

Rainwater Harvesting

STURDY HYDRO-STORE

Underground Rainwater Harvesting System

Mains Water Float Valve

Harvested Rainwater Infill

Existing Attic Tank

Mains Water Inlet (Repositioned)

Pressure Vessel

In the eco-friendly world of today water has become a key environmental issue and with the impending introduction of charges for its use, it is vital that we conserve this natural resource. Approximately 45% of water usage in Irish households is used in showers, baths and for consumption. The other 55% of water consumption does not need to be of the same quality as potable water. If rainwater is used for washing clothes, flushing toilets and watering gardens, it is possible to conserve potable water, while also reducing water charges.

The Sturdy Hydro-Store Underground Rainwater Harvesting System is ideal for domestic use where space is at a premium. The tank's low profile design along with the integrated columns gives it excellent load bearing strength. Its low profile means that it does not need to be buried as deep and the excavation can be completed by hand digging.



- The complete system includes: Underground Tank, Water Butt, Downpipe Filter/ Diverter, Submersible Pump, Pressure Vessel, fine particle filter and Float Valve.
- The low profile Underground Tank is manufactured from WRC (Water Research Council) approved medium density polyethylene.
- Integral support columns within the tank give excellent load bearing properties and it has been load tested to 4 tonnes when empty.
- Multiple tanks can be connected together allowing for increased capacity where required.
- The moulded-in lugs allow tanks to be linked while allowing for flexiblity. This prevents the tanks from moving apart once plumbed.
- The Underground Tank is fitted with a ballcock valve to prevent it from overfilling. Any excess rainwater is diverted back to the water butt where it can overflow back into your down pipe.

- O A riser and screw top lid are also included in the tank design. This allows for easy access to the pump once the tank has been buried. Multiple risers can be used to allow the tank to be buried at a greater depth if necessary.
- The above ground Water Butt acts as the initial storage chamber for harvested rainwater but also acts as a settlemnet tank for any tiny particles that may get through the downpipe filter.
- O The Filter/Diverter is easily fitted to existing downpipes. It has an integrated filter which is easy to remove should it require cleaning.
- The Submersible Pump has in-built safety features which include a dry run shut off mechanism, a pressure switch and a non-return valve.
- A Pressure Vessel is fitted between the pump and attic tank which keeps the system pressurised.
- The Float Valve ensures that you have a constant supply of water whether harvested or mains.





MAINS TOP-UP VALVE



your mains backup on a rainwater collection tank.

It ensures your rainwater tank never runs completely dry in the event of demand exceeding rainfall.

Code: 436-A







Recommendations

- A professional plumber should be used to install all parts of your Rainwater Harvesting system.
- Approved piping should be used for all pipework. All pipework should have a 1" internal diameter (not supplied).
- While they are designed for strength, all tanks should be handled with care. In the case of the Underground Tank, it should be buried in an area of your dwelling where traffic is low, with a good sand base.
- Although it can be placed anywhere between the Tank and your attic tank, we would recommend that the expansion vessel be placed beside your attic tank for convenience.
- Occasional checks on all equipment should be carried out to ensure the system operates efficiently.

DOWNPIPE FILTER DIVERTER



This Downpipe Filter Diverter allows rainwater to be channeled from the filter entrance to the sieve cartridge. Debris is rinsed to the sides, and then into the drain. The cleaned water is then sent into storage.

Code: 420-A

4" DEBRIS FILTER

The 4" Debris Filter allows leaves or moss to be removed from harvested rainwater. Rainwater is gathered from one or more underground gullys and passes through a removable basket filter into your storage tank.

Code: 457-A

1" FLOATING INTAKE



A Floating Intake helps avoid sucking in settled debris from the bottom or top of your tank. The benefit of a floating intake filters is that it pulls water from the best part of your tank- just below the surface.

DOWNPIPE DIVERTER



This basic rainwater diverter allows you to connect your water butt or tank to the downpipes of your home. When the Water Butt is full it will divert excess rainwater back down the downpipe.

Code: 460-A

CARBON FILTER

This Carbon Filter is ideal for use in the treatment of water in all types of industry. Can also be used as part of a domestic filtration system.

Code: 565-A

ULTRA VOILET TREATMENT FILTER

This UV Treatment Filter system is a reliable, economical and chemicalfree way to safeguard water in any residential application. The system has been designed and tested to ensure quality water is available at all times.

Code: 564-A Lamp: 566-A



This Bib Tap is available as a replacement or spare tap suitable for use with any Water Butt.

PUMP

BASIC SUBMERSIBLE

This basic 230v submersible water pump has a self priming 400w motor. Offers a maximum flow rate of 150 litres per minute and has an 8m maximum pumping head

4" CONNECTION



This 4" Connection is generally used in commercial installations where there may be a requirement to maximise the quantity of water collected.

Code: 462-A



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