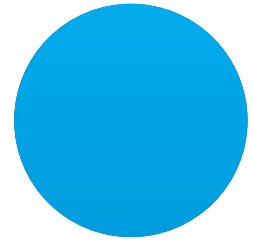




Clearwater

POLLUTION CONTROL



PRODUCT SELECTOR

Pollution Control, Pumping and
Rainwater Harvesting Systems

PACKAGE SEWAGE TREATMENT SYSTEM

Clearwater treatment plants are ideal for single houses and employ the well proven aerobic biological process for the treatment of sewage.

Certificated to European Standard EN-12566

In 2005, a new European Performance Standard was introduced. EN-12566 requires manufacturers to submit their product to a testing regime that accurately measures the performance of treatment plants up to 50 population.

These tests identify how much pollution the treatment plant removes from the sewage, what level of maintenance is required, and what power is absorbed.

By holding EN-12566 certification, the Clearwater treatment plant is approved for an exemption from a permit to discharge under the new EPP2 environmental legislation.

For more information on EPP2 and off-mains regulations please contact us.

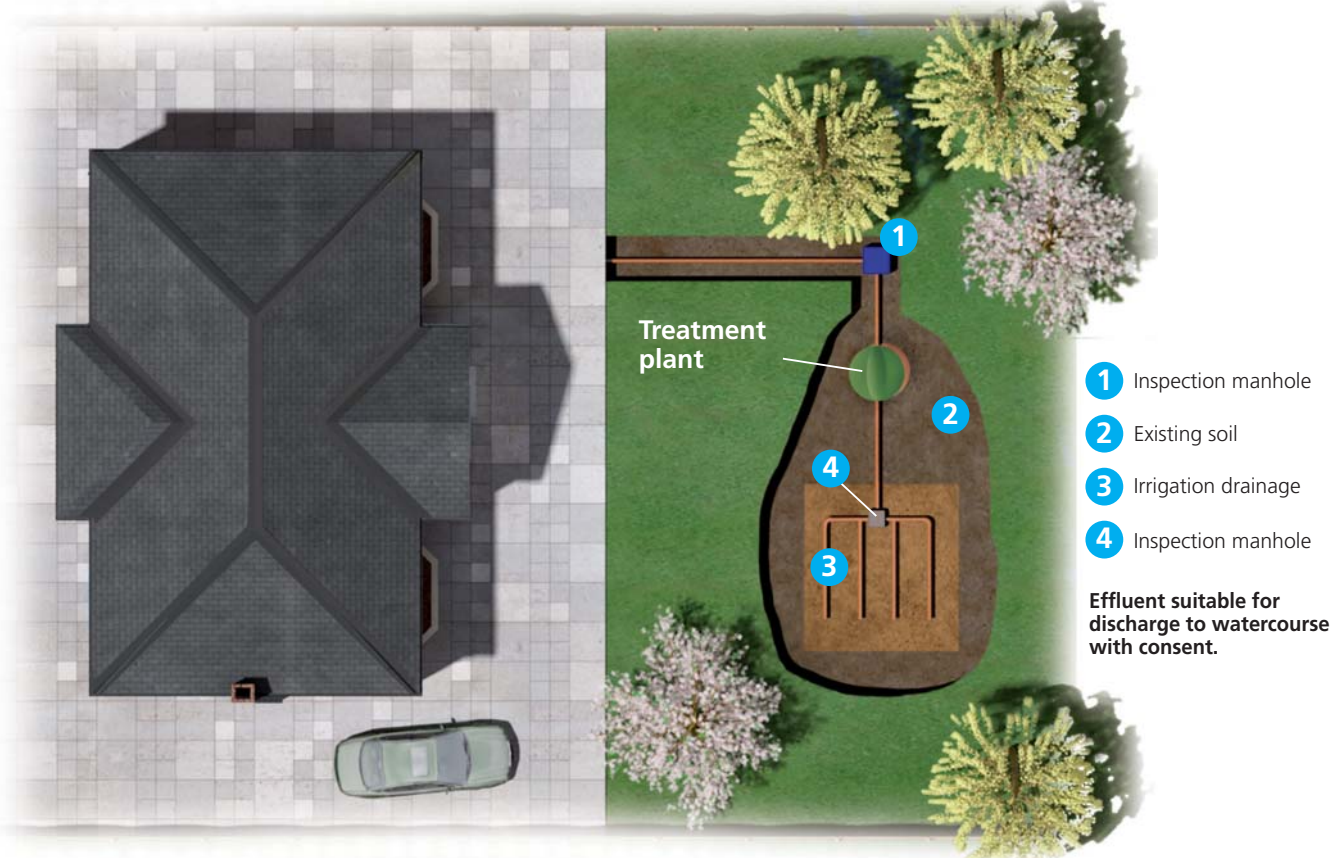
Three distinct process stages take place within the single tank:

