

RAINWATER MANAGEMENT

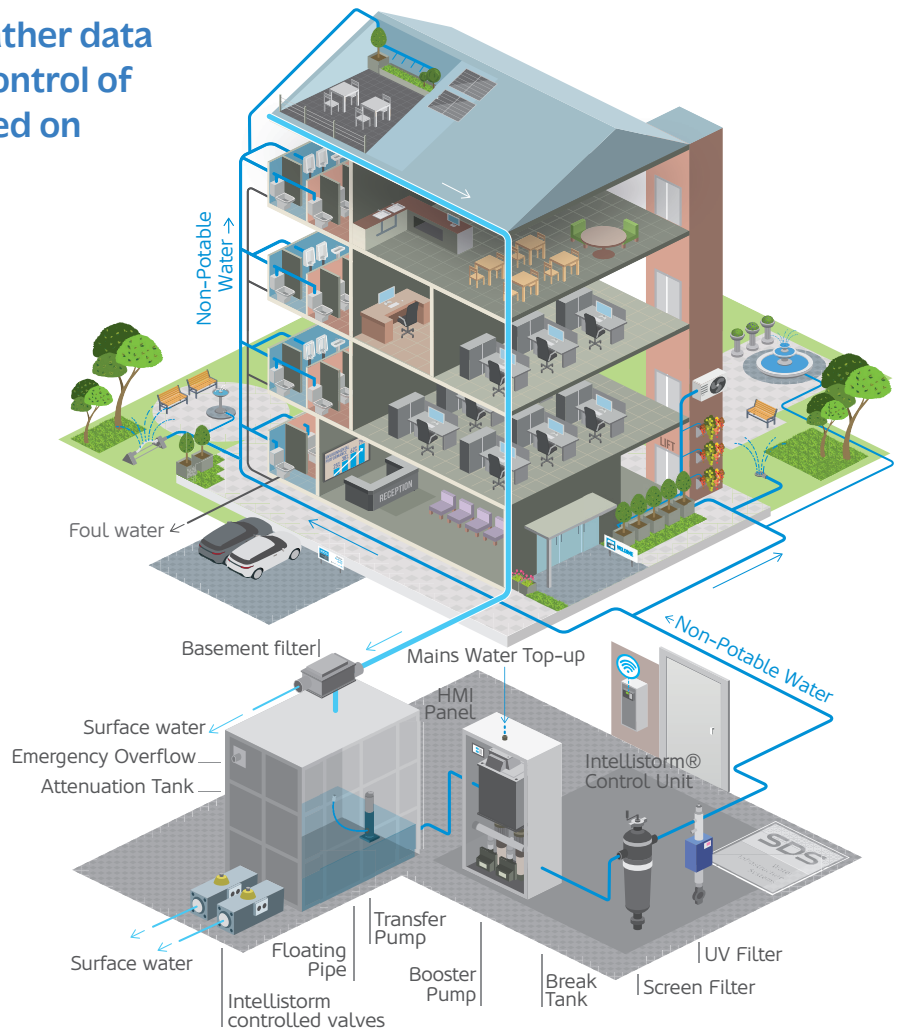
SDS WaterBank® Intellistorm® RWM System

Intelligent Rainwater Management System

SDS WaterBank® Intellistorm® systems integrate stormwater attenuation and rainwater harvesting to maximise the capacity for water reuse and minimise the risk of flooding.

SDS Intellistorm® uses live weather data to facilitate the autonomous control of water retention and reuse based on expected rainfall and local catchment area.

- Supplies up to 25m³/hour rainwater
- Receives live rainfall forecasts
- Variable speed pumping and choice of pump capacity available
- Tank level gauges and display
- Volt-free and Modbus BMS output capability
- Submersible or dry-mounted pump or valves (for water reuse transfer)
- Meets BS EN 16941-12018 requirements



SDS WaterBank® Intellistorm® maximises the capacity for water reuse utilising only the attenuation volume, whilst minimising the potential for flooding by controlling the discharge of excess stored rainwater prior to a rainfall event.

Water can be released to the surface water sewers during periods when the network has spare capacity, relieving stress on both the mains water supply and the surface water drainage system.

The intelligent control of attenuation tanks means that dual flood mitigation and water recycling purposes can be served by just one tank, with no extra storage capacity required for rainwater harvesting.

Features	Benefits
Reuses water that might otherwise have contributed to flooding and actively controls the release of excess water.	Limits the impact of uncontrolled rainwater on the natural environment and engineered drainage infrastructure.
Manages stormwater attenuation and rainwater harvesting in one tank.	The additional space and storage capacity normally demanded by extra rainwater harvesting volume, together with the costs of associated materials and land take, are avoided.
Live rainfall forecast received in mm/24 hours.	Continuous monitoring of rainfall forecasts ensures any expected changes in weather are accommodated.
Automated calculation of spare capacity for attenuation with programmable safety levels.	Provides control of tank water levels to optimise water reuse efficiency (via predictive weather forecasting). Constantly creates and maintains required tank void.
Releases water into the public sewers before the expected storm event.	Minimises the load on the public sewers during storm events.
Valves can be installed on the tank outlets before the flow controller.	Compatible with gravity drained systems. For systems where the tanks are below the level of the sewers a pump is installed.
Choice of attenuation tank manufacturing material according to site requirements or specification preferences.	System can be used with any type of attenuation tank.
Low energy pumping.	Reduces running costs and carbon footprint.
Choice of attenuation pump capacity.	Any SuDS discharge limits set by the Water Company or Local Authority are adhered to.
Pump typically submerged in underground tank installations or mounted above-ground when tank is installed in a building basement.	Flexible pump locations ensure the system is suitable for all types of project and above- or below- ground installations.
Bespoke transfer pump sizes available on request.	Pump increases or decreases the amount of water supplied for reuse as required.
Safe-to-fail operation.	System reverts to standard attenuation operation if any safety parameters are exceeded.
Compatible with a range of water filtration and treatment systems.	Ensures that when configured as a rainwater harvesting system the delivered water meets the required quality standards of multiple supply purposes.
Custom designed and supplied to the requirements of each site.	Enables controls, measures and monitoring parameters to be built into the system.
Sub-metering and automated meter reading, including remote production volume monitoring, available via SDS SYMBiotIC™.	SDS SYMBiotIC™ provides 24/7 client access to accurate rainwater harvesting data and mains water usage via a secure web portal dashboard.



System Requirements

- Antenna
- Any network SIM card
- Cellular coverage
- Subscription contract with SDS for Met Office data
- 240V AC power supply
- Optional additional battery back-up

RWM DS/0125