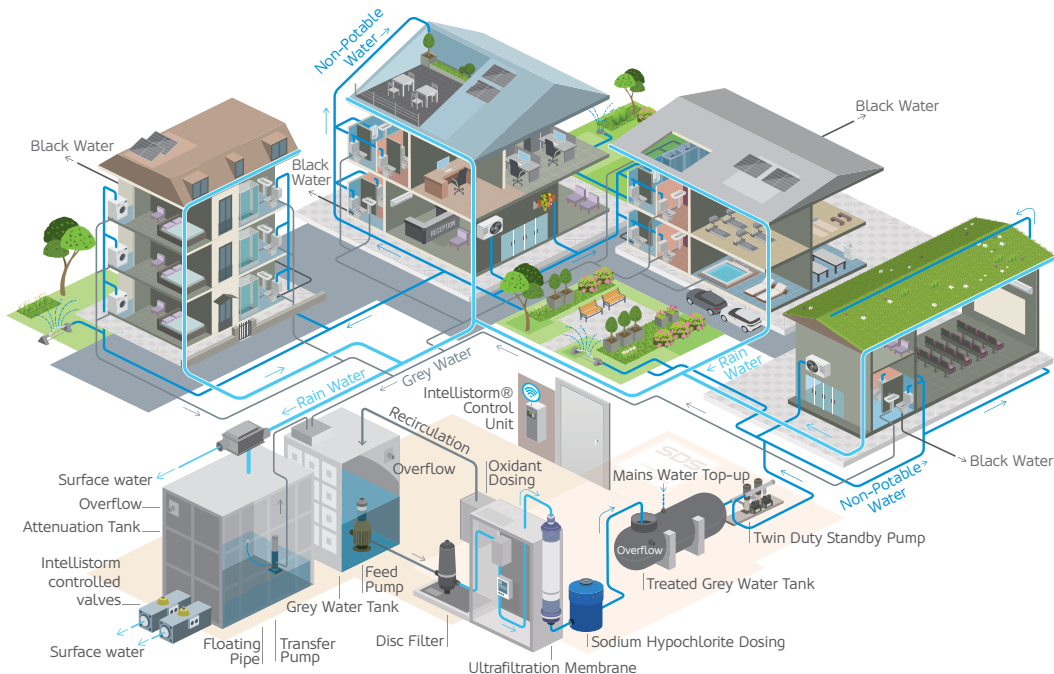


SDS WaterBank® Intellistorm® Rain- And Grey- Water Recycling System

SDS WaterBank® intelligent rain- and grey- water recycling system provides an integrated water management and delivery platform to enable the distribution of treated rain- and grey- water to a single or multiple end user application.

This fully automated system prioritises grey water, then rainwater and lastly mains water as the fail-safe back-up in order to provide a seamless supply of water through periods of rainfall, drought and absence of grey water supply.



- Supplies up to 25m³/hour rainwater and 12m³/hour grey water
- Single system control unit with individual HMIs
- Live rainfall forecast received
- Tank level gauges and displays
- Variable speed pumping available
- Submersible or dry-mounted pumps or valves (for water reuse transfer)
- Volt-free and Modbus BMS output capability
- Meets BS EN 16941-1:2018 and BS8525 requirements

The system features Intellistorm® in order to maximise the capacity for water reuse utilising both the rainwater attenuation and grey water collection volumes. This minimises the potential for flooding by controlling the discharge of both grey water and excess stored rainwater prior to a rainfall event.

Rainwater 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.

| Features | Benefits |
|--|---|
| Provides sources of water other than the mains water supply. | Protects the supply of increasingly scarce treated drinking water. Reduces water supply fees and carbon footprint. |
| 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. |
| Control software incorporates level sensors. | Ensures rain- and grey- water are prioritised as the primary water source. |
| Integral treated water tank features a WRAS-approved mains valve with an AA air gap. | Ensures a constant water supply is achieved by intelligently switching to mains water when rain- and grey- water are unavailable. |
| Compatible with above- or below- ground tank installations. | Suitable for use in all building types (subject to max distances). |
| Recommended for partnering with SDS-supplied water tanks. | Conforms to BS and Water Supplies (Water Fittings) Regulations (when partnered with SDS-supplied tanks). |
| Choice of attenuation and collection tanks' sizes, shapes and manufacturing materials according to site requirements or specification preferences. | System can be used with any type of attenuation and storage tanks. |
| System is supplied from a transfer pump typically located within the rainwater storage tank. | Ensures that the bulk of the stored water is kept in cool conditions, usually underground. |
| Bespoke transfer pump sizes available on request. | Pump increases or decreases the amount of water supplied for reuse as required. |
| Choice of attenuation pump capacity. | Any SuDS discharge limits set by the Water Company or Local Authority are adhered to. |
| Pumps 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. |
| 2-stage grey water filtration process by either disc and ultrafiltration or cartridge and nanofiltration. | Enables rapid treatment of grey water. Water storage requirements occupy a smaller footprint than MBR systems. |
| Automatic backwash process allied to low level chlorine dosing. | Ensure the highest level of water quality. |
| Safe-to-fail operation. | System reverts to standard attenuation operation if any safety parameters are exceeded. |
| Variable time control for operation and automatic shut-down. | Perfect for variable demand situations and shut-down periods such as over weekends and holidays. System does not require rebooting or recommissioning following shut-down. |
| Optional sub-metering and automated meter reading, including remote volume monitoring, available via SDS SYMBiotic™ telemetry system. | Provides client with 24/7 access to rainwater harvesting and recycling, as well as mains water consumption, data via web-based client portal. |

System Requirements

Please refer to Datasheets for WaterBank® Grey Water Recycling and Intellistorm® Systems.



RGWR DS/0125