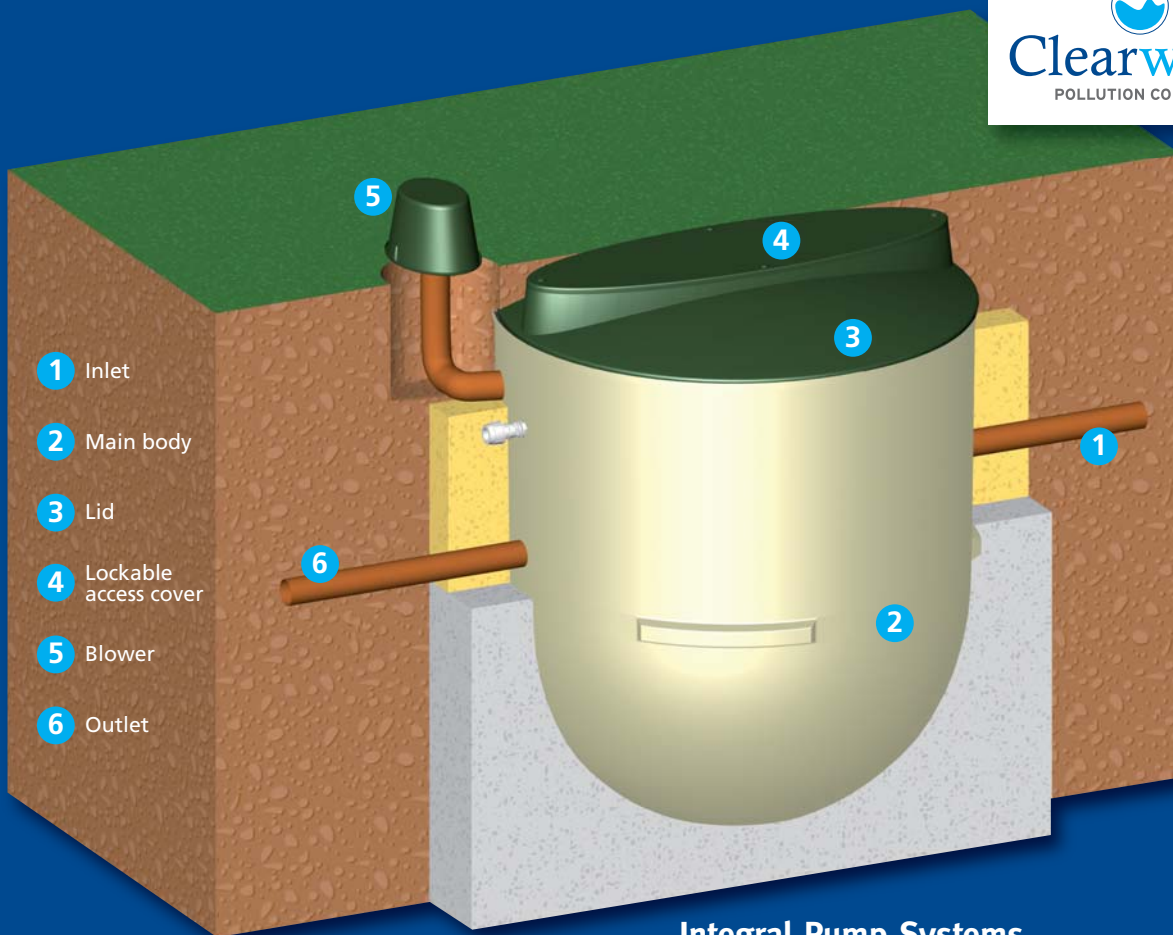
First, coarse solids are filtered and retained for gradual breakdown. Then the resulting liquid is continuously distributed over a plastic suspended filter by an integral lift, powered by a remotely sited blower.

