



installation manual

ECORASTER® BLOXX

FCORASTER BLOXX

Why ECRASTER®?

Preparations

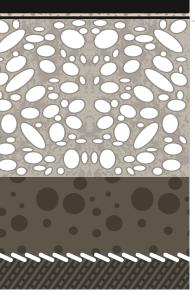
- Quick and easy to install (about 20 m² per person per hour)
- ✓ Low transport and handling costs
- ✓ High load capacity (up to 800 t/m² filled)
- Safety locking system
- Surface reinforcement with natural drainage
- Extremely versatile thanks to the BIOXX system being fully compatible with other 50mm grass or gravel filled grids
- Minimises maintenance
- ✓ Non-slip and crackproof
- Weatherproof and environmentally friendly
- Resistant to frost and UV radiation
- Seasy to fit to borders or cut to shape

Determining how much sand, broken stone etc. you need

Before determining how much chippings / broken stone etc. you need, you should specify exactly the height of the surfaces. With larger surfaces you should work with a spirit level or laser. CBR ratings will depict the depth of sub-base that you need to install.

If you do not build a base layer, surface drainage is not assured. Not only that, movement in the natural soil can cause unevenness. ECORASTER® considerably increases the load capacity of the surface, but it goes without saying that even ECORASTER® will be tested to its limits if the entire ground gives way extensively.

Example: car park bay delineation ECORASTER® BLOXX



- ECORASTER Bloxx®
- Base Layer

3 cm [1.18 in] compacted filling material 110g geotextile membrane

Draining layer

20 cm [7.87 in] compacted draining

- Substructure 10 [3.93 in] to 40 cm [15.74 in] draining gravel (0/80)
- Optional open membrane*
- Foundation

Fill in the ECORASTER BIOXX with supplied inserts

Levelling course

Put on a layer of 2/5 mm chippings (height approx. 2 cm) and level off roughly

Drainage layer

Put on broken stone grain size 5/32 mm or similary and compact (roller or plate vibrator)

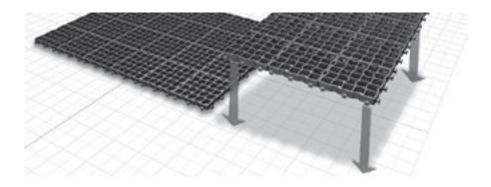
Height of broken stone for cars: approx. 25 cm Height of broken stone for lorries: approx. 45 cm

Natural soil

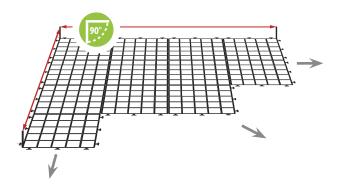
Create an approx. 1 - 1,5 % gradient in the ground

ECORASTER® BLOXX

Working with the preconnected grids



ECORASTER® is quick and easy to lay without machinery. The system is delivered in preconnected units of 12 sections and can be taken straight off the pallet and laid in one go.



Installing

To lay the grids, start in one corner of the area. The lugs of the first row must point in the direction you are working in. The subsequent rows are then pressed into the lugs of the laid surface. We recomend to use a plumb line when installing ECORASTER.

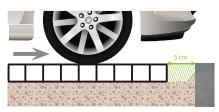
Disconnecting

The preconnected sheets can be taken apart if necessary. Lay the sheet you wish to take apart on another sheet and, using your foot, press the tiles you want to remove down and out of the safety locking system.

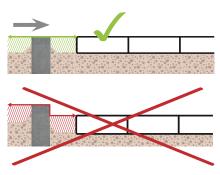
Fitting – cutting to size

For quick and clean tile cutting, the following tools have proved most effective in practice:

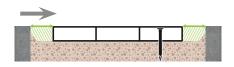
• Angle grinder with diamond tipped blade



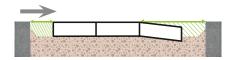
If there should be some kerbstones, make sure to leave a gap of min. 5 cm.*



The ECORASTER system should be installed level to surrounding edges.*



To avoid surface distortion at the edges caused by the shear forces of cars, the ECORASTER System can be fixed with ground anchorsat the rear end of the parking area.*



As an alternative to 'J' pins you may also just press down the rear part of the ECORASTER BLOXX*

^{*} Direction of travel from left to right

ECORASTER® BLOXX

CBR (California bearing rate)

Application Load	CBR % strength of subgrade soil	DoT sub-base thickness (mm)
Fire trucks, coaches and occasional HGV access	>6	100
	=4<6	120
	=2<4	190
	=1<2	380
Light vehicle access and overspill	>6	100
car parking	=4>6	100
	=2<4	135
	=1<2	260

Field guidance for estimating sub-grade strengths						
	Indicator			Strength		
Consistency	Tactile(feel)	Visual (Observation)	Mechanical (Test)	CBR	CU	
			SPT	%	KN/SQM	
Very soft	Hand sample squeezes through fingers	Man standing will sink>75mm	<2	<1	<25	
Soft	Easily moulded by finger pressure	Man walking sinks 50-70mm	2-4	Around 1	Around 25	
Medium	Moulded by moderate finger pressure	Man walking sinks 25mm	4.8	1-2	25-40	
Firm	Moulded by strong finger pressure	Utility truck ruts 10-25mm	8-15	2-4	40-75	
Stiff	Cannot be moulded but can be indented by thumb		15-30	4-6	75-150	

ECORASTER® BLOXX

Things to bear in mind!

Irrigate surface before installing ECORASTER®! Fleece from geotextiles reliably prevents of mixing up the ground construction layers with the soil.

Only limited suitable for areas which are mainly used by trucks / heavy load.

Tip

For quick and clean cutting to size, a circular saw has proved most effective in practice. For smaller corners which must be cut exactly to size, we recommend that you use a compass saw or strong pruning shears. Do not cut the grids in advance. If possible, lay them over the border and then cut them. Use a small base (slat / board / ECORASTER® tile) to make it easier to cut.

Accessories

- Parking space markers
 A variety of block colours are available to signify edge details or bay markings
- Slope angles
 Universal Slope angle adjustable up to 90° used with connecting grids
- Block sealants for a permeable UV stable surface
- Geotextiles

Care instructions

ECORASTER BLOXX should be cleaned regularly to ensure gaps are debris free

