

110mm Ø Inlet

1450

1700

Settlement

Media



1450

100mm Reinforced Concrete Tank Walls

bioTank

Waste Water Treatment System

110mm Ø Inlet

3400

Blower Housing

Manhole Cover

24

450mm Ø Access Opening

Manhole Cover

110mm Ø Outlet to Percolation

Pedestrian Duty Manhole Cover

110mm Ø Inlet

bioTank is our Irish designed and manufactured waste water treatment system. It is manufactured from high strength concrete and is certified to the EU standard, EN 12566-3.

Why Choose bioTank?

The bioTank treatment unit is made from 40 N concrete which is a very high strength concrete that will strengthen over time. We are so confident of this product that we provide a 30 Year warranty on any structural defects. The treatment unit is a single structure which means it is easier, more economical and requires less space to install than a standard septic tank. There are no mechanical parts within the treatment unit which keeps maintenance and running costs to a minimum. The treatment unit also supports the standard influent range now insisted upon by many county councils.



- ✓ Easy and economical install.
- ✓ Low maintenance and running costs.
- ✓ Made from durable high strength concrete.
- ✓ Meets EU and local council standards.
- ✓ The best value product on the market.

How the bioTank Waste Water Treatment System Works

1. Primary Settlement

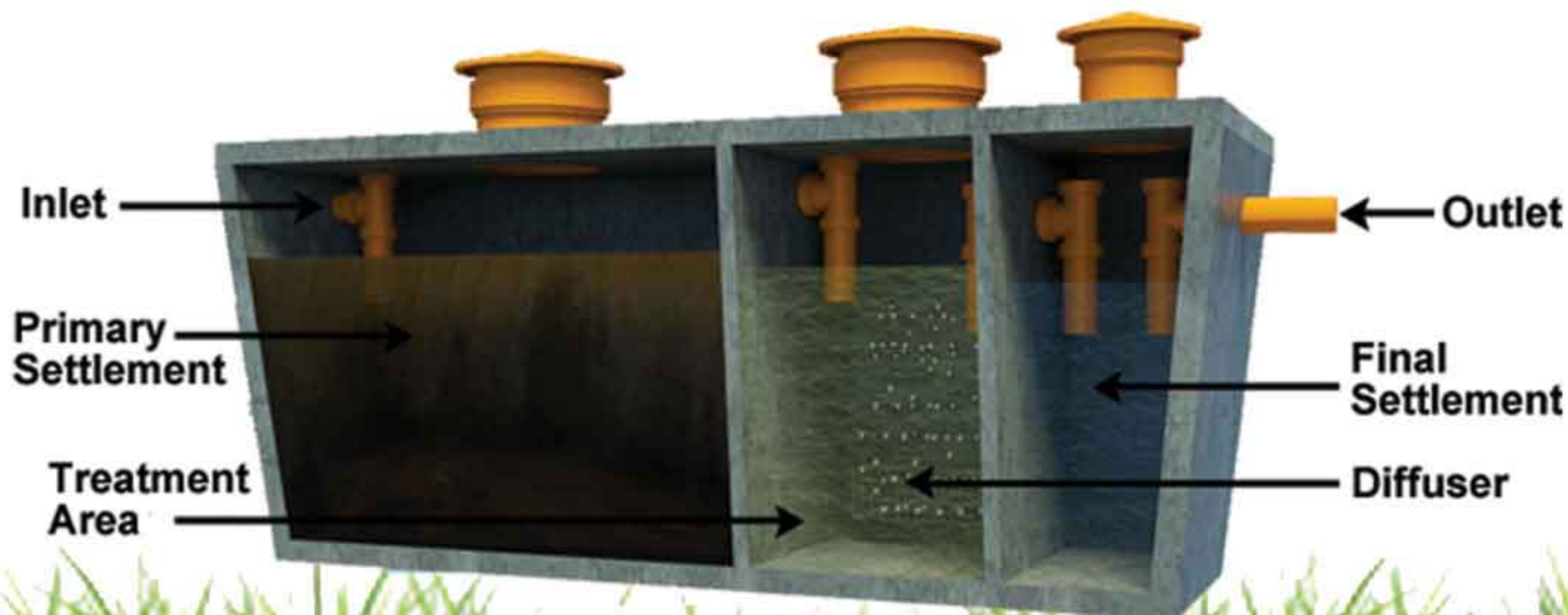
Waste water flows into the primary chamber. Initial settlement and separation of solids occur. A sludge layer is formed at the bottom of the tank which should be removed periodically. The liquid effluent passes forward for treatment in the aeration zone.