Finally, the solids are allowed to settle and, under normal domestic conditions, treated water of 20mg/l BOD, 30mg/l S.S., 20mg/l Ammonia can be achieved.

Typical Plan

Cutaway Plan





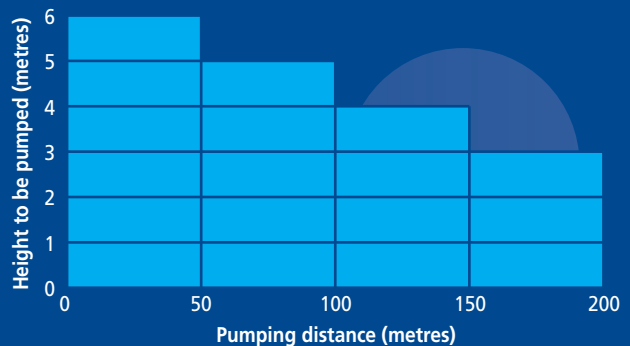
Benefits

- Superior performance rating.
- Subject to consent and site conditions, the plant can discharge directly to a watercourse.
- No mechanical or electrical components within the plant - low running and maintenance costs.
- Low level visibility with a lockable child-proof pedestrian duty cover - safe for children and pets.
- Controlled ventilation - minimises risk of odour nuisance.
- Package options to all requirements and needs.
- Easy to install and maintain with annual desludging.

Integral Pump Systems

You may find that your soakaway area/watercourse area is some distance away from the outlet pipe where the treatment plant releases the treated water. If this is the case, you may need to use a model which has the ability to pump treated water. These are our Integral Pump models (IPS). Please contact us for further information.

Single Pump System (50mm OD MDPE Pipe)



Technical Details

Model Type		6	12	18
Model Ref.		E006G10A0B	E012G10A0B	E018G10A0B
Max. No. of Full-time Residents	p/day	6	12	18
Average Flow	m ³ /day	1.20	2.40	3.60
BOD Load	kg/day	0.36	0.72	1.10
Weight Empty	kg	200	217	445
Overall Diameter	m	1.85	1.85	2.70
Overall Depth	m	2.20	2.70	2.60
Inlet Invert	m	1.00*	1.00*	1.00*
Inlet Invert to Base	m	1.20	1.70	1.60
Outlet Invert	m	1.10**	1.10**	1.10**
Blower Motor Rating	Watts	60	60	1.50
Drainage Fitting	mm	110	110	110

* There are two depths of inlet in the range 1.0m and 1.5m.
 ** 0.605m on IPS models.
 Under normal domestic conditions a discharge of 20mg/l BOD, 30mg/l SS and 20mg/l ammonia can be achieved.

SEPTIC TANKS & CESSPOOLS



Clearwater units are available in two shapes, spherical and cylindrical, with sizes suitable for all domestic applications.

Clearwater septic tanks are designed to meet both the installation requirements and the standards of discharge specified by BS 6297: 1983.

