

Built Environment Retrofitting System



The Hydrorock Block System provides a sustainable retrofit solution for existing buildings to manage excess rainwater, particularly in heavily paved urban areas

The system, which incorporates a highly innovative, mineral wool product from Global market leader Rockwool, stores and manages excess rainwater before distributing it back into the surrounding soil, helping to prevent local storm drains being overwhelmed. It provides game changing solutions for SuDS water management in the built environment.

A totally natural product and truly green SuDS solution

Hydrorock Blocks are an aquifer and a 100% natural product – soaking up water like a sponge, holding it like a reservoir and releasing it like a watering can. Blocks are ecologically and environmentally friendly and totally recyclable.

Standalone solutions and fully integrated systems

Hydrorock SuDs Solutions can be installed individually or as part of a fully integrated Hydrorock Block System for storm water buffering, attenuation, infiltration, rainwater harvesting, drainage and irrigation. They can be installed where they will be the most effective; flexible tubes can then interconnect the Hydrorock Blocks to create a whole system, a unitary aquifer enabling holistic SuDS planning.

Sponge cities

- Proper SuDS water management stops water gathering and running off impermeable surfaces, causing flooding or overpowering the sewers.
- Hydrorock Blocks ensure water is as widely dispersed as possible and rapidly infiltrated into the soil.
- Councils are using Hydrorock to disconnect roofing drainage from the sewers and create large absorbent green planted areas.
- Hydrorock Blocks are ideal for remediating paths, driveways, pedestrian areas, car parks and roads into Sponge Cities.

Remediation of existing developed sites and for brownfield new building

 Hydrorock Blocks are ideal for difficult sites with restricted spaces because they are solid – enabling installation against walls of buildings.





For more information please email **info@hydrorocksolutions.com** or visit us on:

 Wherever Hydrorock Blocks touch each other, water can flow between them, forming a unitary aquifer – enabling installation around all obstacles and corners.

Versatile configuration and flexible installation

- Hydrorock modular solutions are infinitely scalable for simple installation.
- A few Hydrorock Blocks can harvest roof water in domestic gardens.
- It is possible to disconnect industrial roofing from the sewage system.
- They protect nationally significant buildings such as the Rijksmuseum in Amsterdam from flooding.





Technical information – BD 40 Hydrorock Block functionality & performance

Please see the Technical Brochure for descriptions of all the separate Hydrorock Systems including their uses and full details about their specification.

- A Hydrorock Block System consists of different sized blocks dependent on application.
- Hydrorock Blocks are ready wrapped in a geotextile membrane for handling and underground integrity.
- There are two Hydrorock Block densities D & BD blocks with maximum loading 2000 kg per m2; HD blocks with maximum loading 4,000 kg per m2 (for use under heavy trafficked areas).
- Hydrorock Blocks are available with 100 mm connector fittings and internal tubing to allow fast water inflow or as solid blocks
- It is possible to disconnect industrial roofing from the sewage system.

How Hydrorock Blocks work

- Hydrorock Blocks can hold 94% water suspended in the gaps between the fibres.
- Low hydrostatic pressure beneath the Hydrorock Block prevents soil compaction, uniquely enabling infiltration across the whole bottom and all sides surfaces.
- Separate/dispersed modules can be connected by flexible tubing into a unitary aquifer.
- Water naturally flows freely between touching or connected blocks within the Hydrorock System.
- Water is naturally drawn by capillary action of the soil into the ground where it is most needed.

How Hydrorock Blocks can be used

- The system can be configured into endless formats and sizes of modules, fitting around existing infrastructure, pipes and cables enabling optimised SuDS installations.
- No specialist installation engineering or equipment is required with simple snap-together fittings requiring no special skills or tools.
- Installation is simple and quick with minimal disruption.
- Excavation and spoil is minimised as no access is required to fit membrane.
- Hydrorock Blocks can be retrofitted right up against buildings.
- Maintenance free with lifetime design specification operational integrity.



