

Septic Tank Product Information, Installation and Warranty Manual

Coerco engineer a range of Polyethylene Septic Tanks and Pump Pits to suit any application that have all been rigorously tested to meet Australian Standard AS/NZS1456.1 and approved by Department of Health for installation throughout Australia.

Their durable lightweight design makes them convenient to transport which is ideal for local and remote destinations alike. Coerco Septic Tanks and Pump Pits are designed to provide many years of troublefree service by following these guidelines.

Installation Instructions

These instructions must be read in conjunction with local council, government authorities and relevant standards applicable to this installation and should be performed by suitably qualified personnel. Please note the procedure remains the same in single or dual tank configurations including optional pump tank.

Handling

- Tanks should only be moved when empty by using lifting/anchor points located in the top of the tank.
- Care should be exercised when placing or moving tanks on hard or abrasive surfaces.
- Visual inspection for any damage during transport should be conducted prior to installation.

Excavation

- Ensure excavated hole is free of all services Dial before you dig 'www.1100.com.au'.
- Observe all local and statutory requirements related to excavations (eg. Benching/battering/shoring).
- The installer shall take all reasonable precautions to ensure the tank is not within the zone of influence of nearby existing structures, such as retaining walls, residential dwellings, commercial buildings, trafficable areas, and the like. In such circumstances, advice from a suitably qualified person should be obtained.
- Measure the distance from the base of the tank whilst sitting of flat ground to the inlet pipe invert level (effective depth).
- Excavate a suitably sized hole and allow for a minimum 100mm clean and level compacted sand pad beneath the base of any tank.
- Note: Maximum cover allowed over the tank is 500mm.

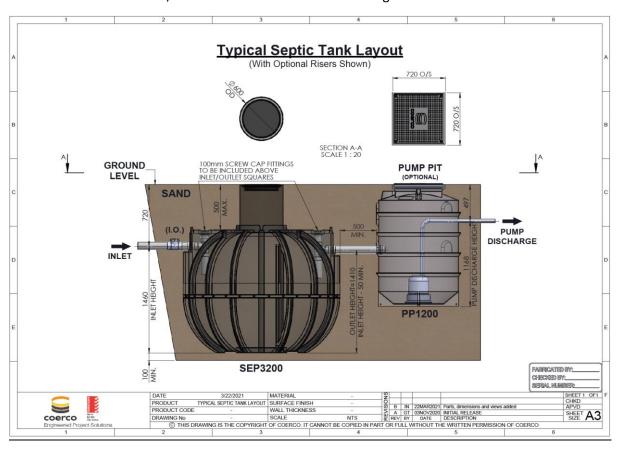
Placement of Tank

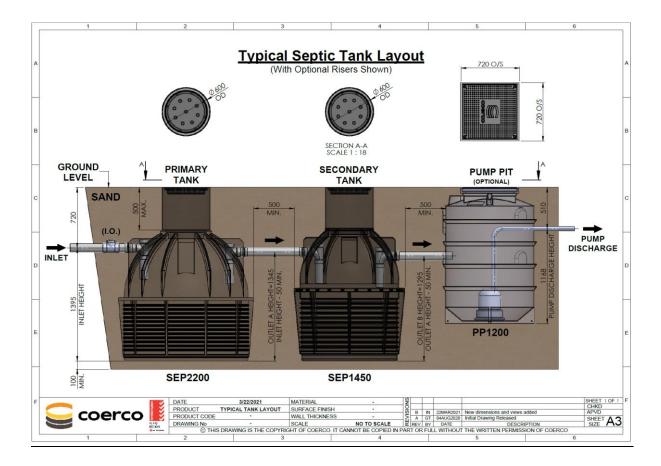
- Utilising the moulded lifting points, place the tank on the completed 100mm clean and level compacted sand pad.
- Ensure tank is true and level with adequate drain fall.
- Connect plumbing pipework to AS3500 regulations.
- Fill tank with water.
- Secure tank lid with Stainless Steel fastners and cover all tank openings to prevent dirt ingress during backfill.
- Your installation should be inspected by the relevant authority, which should be arranged prior to backfilling.
- In areas of potential high watertables, anchors should be provided at the base of the hole consisting of a length of 100mm PVC Sewer Pipe equal to the diameter of the tank and affixed with durable twin ties (12mm rope) to each side of the tank via the lifting/anchor points provided.



