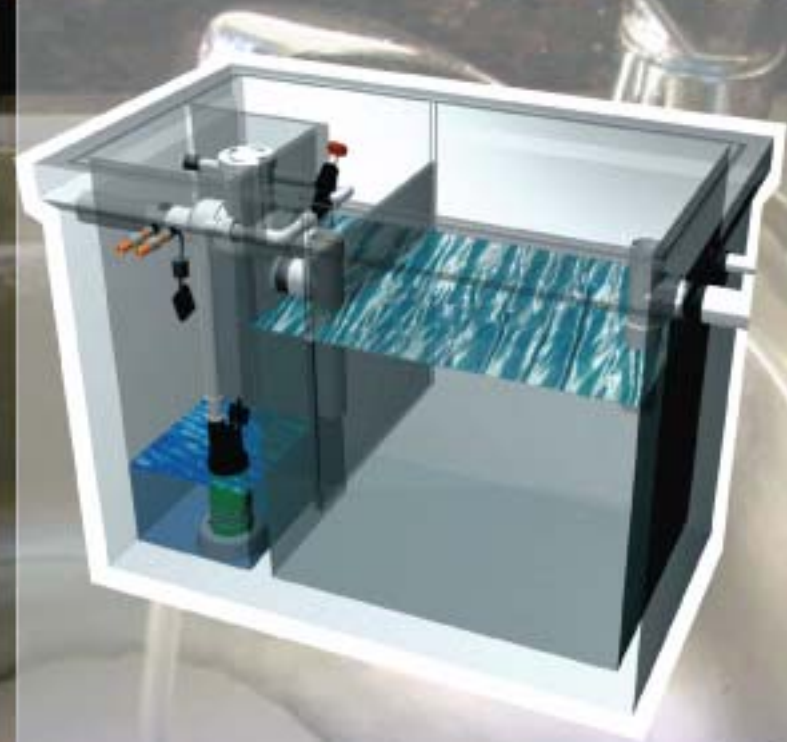


OPERATION



GREYWATER1200

greywater reuse system



GALVIN CONCRETE & SHEETMETAL PTY.LTD.

Your Installation Company is:

TROUBLE SHOOTING GUIDE

SYMPTOM	PROBLEM	SOLUTION
The moisture indicator is 'OFF' while the sewer indicator is 'ON'	Irrigation Filter is Blocked	Clean disks
	Filters are blocked in tank	Remove hatch and clean filters
	Pump is faulty	Contact Installation company
	Irrigation lines are blocked	Contact Plumber or Installation company
The moisture indicator is 'OFF' while the sewer indicator is 'OFF'	System O/K - awaiting more wastewater.	If the garden looks dry then do something that produces waste water. eg washing
	There is no main power to the unit (Tripped circuit breaker or blown fuse at house)	Change fuse or reset circuit breaker. Contact Plumber or installation company
The moisture indicator is 'ON' while the sewer indicator is 'OFF'	System O/K Garden has enough water but there is no more available at that time.	Do nothing
The moisture indicator is 'ON' while the sewer indicator is 'ON'	System O/K - garden has enough water and is bypassing to sewer	Do nothing
The water won't go down the drain.		Contact Plumber

