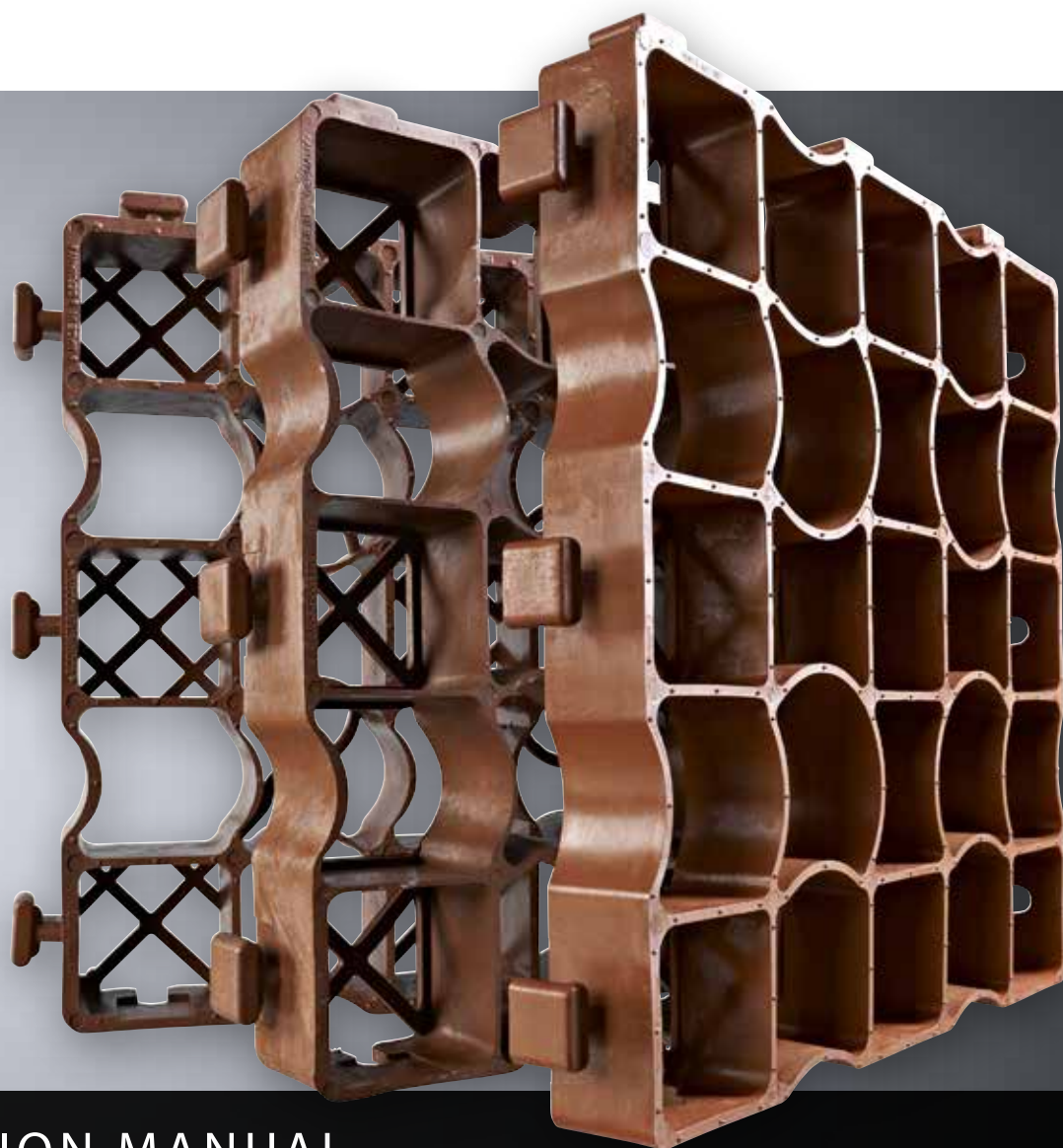


Your Competent Partner
In Equestrian Facility Design

 **ECORASTER**[®]
Equestrian products



INSTALLATION MANUAL

ECORASTER[®] Equine

ECORASTER® EQUINE

Why ECORASTER®?

