



EQUINOX STABILIZATION GRIDS

Installation tips



PADDOCKS ● PATHS ● ACTIVE STABLES ● PADDOCKS PARADISE ● WORK AREAS

EQUINOX STABILIZATION GRIDS

Installation tips

PREAMBLE

HOW TO CLEAN MY EQUINOX GRIDS?

PAGE 3

INSTALLATION TIPS

1. INSTALLATION ON STABILIZED GROUND

PAGE 5

2. INSTALLATION ON NATURAL GROUND

PAGE 8

3. THE HYBRID INSTALLATION: BETWEEN INSTALLATION ON STABILIZED GROUND AND INSTALLATION ON NATURAL GROUND

PAGE 14

4. USE ON A STATIC AREA

PAGE 15

5. USE ON AN EVOLUTION AREA

PAGE 16

6. AS A SUBLAYER FOR A WORK AREA

PAGE 17



HOW TO CLEAN MY EQUINOX GRIDS?

Depending on the area where the grids are laid, we have multiple options for cleaning :

Clean by hand

To pick dungs up, the tools below are appropriate. You can also use a blower or higher pressure cleaner.



Mechanical cleaning

If you rather use a mechanical tool, the best option is a sweeping tool hitched to the front of a vehicle.



INSTALLATION TIPS

Our goal: to make life easier for you and your horses!

