



Equine Installation Manual

HoofGrid by ECORASTER®

ECORASTER® Equine

Why HoofGrid by ECORASTER®?

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

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

Preparation

Before calculating the 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

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

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Installation without base



Fill according to needs of application.
For paddocks and stalls, normally fill to
the top of Ecoraster

ECORASTER® Separation

Layer Landscape fabric

Ground

Recommended depending on soil type

Remove the top layer of ground, grade
and slope 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 (like 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, 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 load ability

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 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

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Minimal Base



Footing / tread layer depending on riding style and application
Arena ring: 3-4 inches
Paddocks and turnouts: H40 & H50 models may be used without footing / tread after filling

- ◀ Footing ————— 1-2" depending on model
- ◀ Ecoraster® ————— Gravel layer 1-2"
- ◀ Minimal Base ————— Recommended depending on soil type
- ◀ Landscape Fabric ————— Graded to 1-1.5% slope
- ◀ Ground

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 H40 and H50 series

Arenas and rings: Approx. 3-4"

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

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Classic base



Footing / tread mix depending on application and style

Arena and ring: 3-4"

Paddock / turnout without footing is possible with H40 / H50 models

◀ Footing

◀ Ecoraster®

◀ Levelling layer

◀ Base layer

◀ Ground below

Fill with 1-2" depending on the Ecoraster model. 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)

