

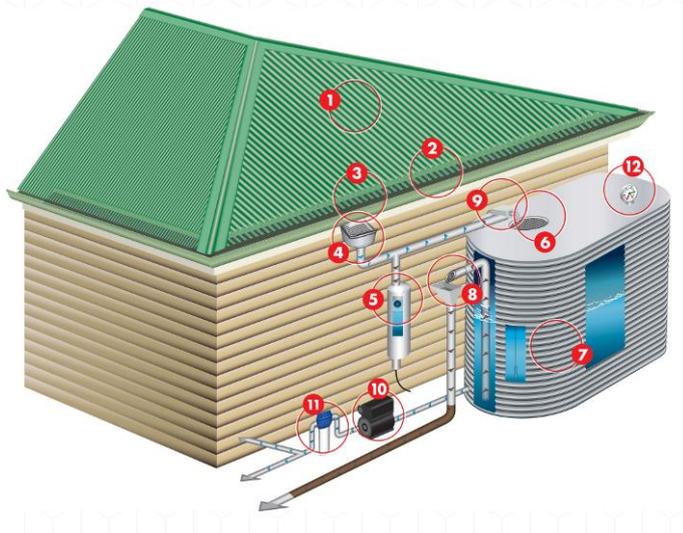
Sustainability of Rainwater Harvesting

Water is considered an everlasting free source that can be acquired naturally. Demand for processed supply water is growing higher due to an increasing population. We are now increasingly becoming aware of the importance of water to our survival and its limited supply, especially in such regions as Cape Town, South Africa. Sustainable use of water could maintain a balance between its demand and supply. Rainwater harvesting (RWH) is the most traditional and sustainable method, which could be easily used for potable and nonpotable purposes both in residential and commercial sectors. This could reduce the pressure on processed supply water which enhances the green living.

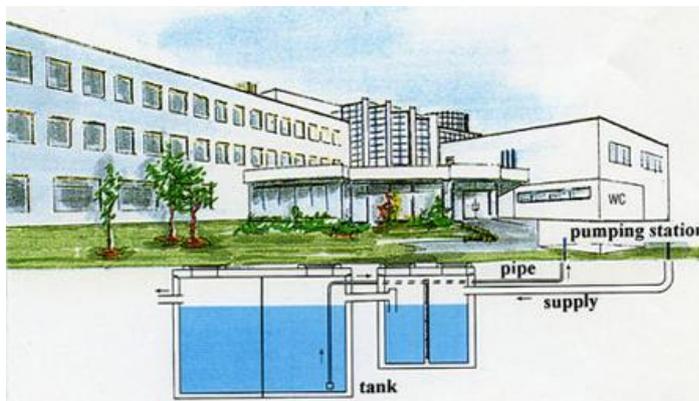
What is rainwater harvesting and why is it Important?

Water is our most precious natural resource and something that most of us take for granted. The harvesting of rainwater simply involves the collection of water from surfaces on which rain falls, and subsequently storing this water for later use. Normally water is collected from the roofs of buildings and stored in rainwater tanks. Water can also be collected in dams from rain falling on the ground and producing runoff. Either way, the water collected should be considered to be precious.

Residential Illustration



Commercial Illustration



Astore Keymak Cape Town branch manager Jacques Cilliers - "In my opinion if the commercial sector (e.g. factories, warehouses etc.) started harvesting rain water it could save them thousands of Rands. As an example, if you take a 2000 sq. meter factory roof that gets +/-10mm of rain they could potentially harvest roughly 20 000 liters of usable water. And all they need to do is connect 3 to 4 10 000L tanks to the gutter system, tie this into their water supply with a peripheral pump and filter system and it will provide them with a similar scenario as municipal water feed. Alternatively they could supply farmers or other organisations/people in dire need of water.

Rainwater Harvesting Techniques.

The collection of rainwater from the roofs of buildings can easily take place within our cities and towns. All that is necessary to capture this water is to direct the flow of rainwater from roof gutters to a rainwater storage tank. By doing this, water can be collected and used for various uses. If you are reliant on collected rainwater and are not connected to a town's water supply, then the water collected will be especially important to you. If you are from the city, then it is possible to replace all or at least a substantial portion of your fresh water requirements by the capture and storage of rainwater from your roof. Being largely self-sufficient in water supply is possible for a vast majority of South African households and buildings.

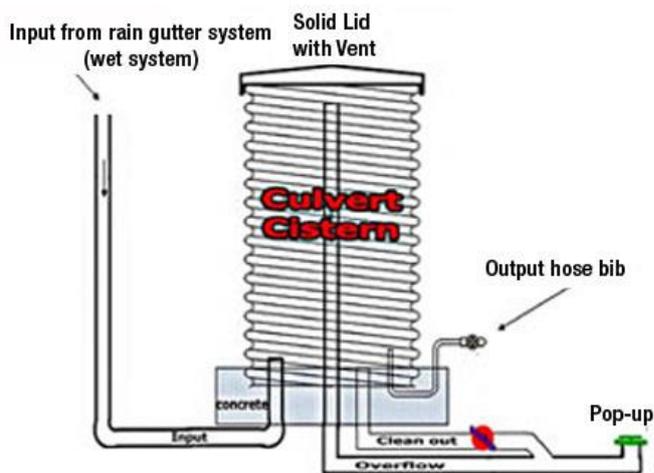
What are the benefits in Rainwater Harvesting?

- Significantly reduce our reliance on water storage dams,
- Collecting and using your own water can also significantly reduce your water bills,
- Improving plant growth by using rainwater for irrigation because stored rainwater is free from pollutants as well as salts, minerals, and other natural and man-made contaminants,

**As rainwater may be contaminated due to pollutants, it is often not considered suitable for drinking without treatment.*

Basic configuration of a rainwater system?

The basic principal of Rainwater harvesting systems is to channel rainwater from a catchment surface (roof or other raised solid surface), through a distribution system (gutters, downspouts and pipes) and then into storage tank.



The storage tank can be above ground or underground and is usual manufactured from Polyethylene via Rotational Moulding. Water storage tanks should be covered & lined to prevent mosquito breeding and to reduce evaporation losses, contamination and algae growth. Rainwater harvesting systems should be kept clean on a regular basis to keep the system hygienic.

How can Astore Keymak Help you with your Rainwater Harvesting System?

Astore Keymak are stockists of a wide range of PVC pipes and fittings for a range of applications in a variety of sectors, which can be used when setting up your rainwater harvesting system. These products are supplied by our international partners, Astore Italy and FIP Plastics & valves, positioned as the experts in Plastic Pipes and fittings.

For more information on our products and the best solution for your rainwater harvesting system contact us on 0861 278673 or send us a mail on info@astorekeymak.co.za, you can also visit our website on www.astorekeymak.co.za. Alternatively can pop into any one of our nationwide branches situated around the country.