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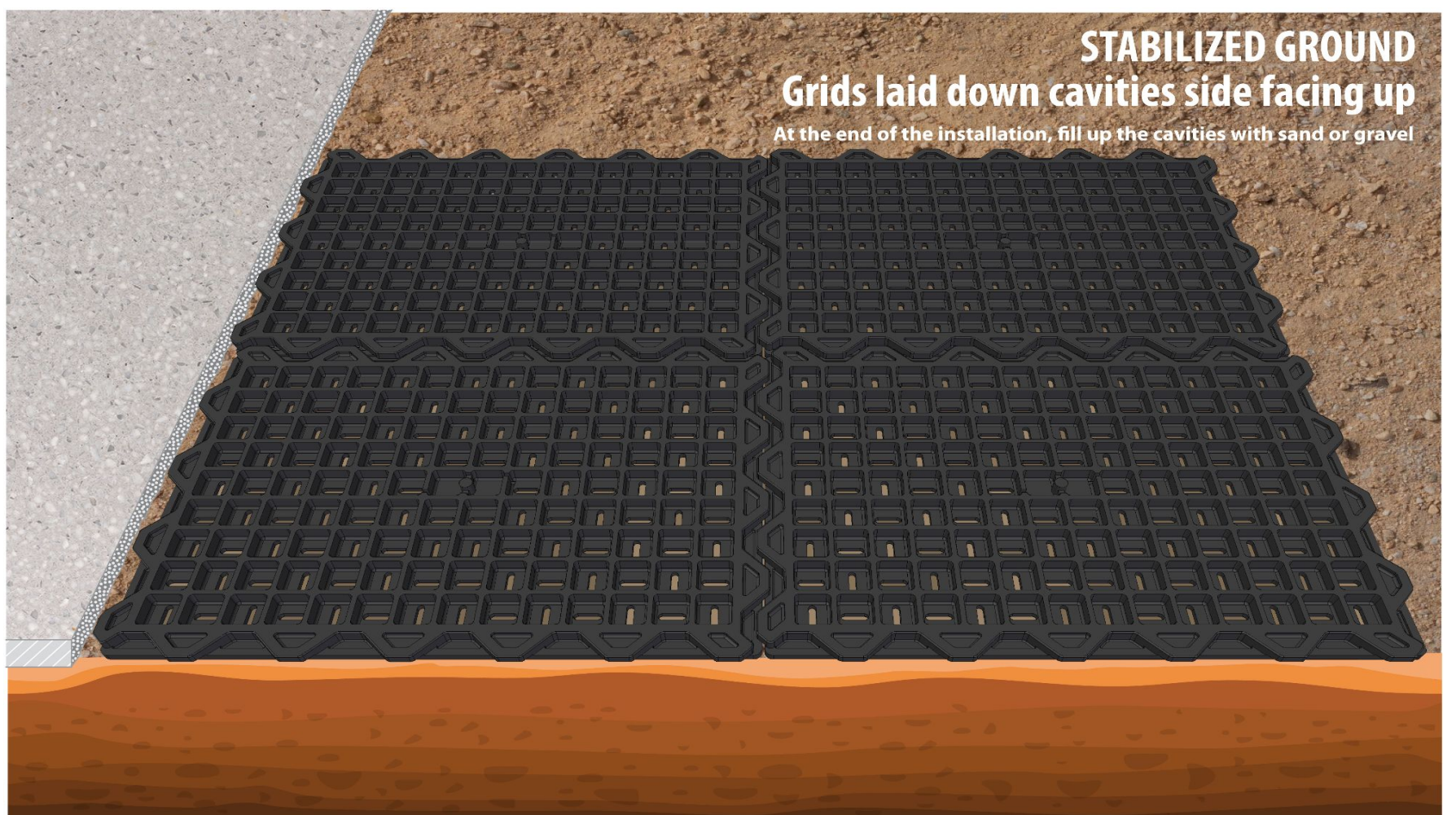
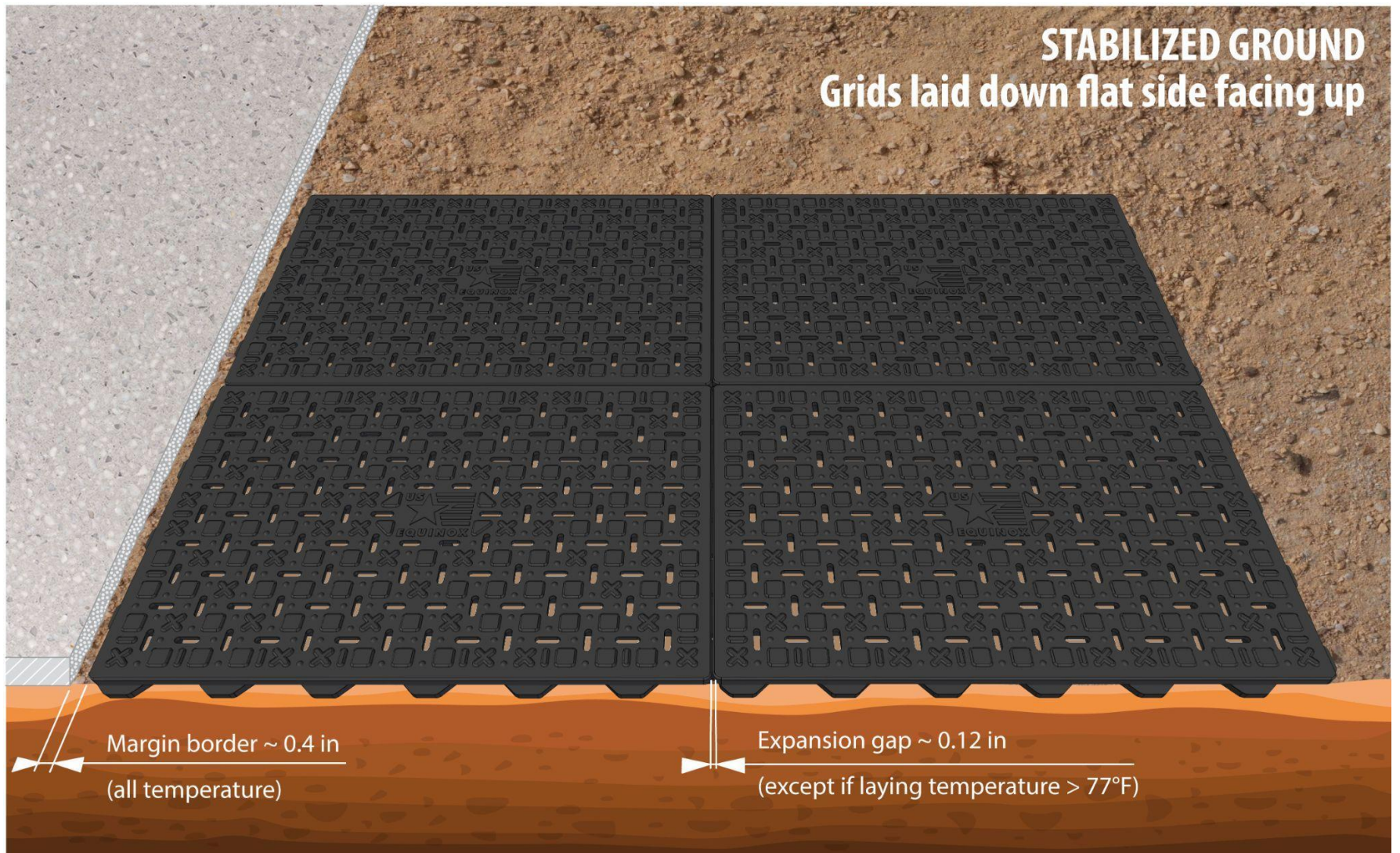
Our EQUINOX GRIDS are made just for that! Here are a few installation tips to help you get the best out of them for years to come.

