

# Rain Water Harvesting



**Rainwater Harvesting** is the collection and use of rain which falls on building roofs and would otherwise go straight to the drainage system. After filtration and settlement such 'clarified' water is suitable for a variety of purposes, from irrigation for lawns, plants and vegetables, as a supply for domestic washing machines, car and other washing facilities and for flushing toilets.

A simple system for garden use that is not be connected to the mains supply can be used all year round regardless of drought warnings. Domestic supply systems would normally be connected to the mains system and incorporate filters controls to supply back to the house.

It is important to balance the rainwater you expect to collect against your rate of use so you should talk to your supplier about sizing a suitable system for your project. Storage tanks are large and require to be installed to regulations, hence installing the tank can account for 2/3 of the overall cost.

If the water is to be used in the home or office it must be clearly identified as recycled water and piped separate from the mains supply so that clean, potable mains water cannot become contaminated.

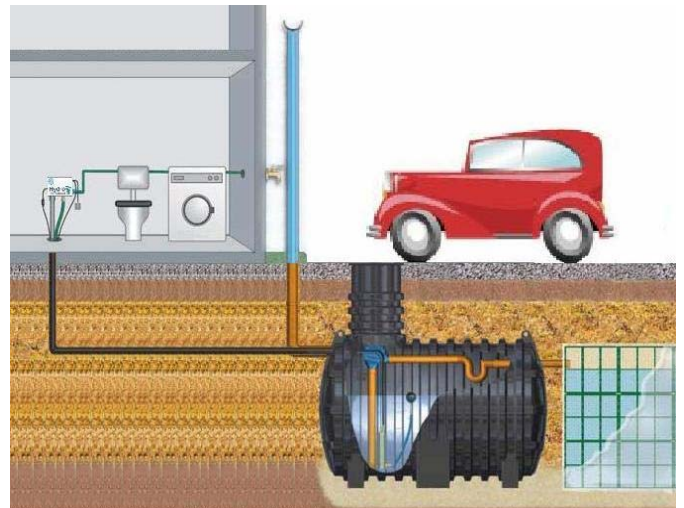
It is a legal requirement that systems be installed in accordance with current water regulations hence we only work with trained & qualified installers.

All systems comply with the European Recreational Water Standard No: 76/160EWG, suitable for supply to swimming pools.

Whilst it is possible to filter water to very high quality and treat with UV light to kill bacteria, the product illustrated will not provide this and we would not recommend that recycled water be used for personal washing or culinary purposes.



- The rainwater is filtered by the collecting unit which excludes leaf debris and other large particles.
- The second stage is settlement in the tank. The heavy particles sink to the bottom and lighter organic matter floats on top. The heavier particles accumulate at around 1 to 2 mm per year to form a beneficial biological layer.
- The overflow unit is designed to skim floating particles from the surface when the tank overflows.
- Water is extracted from the cleanest part of the tank, just below the surface, using a floating filter.
- Water quality is maintained by the removal of organic matter and by the action of incoming water which introduces oxygen to prevent it become malodorous when stored for long periods.



Prices for a complete system ready to install start from £1200, fully installed quotes available on request.

**Planet Energy Solutions**

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