



**STURDY**

**RAINWATER HARVESTING SYSTEM**

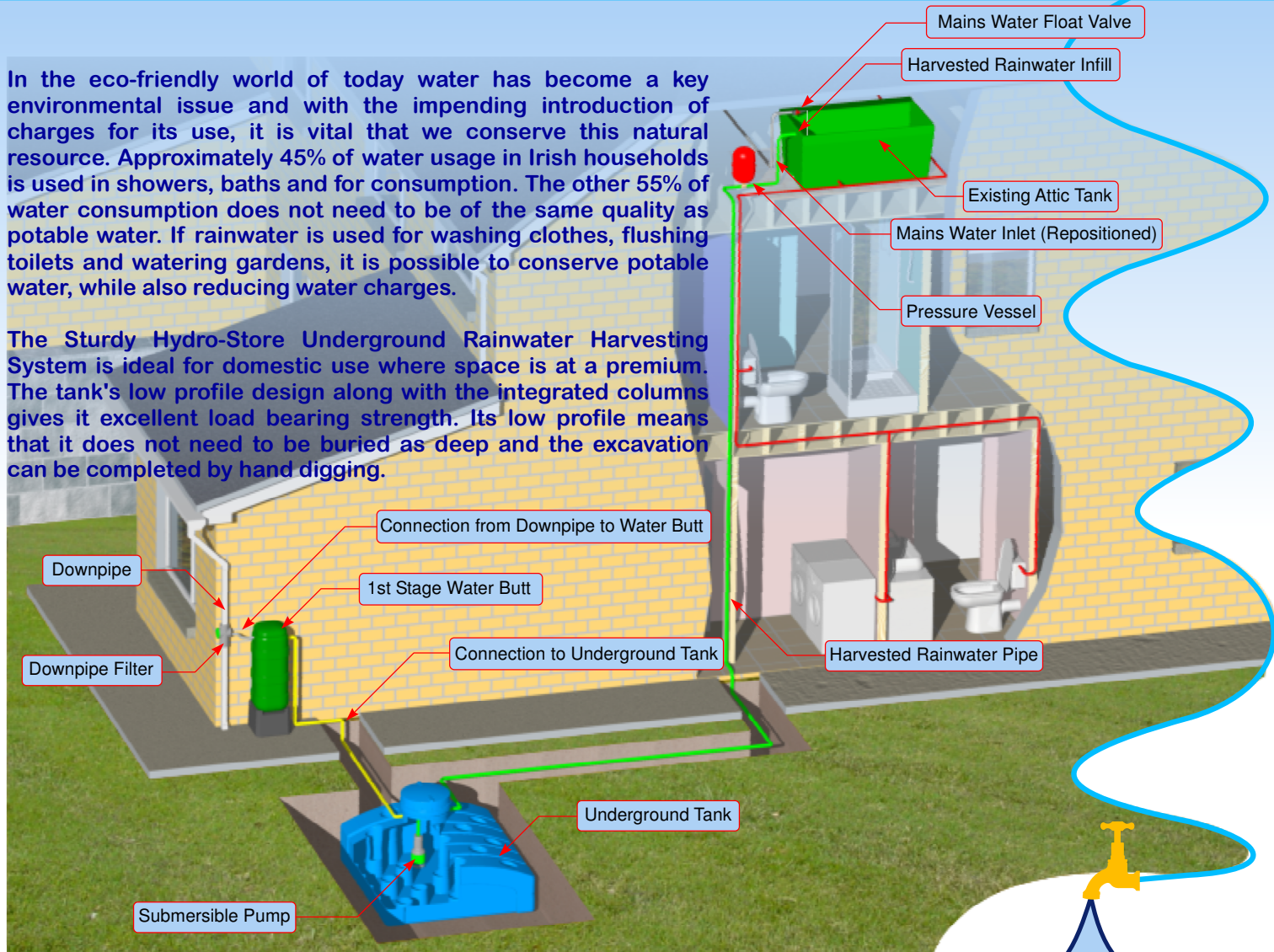


# STURDY HYDRO-STORE

## Underground Rainwater Harvesting System

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.