While installation is easy, we still recommend following the guidelines in this document. Doing so will ensure a strong, long-lasting installation which keeps both you and your animals comfortable. After all, happy horses mean happy owners! :)



1. INSTALLATION ON A STABILIZED GROUND

Ensure a tight expansion joint, regardless of the direction of EQUINOX GRIDS



1. INSTALLATION ON A STABILIZED GROUND

A stabilized surface is a flat and load-bearing surface, as shown on the photos below. It is accessible to construction equipment (minimum load-bearing capacity of 25 Mpa or 3,625 psi).

If you install your grids on this type of ground, you can lay them down directly, ensuring that they are in full contact with the ground at all points.



When installing your grids, avoid crossing the grids beyond 16 Ft.

- A minimum of 1/8" between the grids to allow expansion (unless you are laying them at temperatures above 77°F).
- A minimum of 0.4" along a wall, curb, or any other fixed structure.



Once the grids are laid, your horses can organize a little equestrian parade to celebrate their new comfort! 🐾✨



2. INSTALLATION ON NATURAL GROUND

The installation of EQUINOX GRIDS on natural terrain is certainly possible, and our field experience confirms that every day. However, we want to give you a heads-up: not all soils and regions are suited for this type of installation. Maintaining your stabilized area may be more demanding, and the platform may deform more easily.



Do not install your grids when the temperature is below 40°F, as proper anchoring to the ground won't be possible.

- The installation of EQUINOX GRIDS on natural ground should only be considered for horse traffic and light vehicles. If you plan to perform mechanical maintenance on the grids, such as scraping with a vehicle (ie: skid loader), this type of installation is not compatible, as the grids will follow the natural contour of the terrain.
- In any case, it is paramount to ensure that the grids are laid down on a surface which is as much flat and level as possible. This way, EQUINOX GRIDS are in full contact with the ground.
- By choosing to install on natural ground, you are also opting for a more ecological solution, insignificantly altering the water flow of your and and preserving the natural exchanges between the soil and the atmosphere. EQUINOX GRIDS help fight against soil erosion and compaction, maintaining the natural permeability of trampled soils.



MEMO
INSTALLATION ON A NATURAL GROUND

In any case, prior to installing your stabilization grids, make sure your surface is as much flat and level as possible.

- | | |
|--|--|
| ➕ More eco-friendly / sustainable solution | ➖ Incompatible with mechanical maintenance |
| ➕ Less ground preparation | ➖ Heavy vehicle traffic not recommended |
| ➕ More economical solution. | |

