



installation manual

ECORASTER[®] MINERAL

(ECORASTER[®] + chippings/broken stone = ECORASTER[®] MINERAL)

ECORASTER® MINERAL

Why ECORASTER®?

- ✓ Quick and easy to install (about 100 m² per person per hour) because it is lightweight (approx. 5 - 11 kg/m² depending on type)
- ✓ Low transport and handling costs
- ✓ High load capacity (up to 350 t/m²)
- ✓ Safety locking system
- ✓ Surface reinforcement with natural drainage
- ✓ Extremely versatile thanks to additional components like slope angles, Curvepieces, parking space markers
- ✓ Minimises maintenance
- ✓ Non-slip and crackproof
- ✓ Weatherproof and environmentally friendly
- ✓ Resistant to frost and UV radiation
- ✓ Easy to fit to borders or cut to shape

Preparations

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.

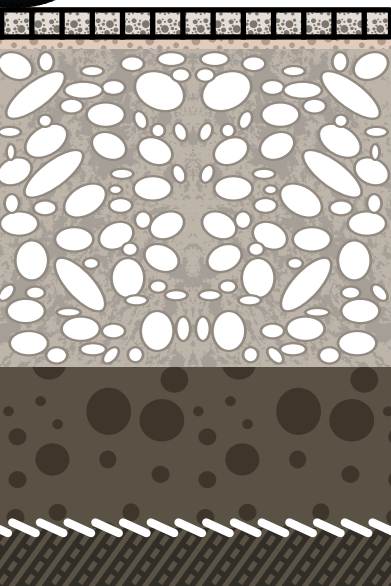
Calculate how much you need to fill the grids as follows:

$$0.95 \times \text{area} \times \text{grid height}$$

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.



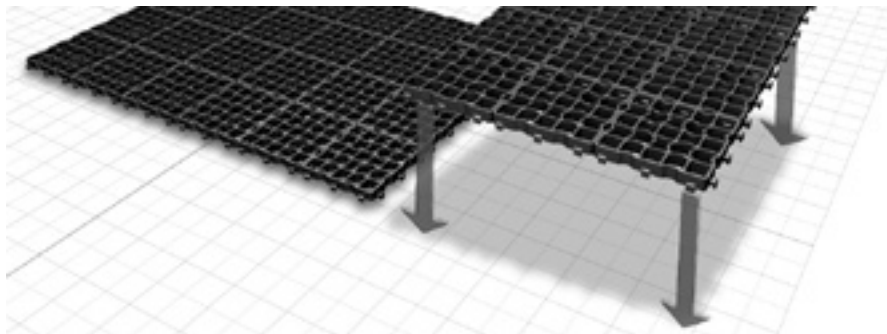
Example: car park with chippings ECORASTER® MINERAL



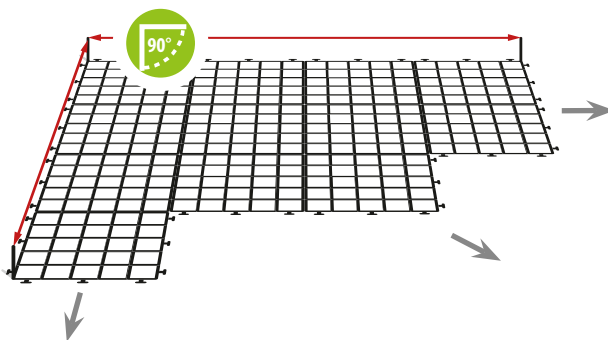
- ◀ **ECORASTER® MINERAL**
- ◀ **Base Layer**
3 cm [1.18 in] compacted filling material
- ◀ **Draining layer**
20 cm [7.87 in] compacted draining gravel
- ◀ **Substructure** 10 [3.93 in] to 40 cm [15.74 in] draining gravel
- ◀ **Anti-contaminant geotextile**
- ◀ **Foundation**
- Fill in the ECORASTER**
Gravel/sand/chippings: Fill in the grids with appropriate material
- 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 similar and compact (roller or plate vibrator)
Total height of broken stone for cars: approx. 25 cm
Total height of broken stone for trucks: approx. 45 cm
- Natural soil**
Create an approx. 1 - 1,5 % gradient in the ground

ECORASTER® MINERAL

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 recommend to use a plumb line when installing ECORASTER.

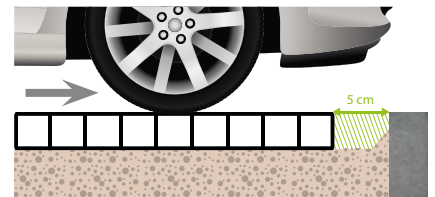
Disconnecting

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.

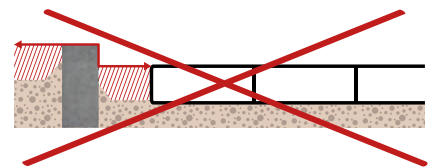
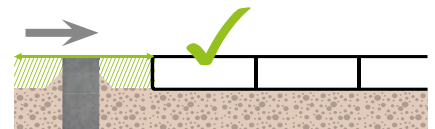
Fitting – cutting to size

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

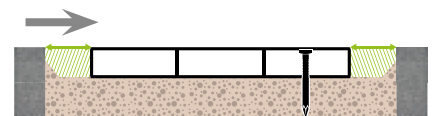
- Circular saw
- Flex (cutting disk)
- Compass saw



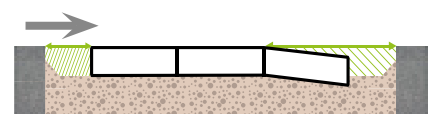
If there should be some kerbstones, make sure to leave a gap of min. 5 cm.*



The ECORASTER System should be installed plain 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 anchors at the rear end of the parking area.*



As an alternative to earthnails you may also just press down the rear part of the ECORASTER.*

* Direction of travel from left to right

Things to bear in mind!

Note that, in relation to the height of the base layer, the vibrator action will press in the ECORASTER® by approx. 0.5 cm.

After infilling ECORASTER®, some slight settling may occur. Fleece from geotextiles reliably prevents of mixing up the ground construction layers with the soil. When laying ECORASTER® during the warm summer months, ensure laying ECORASTER®, the grids are infilled and overfilled right after installation.

For areas that mainly used by trucks / heavy vehicles (tight turning circles) we recommend to cover the ECORASTER with a layer of 1 – 2 cm chippings.

Alternatively, you can use the ECORASTER Stone system.

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®) to make it easier to cut.

Accessories

- **Parking space markers**
Parking space markers are available in white and can be inserted into the grid without further preparation
- **Slope angles**
Universal Slope angle adjustable up to 90°
- **Curvepieces**
- **Ground anchor**
- **Geotextiles**