

## Portapura

Portable, compact, efficient sewage treatment solutions for temporary buildings



# A sewage treatment plant unlike any other sewage treatment plant

#### Overview

The Portapura is the most compact and efficient sewage treatment plant we've ever made.

Designed for temporary accommodation, site offices, site toilets and workshops, the Portapura is portable, can be installed above or below ground and treats domestic wastewater to a level that is 25 times better than the recommended FN standard.

#### Portapura benefits

- Available in three sizes 2, 3 or 5 person units
- Compact, lightweight construction No heavy plant required
- Portable Systems can be installed above ground and removed/stored when not in use
- Cost effective installation Below ground installation can be achieved in approximately 2 hours
- Outstanding treatment efficiency 14:19:0.7mg/ltr (BOD:Suspended solids:Ammonia)
- Near silent air compressor Ensures minimal running, maintenance and servicing costs
- Electrical consumption: 1.8kWh/d Equivalent to the daily use of a lightbulb
- O CE approved to BS EN 12566
- Fire resistance tested in accordance with EN ISO 11925-2:210
- Tested for structural integrity in accordance with EN ISO 179-1/1eA



#### **Unit specifications**

Model	People served	Length	Width	Tank depth	Inlet invert	Outlet invert	Inlet/outlet dia
M2	Up to 2	2750	980	415	445	270	Ø110
М3	Up to 3	2050	1500	600	685	445	Ø110
M5	Up to 5	2640	1500	800	885	645	Ø110

Larger population sewage treatment plants can be supplied.
Please contact us for precise tank sizes and configurations.
All dimensions in mm.



Accoustic compressor housing ensures minimal noise and vibration



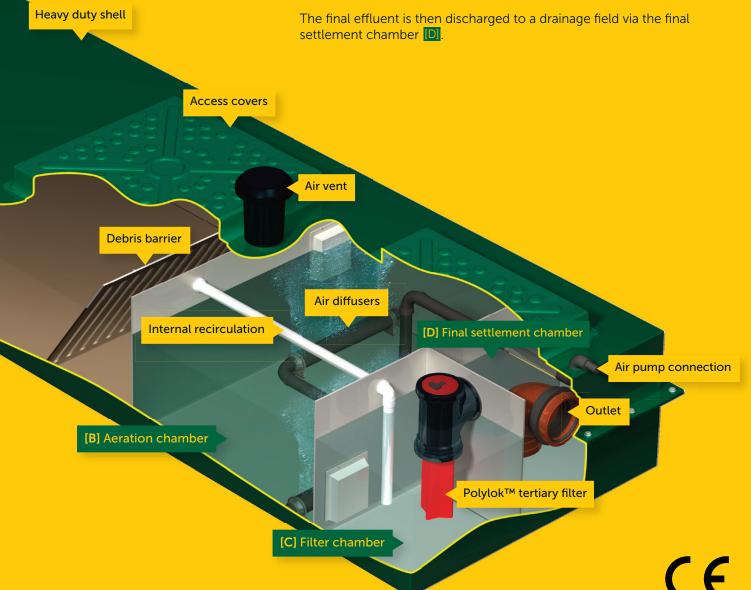




### Operating principle

Wastewater enters the primary settlement chamber where large solids are removed by settlement and flotation. An accumulation forms at the base of the tank and is removed by desludging

The clarified water is then transferred to the main aeration chamber B. Here it is treated to remove dissolved constituents. Aerobic bacteria, supported by diffused air, ensures full treatment is achieved before the effluent and 'sloughed off' bacteria flows to the filter chamber for further solids removal.



#### Why choose Portapura?

**It's more efficient than other sewage treatment options...** And more portable than all of them.

**It's a space-saving solution...** Its compact design provides quick and easy installation with minimum visual impact on the surrounding landscape as well as simple and safe access for maintenance and cleaning.

**It's cost-effective...** The cost of installing and running the Portapura is minimal when compared to larger, commercial systems.

**It's environmentally sensitive...** CE approved to BS EN 12566 with an ammonia result that is 25 times better than the recommended EN standard means the Portapura is well within discharge consent requirements.

It's designed specifically for temporary buildings... Design objectives included performance, running costs, installation, transport and storage, making the Portapura the logical choice for sites where temporary buildings are required.



#### Structural integrity testing

Structural integrity tests, performed in accordance with EN ISO 179-1/1eA: 2010-11, were undertaken to evaluate the strength of Marsh Industries' GRP materials against similar GRP materials used by other manufacturers.

Three separate material samples were submitted for impact testing; Marsh GRP material (virgin unfilled resin), a GRP material containing calcium fillers and a GRP material containing sand filler.

The tests involved 12 samples of each material at a size of 80x10x5mm. The nominal pendulum energy was 15J at an impact velocity of 3.8m/s.

Results proved Marsh GRP material to be 40% stronger than the other materials tested.

#### Fire resistance testing

Fire resistance testing was performed to assess ignitability of products subjected to direct impingement of flame. Marsh Industries' GRP material passed all practical testing to achieve EN ISO 11925-2:2010 standard.



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