2. INSTALLATION ON NATURAL GROUND

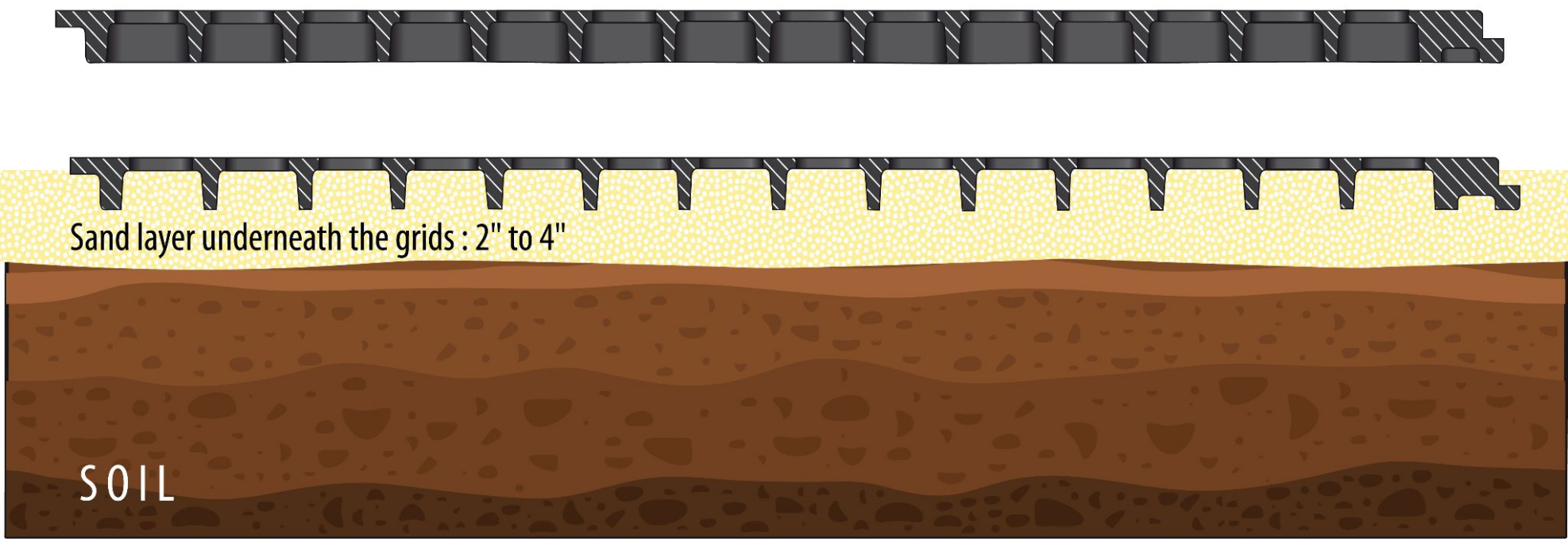
Thanks to our many on-site adventures, we've learned exactly what it takes for a successful and long-lasting installation on natural terrain. Let us share our secrets with you!

1. A PERMEABLE (DRAINING) SOIL

You can assess the drainage capacity of your soil through simple and practical tests.

By nature, sandy or well-balanced soils are often draining, as opposed to clay soils. An impermeable soil will absorb water until it reaches its fluidity limits, making it unable to support the grids as it loses all load-bearing capacity. The risk of platform deformation then becomes possible, and in the most extreme cases, it could damage the grids.

