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RAINBALL
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THINK ROUND, DRAIN SMART

„The future of drainage - in perfect shape“

THE PRODUCT DESCRIPTION

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Rainball is a hollow, spherical drainage element made of perforated polypropylene, which is highly resistant to environmental influences. The spherical shell design allows water to easily enter the interior and then flow unhindered towards the ground or into neighboring elements. This structure ensures fast and efficient drainage.

The product consists of two symmetrical hemispheres that are assembled on site during production.

The pins and sleeves on the rim – as well as the grooved fastening – ensure that the joint is stable and the sphere is difficult to disassemble after assembly.

The symmetrical design has several advantages:
Assembly is quick and error-free, as the hemispheres can only be fitted together in one way (by rotating 180°).

The product does not require any special markings or assembly instructions to assemble.
The spherical shape geometry and the internal ribs ensure exceptional structural rigidity even with a thin wall thickness.

The dense and small openings on the surface of the shell guarantee fast and unhindered water infiltration. Another practical advantage of the spherical shape is that it perfectly fills the available space when installed in bulk. This avoids the formation of dead spaces, reduces the need for earthworks and eliminates the need for backfilling.

The optimised design of the internal ribs significantly increases the load-bearing capacity.

MANUFACTURING PROCESS

The production is carried out using injection molding technology, and then the finished product is assembled in pairs in a partially automated manner at the production site.

Injection molding technology is suitable for producing the product in hemispheres.

After the production process is completed, the finished product is delivered to the installation site in 200-liter packages, packaged in recycled bags.

DURABILITY

The complete desiccant structure is able to perform its function until the elements that make it up – primarily the geotextile – reach the end of their life cycle.

Since the degradation of polypropylene takes centuries, the lifespan of the desiccant spheres does not limit the operation of the system, so the service life of the entire structure is basically determined by the physical condition of the geotextile.

OPERATING PRINCIPLE

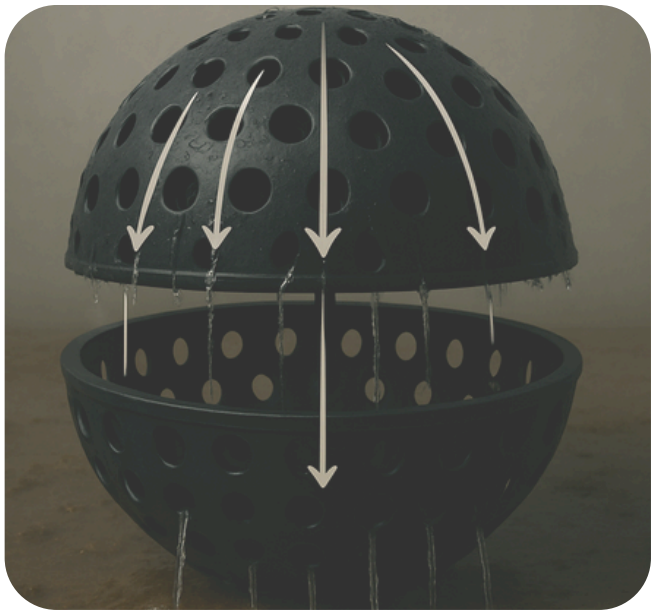
The Rainball drainage system operates on the same principle as traditional solutions: it returns rainwater to the environment based on the natural water absorption capacity of the soil. The difference lies in the material used. Instead of the usual gravel filling, the system uses specially designed, hollow, heavy-duty plastic balls, which provide a significantly larger water absorption volume.

The purpose of the septic tank is to quickly absorb the introduced rainwater and then continuously transfer it to the surrounding soil. The perforated surface of the spheres ensures the free flow of water, so the system works efficiently, without stagnant water.

Three aspects are given special importance during the design:

- Fast water absorption: incoming precipitation reaches the interior of the system without obstacles,
- Maximum space utilization: the spheres perfectly fill every point of the drainage space,
- Long service life without maintenance: the choice of materials and the structure also serve long-lasting, problem-free operation.

The Rainball system is also easy to install, heavy-duty, cost-effective, and made of fully recyclable materials.



In essence:
we offer a sustainable and efficient solution for on-site rainwater drainage that responds quickly to the amount of water falling, while operating reliably in the long term.

INSTALLATION

Installing the Rainball rainwater drainage system is a simple and quick process that does not require special skills or heavy machinery – it can even be easily done at home.

The first step is to create a pit of a predetermined size at the planned location. This pit must be lined with geotextiles laid on the bottom and walls of the drainage area, which prevents small particles of the surrounding soil from entering the RAINBALL drainage body, thereby facilitating its clogging.

After the geotextile has been placed, the Rainballs can be simply poured into the excavated area by hand, up to the desired level. The top layer is covered with geotextile again, and the rainwater drainage pipe is then introduced to the center of the system, so that the water is evenly and efficiently distributed throughout the entire drainage area.
Finally, the system is covered with soil, after which the affected area can be immediately loaded - for example, with pedestrian or even small vehicle traffic.

The Rainball system performs the same function as traditional gravel dewatering systems, but is a much more practical and sustainable solution. A 15m3 capacity Rainball system can be transported to the installation site in a single van, while the same capacity with traditional gravel requires more than 30t of material handling, which entails significant costs and environmental impact.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