2. Treatment

From the primary treatment zone the separated liquid now enters the treatment zone where natural bacteria is cultivated using specially designed media, self cleaning diffusers and air supplied by a specialised pump. The micro organisms require oxygen to develop and they in turn reduce the levels of BOD (Biological Oxygen Demand) and TSS (Total Suspension Solids) in the liquid effluent to reach a 20:30 standard.

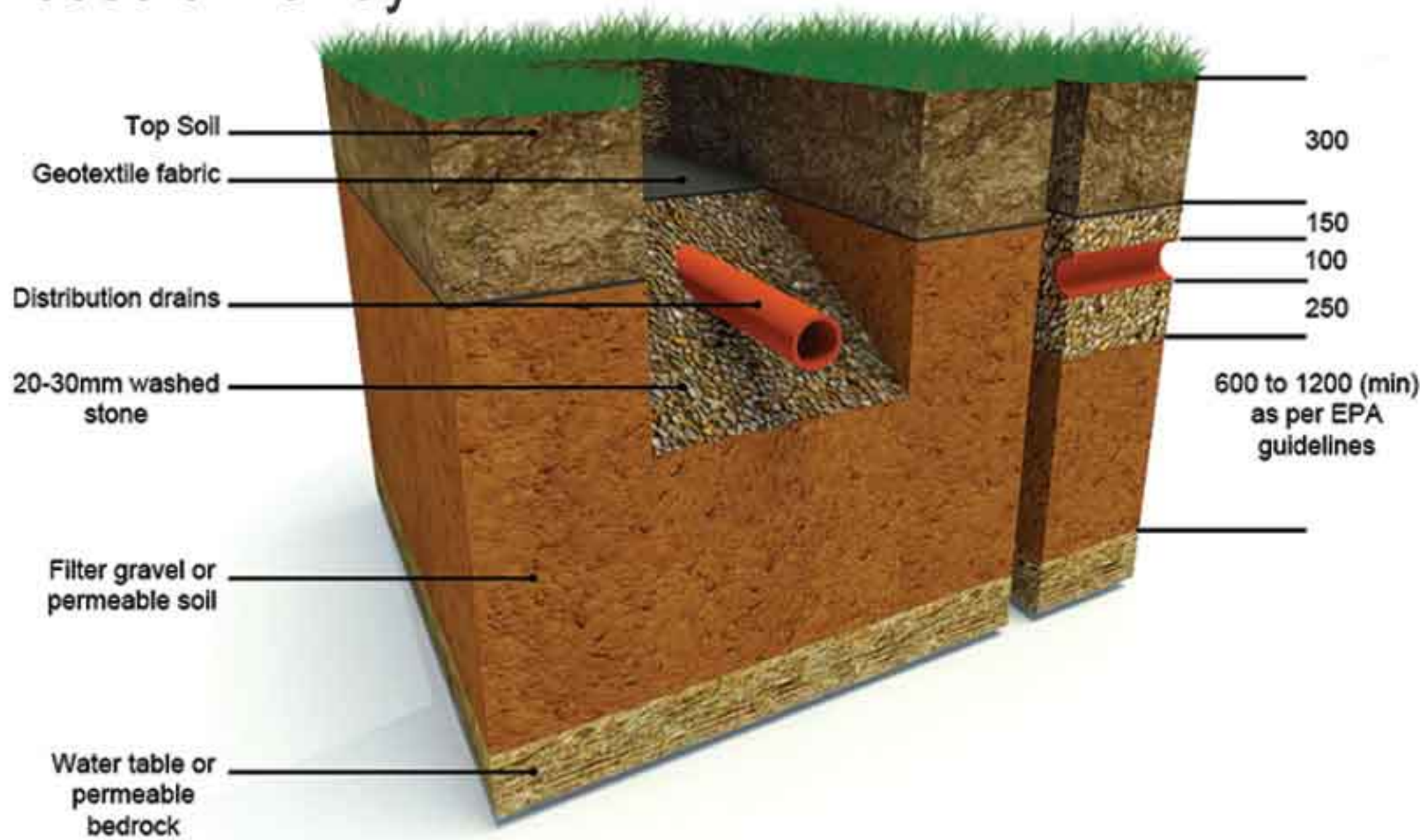
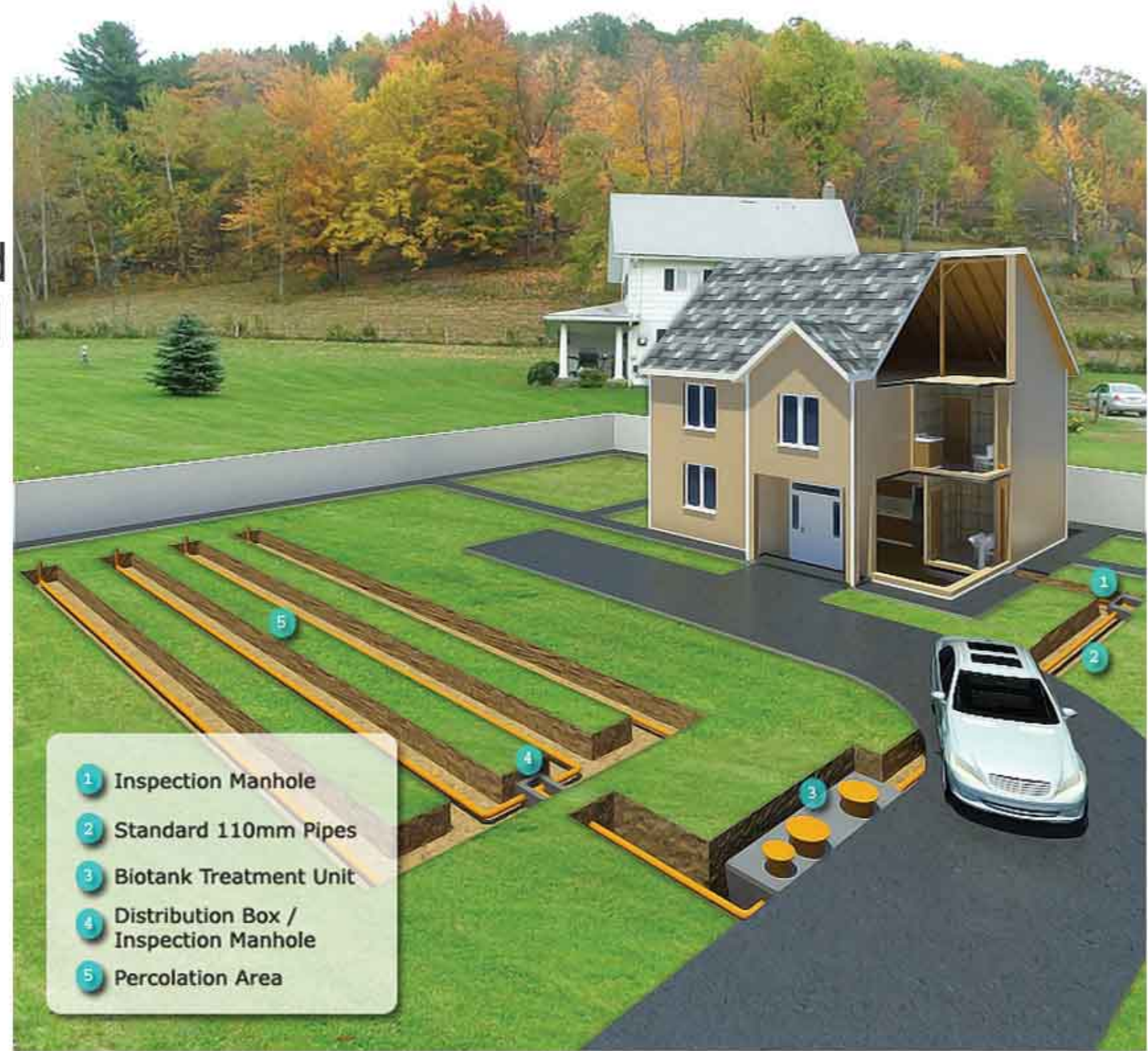
3. Final Settlement

The last stage of the treatment is when the liquid enters the final settlement chamber where any small bits of sludge settle to the bottom. This sludge is then returned back to the primary treatment zone. The remaining treated liquid, which is now at its required standard, flows to a percolation area.