Permeable (draining) soil - Grids laid down flat side facing up

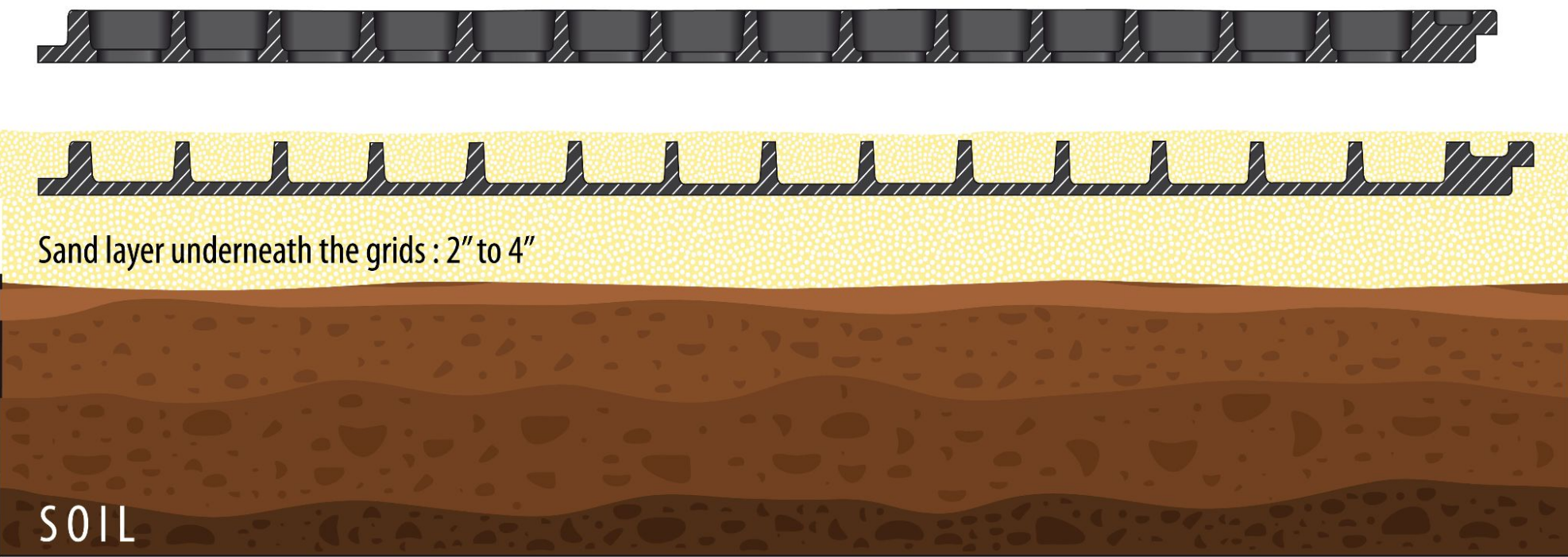


2. INSTALLATION ON NATURAL GROUND

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1. A PERMEABLE (DRAINING) SOIL

Permeable (draining) soil - Grid laid upside down, cavities side facing up




MEMO
PERMEABLE SOIL

✔ Sandy or well-balanced texture

✘ Clay soil

✘ Waterlogging soil

2. INSTALLATION ON NATURAL GROUND

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2. A VIRGIN NATURAL GROUND

As opposed to a trampled, degraded ground without vegetation cover, a virgin natural ground is much more likely to provide an adequate result.

Overgrazed terrains are less permeable and tend to react unevenly to horse traffic, especially in water retention zones.

For this reason, we strongly advise against installing your grids directly on mud, as you risk poor load-bearing capacity and excessive material rising through the grids. This is also why we recommend, when possible, relocating your feeding or shelter areas to a virgin zone before installing your grids.



MEMO

VIRGIN NATURAL GROUND

- | | |
|---|--|
| ✓ Installation possible on preserved / virgin ground | ✗ Overgrazed land |
| ✓ Relocate a shelter or a hay rack if the ground is too trampled. | ✗ Installation on muddy ground not recommended |

2. INSTALLATION ON NATURAL GROUND

Thanks to our many on-site adventures, we've learned exactly what it takes for a successful and long-lasting installation on natural terrain. Let us share our secrets with you!

3. ON VEGETATED GROUND

Experience has shown us that installation on grassland gives excellent results as long as the soil is permeable.

The vegetation cover helps in several ways

- It provides support to your soil through its root network.
- It promotes drainage thanks to the airing it procures and limits erosion.

Laying down on vegetated ground can be challenging due to possible issues with surface flatness. This is not a deal-breaker though, as long as the grids are in full contact with the ground and remain flat.

We can also advise you to apply a sand leveling layer to limit soil deformations before installing EQUINOX GRIDS: the thickness should be dictated by the surface flatness, generally between 1" and 4".



MEMO

VEGETATED GROUND

EQUINOX GRIDS must be in full contact with the ground at every point, remain flat and must not be subjected to bending effect

- +

Excellent results on a draining soil

+

Provides load-bearing capacity to the ground

+

Promotes drainage
- May cause leveling issues that can be resolved with a sand leveling layer.

2. INSTALLATION ON NATURAL GROUND

Thanks to our many on-site adventures, we've learned exactly what it takes for a successful and long-lasting installation on natural terrain. Let us share our secrets with you!

4. SLOPE

A slight slope on your stabilization area is like a natural benefit.

It lets the water flow away, preventing any loss of soil load-bearing capacity. For a better grip, our advice is to use the grips upside down and fill up the cavities with sand.

5. THE GROUND LEVEL

In the same way as a slope helps with water runoff, it is more effective to create your stabilization areas on higher elevation ground for the same reasons.

If your platform is slightly elevated compared to the natural terrain, it is a good way to allow for the drainage of excess water. This elevation can either be natural, due to the topography of your location, or you can create it by adding materials. This is the hybrid method we are proposing hereafter.