- ✓ No More Mud!
- ✓ Level and elastic riding surface gives the animals reduced risk of injury to tendons and joints.
- ✓ No more mixing of gravel base and footing
- ✓ Minimized maintenance
- ✓ High elasticity
- ✓ Integrated expansion elements
- ✓ Safety locking elements ensure no tripping
- ✓ Excellent free-draining arenas at reduced costs
- ✓ Extreme high load bearing can support the heaviest vehicles
- ✓ Quick and easy installation
- ✓ Environmentally neutral

Preparation

Before calculating materials needed you should first establish the exact height of the surface. For large areas a laser level is highly recommended.

The amount of fill material for Ecoraster may be calculated as follows:
95% of area multiplied by height of the grid

Variable applications, tailored to your specific needs.

The individual requirements allow and require different installations. Depending on budget and needs the following installation methods are possible:

- ① Installation without base
- ② Installation with minimal base
- ③ Installation with classic base
- ④ Installation in walkers

Please note that the fill material of the ECORASTER® can be compacted approximately 1/4" by tamping.

In case of hard borders or posts an inch or two of space must be allowed between the ECORASTER® and the hard surface. This is to prevent buckling of the surface.

During the hot summer months it is recommended to fill the Ecoraster immediately after installation.

The Ecoraster 30 series must be topped with 3-4 inches of footing/tread layer.

The type of installation needed depends on the sub-base type and the requirements of the application.

ECORASTER® EQUINE

Installation without base



◀ **ECORASTER® Separation layer**

Fill according to needs of application
For paddocks and free stalls normally
Fill to top of ECORASTER®

◀ **Landscape fabric**

— Recommended depending on soil type

◀ **Ground**

— Remove the top layer of ground,
grade and slope to 1.5%

Note.

If Ecoraster is installed directly on the ground, the drainage is only as good as the Ecoraster installation. With permeable soils the drainage remains intact.

Impermeable soils (clay) will remain impermeable. In this case the rain water which cannot drain will eventually make its way to the surface of the grid.

If the base layer is left out then the drainage and stability of the ground cannot always be ensured.

The Ecoraster will however in this case improve the situation, both in point and area loadability.

Ground below

Grade and slope to 1-1.5% depending on requirements

Landscape fabric

Reduces or prevents the Ecoraster from sinking into very soft ground
Works in a similar fashion as a foundation.

Separation layer

ECORASTER® is installed, plate tamping is recommended after filling

Filling the ECORASTER

Paddock / Round Pen / Turnout/ Walker/ Riding arena:

Rough sand, recycled sand, fine gravel, recycled gravel type 8 or similar.

Footing layer

According to needs

ECORASTER® EQUINE

Minimal Base



- ◀ Footing/Tread
- ◀ ECORASTER®
- ◀ Minimal Base
- ◀ Landscape Fabric
- ◀ Ground

Footing/tread layer depending on riding style and application

Arena/ring: 3-4"

Paddock and turnouts: Ecoraster 40 and 50 series may be used without footing/tread after filling

Ecoraster 30 series requires 3-4" of footing

— 1-2" depending on series

— Gravel layer 1-2"

— Recommended depending on soil type

— Graded to 1-1.5% slope

Ground below

Grade and slope to 1-1.5% depending on requirements. Very soft soils may require a landscape fabric for stabilization.

Landscape fabric

Reduces or prevents the Ecoraster from sinking into very soft ground. Works in a similar fashion as a foundation.

Minimal Base

Gravel base type 57 gravel or similar

Separation Layer

ECORASTER® is installed, plate tamping is recommended after filling

Filling the ECORASTER

Paddock / Round Pen / Turnout/ Walker/ Riding arena:

Rough Sand, recycled sand, gravel, recycled gravel,

Footing/Tread

Top according to needs and application

Paddock / Turnout

Without or with minimal footing for 40 and 50 series Ecoraster
30 series requires min. 3" of footing

Arenas and rings: Approx. 3-4"

Footing/tread mix depends on riding style and sand quality
(Dressage, Jumping, Western - Cutting / Reining, Driving etc.)

ECORASTER® EQUINE

Classic base



◀ Footing/Tread

◀ ECORASTER®

◀ Levelling layer

◀ Base layer

◀ Ground below

Footing/tread mix depending on application and style

Arena and ring 3-4"

Paddock / Turnout without footing is possible with Ecoraster 40 and 50 series. Ecoraster 30 series requires 3-4" of footing

— Fill with 1-2" depending on Ecoraster series
Ensures excellent drainage and support

— Fine gravel type 8 or similar

— Gravel 4-12" deep depending on soil type and drainage requirements

— Graded and sloped to 1-1.5%

Ground Below

Grade and slope 1-1.5% depending on requirements

Base

Type 57 or similar compacted gravel
(roll or plate tamper)

Levelling Layer

Install fine gravel layer and screed to level. (Better base layer preparation means less work in levelling and screeding)

Separation Layer

ECORASTER® is installed and filled. Plate tamping after filling is recommended.

