



**Eco Water Solutions**

[www.ecowater.co.nz](http://www.ecowater.co.nz)

021 745 335



**GORILLA PUMP STATIONS**

**Further and Faster**

## 150 Litre Sewer Pump Systems

### Installation Instructions

Thank you for purchasing an Eco Water Solutions sewage tank and pump unit. These units are designed for tiny houses, baches, and basement level bathrooms built below the sewer line.

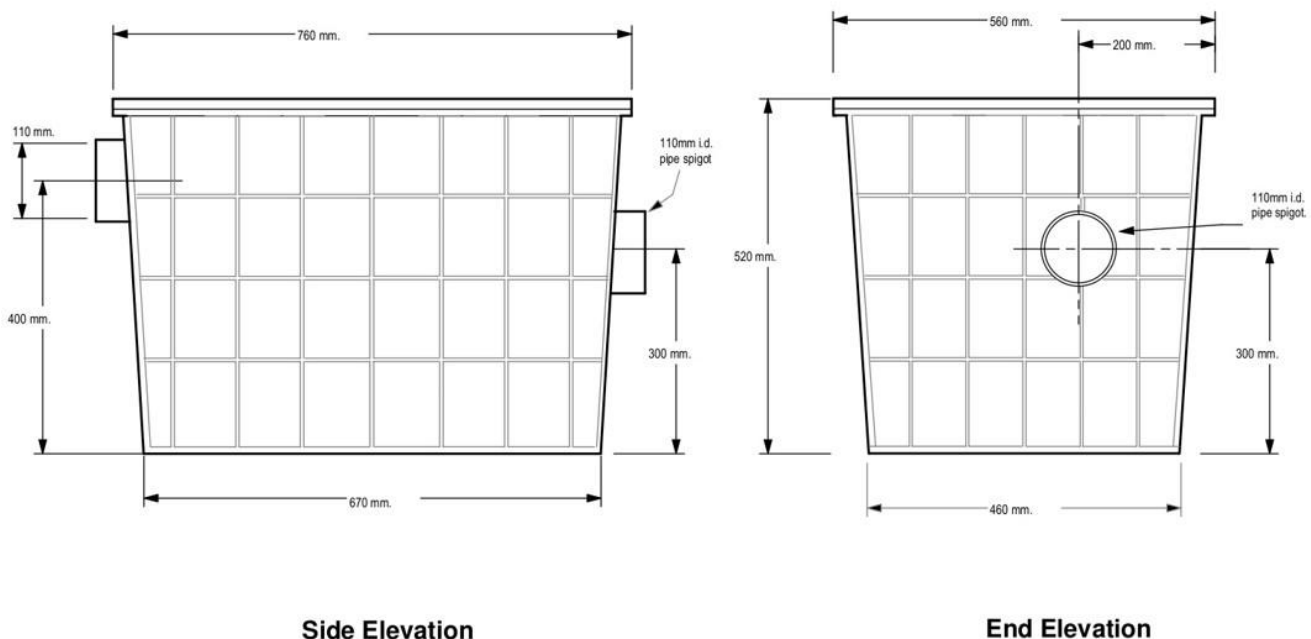
#### Unpacking

Remove the lid of the tank (6x screws) as the pump is packed within a carton inside the 150L plastic tank. Underneath the pump are the discharge pipe fittings and valves.

Remove all packaging. When unpacking please check for possible damage caused in transit.

Check that the correct pump is installed in the unit.

#### General dimensions



#### Outlet connection

The outlet is a 40mm BSP-female screwed socket, normally located on right hand side when facing the inlet connection. If requested at time of ordering it can be located on the left side or on the inlet end.

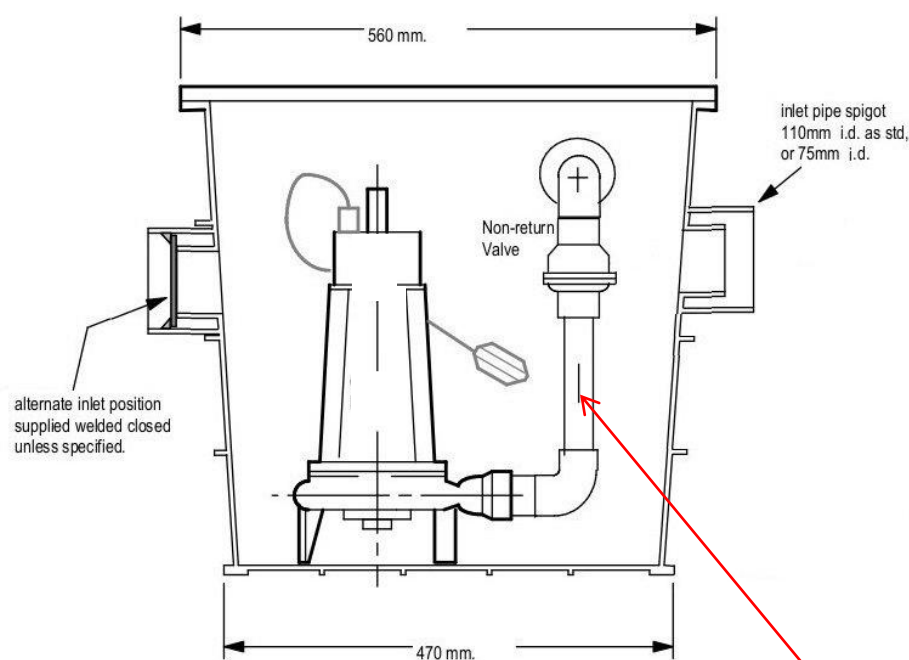
### **Inlet Connection**

Inlet connection is a 110mm i.d. socket, with a secondary 75mm i.d. socket to suit smaller waste pipes. The NZ standard 110mm dia pipe will slide inside the socket for a tight fit. However due to the grade of plastic it cannot be glued in place, and we recommend Plumbquick or similar be applied at the inside base of the socket.

There is a secondary inlet connection at the other end of the tank, which is 40mm lower, and that is supplied silicone/sealed in place.

### **Assembly**

Please refer to the sectional drawings shown below so that you can see how the unit appears when fully assembled.



***Do not use the power cable to lift the pump.***

Connect the outlet ball valve to the outlet pipe.

When connecting the pipe union and the valve, check that the sealing O-ring is in place, and is not loose in the bottom of the tank.

Ensure that the pump is centred in the tank, and that the float switch is free to move up and down without obstruction.

***This pipe is not glued. Cut to suit, then glue and test.***

***Read the pump instruction manual supplied with the pump.***

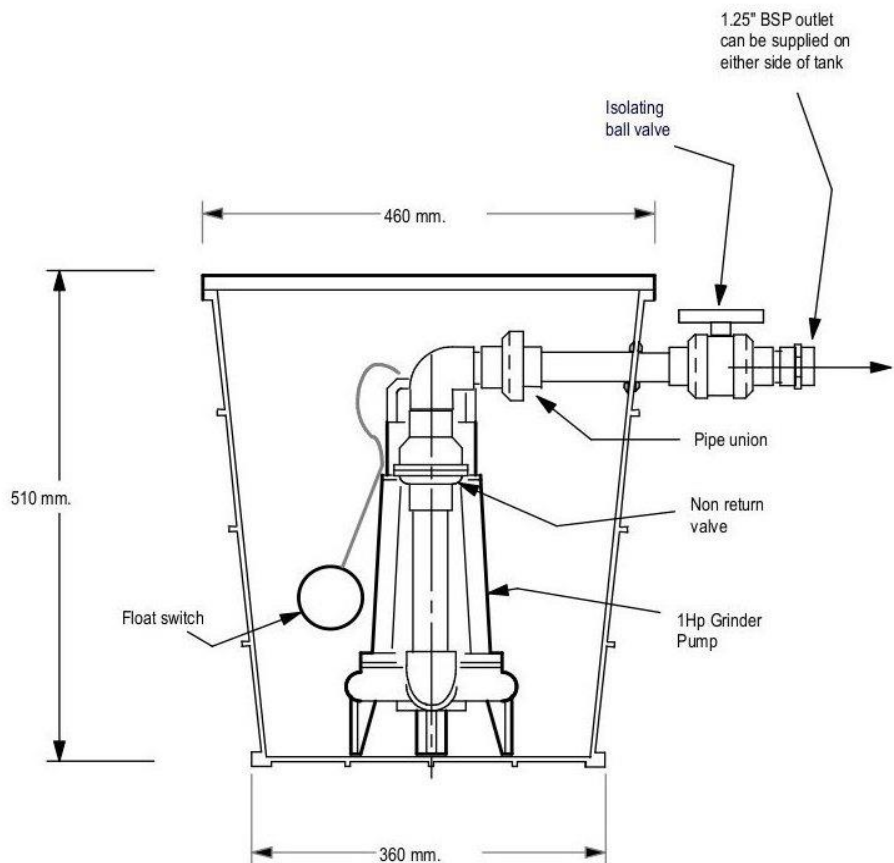
The tank lid is constructed from a polyester resin concrete mixture. It is very strong and can be walked on if the tank is properly installed in the ground.