MEMO SLOPE / GROUND LEVEL

A slight slope / elevated stabilization ground promotes water runoff



Prevents stagnant water



Can be natural or created by adding materials



A slope that is too steep will not allow the grids to hold properly

3. THE HYBRID INSTALLATION: BETWEEN INSTALLATION ON STABILIZED GROUND AND INSTALLATION ON NATURAL GROUND

In the same way as a slope helps with water runoff, it is more effective to create your stabilization areas on higher elevation for the same reasons. If your platform is slightly elevated compared to the natural ground, it is a good way to allow for the drainage of excess water.

This elevation can either be natural, due to the topography of your location, or you can create it by adding materials. This is the hybrid method we are proposing hereafter.

Installing the grids at a higher elevation offers multiple benefits :

- It allows you to preserve your ecosystem, the natural soil, and its permeability by avoiding excavation. You are also spared from finding a solution for disposing of or reusing the excavated soil.
- By choosing the right material and thickness, you can specifically address the weaknesses of your natural substrate. For example, a 4"-6" layer of gravel type 0/1 ¼" can compensate for a lack of load-bearing capacity. A 2" layer of gravel type 0/(3/8)" provides a good leveling while maintaining stability and permeability.
- Installing the grids at higher elevation foster fast water drainage



MEMO
HYBRID INSTALLATION

Ensure a smooth transition with the ground level at the platform edges

- ➕ *Preserves the ecosystem, the natural soil, and its permeability*
- ➕ *Corrects weaknesses of natural substrate*
- ➕ *Requires less soil preparation work*
- ➕ *Promotes water drainage*

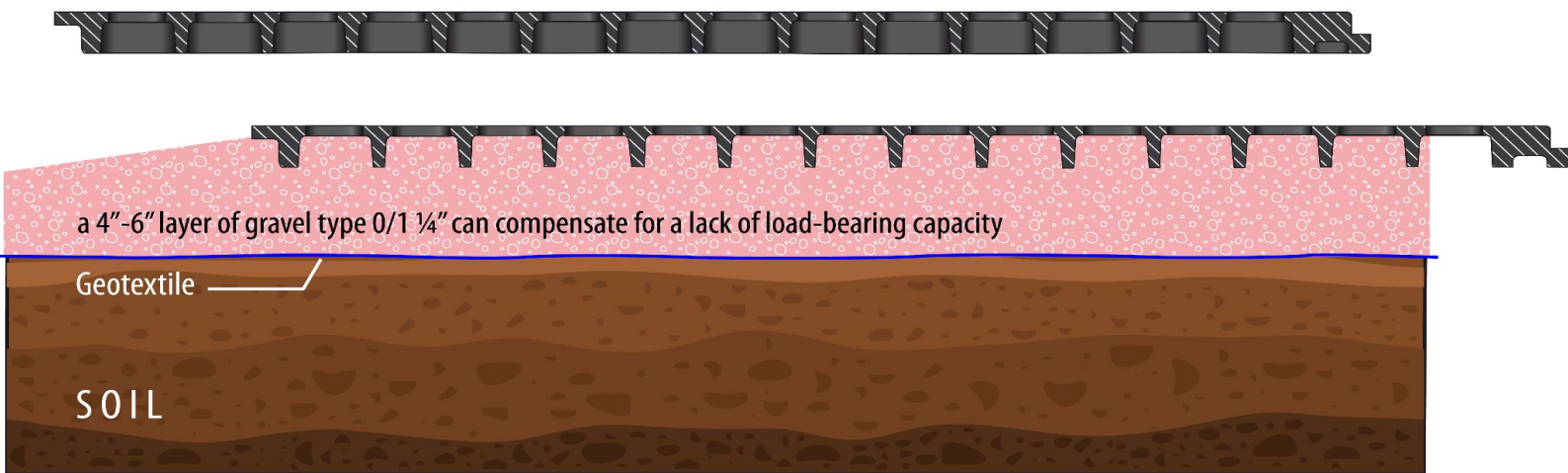
3. THE HYBRID INSTALLATION: BETWEEN INSTALLATION ON STABILIZED GROUND AND INSTALLATION ON NATURAL GROUND

Lay your grids down either way according to your preference – with or without sand filling. What about the geotextile in this case? For clay soils, it might be beneficial to install one before adding the filling material to limit clay upwelling.

