ECOGRID® ELASTIC

Installation instructions for horse riding applications

- ❍ **Installation with standard base layer**
- ❍ **Installation with minimal base layer**
- ❍ **Installation without base layer**

Why ECOGRID®?

- **No mud**
- **Equal load on all joints thanks to the elastic, even surface**
- **The tread layer remains separate from the substructure**
- **Minimal maintenance**
- **High elasticity**
- **Load capacity of up to 350 t/m²**
- **Patented safety locking system**
- **Excellent drainage**
- **Over 200 expansion elements per m²**
- **Quick and easy to lay**
- **Environmentally friendly**
- **Only very slight hoofprints are left**

Installation variants

Each individual application requires or allows a different form of installation. The different applications and the variants best suited to them are given below.
If your proposed application is not listed, please contact our teams of advisors.

1. with standard base layer

2. with minimum base layer

3. without base layer

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 x area x 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. **ECOGRID®** econsiderably increases the load capacity of the surface, but it goes without saying that even **ECOGRID®** will be tested to its limits if the entire ground gives way extensively.

- ➔ Note that, in relation to the height of the base layer, the vibrator action will press in the **ECOGRID®** by approx. 0.5 cm.
- ➔ If there is an existing border, or one has been constructed, a distance of at least 2 cm must be left between border and **ECOGRID®.**
- ➔ During the warm summer months, ensure that when laying **ECOGRID®**, the grids are infilled and overfilled right after installation.

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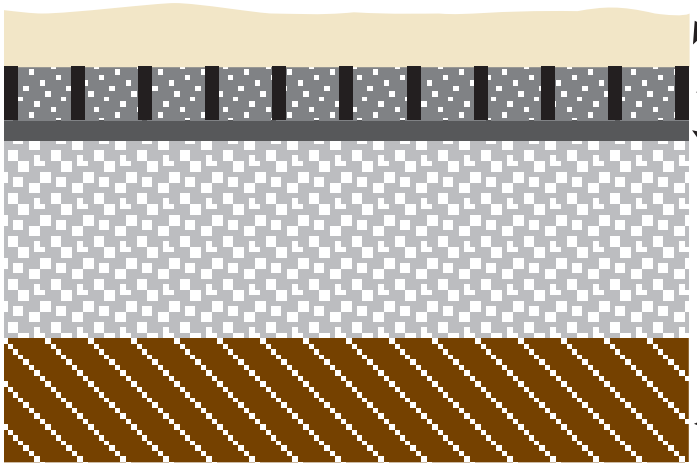
1. Installation with standard base layer



Tread layer
The composition of the tread layer
is dependent on the application
Riding arena: 6-8 cm
Paddock/Exercise area:
none for E40, E50, S50;
for EL30 at least 5cm

Separation layer
ECOGRID® 3 - 5 cm
Filled according to use

Levelling layer
Chippings, height 2 – 5 cm

Base layer
Broken stone or gravel, height approx. 10-2
depending on the strength of the natural so

Natural soil
Ground with gradient of 1-1.5%

Example: Riding arena

❶ **Natural soil**
Create an approx. 1-1.5% gradient in the ground

❷ **Base layer**
Put on broken stone or gravel, size 0/32 mm or 5/32 mm,
and compact (roller or plate vibrator)

❸ **Levelling layer**
Put on a layer of 2/5 mm chippings (2 - 5 cm)
and level off roughly

❹ **Separation layer**
Lay **ECOGRID®** and compact (plate vibrator)

❺ **Fill in the ECOGRID®**

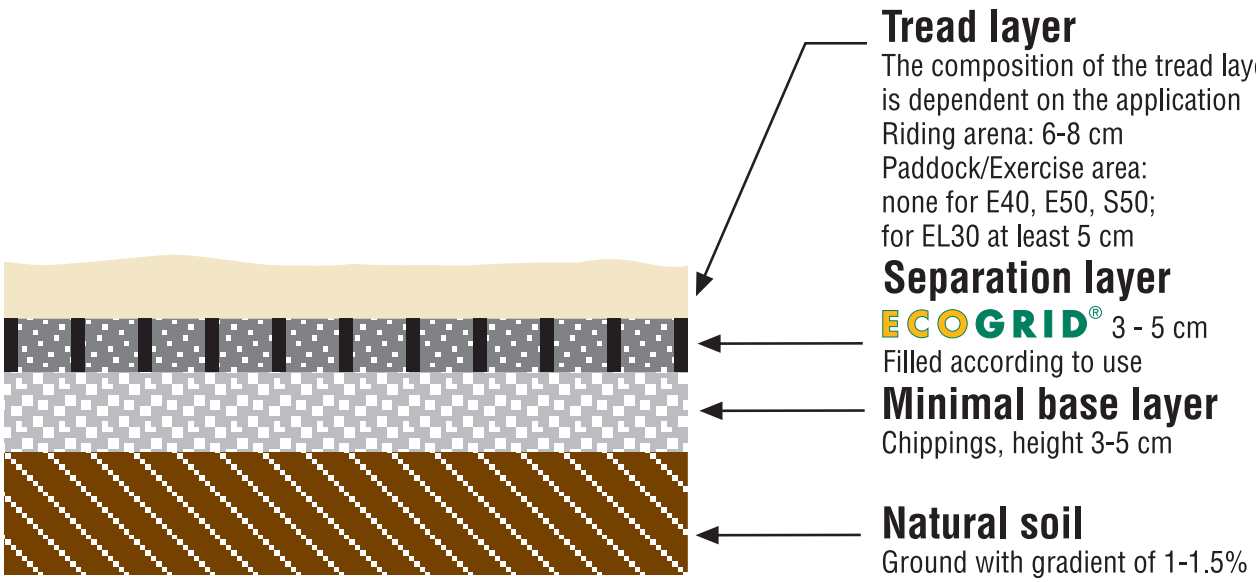
Paddock / round pen / exercise area / walker / riding arena:
Sand, recycled sand, grain size 1-3 mm,
Chippings, recycled chippings/broken stone 2-5 mm,
Lava chippings 2/5, lava 5/8 or 2/8