WARRANTY

- 10 years on Tank and Cover
- 2 years on Parts and Labor

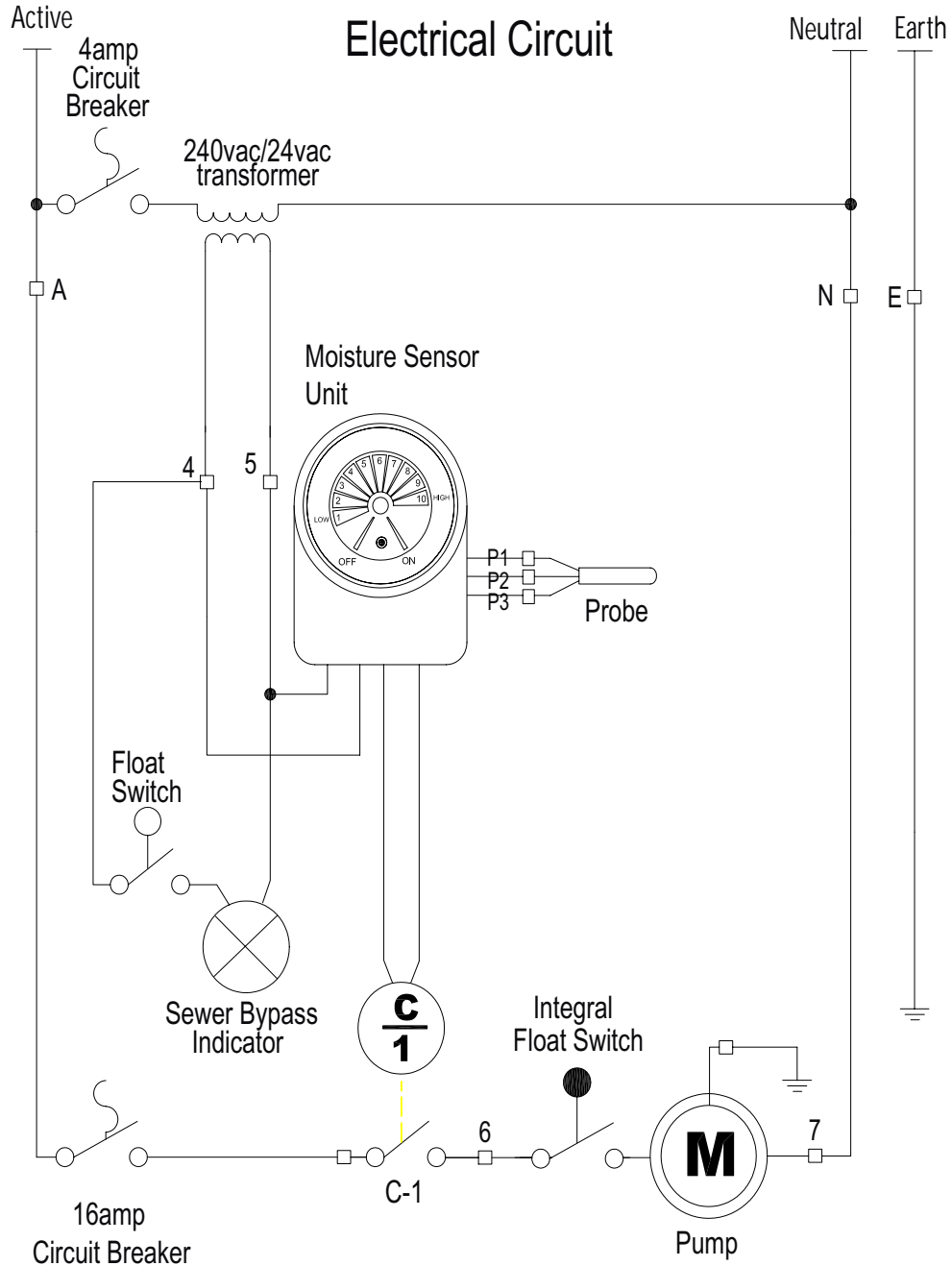


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GREYWATER 2000

Constructed to the highest quality and made from precast reinforced concrete, this unit will last for many years to come.

This unit Complies with all Australian Standards and Health Department Regulations.