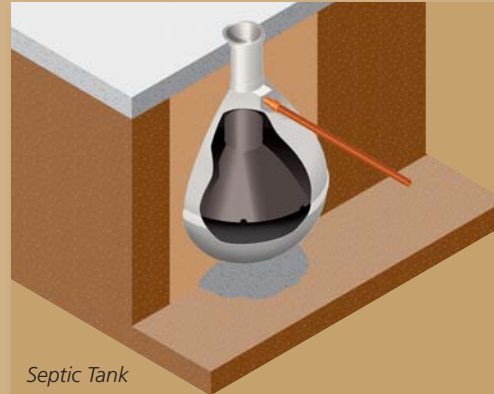
Clearwater tanks are used for domestic sewage disposal where connection to a mains sewer is not practical.

The septic tanks in the range all achieve a high degree of settlement, producing a quality of effluent for discharge to a land drainage system.

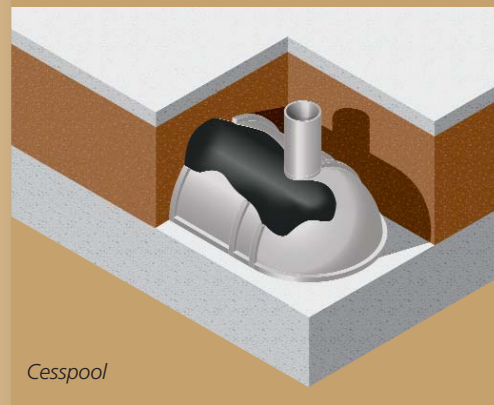
Septic Tanks & Cesspools

A septic tank consists of a two or three chamber system that retains sewage from a property for sufficient time to allow the solids to form into sludge at the base of the tank, where it is partially broken down through anaerobic digestion. The remaining liquid in the tank then overflows from the tank by means of an outlet pipe to a drainage field.

Spherical septic tanks are manufactured as standard from 2,800 to 4,600 litres net working capacity.



Septic Tank



Cesspool

Cylindrical cesspools are available with capacities from 18,000 to 26,000 litres. The cylindrical tank allows reduced depth excavation in comparison with the same size of spherical tank, offering considerable savings where ground conditions are difficult or where there is a high water table.

Cesspools are designed for storage only, with their contents being emptied at regular intervals using tankers. High Level Alarms with audible and visual warnings are available for all tanks to enable level monitoring for optimum use.

When sizing a storage tank for domestic properties it must be noted that under the Building Regulations it must have a minimum capacity of 18,000 litres (2 people) under Environment Agency regulations.

When siting units there are a number of factors to be considered. Systems should not be positioned closer than 7 metres to any dwelling and as far as possible from any watercourse, normally not less than 10 metres. Adequate access to tankers for emptying should also be taken into consideration.

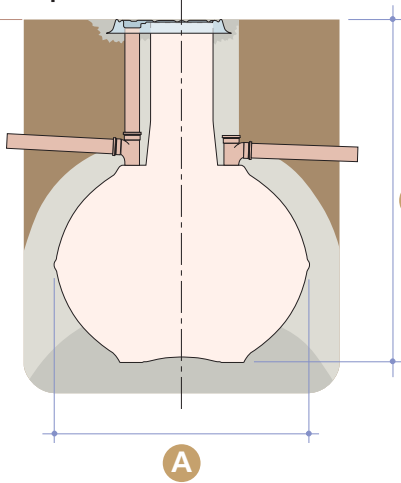
Septic Tank and Cesspool Selection Chart

Capacity (litres)	Model Ref:	Septic Tanks (Spherical)			Cesspools (Cylindrical)		
		Capacity (gallons)	Diameter A (mm)	Height B (mm)	Capacity (gallons)	Diameter C (mm)	Length D (mm)
2,800	STS0281OB	615	1,905	2,565	-	-	-
3,800	STS0381OB	835	2,070	2,795	-	-	-
4,600	STS0461OB	1011	2,080	3,035	-	-	-
18,000	CP2818S10CB	-	-	-	4,000	2,600	4,320
22,000	CP2822S10CB	-	-	-	5,000	2,600	5,090
26,000	CP2826S10CB	-	-	-	6,000	2,600	6,190

