HIDROSTANK

HIDROCRATE:
APPLICATIONS TO SYSTEMS SUSTAINABLE URBAN DRAINAGE



Catalogue Nº 079.4I

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CHARACTERISTICS OF THE HIDROCRATE SYSTEM



The Hidrocrate system forms a high-resistance plastic geostructure that allows the execution of elements for the collection, infiltration, accumulation, and underground transport of rainwater in a modular and simple way. With a very simple manual assembly, the product allows configurations of different heights and simplifies the assembly of previous models.

The system is wrapped in a permeable or waterproof geotextile and water can enter it through the Hydrocell or pipes. In the case of water entering through pipes, it is necessary to place at least one chamber to allow aeration and when the collection is done through drains, it is necessary to pre-treat rainwater using chambers with a pre-treatment collector and/or hydrodynamic separators.

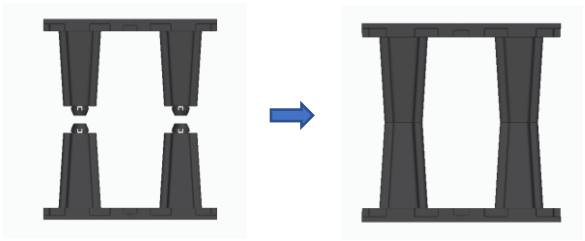
The benefits obtained from the use of the Hidrocrate in the application of the SUDS are:

- They reduce the volumes of runoff and peak flows from urbanized areas by means of a retention and lamination element.
- They minimize the cost of drainage infrastructure while increasing the value of the landscape environment.
- They improve the quality of water receiving urban runoff, favoring natural purification processes, and preventing polluting loads reach sensitive receiving environments.
- They retain excess nutrients (nitrates, phosphates...) that produce the phenomenon of eutrophication of rivers, that is, the uncontrolled growth of vegetation that reduces the presence of oxygen in the waters and, therefore, death of living beings.
- They integrate the treatment of rainwater into the landscape, maximizing citizen service and improving the landscape with the integration of watercourses in the environment.

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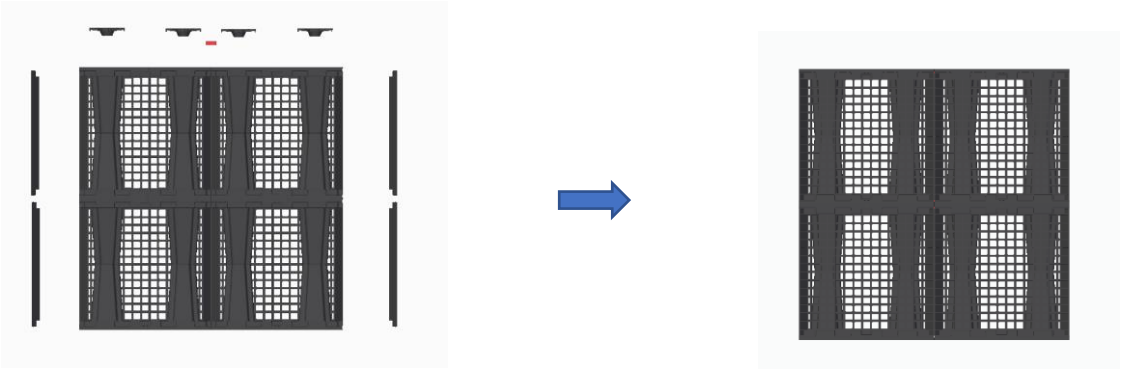
TECHNICAL CHARACTERISTICS OF THE HIDROCRATE SYSTEM

The system is made up of a base piece that, when joined with another equal part, forms a block with the following characteristics.



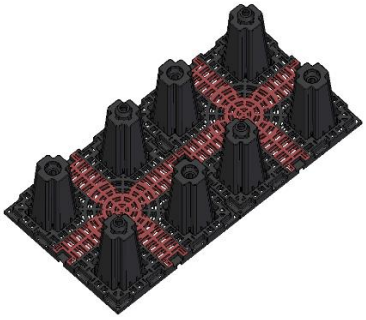
TECHNICAL CHARACTERISTICS	
Material	Black polypropylene reinforced with mineral charges
Dimensions	500 x 500 x 500 mm
Area per unit	0,250 m^2
Nº de parts per ml	2
Nº de parts por m^2	4
Nº de parts por m^3	16
Total capacity	125 l
Useful capacity	118 l
Porosity	94%
Compressive strength	*According to class

Adding more blocks, we can increase the surface and consequently the retention volume, some boxes with others are joined by means of connectors, when we want to increase the height of the tank, connectors to grow and blocks are used, and to finish the assembly the upper covers, connectors and side covers are placed.



Access for CCTV inspection and cleaning is done through the chambers that can be incorporated into the block.



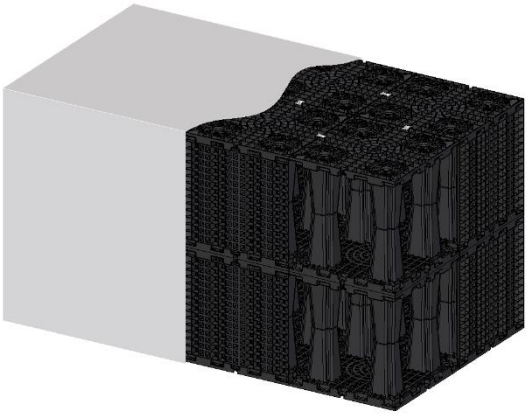


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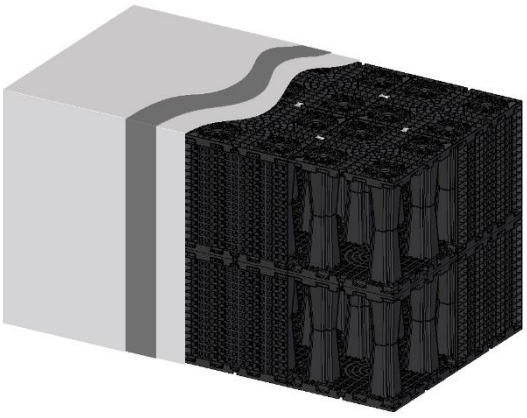
APPLICATIONS