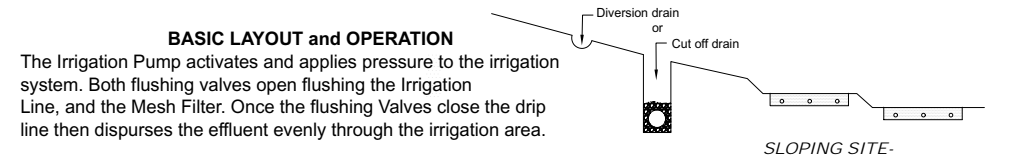
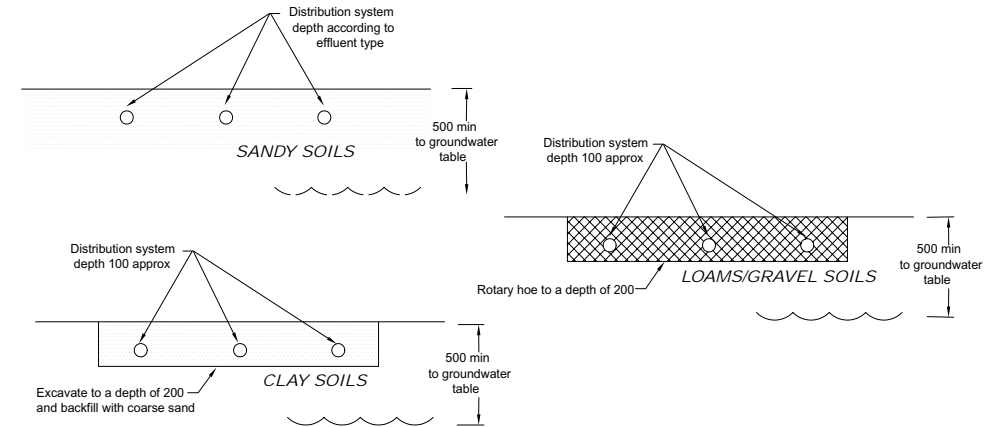
This unit is Approved by the W.A. Water Corporation and the Health Department of W.A.

The maintenance required for this unit is:

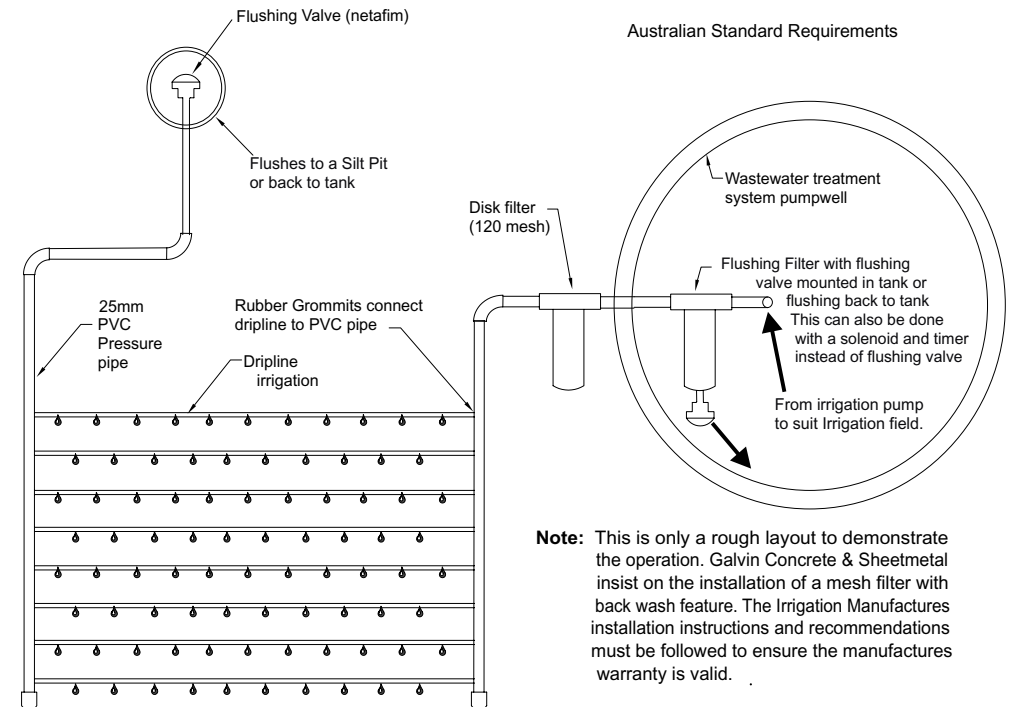
- The filter is to be cleaned every 12 - 18 months. This is done by the householder, plumber or the installation company.
- The System requires desludging every 5-10 years This is done by an approved Liquid Waste company.

