



Rainwater Harvesting

The continuous population growth and the growing number of extreme droughts across the world have led to a great increase in consumption of potable and non-potable water. Conservation of rainwater is becoming critical in parts of the United States to meet the growing water demands. Living in a country where water has always been readily available, most people do not realize that rainwater can be used for nearly all non-potable applications, including irrigation, toilet flushing, bathroom sinks, mechanical systems, washing machines, car washing, custodial uses, and many more.

Rainwater harvesting is the collection, conveyance, and storage of rainwater. Systems can be as simple as a rain barrel for garden irrigation at the end of a downspout, or as complex as a domestic potable system or a multiple end-use system at a large corporate campus. ParkUSA®'s RainTrooper® is a solution for both commercial and residential applications to conserve as much rain as possible to store for future use, and to reduce consumption of the limited treated municipal water.



Features

- Precast concrete, fiberglass, and steel models available
- Overflow design available
- Inlet, outlet, and vent connections
- Easy installation and maintenance
- Portable models available
- Meets all building codes



RW | RAINTROOPER
Standard



Model BPT



Model RH



Model RHF

System Components

The RainTrooper® is designed with the following components:

- Catchment devices
- Debris filtration
- Flush diverters
- Water storage tanks
- Pump systems
- Water disinfection systems

How it works

Rainwater harvesting, in its essence, is the collection, conveyance, and storage of rainwater. Once a maximum level is reached in the tank, the innovative overflow siphon (RTX-OVRFLW), with its skimmer effect, removes particles lighter than water (e.g. flower pollen, oils, etc.) that float slowly to the water surface. Removing this floating layer of surface pollutants through regular overflow from the tank is important to maintain high water quality and allow oxygen diffusion at the water surface. The narrow slits in the overflow siphon prevent rodents from entering the tank.

The floating intake with hose (RTX-FSCF) has an air-filled ball that suspends the floating inlet filter just below the water surface where the cleanest water resides. A high quality one inch diameter flexible hose allows for connection of the floating inlet to a pump or suction line. The filter is made of lead-free brass with a 0.047" stainless steel screen and a built-in check valve.

The calmed inlet feature prevents disturbance and re-suspension of fine sediments that gather on the bottom of the tank. Another important function of the inlet is the introduction of oxygen into the lower layers of the tank, which maintains a fresh supply of water while preventing anaerobic conditions from forming.

Visit raintrooper.parkusa.com for more information and design assistance.

To request a quote or catalog, visit request.parkusa.com.

APPLICATIONS



Good to use
in BMPs



Residential



Green
Infrastructure



Commercial



Low Impact
Development