

Australian  
Standard  
AS/NZS1546.1  
Lic 1950  
Septic Tanks



# POLYMER PUMP WELL

## 450 / 250 L

### 82200C

Tested to comply with AS/NZS 1546.1.2008

## **Assembly and Installation Instructions** for on-site domestic waste-water treatment and disposal systems

### **PARTS SUPPLIED WITH EACH POLYMER PUMP WELL:**

- 1: 1 x moulded Plastic Pump Well Assembly
- 2: 1 x moulded Plastic Access Cover
- 3: 6 x Stainless Steel Screws
- 4: 2 x standard elastomeric rubber rings for 100mm uPVC SWV pipe

### **PARTS SUPPLIED WITH EACH RISER KIT:**

- 5: 1 x 600mm x 630mm dia Ribstruct
- 6: 6 x Stainless Steel Screws
- 7: 1 x Black Butyl Joint Tape (97681)

(Complete single pump and duty/standby pumpwell kits are available on request)

**\* Check with your local authority before selecting any part of a Waste-water disposal system.\***

### **Refer Notes on back page.**

The Polymer Pump Well should be located in areas not exposed to any vehicle or regular pedestrian traffic. It may be installed in an area set aside for garden use. Where the Pump Well is in a high water table area extra anchorage may be required. See "**BACKFILL**".

## PREPARATION

Ensure that –

- appropriate approvals have been given by local authorities.
- appropriately qualified persons, including electricians and plumbers, are employed to install and connect the pump well.

We recommend that all holes cut in the pump well are made leak proof using rubber o-rings (provided), rubber seals or bulk head fittings.

## SAFETY

- Take care when working around excavated holes.
- Deep holes can be considered confined spaces. Consult with local/state laws and make provisions as appropriate.
- An empty pump well weights in excess of 30kgs. Take appropriate precautions when manually handling the pump well.

## SITE ASSESSMENT

Take note of the invert heights of the two available inlets into the pump well and ensure that the incoming 100mm drainpipe is appropriately supported and allows for wastewater to flow directly into the pump well.

Note that invert heights allow for a 50mm rise around the lip of the pump well to limit the ingress of rainwater

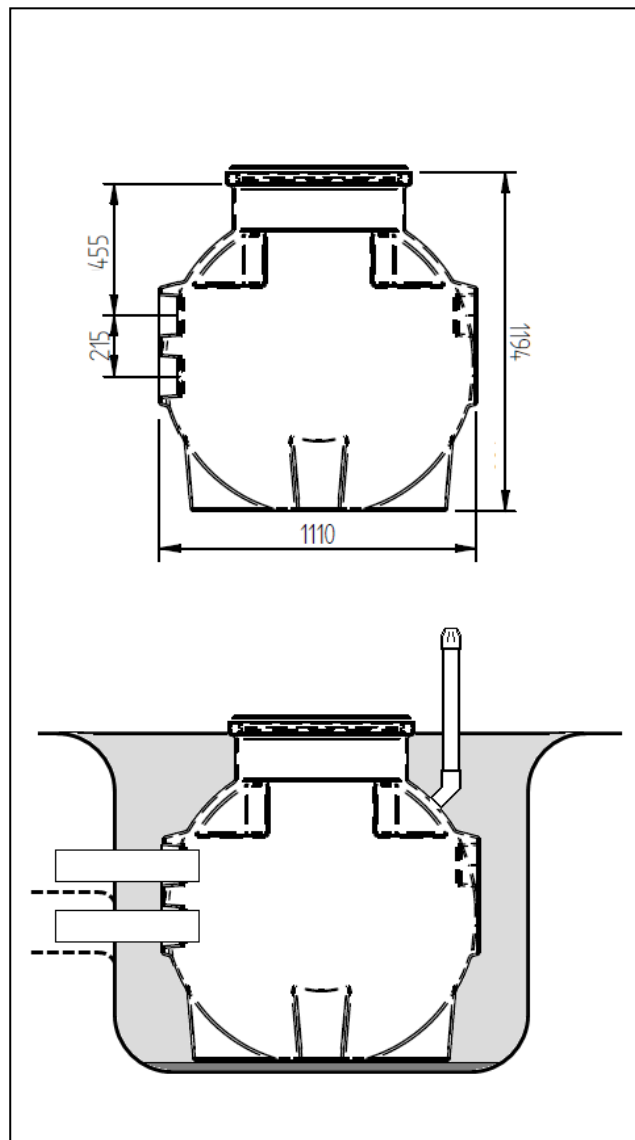
Site **MUST** be away from areas susceptible to all vehicular and foot traffic.

## THE EXCAVATION

- Prepare excavation greater than 1500mm diameter up to 1200mm deep (Deeper holes may be used when a riser is fitted. Sides and bottom should be free from all intruding roots, stones, or other matter.
- Determine which of the two adjacent inlet Connection Ports is to be used. This will depend on the depth of the pipe from the wastewater source at the point where it meets the Pump Well.
- Trench excavation should be widened for
  - low vent connection (see below)
  - pumped water discharge
  - electrical connections
- Line the bottom of the hole with 50mm of sand or 3mm pea gravel

## PUMP WELL PREPARATION

- Cut out the Inlet opening selected using a 108mm hole saw.
- Venting of the upstream pipe is usually adequate for most installations. Where needed, a vent port to suit the required pipe size may be cut in the side of the pump well (as show) or can be cut in the Pump Well wall blister opposite the Inlet. Both may be secured using a bulk head fitting or using 100mm pipe and the provided rubber ring.
- Cut hole to accept selected pump discharge hose or pipe fitting. This hole is normally in any vertical face of the pumpwell. The size of the hole will be dependent on the fittings used.
- Cut the hole to accept the glands selected for the electrical cable and flexible conduit. This may be cut in the same flat topped boss, and should be close to the side of the Pump Well to minimise the exposed electrical conduit.



## POSITIONING AND FITTING OUT THE PUMP WELL

- a) Remove the Access Cover, and clear all cuttings from the interior.
- b) Fit vent and discharge attachments as required
- c) Carefully place the Pump Well in the excavation, seating the base of the Pump Well into the sand bed.
- d) Connect the 100mm drain pipe to the Pump well
- d) Fit out pump as required.
- e) Ensure the top of the Pump Well is level and adjust where required.
- f) Fit access cover ensuring all screws are secure.

## BACKFILL

- a) Backfill around the pumpwell, compacting as you go, ensuring that the pumpwell remains level and the pipe work is not damaged
- b) In areas that are affected by elevated water tables cement/concrete must be added to the soil to prevent uplift
- c) Use excess soil to build a bund above the pumpwell to divert stormwater away from the installation.

## FURTHER RECOMMENDATIONS FOR INSTALLATION

Where the required depth to the pipe invert makes the Pump Well lower than normal, a **Riser** can extend the access opening to surface level. This is EVERHARD Ribstruct 600mm pipe fitted with a top collar, secured by screws, which accepts the standard Access Cover. The Pump Well access rim should be cut off with a saw, leaving a plain upstand of about 20mm. The Ribstruct is trimmed to the required length, leaving a rib-flange at the lower end. Apply the black butyl joint tape to the rim of the open access hole and push the firmly down over the upstand. Secure using six equally spaced Stainless Steel self-tap screws. These must be driven down through the rib-flange into the top of the Pump Well to secure the Riser.

## IMPORTANT NOTES

"Pump Well" is a generic term for any vessel intended to temporarily store liquid before it is transferred by means of a pump to another location, perhaps for processing or long-term storage. The EVERHARD **Polymer Pump Well** has been tested and found to comply with the Australian/New Zealand standard for vessels such as Septic Tanks and Collection Wells for use in domestic, and some other, situations.

It may be used to receive treated wastewater from a Septic tank for pumped discharge to a disposal area, or in applications where site conditions dictate that short-term accumulations of "All-waste", "Black-water" and/or "Greywater" (defined by AS/NZS 1546.1) wastes must be delivered to a treatment system by a suitable pump instead of free-flowing under gravity direct from the source.

**Installers MUST check with your local authority to ensure that this pump well and usage will be permitted in your area before beginning plans for any installation.**

The EVERHARD Pumpwell was designed for on-site treatment and disposal applications. It is tested for Standards Mark approval and does **not** carry WaterMark certification. Connection to sewer systems, and installation in sewered properties, may not be permitted by local authorities.

The EVERHARD **250/450L Plastic Pump Well** has a number of features which make it an obvious choice for many installations. It is light and easily handled and worked with, while also being durable and tough. Produced from a blend of High Density Polyethylene stabilised against ultra-violet light degradation, its' physical characteristics allow the product to exceed the required performance criteria for the applicable tests in AS/NZS 1546.1.

In testing for resistance to lateral load, a critical part of the standard, the EVERHARD **Polymer Pump Well** was subjected to side loading equivalent to the vessel being completely buried, a situation which a correctly installed unit should never encounter. The **Polymer Pump Well** remained intact and suffered no permanent damage whatsoever, despite extended exposure to the test load.

EVERHARD **Polymer Pump Wells** are ideally matched for use with the range of EVERHARD **Polymer Septic Tanks** and **Collection Wells**, all produced in accordance with AS/NZS 1546. Other products available for domestic wastewater applications include the popular EVERHARD **Xtra-treat** Filter which can be quickly and easily fitted into the Outlet Fitting insidemost Septic Tanks. These help prevent the discharge of solid particles suspended in the treated fluid. An **Xtratreat** Filter can greatly extend the service life of the disposal system. The EVERHARD range of disposal system equipment also includes effluent Distribution Boxes in Concrete and in durable, tough Polymers. These complement the cost-effective and very efficient Polymer **EVERTRENCH** Trench Liner for use in Evapo-Transpiration and Soakage treated waste-water disposal systems.

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**EVERHARD products are also available from most reputable building  
and hardware suppliers across Australia.**