Irrigation Layout for Dripline Irrigation

All irrigation layout and installation must comply with AS/NZS1547



Australian Standard Requirements



Note: This is only a rough layout to demonstrate the operation. Galvin Concrete & Sheetmetal insist on the installation of a mesh filter with back wash feature. The Irrigation Manufactures installation instructions and recommendations must be followed to ensure the manufactures warranty is valid.

MAINTENANCE

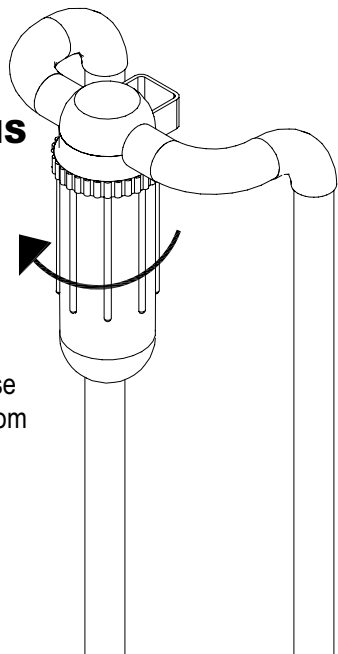
EVERY 6 MONTHS

CLEANING INSTRUCTIONS

for

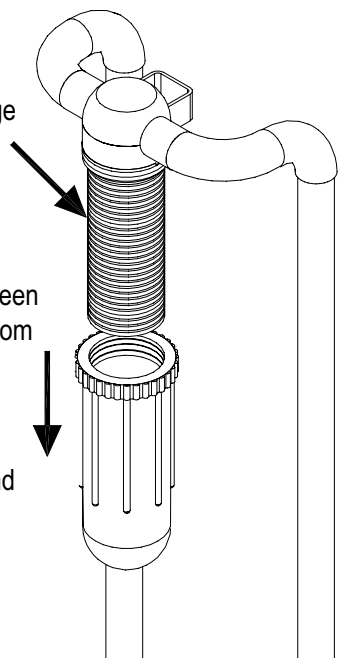
Irrigation Filter
(for Drip Irrigation)

Unscrew the cover by turning it anti-clockwise when looking down from the top.



Disk Cartridge

Slide down the cover and remove the disk cartridge. Wash between disks with pressure from the hose.



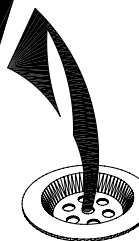
When clean replace the cartridge and slide the cover back on and screw clockwise until hand tight.

Note: wash hands after contact with any irrigation parts.

GREYWATER SEDIMENTATION TANKS

This information applies to Septic Tanks and Sedimentation Tanks

DON'T PUT JUST ANYTHING DOWN THE DRAIN!



Your system uses natural principles to improve the quality of wastewater produced by your household. This is mainly Bacteria, and the time the wastewater stays in the system. The time the wastewater is in the tank is covered by the unit having a volume large enough for at least 24 hour retention. The rest is up to you!

Bacteria is the key to all on site treatment systems (even greywater) and should be encouraged to thrive in your system. This means don't put things down your drain that will kill them like disinfectants, antibiotics chemicals etc.

Also you must look after the soil around your irrigation area by controlling the phosphorus, phosphate, boron, sodium etc. produced by washing powders and cleaning products that will damage the amount your soil will absorb water. This will eventually clog the soil and not allow the moisture to get to your plants roots. Read the contents and compare these products when purchasing and try to use the ones with the lowest levels.

.....Try and look for alternative cleaning methods.....
In our modern way of life we are using more and more products to make life easier without thinking of what we are doing to our surroundings. Some of the old cleaning methods are very effective but now overlooked. To move forward for the future in some areas may mean we have to go backwards.

HOW YOUR SYSTEM WORKS

The waste water produced from a residence is classed in 2 groups :

Greywater and Blackwater.

The waste from your toilet is classed as Black

&

all other wastewater is classed as Grey.

In the past, all waste was either treated on the property (septic systems), or taken away by the sewer system. Due to water shortages the regulations now allow us to keep our Greywater for use on our gardens. Unless treated with high cost, high maintenance systems with disinfection, any waste produced (even greywater) has health risks and the re-use of this water is only allowed below the ground surface. This however does not effect the irrigation qualities of this system as the water is pumped only 100mm under the surface amongst the roots where the plants really need it.

