



Ecobloc

A guide to the selection
Ecobloc stormwater
infiltration/attenuation
system

abg | creative
geosynthetic
engineering

Ecobloc

Ecobloc is a cellular crate system designed to form underground voids allowing the infiltration, detention, retention or harvesting of rainwater collected as part of a SuDS scheme



The modular concept of EcoBloc allows the system size and bearing capacity to be tailored to suit site specific requirements in both trafficked and non-trafficked areas. Designed correctly EcoBloc has the capacity for a heavy-duty lorry bearing capacity of up to 60 tons with as little as 800mm earth covering. Even under very heavy loads the EcoBloc system can be installed at a depth of up to 5 metres, this means that up to 14 layers are possible.

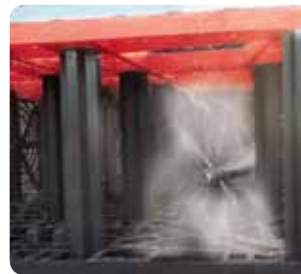
EcoBloc modules are easy to both transport and install. To save space during transport, two modules are stacked one inside the other halving transport costs and reducing CO₂ emissions. The lightweight units are easy to handle on site and the modular system structure requires few accessories and no specialist tools for installation.

The EcoBloc system allows easy access for inspection and monitoring and during routine maintenance is robust enough to resist high pressure jetting.



Easy to inspect

The standard inspection channel allows the entire percolation system to be effectively monitored using inspection cameras.



Easy to maintain

Easy access into the EcoBloc chamber allows cleaning using proprietary cleaning equipment such as jet washing



Easy to install

EcoBloc is modular and simply stacks together on site with no special training or equipment required.



Easy to transport

Modules are designed to nest to minimise volume. Typically this allows double the volume of void space per vehicle reducing costs and CO₂ emissions.

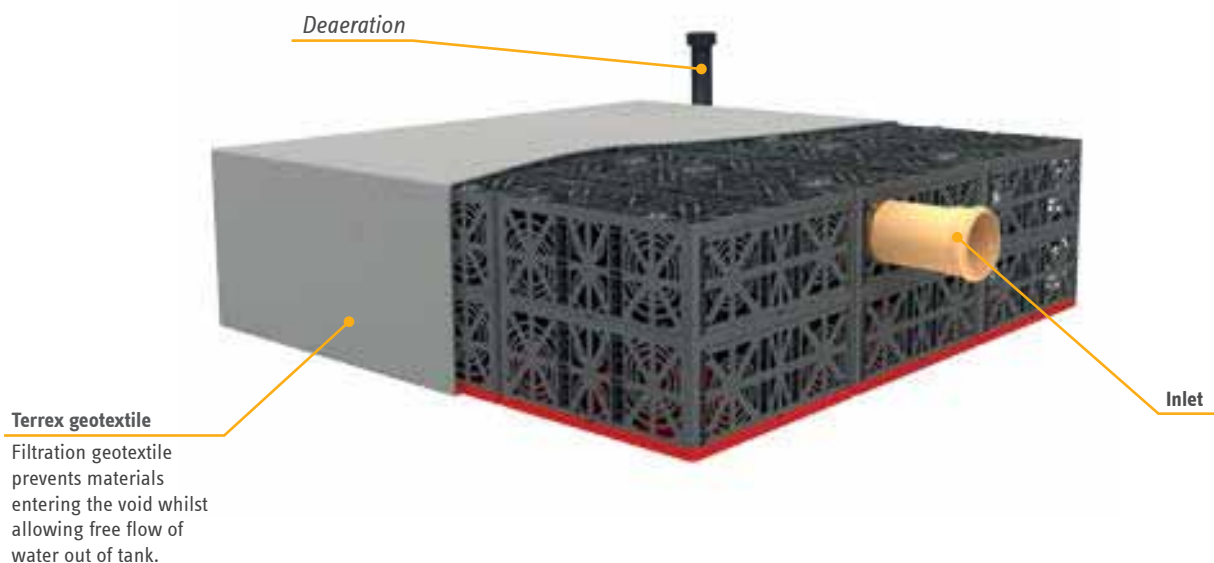


High storage volume

EcoBloc modules have three times the storage volume of standard gravel. One module takes the place of around 1300 kg of gravel or a 50m drainage pipe. This reduces on-site excavation and costs associated with moving materials on site.