❻ **Tread layer**
Put on material according to use

Paddock / exercise area:
Possible to have no tread layer for E40, E50, S50;
for EL30 at least 5 cm

Riding arena:
Approx. 6-8 cm
Composition depending on proposed use
(dressage, jumping, Western riding – cutting / reining, driving etc.)
We would be happy to advise you!

2. Installation with minimum base layer



Example: Riding arena

❶ **Natural soil**
Create an approx. 1-1.5% gradient in the ground

❷ **Minimal base layer**
Put on broken stone or gravel, size 0/32 or 5/32 mm, (height approx. 7-8cm) and compact (roller or plate vibrator)

❸ **Levelling layer**
A layer of chippings is only required if you use 5/32 broken stone. With the other grain sizes you can omit the layer of chippings.
Put on a layer of 2/5 chippings (2-5 cm) and level off roughly

❹ **Separation layer**
Lay **ECOGRID®** and compact (plate vibrator)
If the ground is very soft an Eco-non-woven can be used for stabilisation purposes

❺ **Fill in the ECOGRID®**

Paddock / round pen / exercise area / walker / riding arena:
Sand, recycled sand, grain size 1-3 mm,
Chippings, recycled chippings/broken stone 2-5 mm,
Lava chippings 2/5, lava 5/8 or 2/8

❻ **Tread layer**
Put on material according to use

Paddock / Exercise area:
Possible to have no tread layer for E40, E50, S50;
for EL30 at least 5 cm

Riding arena:
Approx. 6-8 cm
The composition of the tread layer is dependent on the application (dressage, jumping, Western riding – cutting / reining, driving etc.)
We would be happy to advise you!

3. Installation without base layer - Quick On Top

- **Quick to construct**
- **Low construction costs**
- **No earthworks**
- **All own work**

What is “Quick on Top”

The patented ECOGRID grid system is laid directly on the natural soil: just remove the top layer (turf or mud) and have a 1-2% gradient in the surface.

Simple with the secure locking system.

Quick On Top can be used just about anywhere.
The patented safety locking system distributes the point loads over a large area.

Over an area of 1,200 m² more than 60,000 lugs hold the individual **ECOGRID®** together securely. This forms a sturdy grid which can adapt to movement in the surface of the subsoil without losing cohesion, whereas rigid or larger grids, which seem very solid – some may employ a tongue and groove system – have great problems with flexibility.

ECOGRID® surfaces are intrinsically so robust that no border or reinforcement is required.

Remember!

When you lay **ECOGRID®** directly on the natural soil, the surface drainage is only as good as thegrid installation. If the ground is water-permeable, the surface water will continue to drain away. If the ground is limey or clayey, through which surface water could not drain away beforehand, surface water will not be able to drain away after installation either. However, when the grids are laid, the surface is higher than the surrounding area and rainwater drains away from the surface.

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Things to bear in mind!

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

If there is an existing border, or one has been constructed, a distance of at least 2 cm must be left between the border and the **ECOGRID®**.

After filling the **ECOGRID®** in, some slight settling may occur.

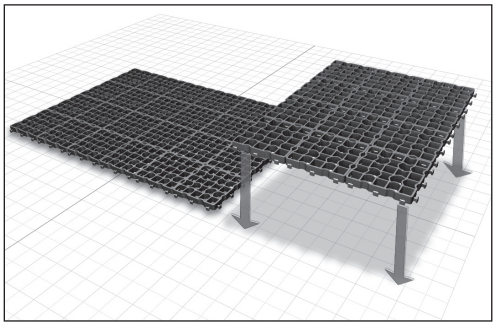
If grassing **ECOGRID®**, the turf must be below the top edge of the grid.

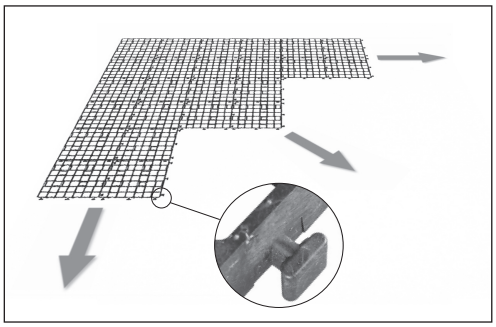
Tip:

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 / **ECOGRID®** tile) to make it easier to cut.

Working with the preconnected grids

ECOGRID® 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.

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
- ➔ Power saw (chainsaw)
- ➔ Flex (cutting disk)
- ➔ Compass saw
- ➔ Pruning shears