With this Greywater re-use system the house plumbing is modified to separate the two types of waste. The Blackwater is plumbed to the Sewer along with the kitchen waste, and the Greywater is plumbed to the Greywater System. By having the Kitchen waste seperated, the black water is flushed through the pipes avoiding blockages that may occur with the lack of water, and the greywater tank can be much smaller. The system has a sedimentation chamber that holds the water for a period of time to retain any solids and improve the water quality.

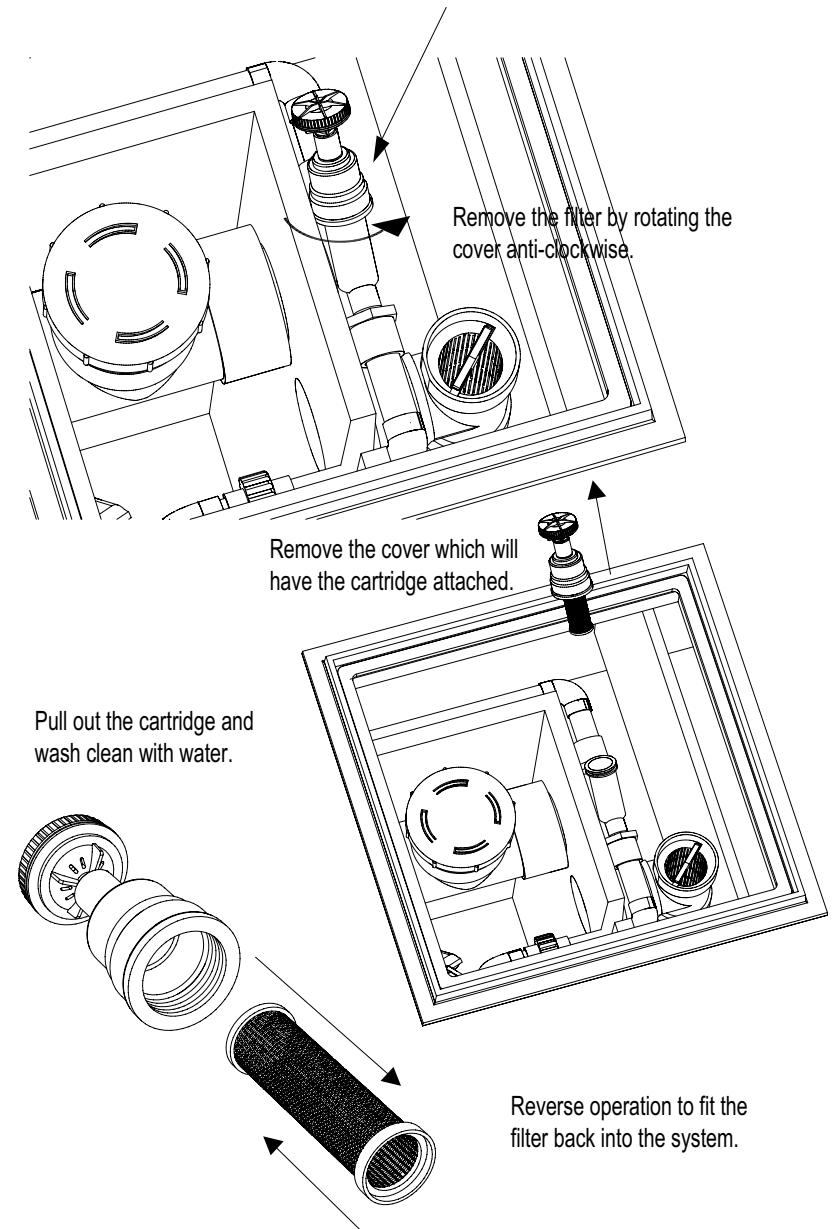
If the garden is dry, the moisture probes set up the irrigation so when there is wastewater available the pump comes on pumping all greywater to the drip irrigation pipes in the garden.

