

# Rainwater Harvesting

## FOUR STEPS TO A SUSTAINABLE RAINWATER HARVESTING SOLUTION FOR ROOF AREAS UP TO 5,500 SQUARE FEET

Drawing for illustration purposes only.

Illustrated is an example of how a rainwater harvesting system could be used in a residential application.

Harvested rainwater can be used for:

- Toilets
- Irrigation
- Laundries or
- Other non-potable uses.

Rainwater is collected on the catchment area; generally a roof top.



**Vortex Rainwater Fine Filter for Above or Below Grade Applications**

Figure Number: RH9520-06

- 1 At the point of discharge, the high capacity vortex rainwater filter removes large and fine debris and oxygenates the water.

NOTE: During low rainfall events, an alternative make-up water source such as the city or county water system is required to supply the home's water needs. The appropriate backflow preventer assemblies, per the local jurisdiction, are required for this application.



**Smoothing Inlet**  
Fig. #RH9530SI

- 2 From the filter, the collected water enters the storage tank or cistern through the smoothing inlet which prevents agitation of sediment and evenly distributes the oxygenated water.



**Float Switch**  
Fig. #RH9542FSO – Dry Run Protection, Normally Open (N/O)

**Pump**



**Storage Tank Floating Filter and Hose**

Fig. #RH9532C

- 3 The floating filter and pump extracts the harvested rainwater from the cleanest part of the tank, just below the water surface for use in the house.



**Figure Number: RH9530DOK – Multi-functional Overflow Device**

- 4 The overflow/backwater device in the tank is designed to skim floating particles from the surface of the water when the storage unit overflows.

Overflow from a rainwater system can be used for groundwater recharge, reducing stormwater runoff.

### Tank

Water quality in the tank is maintained by removing the organic matter and by the action of incoming water which introduces oxygen. Water that is kept aerobic in this way does not become malodorous even when stored for long periods.