Leveling Layer

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

Separation Layer

ECORASTER® is installed and filled. Plate tamping is recommended

Filling the ECORASTER

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

Sand, recycled sand, fine gravel

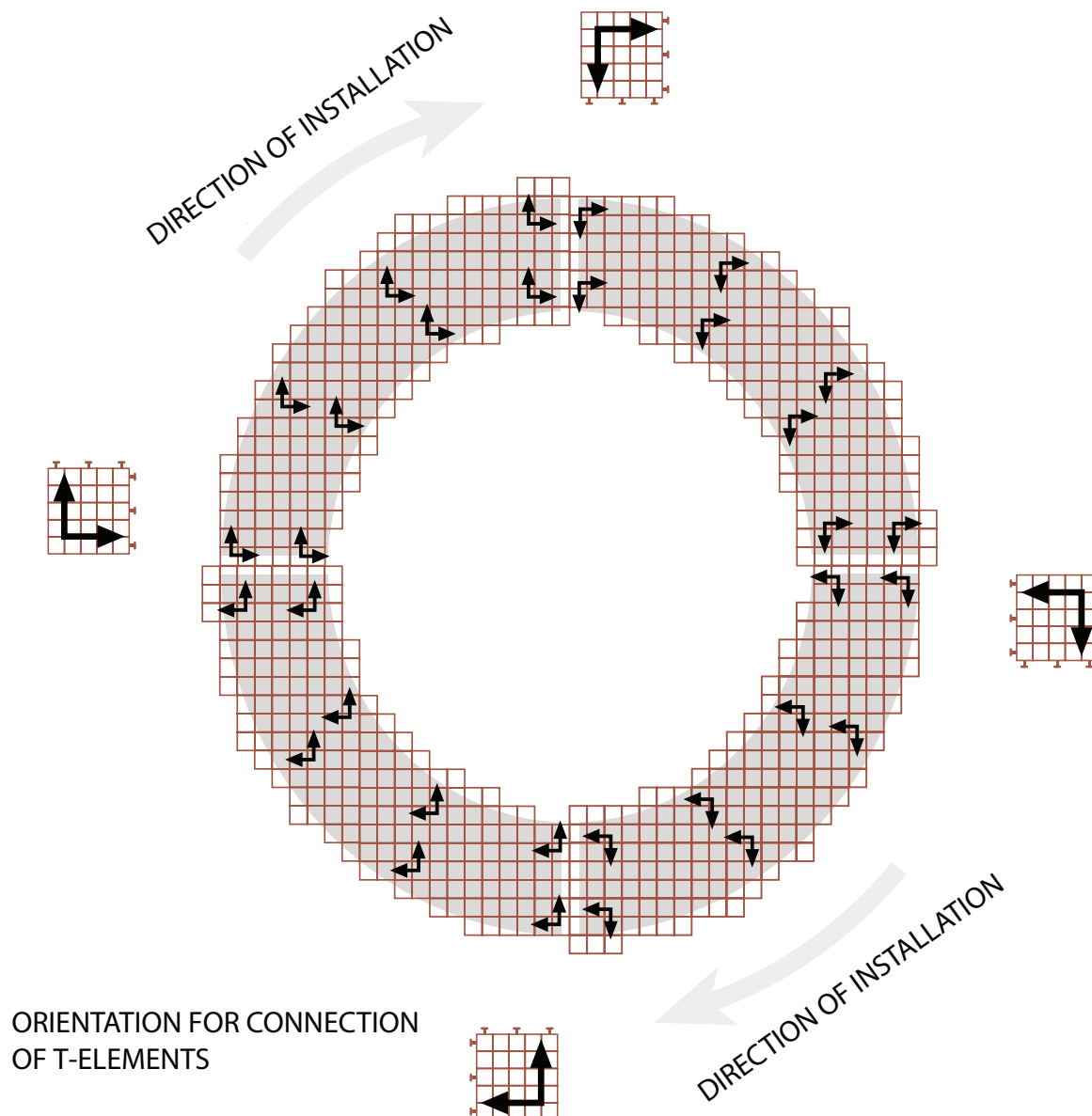
Footing / TCE AD

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

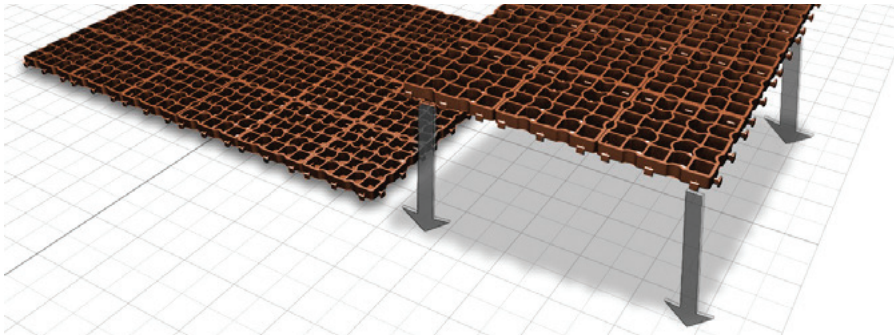


Please pay special attention to the T-elements:

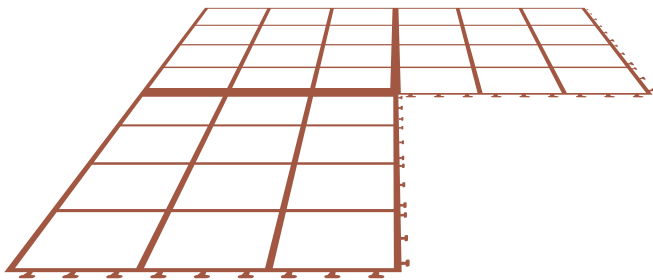
After the first quarter of the circle has been installed, the Ecoraster needs to be rotated clockwise 90 degrees (see diagram), and then attach the second part. Continue this way until all four quarters have been installed. Always pay attention to the position of the T-elements; The arrows in the diagram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

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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 another section or a 2 x 4 and firmly 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 the Ecoraster may compress and lower the final level approx 1/4". 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

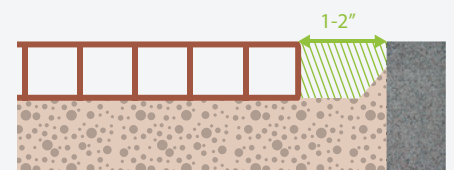
Markers are available and can be snapped into the existing grids

Hinged Angle Adaptor

Universal adaptor for angles up to 90 degrees

Trickrast Adaptors

For temporary riding event insallations



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

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Feel free to contact us with questions and inquiries



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Gravel Equivalents

Size		Stone						Pea Stone			Screenings	
US	MM	#1	#2	#4	#5	#57	#67	#7	#8	#89	#9	#10
4"	101.6											
3 1/2"	88.9	X										
3"	76.2	X										
2 1/2"	63.5	X	X									
2"	50.8	X	X									
1 1/2"	38.1		X	X								
1"	25.4			X	X	X						
3/4"	19.1				X	X	X					
1/2"	12.7					X	X	X				
3/8"	9.5					X	X	X	X	X		
3/16"	4.8								X	X	X	X
3/32"	2.4									X	X	X
1/16" - 0	0-1.6											X

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