If the garden is wet, the pump does not come 'ON' and wastewater builds up in the pumpwell eventually overflowing to the sewer.

The status of the system can be checked by the Indicators on the control panel. (see page 5 -6)

MAINTENANCE

IRRIGATION PRIMARY FILTER

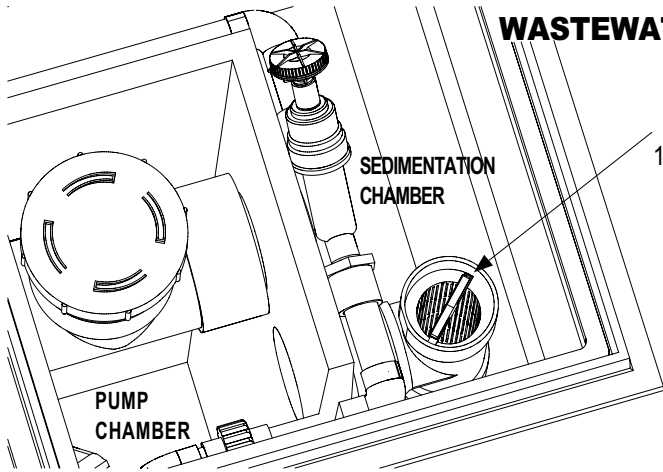
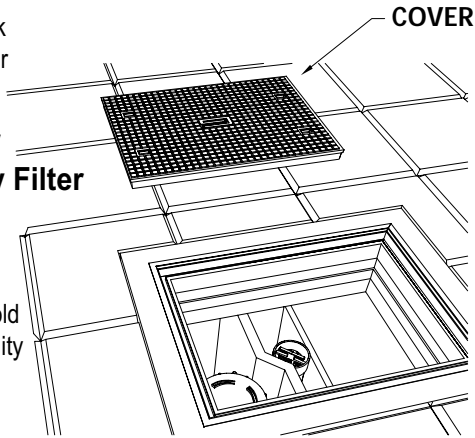


MAINTENANCE

There are 2 main areas to check and maintain, both require the Cover to be lifted -

- Clean - Wastewater Filter**
- Irrigation Primary Filter**

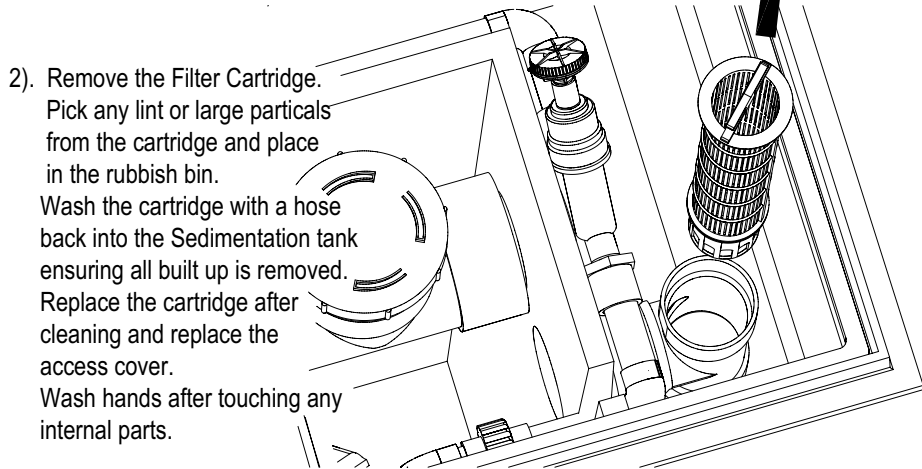
This should be done every 12-18 months (this will vary from household to household depending on the quality of greywater produced)