How to Install the bioTank Waste Water Treatment System

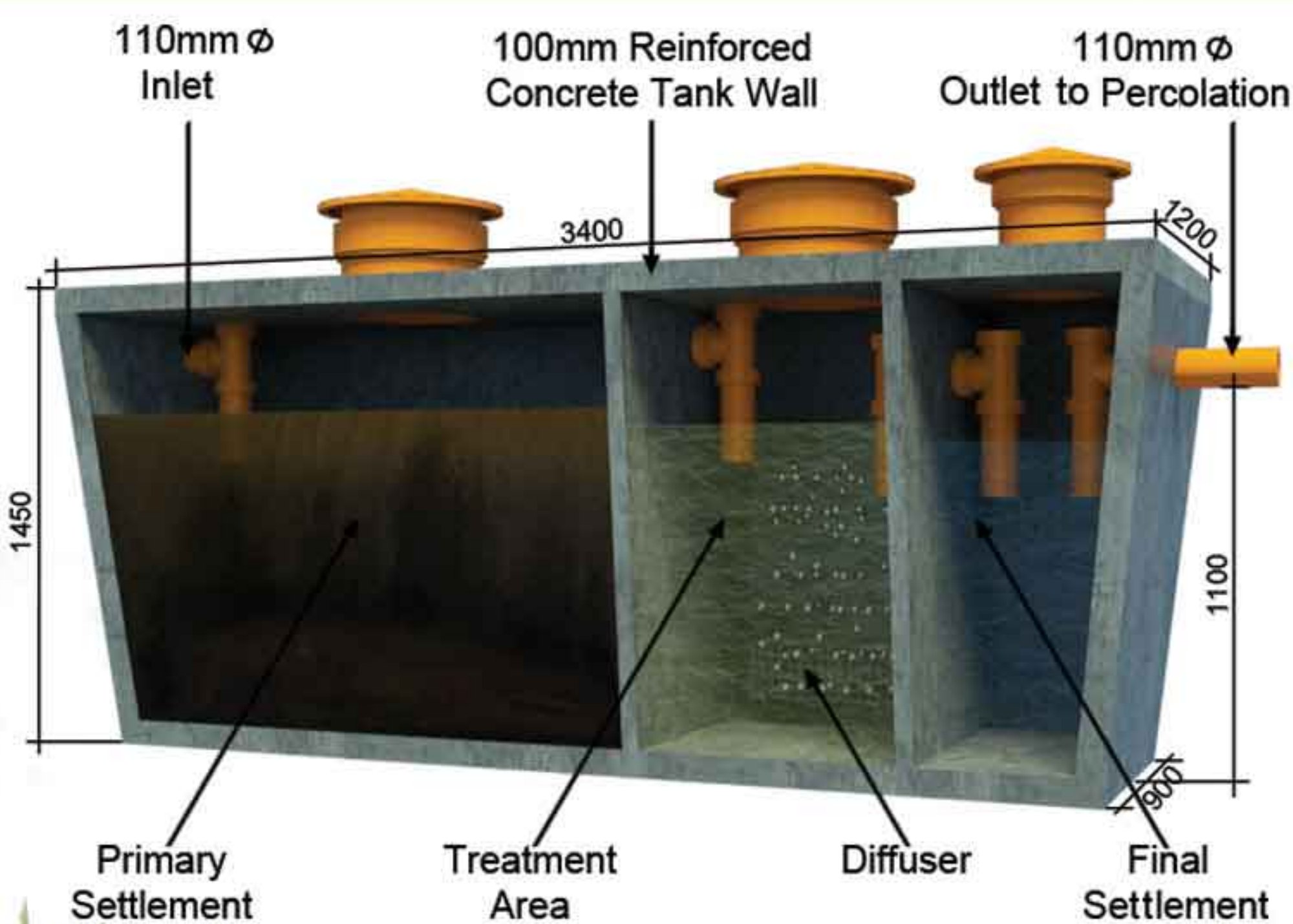
The bioTank waste water treatment system is installed a minimum of 5 meters from the property and is joined to the property and the percolation area by standard 110 mm pipes. Inspection manholes are located between the property and treatment unit and between the treatment unit and the percolation area. The treatment unit itself is installed at a depth of 2 meters and requires 5.9 cubic meters of space (3.4m X 1.2m X 1.45m). As it is constructed from high strength concrete, the unit can be located directly under your house driveway.



