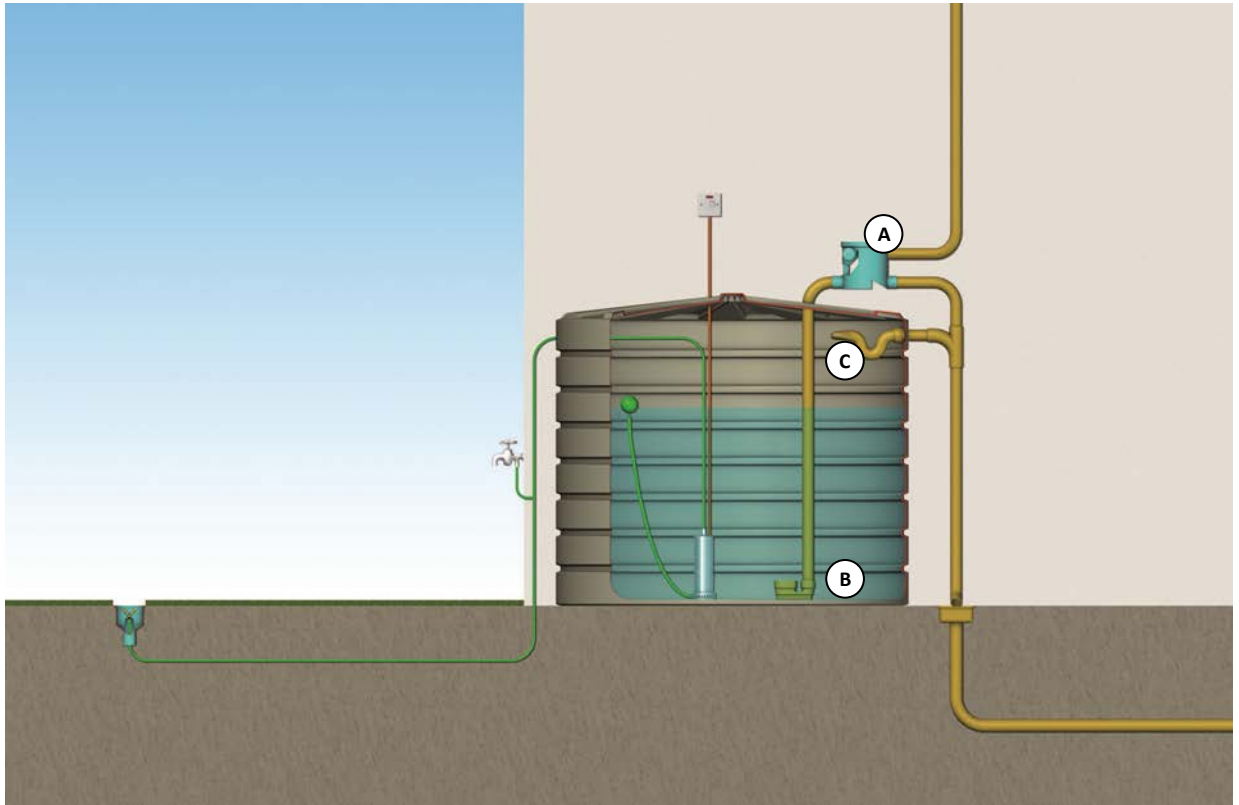


Rainwater Harvesting



The 3-stage cleaning process

With good planning and the right components a rainwater system can be nearly maintenance free and the rainwater quality is ideal for many uses, in both the home and the workplace. A professional system will have three stages of cleaning for the rainwater.

Roof areas

Only rainwater from roof areas should go into the storage tank. Smooth surfaced materials are the best (slate, tiles, glazed, cement roofing slab). The rain yield from green roofs is 30-50% and whilst it can sometimes be a bit discoloured it is still suitable for toilet flushing and garden watering.

Cleaning step A – Filter

The first cleaning step in the rainwater system is the filter. The Rainwater flows from the roof to the filter. Here, dirt particles and debris are separated from the water. The cleaned water flows to the tank. The dirt is washed to waste or soak away with a small amount of rainwater. All rainwater filters have colters, which are easy to remove and easy to clean.

Cleaning step B - Calmed inlet

Here the second cleaning step takes place. In the water column, any residual particles settle to the bottom of the tank. The rainwater calmed inlet ensures that oxygenated water is introduced to the lower layers of the stored water in the tank. This oxygen rich water prevents anaerobic reducing conditions forming in the storage tank and ensures that the water stays fresh. It also allows water to enter the tank without disturbing the water that is already there.

Cleaning step C - Overflow siphon

Any particles that are lighter than water (e.g. flower pollen) float slowly to the water surface. The overflow siphon, with a skimmer effect, removes this floating layer. The overflow from the storage tank is important to get the optimum water quality. It prevents souring of the water. The floating layer could otherwise build up over time, and so reduce oxygen diffusion at the water surface, which in turn could lead to anaerobic reducing conditions in the tank.

Rainwater Harvesting



Garden Filter 70

Filter collector for a typical 70m² (house sized) roof and up to a 4000ltr tank. Fits in downpipe and diverts filtered water to the rainwater harvesting tank.



Garden Filter 200

Filter for a 200m² roof, ideal for tanks between 5500 and 20,000 litres. Suitable for general garden and yard use (this filter requires the filter basket to be emptied as required).



Single Filter 450

A filter collector for a 450m² roof ideal for tanks between 5500 and 20,000 litres. This filter is suitable for garden, yard and indoor non-potable uses such as W.C. flushing and washing machines. The filter is virtually maintenance free as debris is piped straight back to the drains.



Twin Filter 800

A twin filter for an 800m² roof ideal for tanks between 9500 and 20,000 litres. This filter is suitable for garden, yard and indoor non-potable uses such as W.C. flushing and washing machines. The filter is virtually maintenance free as debris is piped straight back to the drains.



Calmed Inlet

In the water column, any residual particles settle to the bottom of the tank. The rainwater calmed inlet ensures that oxygenated water is introduced to the lower layers of the stored water in the tank without disturbing any sediment that may have settled on the base of the tank.



Overflow Siphon

Any particles that are lighter than water (e.g. flower pollen) float slowly to the water surface of your rainwater harvesting tank. This overflow siphon, with skimmer effect, removes that floating layer. The overflow from the tank is important to ensure optimum water quality and prevent souring of the water.