



Commercial buildings and multiple dwellings – **one recycling solution.**

Why lose it when you can re-use it?

Water is a precious commodity. At Aquacell, we're committed to preserving it. Our cutting edge water recycling systems are the sustainable, cost-effective way to reduce water consumption. The new Aquacell G Series gives commercial developers modular solutions to on-site greywater recycling.

Understanding greywater

Greywater makes up around 30–50% of wastewater discharged into our sewers. Therefore, greywater recycling offers facilities the chance to cut their water use by up to half.

Generally defined as wastewater from bathrooms and laundries, greywater can come from our showers, baths, basins and washing machines. It may be contaminated with a range of soluble and insoluble (particulate) substances, from soaps and detergents, to skin and saliva, to dirt and lint. Each type of contaminant, whether it is detergent/surfactant, organic, microbial or particulate, must be treated appropriately. That is why we have developed the Aquacell G Series. Designed with a multi-barrier approach, it combines a

range of purifying processes to remove the various contaminants.

Complete confidence and support

In built control logic and instrumentation continuously react to the ever-changing quality of effluent without the need for an on site operator. Expertly trained Aquacell engineers remotely monitor all systems via the Internet, twenty-four hours a day, seven days a week.

Regulatory compliance

Data acquisition and compliance reporting is built into the Aquacell system from the ground up.

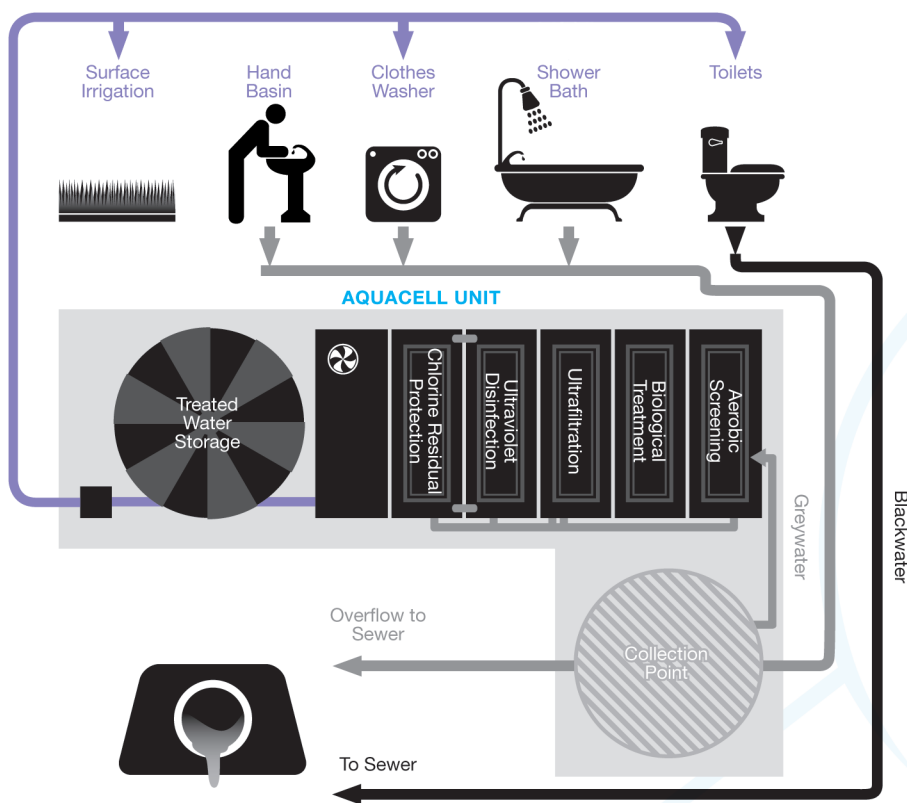
All our systems are backed by expert knowledge, service and maintenance support. This is our ongoing guarantee to ensure your peace of mind.

Green Star benefits

The Aquacell G Series offers high recovery rates with no backwashing, negligible residue and low energy usage. These features provide maximum credits for Green Star or ESD projects.

Aquacell is the ideal option for green builders.





One recycling solution

The Aquacell G Series approach

Our unique modular technology is utilised in the Aquacell G Series. The system features a controlled, robust and comprehensive treatment process that combines physical, microbiological and oxidative treatments into the one package:

Collection point – Water flows from the property to a collection point, whereby it is pumped into the Aquacell to begin the treatment process.

Aerobic screening – The first step is a unique odour free process that efficiently reduces insoluble material to a negligible residue. This residue is usually discharged to sewer and the remaining greywater flows into the second module.

Biological Treatment – Air is diffused into the water to create optimum conditions for bacteria to consume impurities. A sustainable biomass concentration is maintained, which metabolises all incoming waste – resulting in negligible sludge. Of the incoming water, 99.9% is reused.

Typical Greywater performance

Parameter	Influent water quality	Treated water quality
Biochemical Oxygen Demand (BOD), mg/L	80–200	<5
Suspended solids, mg/L	50–200	<1
Total Nitrogen, mg/L	30–50	<15*
Total Phosphorous, mg/L	20	<10
Faecal coliforms, cfu/100ml	10 ⁶ –10 ⁸	<1
<i>E Coli.</i> , organisms/100ml	10 ⁶ –10 ⁸	<1
Turbidity, NTU	<2	
Viruses	99.999%	
Power consumption	Less than 2kWh per kL produced	
* Levels <10 can be achieved if required.		

Ultrafiltration – Ultrafiltration occurs through a special membrane of microscopic pores that prevents particles, bacteria and viruses from passing through. The membranes are cleaned by air scouring, ensuring no wastewater is produced.

Ultraviolet disinfection – As a precaution, Ultraviolet lamps are provided. These act as a further barrier, providing additional protection against pathogens.

Chlorination – Finally, a chlorine residual is added to protect the water while in storage and the reticulation system – the only time any chemicals are used throughout the treatment process.

Treated water storage – The result is safe water, kept in storage for future use in a variety of applications, including surface irrigation, toilet flushing and washing machines.

For further information

Please contact Aquacell Head Office on 02 4782 3300 or email sales@aquacell.com.au