

# Water Infiltration System



Our HD range of Hydrorock Blocks gives a new, cost-effective Infiltration System that has many advantages over current solutions. Based on a highly innovative, totally new mineral wool product from Rockwool. This 100% natural product is totally ecologically and environmentally friendly. Due to its modular design, infiltration can occur across a dispersed natural aquifer system. This greatly increases the surface area over which infiltration can occur. As water is held in suspension in the Hydrorock Blocks, there is little hydrostatic pressure on the bottom surface of the system, so that infiltration can occur across the whole of the bottom of a system, unlike crated sumps, where water can only infiltrate from the sides.

## A dispersed system

The advantages of a dispersed system are many, and these combine to make the Hydrorock Infiltration System a groundbreaking new solution for infiltration.

- By dispersing the Hydorock Blocks over a whole site, the ratio of surface area to volume is greatly increased, allowing for faster infiltration.
- Dispersal means that areas currently unavailable for infiltration can be used, optimising the value of a site.
- Dispersal improves the soil condition of a whole site, rather than having areas of dry and saturated soil.
- The system can be worked around current infrastructure and pipe cables in the ground.
- The system can be installed piecemeal, with significantly less disruption and cost.



 Dispersed systems work! 100% of the time with little maintenance.

### A totally green solution

Hydrorock Infiltration System is made of 100% natural rock wool. Wrapped in a permeable membrane, even the label is biodegradeable in three weeks in the soil. This avoids plastics in the soil, and hence micro plastic particles in the water.

# Maintenance free and lasts a lifetime

Crated solutions create a near void in the ground, Hydrorock is a solid, with up to 4,000 kg per M2 loading strength. Thus, the Hydrorock Infiltration System will not collapse in the future. As the Hydrorock Blocks are solid, and wrapped in a semipermeable membrane, there is no penetration by roots, thus the integrity of the whole system is assured.



# Technical information – BD 40 IR Hydrorock Block functionality & performance

Rather than gathering all the water into one large void on a site, the modularity of the Hydrorock Block System allows the desired volume to be spread around the site, utilising small areas, and thus often increasing the number of properties that can be built on a site.

#### Faster and smaller installation

As the Hydrorock Blocks are prewrapped, the size of the excavation required needs only be as large as the volume required. Also, as the Hydrorock Blocks are solid, the Infiltration System can be positioned closer to buildings maximising the site potential.

# Technical information – Hydrorock Block functionality & performance

- Depending on the site and soil conditions, the whole range of Hydrorock Blocks may be used in combination with drain/filter units, and 100 mm connecting pipes. Please refer to the Hydrorock Solutions Technical Brochure for details.
- Hydrorock Blocks are used in a single layer, on a 100 mm layer of sand. This increases the surface area of the bottom of the system.

- The Hydrorock Blocks are normally installed in a module three blocks wide. This allows for the system to self-vent, and if by human error the filters are compromised, the whole system can be flushed.
- Integrated perforated pipe allows rapid inflow & storage water in each Hydrorock Block underground.
- Site plan of modules all over a site.
- The system can be placed around existing infrastructure, such as pipes and cables unlike crated sumps. This flexibility allows for optimisation of the site.
- The system can be dispersed in many shapes and sizes, again optimising the site.
- Installation is very simple and quick with minimal disruption. The excavation need only be as large as the system, as no access to fit membrane is required.
- No specialist installation engineering or equipment is required with simple snap-together fittings requiring no special skills or tools.

# How the system works

The Hydrorock Infiltration Block System is made from 100% natural stone wool with a filter cloth membrane. It absorbs rainwater with a capacity of 94% of its volume. Built-in perforated pipes provide a connection to the rainwater discharge. The filter cloth ensures gradual infiltration into the surrounding soil.