Filling the ECORASTER

Paddock / Round Pen / Turnout / Walker/ Riding arena:
Sand, recycled sand, fine gravel

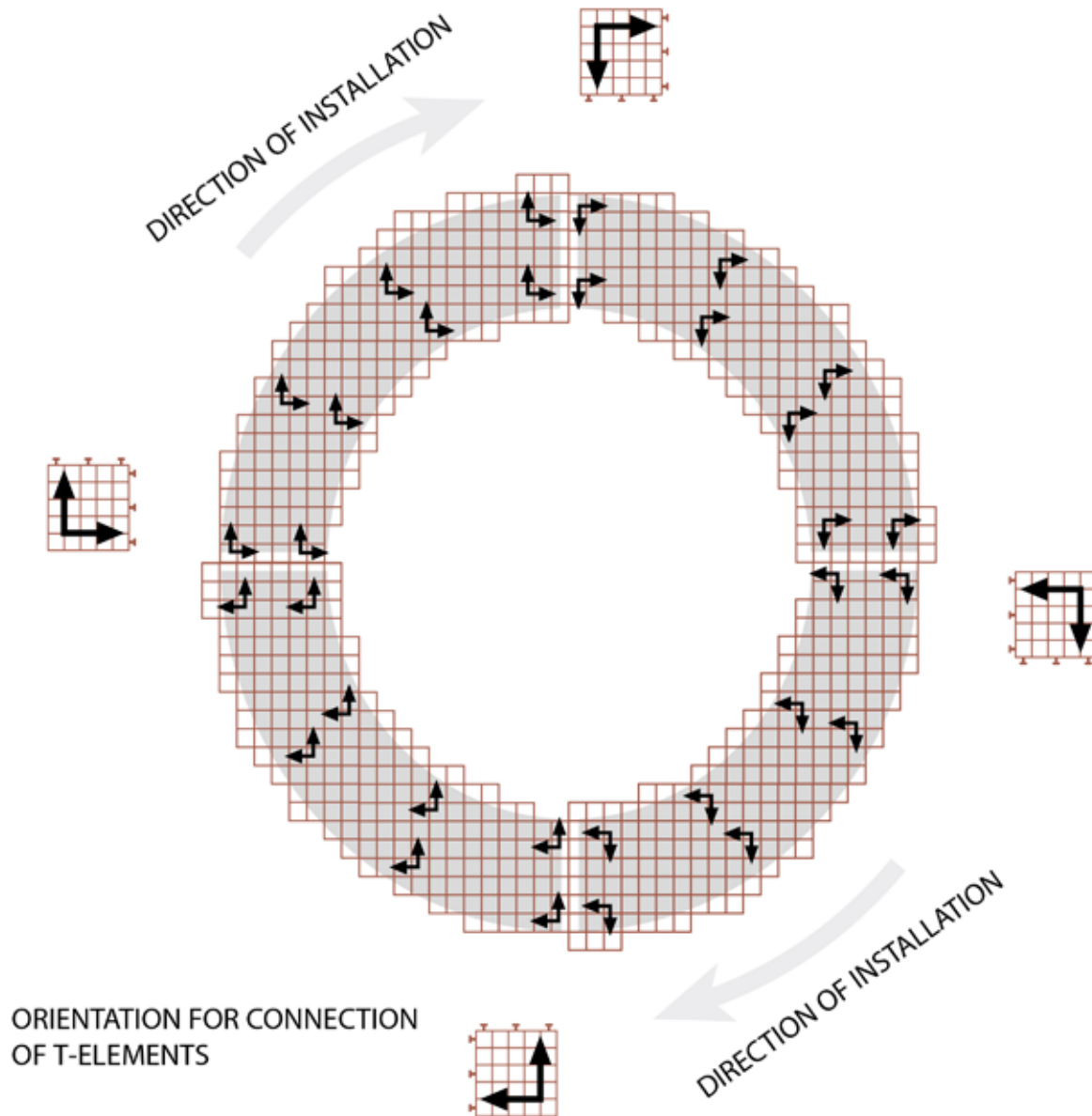
Footing / TCE AD

Specific to application use

Riding arenas and rings: 3-4"

Footing/tread mix depending on sand quality and riding style
(Dressage, jumping, western, cutting / reining, driving, etc.)