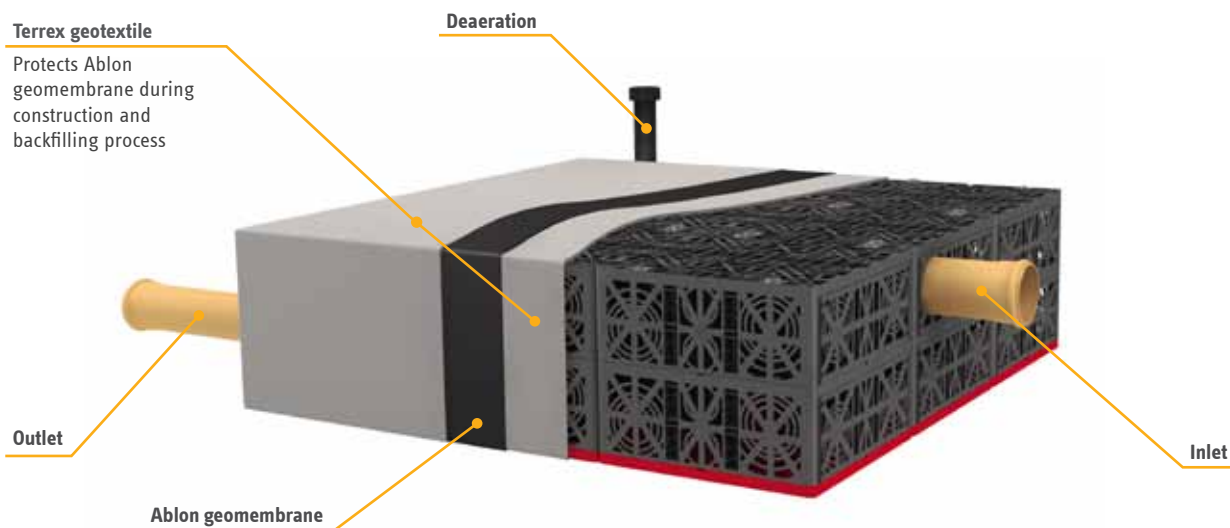


Installing Ecobloc



Infiltration

Infiltration is the preferred method of source control and should be utilised whenever possible. The modular EcoBloc system, encapsulated with an appropriate geotextile, facilitates a high degree of flexibility in design and can be used for the creation of a wide range of infiltration solutions of various configurations from linear infiltration trenches to large footprint underground structures.

