



RAIN WATER HARVESTING
LET'S BE WATER POSITIVE

Vardhman Envirotech

ISO 9001 : 2015 Company

Rain water harvesting



Collection, filtration and storage of rainwater in tanks or underground

Rain water needs to be filtered from all physical impurities like leaves, bird droppings, paper, plastic, silt or other sediments before Reuse or recharge.

Rain water to be diverted to Mother Earth to recharge ground water rather than letting it drain out.

Filtered rain water is ideal for process, cooling tower, garden, fire, flushing, irrigation or domestic applications.

Filtered Roof water collected can also be used as drinking water with proper antimicrobial treatment.



RAINTAP Roof top Rain Water filter



Working Principle



Working principle of RAIN TAP on :



<https://youtu.be/e22Ud6EMTvc>



Actual Working



Installation of RAINTAP on :



Video Link of Recharge:

<https://youtu.be/mjcfN0TXPOQ>

Video Link of Reuse:

<https://youtu.be/oBbgMjy2MPQ>



Components of Raintap Rooftop Filter



Filter Element



Unique Features



- ✓ Simple and Scientific design
- ✓ No electricity required
- ✓ No Maintenance required; Cleaning is simple
- ✓ Leaves and dirt particles are removed by auto flush valve.
- ✓ Compact and user friendly design.
- ✓ Fully enclosed, wall mounted and online system
- ✓ 360 Degree flexible 'T' for ease of installation.
- ✓ Nylon filter element allows micro filtration up to 130 microns
- ✓ No consumables required
- ✓ Consistent even in variation of rainfall intensity
- ✓ No water loss
- ✓ Spring loaded knob as safety feature.
- ✓ Nipple for easy Backwash

Applications of Rain water harvesting



Underground Tank



Bore well

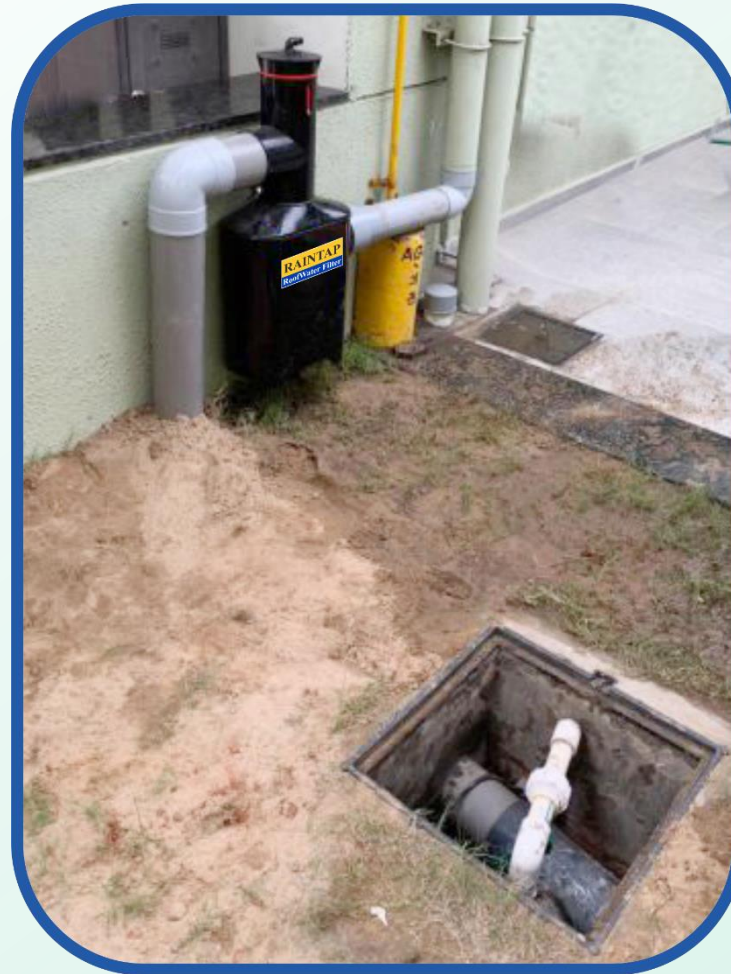


Recharge well



Dug well

Successful Installations



Rainwater Recharge

Successful Installations



Rainwater Recharge

Successful Installations



Rainwater Reuse

Successful Installations



Rainwater Reuse

Successful Installations



Rainwater Recharge at Railway Station

Successful Installations



Rainwater Recharge at Railway Station

Technical Specifications



Suitable roof area:	110 sq. mtrs
Max Intensity of Rainfall:	75 mm/hr
Working Principle:	Capillary action
Operating Pressure:	1 feet of head
Inlet:	110 mm
Filter Element:	Nylon filter
Mesh Size:	130 Microns
Clean water outlet:	110 mm
Drain outlet:	50 mm
Efficiency of Filter:	Above 90%
Working on:	Gravity
Safety Feature	Top vent holes



Potential of Rainwater Per year and Peak



Sr.	Description	Approx. Area Sq. Meters	Possible water Collection : Liters per year
1	Railway Roof	1,858	9,53,000
	Total	1,858	9,53,000

Rainfall 570 mm @ 90% Co-efficient and @ 95% Filter efficiency

Sr.	Description	Approx. Area Sq. Meters	Possible water Collection : Liters per peak
1	Railway Roof	1,858	84,000
	Total	1,858	84,000

Peak Rainfall 50 mm @ 90% Co-efficient and @ 95% Filter efficiency

Benefits of Rain water harvesting



- ✓ Gives fresh drinking water for all
- ✓ Maintains Ecological balance
- ✓ Raises Ground water level
- ✓ Augments the fresh water storage
- ✓ Arrests Saline water intrusion in Fresh water
- ✓ Improves ground water quality phenomenally
- ✓ Gives Food security through sustainable irrigation.
- ✓ Minimizes water pollutions
- ✓ Reduces health risks and hazards



Benefits of Rain water harvesting



- ✓ Averts disasters
- ✓ Brings down Water Footprint
- ✓ Frees rural households from physical work to collect water daily
- ✓ Zero hardness; avoids treatment and wastage
- ✓ Balances entire Eco System and life cycle
- ✓ Reduces Soil Erosion
- ✓ Rejuvenates Rivers, Lakes and other sources of water
- ✓ Dilutes impurities from ground water.
- ✓ Gives us Healthy and Happy life





**Humanity has no money to get water
from Dry lands but has money
to look for water on Mars ?**



Closer to our Customers !



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Committed to greener and healthier Planet

Thanks



American Water Works Association

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