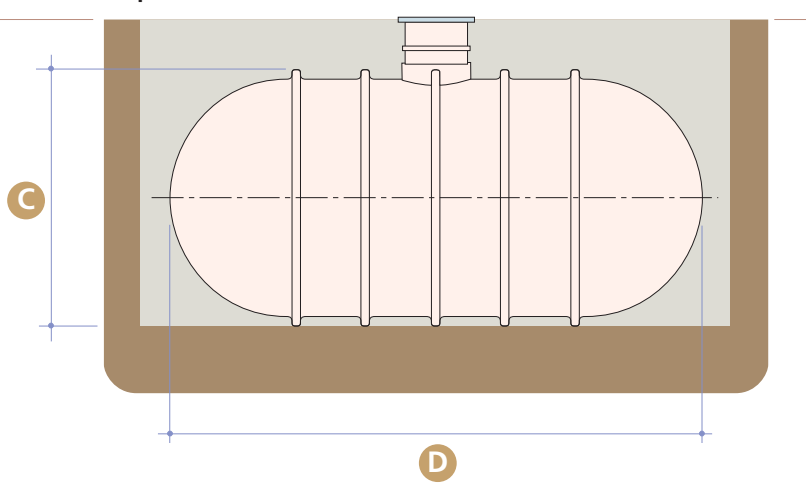
Septic Tanks have a 1.0m standard invert depth. 1.5m inverts are available upon request.

Cesspools are available with invert depths of up to 2.0m. For deeper cesspool inverts please contact our technical sales team.

Septic Tank



Cesspool



Storage Tanks

Clearwater storage tanks provide a reliable solution for the collection and retention of:

- Surface water;
- Firefighting reservoirs;
- Rainwater harvesting reservoirs;
- Animal drinking reservoirs.

* For silage storage, please inquire.



The spherical tank is the simplest and most economical solution to domestic sewage disposal



The cylindrical tank allows reduced depth excavation, resulting in cost savings



PUMPING STATIONS

A range of wastewater pump systems for residential developments.

Applications

Developments where foul drainage by gravity is not possible, including:

- Domestic sewage pumping;
- Effluent pumpsets for sewage treatment plants.

Features

- Complete package systems delivered direct to site.
- Ready for immediate and simple installation.
- Factory built and quality assured.
- Maintenance free GRP chambers.
- High-level alarm fitted as standard.
- Full after sales maintenance available.

Design

Package pump systems are supplied with:

- GRP chambers;
- Pump(s);
- High-level alarm (optional fitment on effluent pumpsets);
- Pre-set automatic level control;
- Non-return valve;
- Discharge pipe and all connections.

Options

- 1m invert.
- Lifting eyes.
- Pedestrian duty cover.

Pump Selection Chart

Type	Invert (m)	Model Ref.
Single Effluent Pump	1.0	PE1S-IR
Twin Effluent Pump	1.0	PE2S-IRA
Single Sewage Pump	1.0	PS1S-1G

Delivery & Installation

Units are normally delivered by flat bed vehicle and crane facilities should be available on-site for off loading.

Installation is quick and economical, the unit requiring only a concrete base and surround. Comprehensive installation instructions are supplied with every unit.

Advice

The information in this sales literature is, by necessity, brief. For more detailed technical literature and drawings regarding applications, installation, maintenance or specific options, please contact us. We have both internal and field sales staff who will be pleased to assist.

Maintenance

Clearwater package pump systems are designed for minimum maintenance. Clearwater offers a full after sales service involving planned maintenance visits.