The tank and lid is not designed to take the weight of vehicular traffic, so do not install in driveways or vehicle parking places.

The lid sits into a groove in the top of the tank, which has a rubber sealing foam strip. When re-fitting the lid, screw in place so that it cannot lift off easily when a sudden surge volume of liquid enters the tank.

When digging a hole to install the tank in ground, we recommend a minimum of 50mm of wet concrete be placed in the bottom of the hole and the tank nestled into that level, to anchor it in place.

If the tank is in a position that will mean that it will be regularly walked on, we recommend surrounding the top of the tank with concrete as well.



## **Vent**

The 50mm vent pipe connection fitting is supplied loose so that you can install it in the best position to suit site conditions for venting. To install use a holesaw to cut a hole 60mm diameter, then fit the male part within the tank inserting the threaded portion through the hole, and then screw the female part on to it outside the tank and tighten.

The purpose of this fitting is to provide connection for a 50mm vent pipe, as the tank needs venting as levels can change suddenly within the tank, such as when a toilet is flushed or a sink drained, and levels can also change rapidly when the pump switches on.

The power outlet unit comes with a 50mm connector to act as a conduit for the pump power cable, as any cable installed in-ground requires installation in a conduit. A 50mm conduit (or similar) pipe will pass a 3-pin plug, and this enables installation without cutting the power cable, and so this eliminates the need for an electrician.

A 50mm white plug seal is provided to seal cable into outlet connection.

**Tip:** *if you ever withdraw the pump from the tank and need to remove the cable, tie a piece of string to the plug so that you can pull it back through the electrical conduit later.*

When installing, draw as much cable out through the electrical conduit as possible, rather than let it coil up inside the tank.

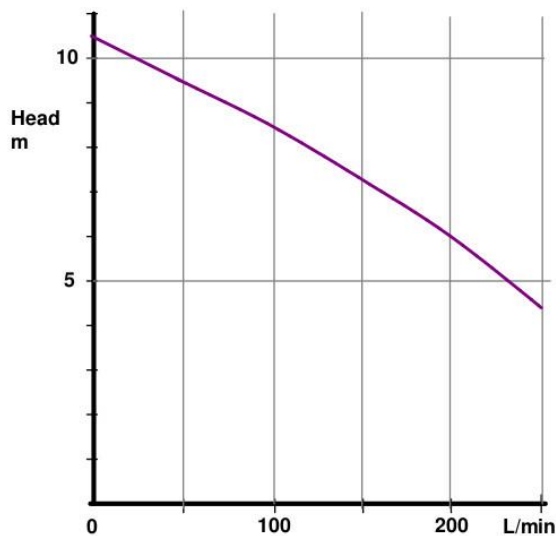
>> *Never lift the pump by the cable, as that will damage the pump.  
Always lift using the handle on top of the pump.*

## **Pump Specs**

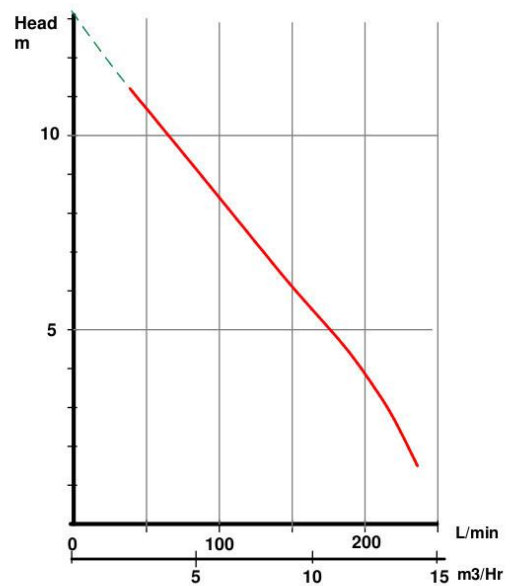
### **Pump Specs**

Pump performance is shown below

**150 SP-3 VH/100 Pump**



**150 SP-6 TPG-100 Pump**



***Read the pump instruction manual supplied with the pump.***

A 50mm connection is fitted c/w seal plug for pump plug to be connected to 50mm electrical conduit or similar. This is needed if pump needs to be replaced or serviced. **Reducing conduit size will invalidate warranty.**

Use Plumbquick connector between plug outlet and conduit.

An RCD (residual current device) must be used with this product

## **Maintenance**

- Check regularly for build-up of solids or any other matter in pump chambers.
- Periodically wash down the inner walls of the chamber with a high pressure hose to activate pump and thus flush out the chamber.
- Check that the vent pipe is also clean and free of any obstruction.