does not exceed 300mm at anytime.
5. Where ground water is present in the excavation, dewatering must be undertaken throughout the installation procedure and until the backfill has completely cured.
6. Similarly the ballast water inside the pump station should not be removed until the backfill has fully cured.
7. It is extremely important that once the AquaTank Pro has been installed and all connections made the drainage system is flushed through and all sand, silt rubble and general debris are removed from the chamber.

### **FAILURE TO CARRY OUT THIS OPERATION WILL INVALIDATE THE WARRANTY ON THE PUMP**

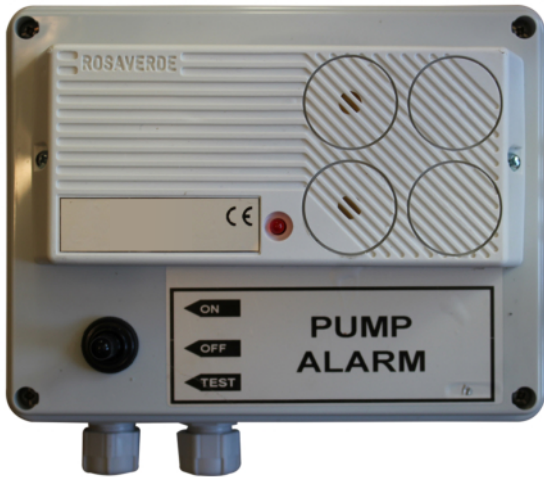
The alarm panel housing (if applicable) must be sited adjacent to the AquaTank Pro with 40mm cable duct (with draw cord) for the cabling. If the control panel is not to be sited adjacent to the AquaTank Pro, DP&T should be advised at order stage so we can make recommendations as the cabling requirements.

All electrical connections must be carried out by a qualified electrician

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### High Level Alarm

The High Level Alarm is mounted adjacent to the AquaTank Pro. An audible signal will be heard in the case of pump failure.

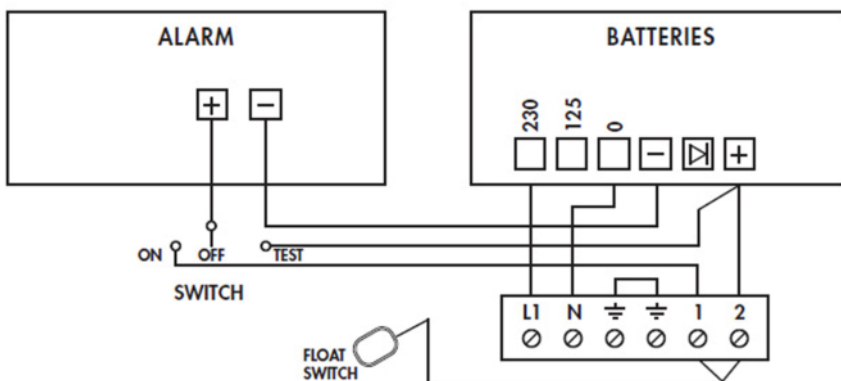


#### SPECIFICATION

Mains supply: 230V/1/50Hz  
 Size: 190 x 140 x 70mm  
 Weight: 0.9kg  
 Battery: NiCd - 6Vdc - 0.5Ah  
 Alarm: 102dB/1m  
         35/6mA/V  
         F=2700Hz  
 Visual alarm: LED D5  
 Restoration time: Approx 12 hrs  
 Battery operating time:  
         Approx. 12 hrs.  
 Three-Way switch:  
     ON: Float switch alarm  
     OFF: Alarm off  
     TEST: Checks function

### Wiring Diagram

The float for the High Level Alarm should be attached to the pump, see picture below.



Ensure float is securely attached as shown