WASTEWATER FILTER

To remove the Wastewater Filter

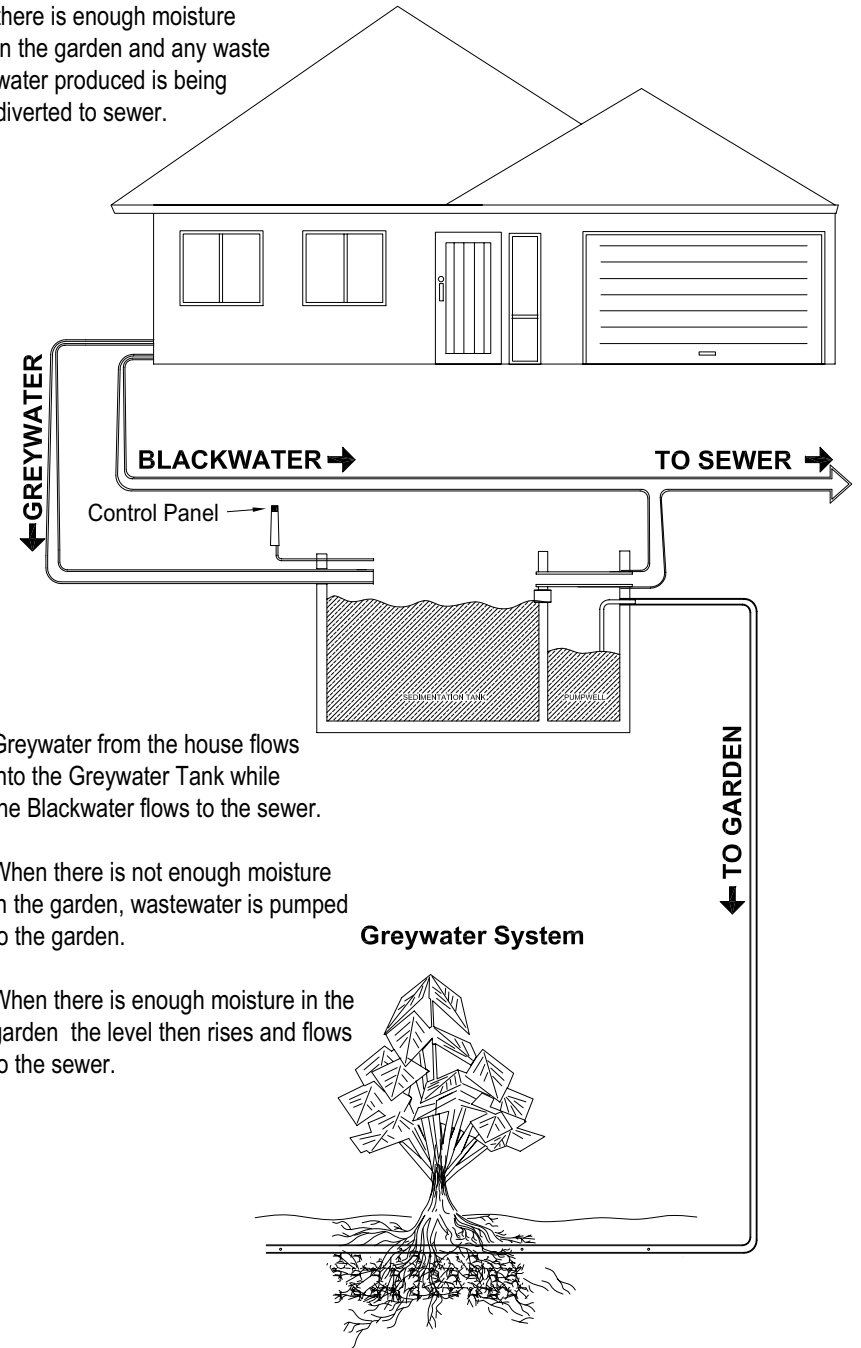
- 1). Grip the filter handle and pull upward until the filter cartridge is completely removed.



- 2). Remove the Filter Cartridge. Pick any lint or large particles from the cartridge and place in the rubbish bin. Wash the cartridge with a hose back into the Sedimentation tank ensuring all built up is removed. Replace the cartridge after cleaning and replace the access cover. Wash hands after touching any internal parts.

Note: This system requires De-sludging every 5-10 years

An Indicator light on the control panel is 'On' if there is enough moisture in the garden and any waste water produced is being diverted to sewer.