Legal Requirements

Prior to installation, there is a legal requirement to obtain permission from the appropriate agencies (including connection to a public sewer).



RAINWATER HARVESTING

Rainwater harvesting systems for home and garden.

HOUSEHOLD APPLICATIONS

Clearwater offer a range of simplified rainwater harvesting systems controlled by a pump, suitable for either direct or gravity fed applications. Operation of the system does not require a control panel, display panel or depth sensor.

Features & Benefits

- Simplified system design for rapid installation.
- Quick-start set-up procedure.
- 'Kit in a box' of key components.
- Delivered to site on single pallet.
- Easy conversion to gravity system with optional header tank.
- Minimal energy use in operation.
- Designed in accordance with BS 8515.

Contact us for advice on selecting the correct size tank for your property's roof area.

GARDEN IRRIGATION

Clearwater's Garden Irrigation system comprises of a filter, an underground storage tank and a pump. Rainwater is stored in the underground tank from which it is pumped at a constant pressure to a hose connection point, as required.

Features

- Pumped water to required application, e.g. garden hose, power washer, sprinkler system.
- Submersible pump.
- Internal self-cleaning leaf filter.

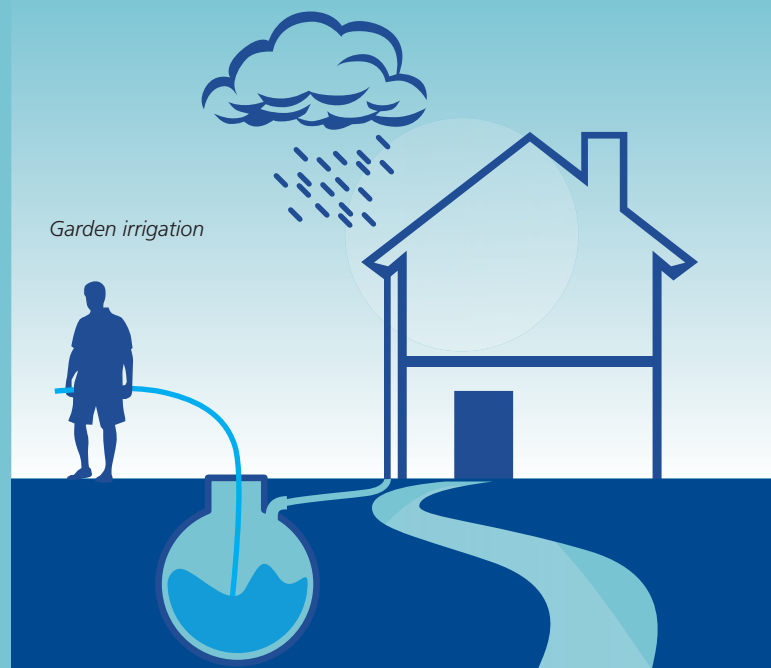
Benefits

- Inexpensive and easy to install.
- Simple on/off operation.
- Suitable for existing and new homes.
- Automatic rainwater diversion when tank reaches full capacity.



Rainwater Harvesting System Selection Chart

Capacity	Model Ref.	
	Gravity	Direct
1,200 litres	AQB012GB	AQB012DB
2,800 litres	AQB028GB	AQB028DB
3,800 litres	AQB038GB	AQB038DB
4,600 litres	AQB046GB	AQB046DB



Garden Irrigation System Selection Chart

Capacity	Model Ref.
2,800 litres	RTA02806AAB
3,800 litres	RTA03806AAB
4,600 litres	RTA04606AAB



Clearwater

POLLUTION CONTROL

- Sewage Treatment Systems
- Septic Tanks
- Cesspools and Storage Tanks
- Pumping Stations
- Rainwater Harvesting Systems

Clearwater Pollution Control

Tel: 0844 225 0514

Fax: 0844 225 0516

Email: info@cwpc.co.uk

www.cwpc.co.uk

Stockist: