

Rainwater Harvesting FAQs

Answered by the UK Rainwater Harvesting Association



#1: What happens in a dry spell?

With full RWH systems, when there is insufficient water in the storage tank the system automatically draws water from the mains again, so that from the point of view of the user no difference is apparent.

2: Is the water clean?

The tanks have filters that remove all debris and particles from the water, so that the water remains clear.

3: How much water is saved?

This depends on the size of your catchment area (usually the roof of the building) and the amount of rainfall in your area. Typically, domestic systems will reduce mains-water consumption by up to 50%, rising to more than 80% in commercial applications



4: Why should I buy one?

The systems provide significant environmental benefits through reducing mains water demand and reducing storm water run-off. Also, control of storm-water run-off is now increasingly a Planning issue which rainwater harvesting systems can play an important part in addressing.

5: Is it only for new buildings?

Systems are best designed-in from the outset, but can be retrofitted depending upon the accessibility of pipe work. We would like to see the Government legislate to ensure that all new structures are built with separate potable and non-potable pipe work to make subsequent retrofitting a very straightforward proposition

6: Is there a danger of Legionella?

No, the system does not provide the conditions necessary for the cultivation of Legionella. With the water stored underground it is dark cool and is kept well oxygenated. Legionella cannot cultivate in these conditions.

7: How big is the system/storage tank?

Varies, and is matched to the catchment capability of the roof, and the likely consumption of non-potable water in the building

9: What maintenance is required?

Varies from system to system, but invariably minimal; typically, washing off the filter (5-minute job with a garden hose) once a quarter is all that is required.

10: How long will a system last?

The buried components, indefinitely; components such as the control system, pump and filter have an extremely long working life, and are easy to replace should the need arise.

12: How old is the technology?

The technology and principles of rainwater harvesting have been around since pre-Roman times, however the modern systems date back to Germany in the mid 1980's.

13: Is it a proven technology?

Yes it is. Systems have been installed in Germany since the early 1980's. One benefit of the UK market being generally 'behind' the rest of Europe is that the potential problems have been worked through and solved, especially by the extensive work taken place in Germany.

16: How often does a system need topping up with mains water?

A well designed system with a good match between supply and demand will only need topping up when it has not rained for some time. Severn Trent monitored a domestic system and found that the only occasionally needed to be topped-up. Most of the time the tank was around 50% full (i.e. an ideal balance between having plenty of water to use, and plenty of space to accommodate the next rainfall).

18: What can I use the water for?

The water harvested is suitable for all non-potable purposes from watering the garden (rainwater is, unsurprisingly, particularly beneficial to plants), washing the car, flushing the toilet and running the washing machine. In certain cases it may be

possible to achieve potable water standard through additional treatment.

20: How much does it cost to run the pump?

The pump typically uses less than 1.0 kWh of electricity to provide 1 cubic metre of water (1000 litres). For a typical 3-bed house using rainwater for WCs, washing machine and the garden, pumping costs are therefore about 10p per week.

21: How much does a system cost?

Around £1500 up to £2000 for a good quality domestic system depending on the size. Industrial systems can be much more expensive but will deliver bigger savings because of increased roof areas.

23: Can I drink the water?

In the UK, rainwater is not usually harvested for drinking purposes, so it is therefore not normally recommended. However, to meet off-grid and other project-specific requirements, some manufacturers are able to provide solutions which can bring the water up to a potable quality, provided regular maintenance is carried out.

26: Can I get any grants or tax allowances for installing a system?

At present there are no funding directly aimed at rainwater harvesting. It does however qualify for 100% capital allowance relief on commercial premises.