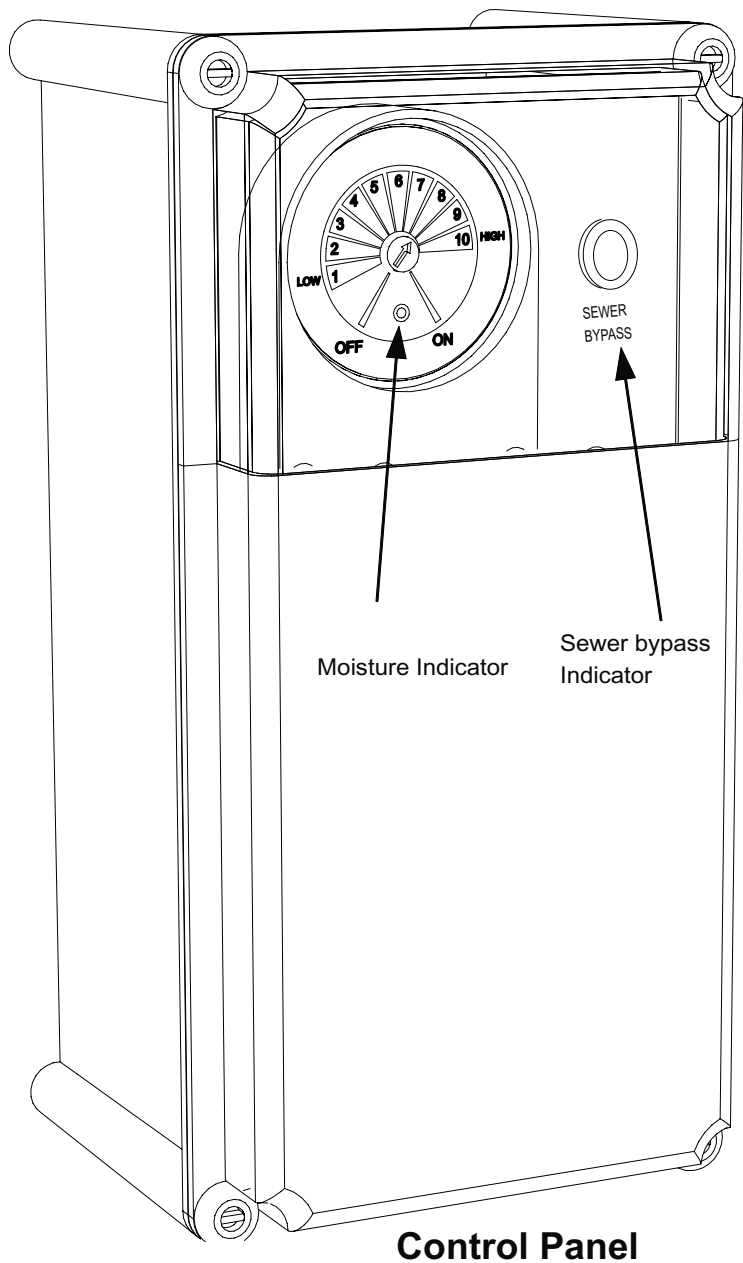


Greywater from the house flows into the Greywater Tank while the Blackwater flows to the sewer.

When there is not enough moisture in the garden, wastewater is pumped to the garden.

When there is enough moisture in the garden the level then rises and flows to the sewer.

Greywater System



This system is automatic and will divert to sewer when there is enough moisture in the garden whilst wastewater is being produced from the house. When the system is bypassing to sewer, the Sewer Indicator on the control panel is illuminated. Also on the control panel is a Moisture Indicator to show when the garden has enough water.

If the Moisture Indicator and Sewer bypass Indicators are both 'ON' there is wastewater available but the garden does not require it and will divert to sewer.

If the Moisture Indicator is 'ON' and the Sewer bypass Indicator is 'OFF' there is no wastewater available for irrigating.

If the Moisture Indicator is 'OFF' and the Sewer bypass is 'ON' for more than 5minutes there is a Fault with the System or Irrigation

If the Moisture Indicator and the bypass Indicators are both 'OFF' there is no wastewater available but the garden does not require water..