The percolation area generally requires 25 square meters for optimal dispersion of the treated waste water. A geotextile fabric is placed beneath 300 mm of top soil and the distribution pipes are enclosed in 500 mm of 20-30 mm washed stone. The EPA recommends a minimum of 600 mm of filter gravel or permeable soil between the pipes and any underlying water table or bedrock.

bioTank Technical Specifications

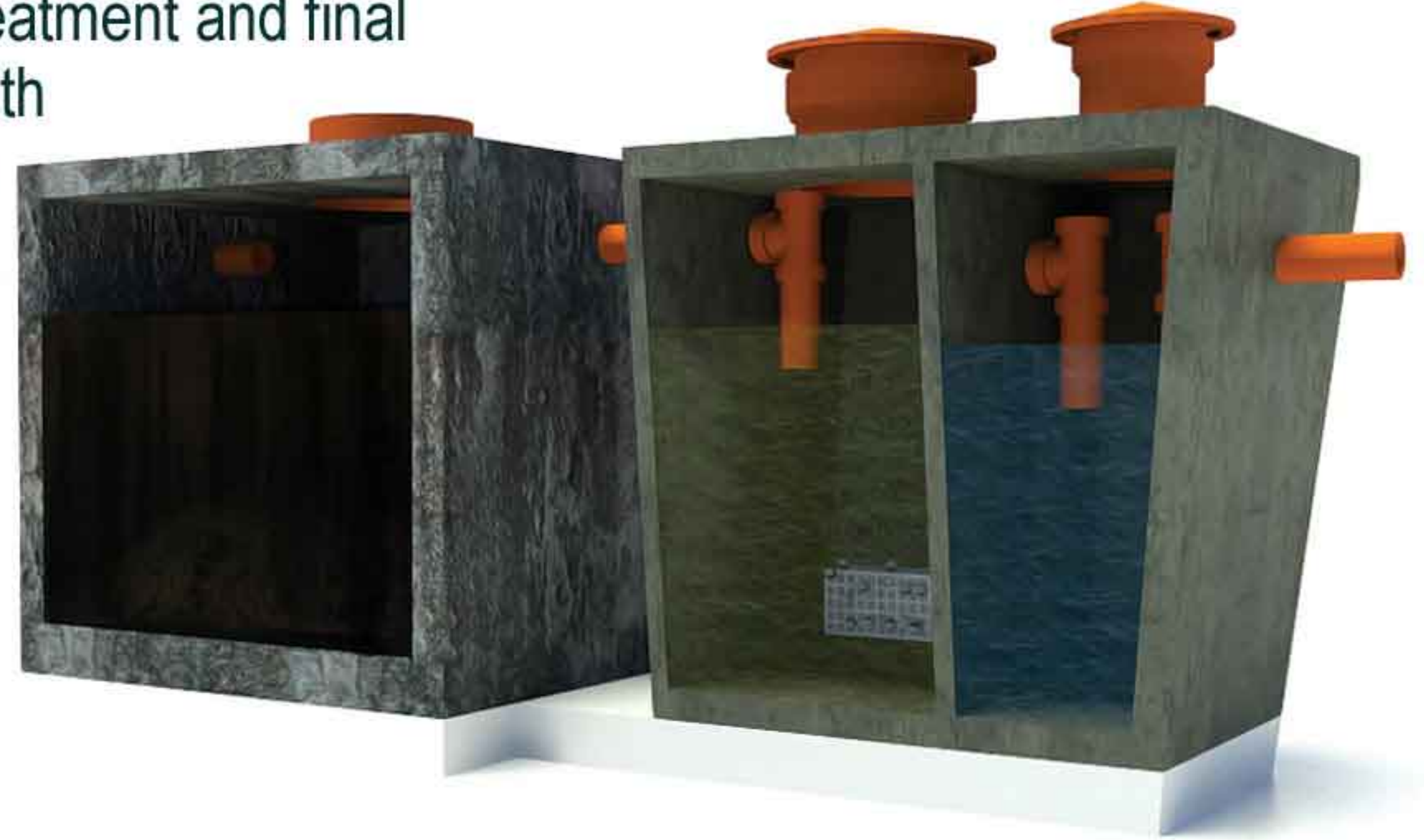
The bioTank treatment unit has integrated PVC lids and separate blower housings to ensure full water tightness - risers can be supplied or sourced locally. The unit contains ample pump chamber storage suitable for pressure dose systems. Units can be supplied with adjustable distribution box and pipe kits, integrated low pressure system kits, percolation soil or biosand.