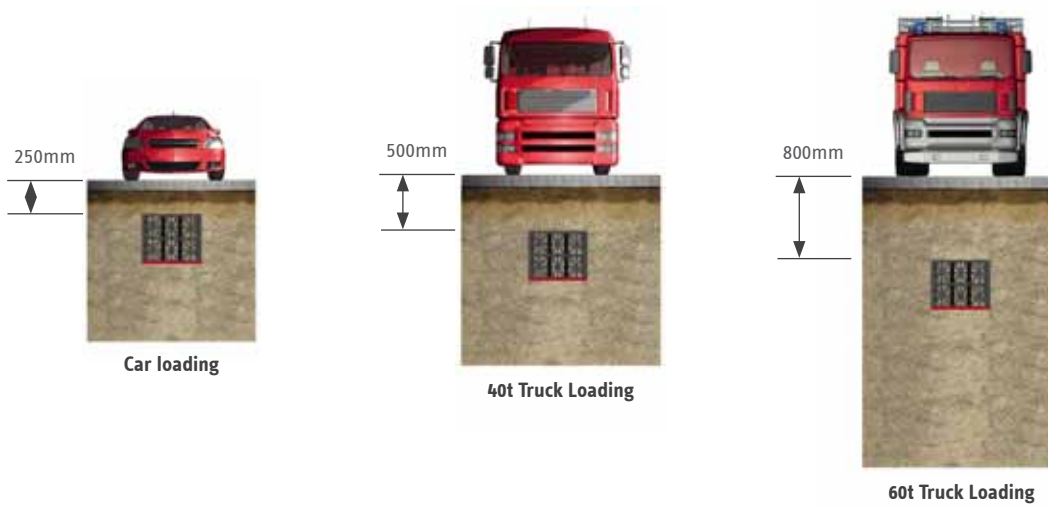


Attenuation

When encapsulated with an appropriate geomembrane with geotextile protection, the EcoBloc system provides an economic attenuation tank solution for the safe storage of stormwater prior to its controlled discharge or re-use. Where attenuation is being utilised in brownfield site applications or the catchment is above a groundwater protection zone, the specification of the geomembrane/geotextile material is critical to ensure the long term performance of the system.

Specifying Ecobloc

Covering for various loads



Installation criteria

		Without traffic load	Vehicle	Truck 12	Truck 30	Truck 40	Truck 60
Min. earth covering	mm	250	250	500	500	500	800
Max. earth covering	mm	2750	2750	2750	2500	2250	2000
Max. installation depth	mm	5000	5000	5000	5000	5000	5000
Max. number of layers	Nº	14	14	13	13	13	13

EcoBloc unit



Weight	kg	8
Gross volume	l	205
Net volume	l	195
Storage coefficient	%	96

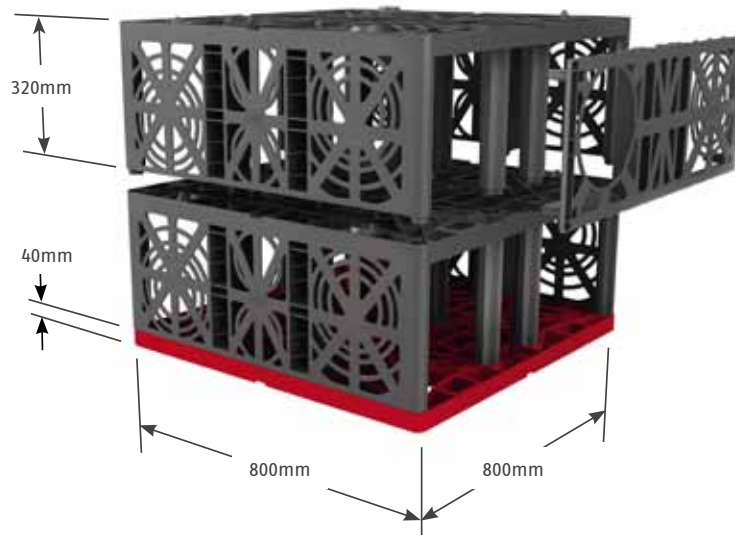
EcoBloc baseplate



Weight	kg	4
Gross volume	l	25
Net volume	l	20
Storage coefficient	%	95

The information above is for guidance only and should not be taken as guide for design. Site specific design guidance and data sheets are available through the ABG Technical Department on 01484 852096 or by emailing technical@abgtd.com.

Product Dimensions





ABG Service

ABG provide full service from initial consultation, design and specification through to advice on installation and on-going maintenance. Our in-house Technical Team, many of whom are chartered civil engineers offer practical advice and guidance to the project team whilst ensuring that the requirements of the regulatory requirements and codes of practice are met.

- Project design
- Design confirmation
- Feasibility study
- Cost advise
- System development

abg | creative
geosynthetic
engineering

abg ltd. E7 Meltham Mills Rd, Meltham, West Yorkshire, HD9 4DS
t 01484 852096 e suds@abgltd.com w www.abgltd.com @abg_ltd



INVESTORS
IN PEOPLE