

# **BALLAM-WATERSLOT**

(PTY) LIMITED

## **THE "POLY-RIB" CONSERVANCY TANK**



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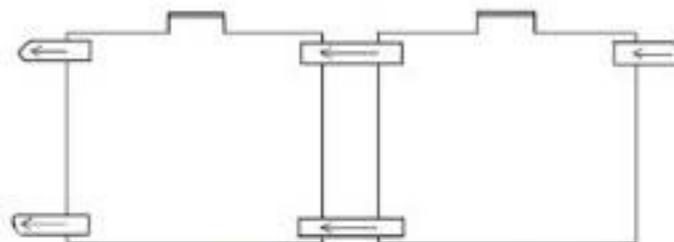
## THE "POLY-RIB" CONSERVANCY TANK

### 1. OVERVIEW

The tank is identical in appearance to our "Poly-Rib" 1.200 litre septic tank, but minus all pipes and fittings. A conservancy tank, by definition, has an inlet but no outlet, and is emptied by means of "honeysucking" through the manhole lid. In the event of a configuration comprising two or more conservancy tanks, the contents of all the tanks may be emptied by accessing the assembly through any one of the manhole lids. Any size may be configured by adding tanks to an assembly. Such assemblies can be either in series or in parallel depending on the availability of space. Conservancy tanks tend to be the most expensive option, in the long run, when deciding on an on-site sewage solution, the reason for this being the on-going expense of "honeysucking" on the regular basis.

The product specifications are as follows:-

Height	1,400 metres (base to manhole lid)
Diameter (cylindrical)	1,200 metres
Length	1,500 metres
Construction	Cylindrical ribbed with domed ends and a centre internal stabiliser bar to reinforce the domed ends against possible abnormal pressures.
Weight	40 Kg - easily transportable
Chambers	Single
Total Capacity	1.200 litres
Fluid Working Capacity	1.100 litres
Wall thickness	5mm
Inlett Diameter	110mm
Manhole Diameter	450mm
Manhole Lid Design	Provision for filling with concrete ballast
Manhole Access Extension	500mm
No Metallic components	
Indefinite Life	



CONSERVANCY TANK CONFIGURATION BY MULTIPLES OF 1200 LITRES PER TANK

## 2. INSTALLATION

The instructions for installation are as follows:-

### a. Siting

The site for the conservancy tank assembly should be situated not less than four metres, and preferably not more than ten metres, from the dwelling. The reason for this is to maintain a 1 : 40 fall on the sewer line without having to dig an excessively deep excavation for the tanks.

### b. Excavation

The size of the excavation depends on the configuration and size, i.e. in series or in parallel, and the number of tanks to give the desired capacity. The excavation sizes for each configuration will be given on request. The depth of the excavation should preferably be not more than 1,2 metres. This will ensure that the manhole covers protrude slightly above natural ground level and are readily accessible. The base of the excavation should be virgin soil and completely level from end to end.

Should the base soil be unstable, cast a level 75mm thick concrete slab at the bottom of the excavation, whilst maintaining the specified depth of 1,2 metres from natural ground level. Allow three days to harden. The invert level is 950mm from the base to the underside of the 110mm  $\varnothing$  inlet pipe. It is essential that these parameters are strictly adhered to, so that, when installation takes place, it is a simple matter to slide all components together.

### c. Pipe Connections

All rubber seals and related pipes should be coated in a lubricant, as specified by the manufacturers, or sunlight liquid soap, or soft soap. By virtue of the level base, complete installation takes only a few hours.

**If the system is being installed at a new site, do not connect the sewer until *all* contractors have left the building site. Contractors are notorious for washing all types of items down the drain, including paint, cement, rags, cement bags, sand and any other type of building by-product. Give the sewer a thorough flushing before connecting it to the conservancy tank/s.**

### d. Backfilling

It is important that the back-filling instructions are followed closely. The back-fill should consist of fine selected soil, preferably river sand, in a dry mix with 5% cement, although a slightly damp mixture will suffice.

As back-filling takes place, water should simultaneously be placed in each tank to equalise pressure both inside and outside the tank. This is applicable to all tanks

The back-fill material, as described, should be firmly rammed around each tank. Once the water level inside the tanks has reached the halfway level, the filling of water can be stopped and the tanks covered with back-fill up to the prescribed level, which is approximately where the manhole protrudes from the top of the tank.

Under no circumstances should the soil interfere with the settling of the manhole cover, which is tapered specifically to prevent any odours escaping, or surface water entering the tanks.

For all practical purposes, the installation is now complete.

### 3. MAINTENANCE

“Poly-Rib” conservancy tanks are maintenance-free. We would caution that, when “honeysucking” (emptying) the tanks does take place, it should be done under supervision to ensure that the stabiliser bar is not broken or dislodged by the heavy-duty suction hose and nozzle.

### 4. ENVIRONMENTAL MANAGEMENT

It should be remembered that the effluent contained in these tanks is still highly toxic, and should not be allowed to flow into the environment. The depth of the effluent within the tanks should be inspected regularly to ensure that “honeysucking” (emptying) can take place prior to the assembly overflowing because the capacity has been exceeded.

### 5. SAFETY CONSIDERATIONS

We reiterate that the effluent contains high levels of toxicity and this should never be permitted to lie in puddles or dams.

When there are children around, ensure that concrete ballast is cast in the lids of the manholes to prevent the children from opening the manholes. If a person falls into one of the units, drowning could result

### 6. DISCLAIMER

**Ballam-Waterslot “Poly-Rib” conservancy tanks, septic tanks and sewage treatment plants are designed to operate under specific environmental conditions. Should the end user opt to ignore these physical parameters, then Ballam- Waterslot accepts no responsibility for any damages, or consequential losses, as a result of collapsed tanks, electrical surges, power failures, chemical poisoning of the system, or any other related cause.**

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