Backfilling

- Backfill and foundation material should consist of clean permeable sand, 10mm bluemetal or 10mm recycled concrete.
- Place fill slowly and evenly from all sides, and ensure there are no voids.
- Backfill around the tank shall be placed evenly in compacted layers, no greater than 200mm.
- Only hand held vibrating plate compactors (Jumping Jack/Rammer) may be used in the compaction process.
- Soil pressures based on a backfill/subgrade material must have a minimum density of 18kN/m3 and a maximum of 20kN/m3.
- Backfill material is to be compacted around the perimeter of the tank to a 98% modified dry density + 2% from optimum moisture content.
- Optional Risers should be fitted to the tanks to bring access lids to ground level for ease of access.
- Divert stormwater/runoff from the tank location through use of bunds or diversion drains.





Pump Pits (Optional)

- Pump Pits are required when wastewater can not be gravity fed to a drainage recepticle due to site conditions, contours or local authority guidelines.
- Coerco has a range of Polyethylene Pump Pits sized at 600lt, 900lt and 1200lt capacity to suit any application.
- Thought should be given to expected wastewater volumes and invert levels when determining the most suitable unit for your application. Refer to table 1. Note: Litres represent normal operating volumes not tank capacity.
- Optional invert levels are available on Pump Pits. A 100mm Flanged Tank Coupling should be fitted at a suitable height, using a quality polyurethane sealant fixed with 20mm 316G stainless steel screws.
- Installation is the same as for septic tanks detailed above.
- Submersible pumps should be placed on a 50mm plinth placed in the centre of the tank to avoid fouling the float switch.
- An audio/visual alarm should be installed as a warning of high wastewater levels.
- A 560mm optional lid riser is available for fitment to the Pump Pit if required, which can also be cut down to suit a variety of depths.
- The lid riser can be cut as required to suit site condition and then securely fixed to the Pump Pit with stainless steel screws or bolts.
- A thick bead of a quality polyurethane sealant should be applied where the the pump pit and riser meet to create a watertight seal.

- Bolt the square lid to the moulded nuts fitted within the riser.
- Place backfill evenly around the tank with finished ground level to suit.

Table 1

Product	Invert Level B.G.L. (litres)		
PP600	380mm (664lt)	550mm (503lt)	
PP900	380mm (930lt)	550mm (760lt)	930mm (408lt)
PP1200	380mm (1187lt)	550mm (1025lt)	930mm (664lt)



PP900 shown with riser fitted.

Maintenance Instructions

- No additional external loads should be applied to the top of the tank after installation, without a structural assessment.
- Testing of the sludge layer on the bottom of the main tank should be carried out annually. This can be done by carefully dipping through the tanks inspection opening. As a guide the sludge layer can be up to 350mm deep before pumping out the system is recommended.
- In any case septic tank should be pumped periodically to assist in the settling of the solids, fats and greases from the wastewater, to prevent these entering the drain.
- These pump out requirements are dependant on usage and are intended as a guide only:
 - 1-2 persons 10 years.
 - 2-3 persons 7 years.
 - 4-5 persons 5 years.
 - 6-7 persons 4 years.

Troubleshooting

- 1. Septic System emitting odour?
- After initial use a scum layer will form on the surface of the watewater within the main tank that elininates unpleasant odours. This may take up to 4 months dependant on usage and is a normal occurance during the development of bacteria within this chamber.
- Check sludge level in the main tank (see above).
- Check condition of drains that may be full and have saturated this area.
- Use of Biodegradeable type cleaning products is highly recommended as medicines, fats/greases and heavy duty cleaning products can kill bacteria, eventually leading to drain failure.
 - 2. Inside fixtures not draining properly or gurgling?
- Blockage between the tank and the plumbing fixture. Seek advise from your plumber.
- System may require a pump out.
- Drains may be full.