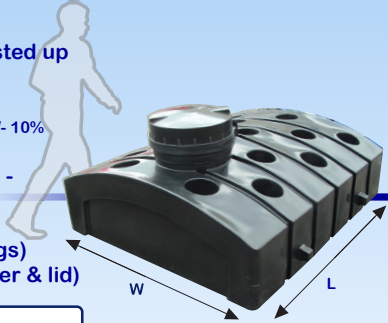


- The complete system includes: Underground Tank, Water Butt, Downpipe Filter/Diverter, Submersible Pump, Pressure Vessel and Float Valve.
- The low profile Underground Tank is manufactured from WRC (Water Research Council) approved medium density polyethylene.
- Integral support columns within the tank 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 flexibility. This prevents the tanks from moving apart once plumbed.
- The Underground Tank is fitted with a ballcock valve to prevent it from overflowing. Any excess rainwater is diverted back to the water butt where it can overflow back into your down pipe.
- 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 settlement tank for any tiny particles that may get through the downpipe filter.
- 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.



### Underground Water Harvesting Tank

- Excellent load bearing properties. Has been tested up to 4 tonnes when empty.
- Capacity - 1,250 Litres +/- 10%
- Dimensions (Excl. Riser) -  
Length: 1875mm  
Width: 1600mm (excl. lugs)  
Height: 690mm (excl. riser & lid)



Code: 418-A €

### Water Harvesting Downpipe Filter

- Filters and diverts rainwater to water butt and rain storage tank.
- Fits most down pipes between 65-100mm.
- Rainwater is channelled from the filter entrance to the sieve cartridge.
- Dirt is rinsed to the sides, and then into the drain.
- Cleaned water is led through the cartridge's outlet channel into storage.



Code: 420-A €

### Water Harvesting Butt Tank

- Designed for gardens where space is limited.
- Made from compounded recycled plastic.
- Dimensions -  
Diameter: 380mm  
Height: 940mm
- Capacity - 100 litres.



Code: 422-A €

### Water Harvesting Submersible Pump

- Built in electronic pressure switch and flow sensor.
- Equipped with dry run protection and non return valve.
- 1" Supply Connection
- Supplied with 15M power cord.
- Max pumping height 48M.



Code: 421-A €

### Water Harvesting Pressure Vessel

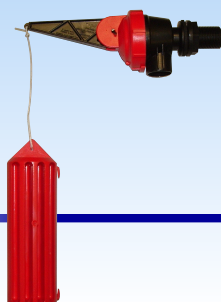
- Designed to keep the system pressurised and help prevent drips.
- 1" Supply Connection
- Dimensions -  
Diameter: 200mm  
Height: 310mm
- Capacity - 10 litres.



Code: 423-A €

### Water Harvesting Float Valve

- The Float Valve is ideal for controlling your mains backup on a rainwater collection tank.
- It ensures your rainwater tank never runs completely dry in the event of demand exceeding rainfall.
- The level can be set as low or as high in the tank as you need.



Code: 436-A €

### Recommendations

- A professional plumber should be used to install all parts of this system.
- Approved piping should be used for all pipework. All pipework should have a 1" internal diameter (not supplied).
- While it is designed for strength, the Hydro-Store Tank should be handled with care and buried in an area of your dwelling where traffic is low, with a good sand base.
- Although it can be placed anywhere between the Hydro-Store Tank and your attic tank, we would recommend that the pressure vessel be placed beside your attic tank for convenience.
- A ballcock valve is supplied on each tank to control the incoming harvested rainwater.
- Occasional checks on all equipment should be carried out to ensure the system operates efficiently.

# STURDY Range of Standard Water Tanks


## Carbery 5,000



Capacity\*: 5,000lt. (1,100 Gal)  
Diameter: 1,930mm (76")  
Height: 2,170mm (86")  
Lid Opening: 500mm (20")

### RECOMMENDED SUPPORTING BASE:

2.31m  
(91")



2.31m (91")

Product Code: 268 - A


## Carbery 10,000



Capacity\*: 10,000lt. (2,200 Gal)  
Diameter: 2,500mm (99")  
Height: 2,810mm (111")  
Lid Opening: 480mm (19")

### RECOMMENDED SUPPORTING BASE:

2.6m  
(103")



2.6m (103")

Product Code: 366 - A

\*Note - All capacities +/- 10%

Sturdy's range of standard water tanks can also be used to harvest rainwater. Some of these larger capacity tanks are ideal for use in factories, hotels, schools, and farms. They are also suitable for use by local authorities for activities such as road sweeping, irrigation and vehicle washing. The same pumping system can be used in these tanks as in the Hydro-Store system without the need to bury the tank. Remember, the larger the roof area your building has, the more rainwater you can collect!