

Stormbloc® Optimum Range

Attenuate or infiltrate surface water effectively even in challenging urban environments

Product Summary

The Stormbloc® Optimum range comprises two resilient geocellular storage systems that provide underground storage and infiltration of surface water runoff; **Stormbloc® Extra** and **Stormbloc®**, plus an inspection chamber, the **Stormbloc® Inspect**.

The system helps meet Sustainable Drainage System (SuDS) objectives by returning stormwater back to the natural water cycle at or near its source, without taking up valuable space for amenity or development above ground.

The lightweight materials, combined with robust design make them easy to transport, quick to install and extremely durable. With an optimum-strength option for high-traffic areas and a lighter option for landscape and low-traffic areas, the Stormbloc® Optimum range provides a space-saving solution for many applications.

Applications

- » New and retrofit Sustainable Drainage (SuDS) schemes.
- » Infiltration / soakaway schemes.
- » Attenuation schemes.
- » Highways and infrastructure projects.
- » To increase swale / pond capacity.
- » Car parks and Park & Ride schemes.
- » Housing Developments.
- » Schools and Public / Civil schemes.
- » Aquifer re-charge.
- » Storage for rainwater harvesting and re-use

Benefits

Maximise storage

The Stormbloc® Optimum range can store 960 litres of stormwater below ground in 1 cubic metre of volume, more than 60% more stormwater storage in the same volume when compared to conventional gravel infiltration trenches.

Save space on site

Both Stormbloc® Extra and Stormbloc® stack into compact nests for transport and storage, saving up to 75% of valuable space. The nested units save time and cost during installation, enabling more storage volume to be lifted into excavations at any one time.

Lightweight with two strength options

For more flexible designs choose between the high-strength Stormbloc® Extra for deep or high-loaded installations and Stormbloc® for shallower installations with lighter loads such as landscaped or low-traffic areas.

Stormbloc® Optimum range

Stormbloc®

A lighter, cost-effective option suitable for landscaped or low-traffic areas. Access for inspection and maintenance can be included where required using Stormbloc® Inspect chambers and Stormbloc® Extra blocks.



Stormbloc® Extra

A high-strength option ideal for installation beneath high-traffic areas such as roads, car parks and warehouse yards. Access for inspection and maintenance is via Stormbloc® Inspect chambers and the channels in the blocks allow access for CCTV and cleaning to ensure that the storage volume of the system isn't reduced by the build up of silts.



Stormbloc® Inspect

The Stormbloc® Inspect offers an unrivalled level of accessibility to any Stormbloc® Extra or Stormbloc® installation. This modular access chamber, sited within the tank, has identical dimensions to a Stormbloc® Extra module and so can be easily incorporated into the layout of the infiltration or storage system.



Find out about the Stormbloc® Optimum range can help you design cost-effective, space-saving surface water control systems:

→ <https://hydro-int.com/en/stormbloc-optimum>

Technical information

	Stormbloc®		Stormbloc® Extra		
Application suitability	Lighter loaded areas, such as landscaped or low traffic areas (cars ≤ 2.5t)		Heavy loaded area and High-traffic areas such as car parks, roads and warehouse yards.		
Maximum installation depth	3 m		4 m		
Cover depth	Landscaped area, no traffic	Light traffic loading ≤ 2.5 t	Landscaped area, no traffic	Light traffic loading ≤ 2.5 t	Roads & HGV loading yards with traffic loading ≤ 44 t
	0.5 m - 1.5 m	0.8 m - 1.5 m	≥ 0.4 m	≥ 0.6 m	≥ 0.8 m
Material	Polypropylene (up to 100% recycled material)		Polypropylene		
	Half block		Full block	Half block	
Length / Width / Height	800 / 800 / 330 mm (Note: for the bottom layer add 30 mm for the base plate)		800 / 800 / 660 mm	800 / 800 / 360 mm	
Nominal block volume	0.230 m ³		0.422 m ³	0.230 m ³	
Nominal storage capacity per unit	0.220 m ³		0.405 m ³	0.221 m ³	
Constructed weight	10 kg (1 element and 1 baseplate)		18.6 kg	13.7 kg	
Porosity	96%		96 %	96%	
Vertical ultimate compressive strength	313 kN/m ²		420 kN/m ²	420 kN/m ²	
Horizontal ultimate compressive strength	93 kN/m ²		165 kN/m ²	225 kN/m ²	

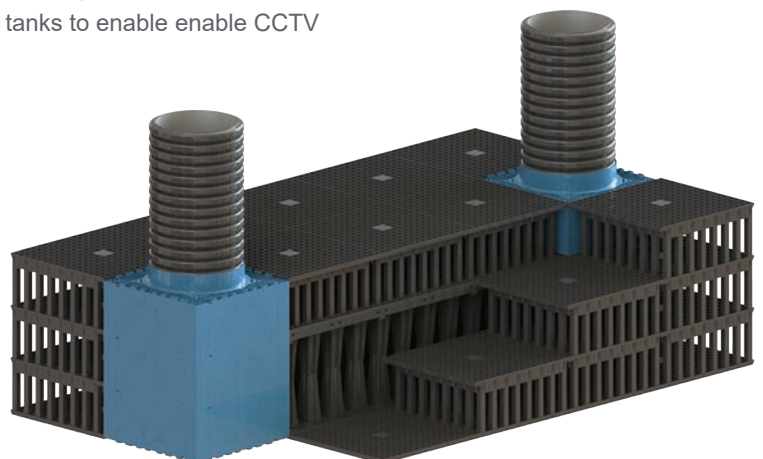
Inspection and maintenance

To ensure that the storage volume of the systems aren't compromised by the build up of silts, Stormbloc® Inspect chambers can be added to Stormbloc® Extra tanks to enable CCTV inspection, maintenance and cleaning.

Access for inspection and maintenance of Stormbloc® tanks can be provided by adding Stormbloc® Inspect chambers and constructing a row of Stormbloc® Extra blocks through the tank.

Smart Maintenance

A Hydro-Logic® Smart Maintenance package can be added to either Stormbloc® Extra or Stormbloc® tanks to provide near real-time level information and send automated alerts when the tank requires maintenance.



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