

Storm Water Attenuation System

The Hydrorock Block System delivers a properly sustainable attenuation system to manage excess rainwater

The System incorporates at its heart a highly innovative, mineral wool product developed by market leaders Rockwool to provide a game changing storm water attenuation system with major advantages over all current alternatives.

A totally green and effective SuDS Solution

Hydrorock Blocks are manufactured from 100% mineral fibre. They are natural aquifers –soaking up water like sponges and holding it as a reservoir before releasing it like a watering can. Blocks are ecologically and environmentally friendly throughout their life and totally recyclable at the end, avoiding the environmentally damaging practice of burying plastic crates in the soil and introducing micro plastic particles into the water system.

Improved onsite water management

The Hydrorock Attenuation System can be installed as part of a fully integrated onsite water management system and can be combined with other Hydrorock SuDS systems such as infiltration, ClaySolve, rainwater harvesting and irrigation. By maximising the retention and utilisation of precious rainwater onsite, local soil conditions and stability improves while minimising wasteful and environmentally costly offsite discharges.

Maintenance free lifetime system integrity

Hydrorock Blocks form a solid permeable load-bearing substrate which cannot collapse and a geotextile membrane, preventing penetration by roots and influx of soil particles. This ensures maintenance free, lifetime integrity of the whole system, with operational performance that always remains at design specification.



Ideal for use on difficult sites and in limited spaces

Separate Hydrorock Block modules can be easily installed retrospectively alongside existing installations and other underground obstacles. The blocks can even be positioned next to the existing walls of buildings. This versatility and flexibility in installation means there is nearly always an ideal solution for green or brown field new builds, or retrofitting within the existing built environment.

Faster installation

Hydrorock Blocks are prewrapped greatly speeding up handling. In most projects, the size of the required excavation needed and the actual volume of the blocks required is also considerably less than that required, by other alternatives, enabling simple and rapid installation.

Maximising land use for cost-effective construction

Combining Hydrorock Blocks with unwrapped core material, creates a highly cost-effective attenuation module. Decentralising smaller modules across a site, also avoids the creation of an extensive construction exclusion zone, normally required around a centralised underground crated water sump in a large void. This increases the potential number of properties that can be built, maximising value from land and construction.

Technical information – BD 40 Hydrorock Block functionality & performance:

- To maximise efficiency and minimise cost of the Hydrorock Attenuation module, we recommend combining BD 440 and D440 Blocks with unwrapped Hydrorock.
- Hydrorock Blocks measure (cm) – 120 L x 100 H x 400 W.
- Unwrapped Hydrorock measures (cm) – 120 L x 100 H x 200 W.
- Water capacity – Hydrorock holds 92% water of its cubic volume.
- BD 440 and D 440 Blocks each hold 440 litres of water.
- Unwrapped Hydrorock holds 220 litres of water.
- The system can be configured in many formats and sizes, with separate / dispersed modules connected by flexible tubing into a unitary aquifer.
- The modules can be readily placed around existing infrastructure, pipes and cables, enabling optimisation of construction within the site.

- Installation is very simple and quick with minimal disruption. The excavation needs to be only as large as the system, as no access is required to fit the membrane.
- No specialist installation engineering or equipment is needed, with simple snap-together fittings which require no special skills or tools.
- BD440 Blocks are used on the top and bottom layers of the system, with D440 blocks on the sides. The centre of the system is filled with uncovered Hydrorock Blocks.
- Integrated perforated pipe allows rapid inflow & storage water in each Hydrorock Block underground.
- By inverting the bottom layer of HD Hydrorock Blocks, water readily flows out of the system when the control valves allow.
- Placing the system on a 100mm layer of sand will permit infiltration from the module into the surrounding soil and facilitate the discharge of water from the Hydrorock Blocks.



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