Infiltration

The infiltration of rainwater at source is becoming a necessity in the management of rainwater. With the use of the Hidrocrate system in new urban developments and with its implementation in existing ones, we achieve the infiltration of rainwater into the underground layers, emulating the hydrological cycle that we had before the urbanizations.



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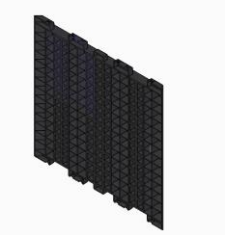
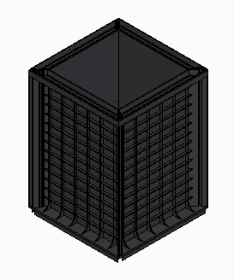
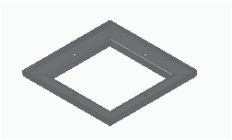
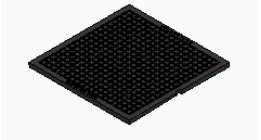
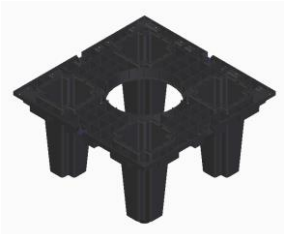


Retention

The retention of rainwater allows laminating or retaining the water for later reuse, for this, two sheets of permeable geotextile are placed with a waterproof Geomembrane between the two sheets to protect the geomembrane and guarantee waterproofing.

It is necessary to highlight the importance of the correct execution of the installation due to the great influence that the correct construction process has on the useful life, the maintenance of the blocks and the proper functioning of the system, especially in retention tanks, that must guarantee the watertightness.

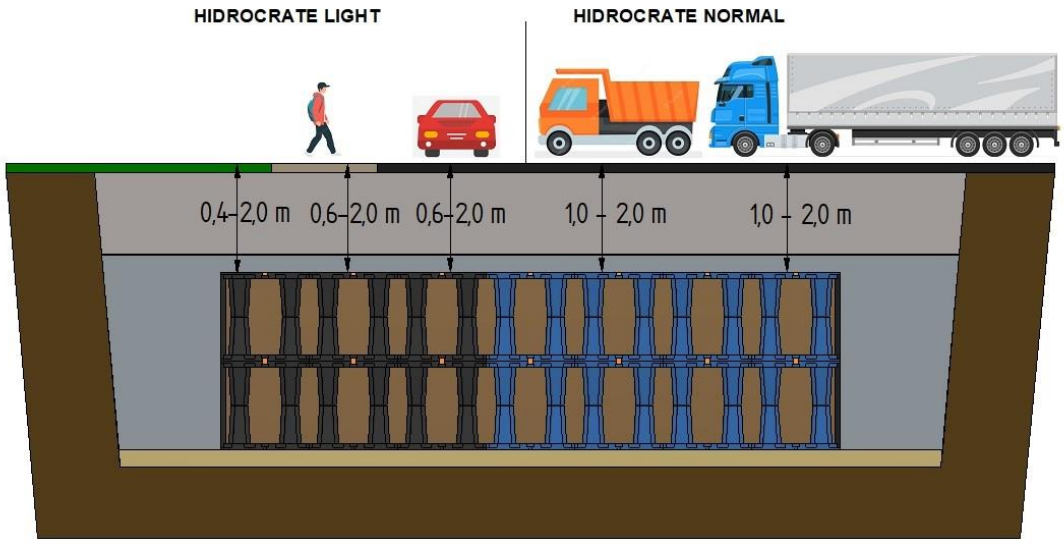
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COMPONENTS			
	HI-010 Hidrocrate base part with dimensions 500 x 500 x 250 mm		HI-016 Hidrocrate base piece with dimensions 500 x 500 x 250 mm with connection for inspection box
	HI-011 Hidrocrate Side Face with dimensions 500 x 430 mm		A 035x035x060 Chamber of reinforced polypropylene
	HI-012 Hidrocrate cover with dimensions 120x120 mm		M4035035.3.01B Galvanized Steel Frame for B125 lid and Box 35 x 35 cm
	HI-013 Union part Hidrocrate		T035035.01FB00 Cast iron cover 457 x 457 x 20 mm for c**hamber** 35 x 35 cm UNE EN124 B-125
	HI-014 Union part and to grow Hidrocrate		Geotextile
	HI-015 Dimensioned Hidrocrate base piece with access 500 x 500 x 250 mm		Geomembrane

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Compressive strength

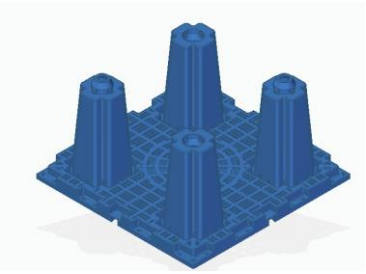
Depending on the area in which the tank is to be installed, there are three types of parts



- HIDROCRATE LIGHT: for garden areas, pedestrian areas and parking of light vehicles. Its color is BLACK.



- HIDROCRATE: for parking areas for heavy vehicles. Its color is BLUE.



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