Installation of walkers

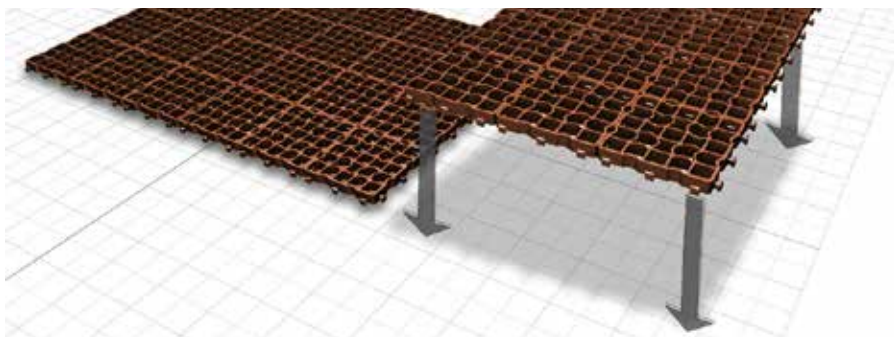


Please pay special attention to the T-elements:

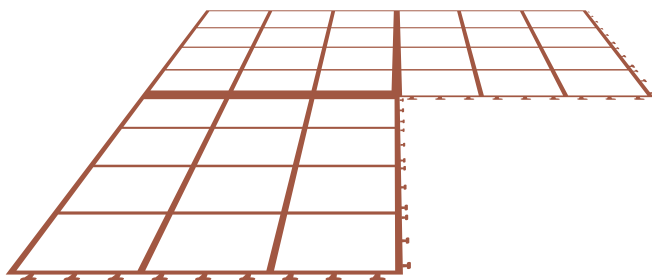
After the first quarter of the circle has been installed the ECORASTER® needs to be rotated clockwise 90° (see diagram) and then attach the second part. Continue in this way until all four quarters have been installed. Always pay attention to the position of the T-elements! The arrows in the diagram show in which directions the T-Elements need to be oriented.

ECORASTER® EQUINE

Working with the pre-assembled grids



ECORASTER® is simple and quick to install without special tools or equipment. The system is pre-assembled in 3 x 4 pieces (approx 42' x 50") can be efficiently installed in large sections.



Installation

Installation begins in one corner with the T-elements facing outward. Each layer of 12 pieces must have the same orientation, with the T elements facing outwards. The next sections are simply put in place and "stepped down on" to connect the adjacent sections.

Disassembly

The individual Ecoraster elements can be disassembled if needed. Place the section to be separated on top of another section or a 2 x 4 and simply step on the grids to unsnap them.

Fitting and cutting

ECORASTER® can be cut quickly and cleanly with any wood-cutting tool or equipment. For small sections where precision is required a small hand saw or branch cutter is recommended. Pre-cutting is not necessary. If possible lay the section to be trimmed over the edge of the curb or border and cut it in place. Recommended tools are hand saws, circular saws, edge cutters, jigsaws, or branch cutters.

Helpful hints and tips

Tamping the Ecoraster may compress and lower the final level approx ¼". Please take this into consideration when planning the final level.

After the Ecoraster is filled there can be minor settling of the level. Grass filled Ecoraster must have the roots below the level of the grid, thus protecting them from damage.

Accessories

Paddock Markers

Markers are available in white on special request. and can simply be snapped into the existing grids.

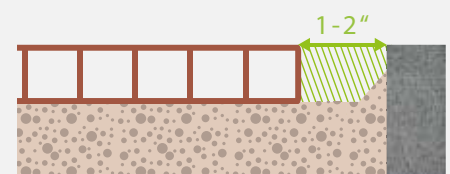
Hinged Angle Adaptor

Universal adaptor for angles up to 90°

Trickrast Adaptors

For temporary riding event installations

Tip



If there are hard borders, posts or other immovable objects in the installation, 1-2" of space must be left between the Ecoraster and the immovable objects.

ECORASTER® EQUINE

Feel free to contact us with questions and inquiries

Notes



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