Maximum Number of Full Time Residents	P/ day	8
Average Flow	m ³ /day	1.2
BOD Load	kg/day	0.48
Overall Length	m	3.4
Width	m	1.2
Height	m	1.45
Inlet Level to Base	m	1.2
Outlet Level to Base	m	1.1
De Sludge Period	month	12
Air Blower Motoring Rating	watts	60
Weight	kg	3200

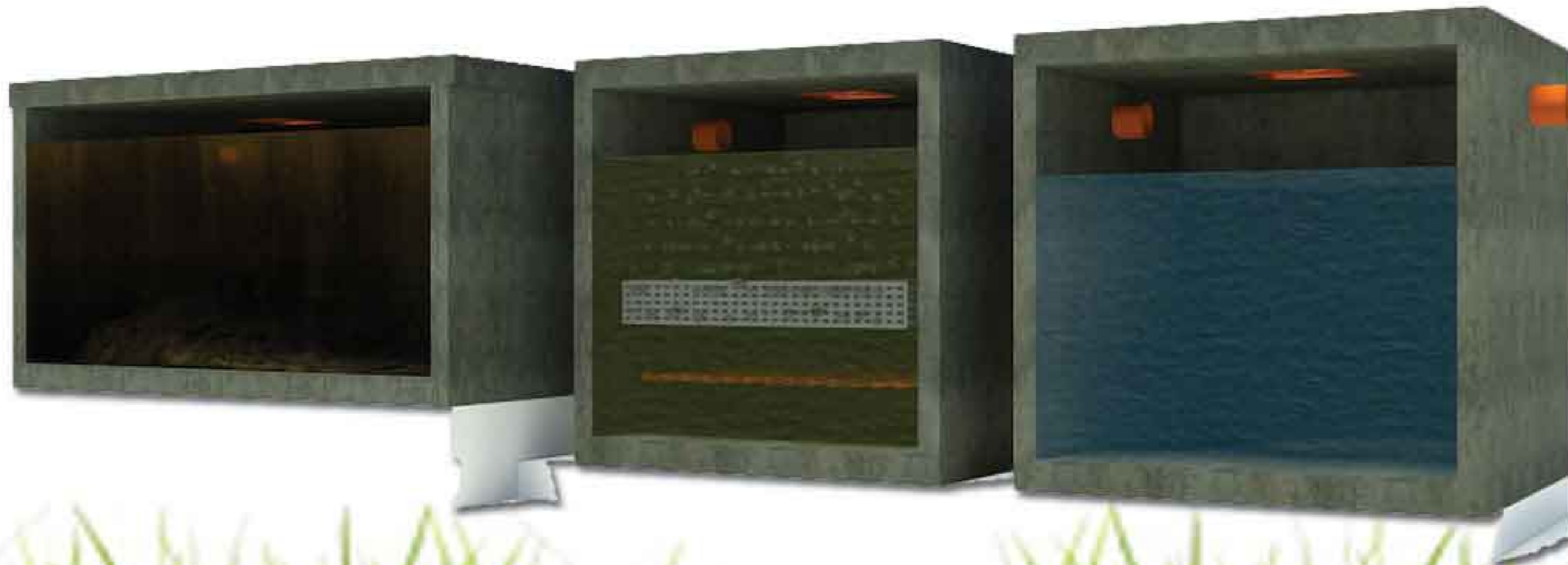
Upgrading an Existing Tank

We can also retrofit our bioTank into any existing location. As it is a single structure and supports the standard inlet and outlet pipe sizes, replacing the tank could simply be a matter of extracting your existing tank and lifting the bioTank into its place. Alternatively, after initial inspection, if your existing tank is of sufficient quality, we can integrate the bioTank treatment unit with your existing tank, avoiding the necessity to remove your tank. In this case the treatment and final settlement chambers of the bioTank are integrated with your existing septic tank via a standard 110 mm pipe.



Our Commercial Treatment Units

bioTank.ie provide a range of larger treatment units for commercial use. We provide all standard sizes from P8 to P500. We can provide custom unit sizes up to P500 to take account of any site specific terrain variations. We can also provide pumping stations where the treatment of effluent cannot be carried out on site and must be pumped to a main sewer. Contact us for further details on our commercial treatment system.



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