Australian Consumer Law and Consumer Warranty.

- Coerco warrants all our Septic Tanks against defects in materials and workmanship for a period of 15 years from the date of purchase.
- Coerco handles returns and process refunds in accordance with the Australian Consumer Law.
- Should you wish to return your order, you must contact us within fourteen (14) calendar days of delivery to report any discrepancies or faults.
- You are entitled to return a faulty Product. You may choose a refund or exchange if a
 Product has a major fault. If the fault is minor, Coerco may elect to give you a free
 repair instead of a replacement or refund.
- Returns or refunds are made in our discretion subject to any guarantees that cannot be excluded under the Australian Consumer Law.

Phone: _____ Email: _____

Contact Us:

Owner details

We are always happy to receive feedback about our products and service so call one of our friendly staff if you require any further information about any of our products and services.

Mail: Coerco

P.O. Box 319

Dalwallinu W.A. 6609.

Freecall: 1800-491-756

Email: <u>info@coerco.com.au</u>

Version D – Updated 23/08/21 – TK.

Leach Drain Septic Systems

Advantages

Easy to Transport

Take inthe back of a ute and assmeble on site.

Easy to Install

Less than 30 minutes for one man, including assembly.

Modular Structure

Create any shape and any size.

No Breakages

Impossible to break in transit or during installation.

No Aggregate Needed

Just backfill with clean sand.

Extremely Strong

Crush strength of over 20 tonne per m² (withstands accidental motor vehicle traffic)

High Percolation

High void space including sides and ends.

Lightweight

No crane or mechanical lifting needed.

Environmentally Friendly

Made from recycled plastic.

Approvals

Approved for use by local authorities.







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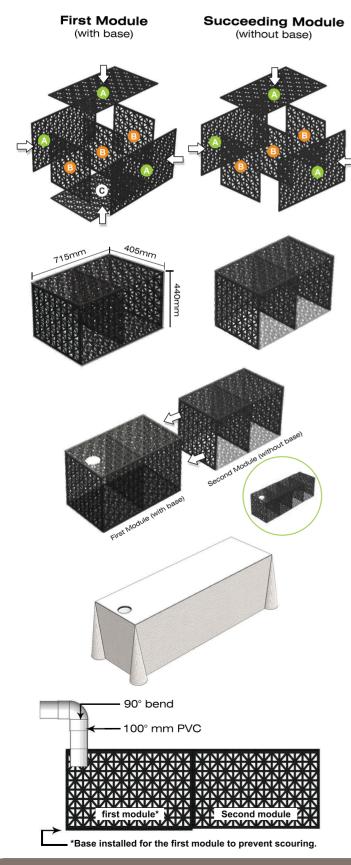
Coerco tank modules are a lightweight and high strength, polypropylene tank with 95% void space. Tank modules are assembled on site and easily positioned in the excavated trench to form a continuous channel. Inlet pipe is connected from the top of the tank prior to wrapping in Coerco geotextile on the topsides and ends. The full structure is then backfilled with clean sand or gravel.

Coerco septic systems are three times more efficient in leaching, as compared to traditional gravel systems and don't have any traditional clogging issues.



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Step 1

Fix Sides and top plates (A) to tank plates (B). Plate C (the base plate) is installed only on the first module to prevent scouring.

The succeeding modules don't require a base plate.

Step 2

Check if all parts are securely locked into position.

Step 3

Assemble more units together to form continual drain to the required length on prepared base with module oriented as shown.

Step 4

Completely surround the top and sides with the fabric supplied.

Step 5

Connect outfall pipe to the top of the tank by means of 90° bend and secure integrity of connection.

Backfill with clean fill a minimum of 300mm to surround structure before compacting.

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