

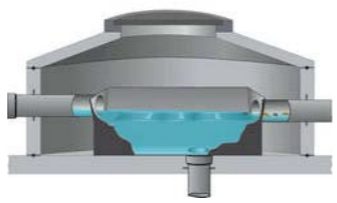


Filters

In-Line Filter	Volumetric Filters	A Class Filters
 <p>For roof areas up to 450 m².</p> <ul style="list-style-type: none"> Minimal fall between inlet and filtered water outlet of 65 mm. High grade stainless steel filter with fine filtration down to 0.35 mm. 90% efficiency. Self-cleansing. 	 <p>For roof areas of 1,000 to 3,200 m².</p> <ul style="list-style-type: none"> Height difference between rainwater inlet and outlet to tank just 32 cm. Filter insert easily removed for cleaning. Maximum flow rates of 25.5 l/s up to 75.5 l/s. Larger units can accommodate 2 inlets. 	 <p>For roof areas of 1,000 to 40,000 m².</p> <ul style="list-style-type: none"> Can be fitted within the storage tank or a manhole chamber. Integrated, automatic cleaning and sprinkler system using rainwater. Minimal height difference between inlet and outlet. 0.7 mm mesh size. Maximum flow rates of 30 l/s up to 1,200 l/s.

Treatment

No formal standards currently exist for harvested water. It is a matter of client preference as to whether treatment is required. For instance, where occupiers may come into contact with untreated water, then treatment may be considered. Treatment generally involves filtration and UV treatment.

Design & Technical Assistance

HRD Technologies Ltd offers a free design service to users and specifiers, ensuring the most appropriate and cost-effective solution.

Contact our design team on: **01-4013964** to discuss your requirements.

StormBank® Pro



StormBank® Pro

Advanced Rainwater Harvesting System

StormBank® Pro *Advanced Rainwater Harvesting*

Rainwater Harvesting is a relatively new concept in Ireland, but is rapidly becoming an accepted and desirable feature of new buildings, providing a sustainable and economic resource that reduces and conserves expensive treated mains water supply. The concept also has demonstrable pay-back, even for the larger commercial systems, and many installations will pay for themselves in just a few years. For larger commercial applications, it can be possible to achieve quantity savings on mains water in the order of 35-40%, with commensurate cost savings.

HRD Technologies Ltd provide a range of standard and bespoke rainwater harvesting systems that cover the full scope of user requirements, from the smallest domestic to the largest commercial harvesting arrangements. Rainwater harvesting on a wider scale also plays a positive role in terms of Flood Risk Management and SUDS, reducing impacts on local drainage and watercourses and helping to meet planning requirements such as PPS25.

Applications

- Schools.
- Colleges.
- University buildings.
- Office buildings.
- Retail parks.
- Garden centres, nurseries.
- Vehicle, train washing facilities.
- Hospitals / care homes.

Advantages

- Bespoke solutions.
- Savings on mains water use up to 35-40%.
- Demonstrable pay-back.

Design Optimisation

Commercial rainwater harvesting systems are not an off-the-shelf solution, and many design issues need to be identified and quantified in order to provide the most efficient and effective design. It is therefore important to consider these issues at the earliest design stage such that key deliverables can be achieved.

HRD Technologies Ltd offer a comprehensive, client-sensitive design and advisory service on harvesting issues. To achieve the proper outcome, information including occupancy, physical characteristics of the building, drainage arrangements, Health & Safety, planning issues, location and water quality need to be considered at design or feasibility stage. At present there are no formal standards for rainwater harvesting systems, so it remains incumbent on the specifier and system designer to ensure that optimum design is achieved, although certain benchmarking systems such as BREEAM may be applied.

Components

A range of control systems are available to suit almost any size of building or site and can be configured for numerous applications.

Large scale commercial rainwater harvesting systems typically include:

- StormBank® Pro Control Panel
- Primary Storage Tank - fabricated in polypropylene, GRP or LDPE.
- Single or twin pump system with automated control.
- In-line volumetric filtration arrangements.
- Ultraviolet treatment is available where required.

StormBank™ Pro 1 - for Domestic Installations > 6 Bedrooms and Small Commercial Sites < 300m²



- Silent running.
- Low space requirements.
- Level indicator.
- Demand orientated mains back up system with internal holding tank.
- Manual changeover to mains water supply.
- Internal suction pump.
- Dry run protection.
- Pressure indication.
- Maximum flow rate 6 m³/hr.
- Maximum pressure head 36 m.
- No additional booster pump or break tank required.

Components *Cont ...*

StormBank® Pro 2 - for Small to Medium Commercial Sites/Schools 300 - 750 m²



- Wall or floor mounted metal platform.
- Integrated break tank with proportionally controlled mains water back-up.
- Level indicator for rainwater holding tank.
- Potable water stagnation protection.
- Manual changeover to mains water supply.
- Double booster pump set (self-priming) with intelligent pressure switch control.
- Flow control with run dry protection and flow rate dependant pump stop.
- Vibration stops for platform and pump.
- Maximum flow rate 10 m³/hr.
- Maximum pressure head 47 m.

StormBank® Pro 3 - for Large Commercial Sites/Schools/Offices > 750 m²



- Self-priming double booster set with multiple staged, horizontal centrifugal pumps.
- Integral 200 litre break tank. No separate booster pumps are required.
- Separate supply pump within the rainwater storage tank.
- Option to connect a second supply pump for systems with two storage tanks.
- Electronic control with 4 line LCD display.
- Pressure indicator for booster pump set.
- Level indicator for rainwater storage tank.
- Manual changeover to mains water supply.
- Alarm signal to alert to breakdown or maintenance requirement.
- RS 232 computer interface.
- Maximum flow rate 14 m³/hr.
- Maximum pressure head 59 m.

Storage Tanks

LDPE	GRP	Stormbloc® Storage System
<ul style="list-style-type: none"> • For volumes up to 12,000 litres. • Telescopic access shaft - adjustable to finished levels. • Options for integral filter for roof areas up to 200 m². • Easy installation, no concrete backfill required. 	<ul style="list-style-type: none"> • Suitable for volumes of 12,000 litres up to 30,000 litres. • Single-piece, lightweight and durable. • Minimal maintenance. • Can be used for potable water storage. 	<ul style="list-style-type: none"> • Suitable for volumes greater than 30,000 litres. • Very strong, can be used under trafficked areas. • Modular construction allows rapid installation to any shape or size to suit site conditions. • Manually handleable.