

Greywater Recycling in the home.



Greywater Recycling is the collection, treatment and reuse of water that has come from light cleaning processes such as the shower, bath and sinks that would otherwise be sent straight to the drainage system. In most cases it is clean enough to consume although it is mostly used for irrigation of lawns, plants and vegetables and is ideal as a soft water supply to washing machines and for flushing toilets.

The average daily water consumption per person is around 130 litres. In private housing, 35-50% can be saved and in hotels, residential care and guest houses this figure often rises.

Reuse of water that you have already purchased makes good sense, it reduces costs, conserves ground-water resources and wastewater transportation costs to / from the municipal processing sites.

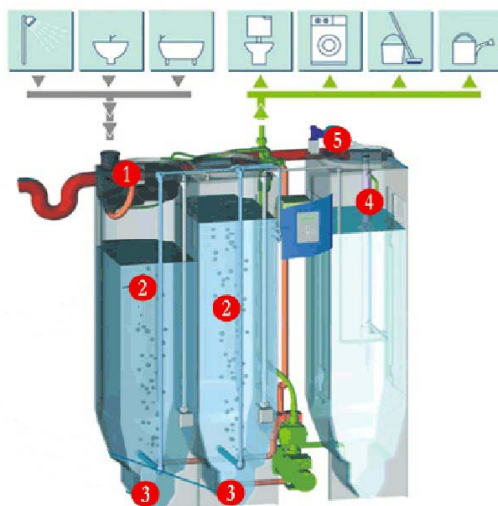
As part of a new build project a greywater recycling plant such as the Aquacycle® illustrated can pay for itself within a few years.

Greywater is gravity fed into the unit, which needs to be in an area below the house, such as a basement or ground level garage for example, and in an area of easy access.

The Aquacycle® 900 consists of three modular tanks, each of 300ltr capacity. Larger particles are collected in a SS mesh filter (1) before entering tank one. One & two are settlement tanks, here dirt particles are decomposed and the water pumped to the next. Oxygen is pumped through them (2) and small foam rubber pieces moving around are an important part of the biological cleaning process. The organic sediments produced are regularly sucked out on a timed basis and washed away (3).

The water is then pumped through a U-V disinfection unit (4) into the final tank as clean water ready to use. To the eye it is clear, colourless and odourless, as good as water in a swimming pool or hot tub.

To ensure there is enough supply for the house Mains water will automatically be fed into (5).



Water quality from these systems complies with the European Recreational Water Standard No: 76/160EWG. It is a legal requirement that recycled water used in the house or an office environment, is installed in accordance with WRAS guidance 9-02-03,04 & 05, that it is piped separate from the mains supply so that clean, potable mains water cannot become contaminated and that it is clearly identified as recycled water.

The Aquacycle® 900 is ideally suited for inclusion in new build residential projects, larger models are available for for multi-family housing, apartment blocks, hotels, camping sites, etc. The 900 unit uses 0.6kWh of electricity to operate and as an optional extra we can offer a roof mounted Photovoltaic Solar Panel to provide this electrical energy.

The Aquacycle® 900 costs c.£3750. A full installation service price can be offered subject to survey.

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