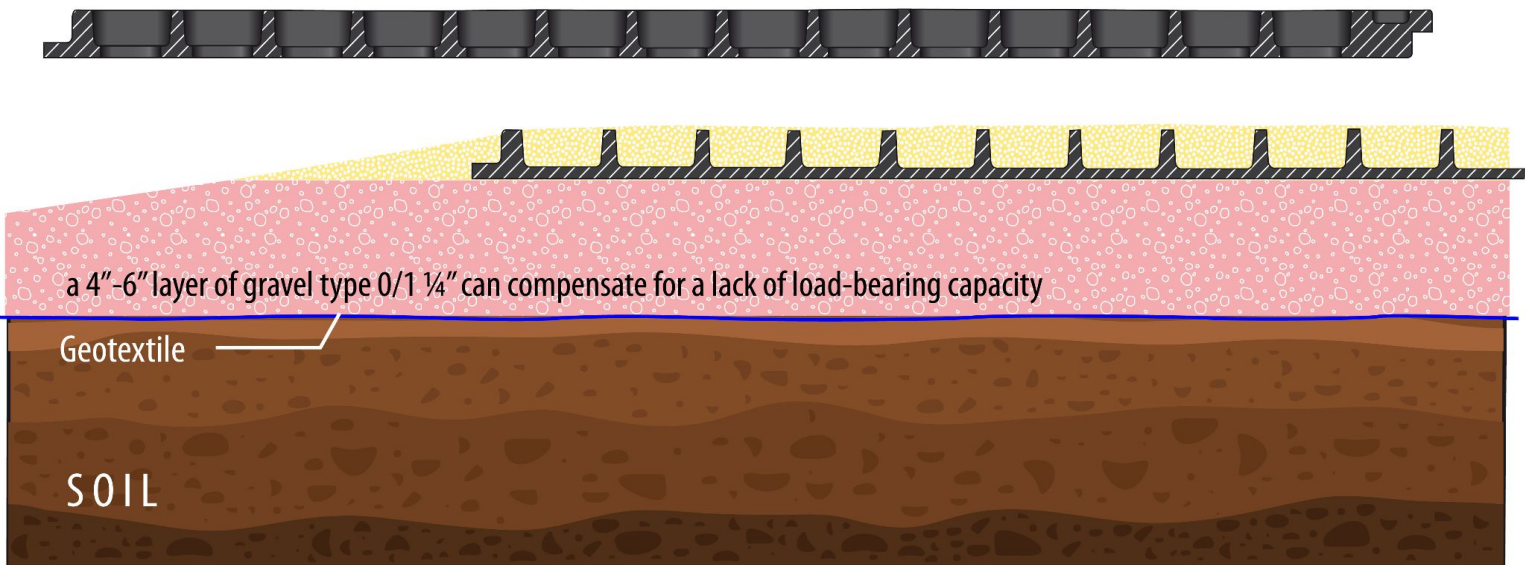


If you opt for geotextile, make sure you fill the cells with sand or gravel to ensure your platform is sturdy enough to avoid any gaps under the slabs.

NATURAL GROUND (LOW DRAINING CAPACITY)
Grids laid down flat side facing up



NATURAL GROUND (LOW DRAINING CAPACITY)
Grids laid down, cavities side facing up



In case of usage on a higher elevation, especially in the early stages after installation, you must make sure there is a smooth transition between the stabilized area and the natural ground. It will prevent materials and grids on the edge from moving. Several solutions exist: for example, a retaining board, a "boat" shape or "curb ramp" at the edge of the platform, or a reinforcement. Once the platform is well set, movements are significantly reduced.

4. USAGE ON A STATIC AREA



If you plan to utilize your grids in an area where horses – which we know well ;) – are not expected to walk and run fast or cause significant impacts, EQUINOX GRIDS can be installed flat side facing up, after preparing the ground as mentioned earlier.



5. USE ON AN EVOLUTION AREA



If your grids are intended to be utilized in an area where horses will trot, gallop, play, kick – in other words, live their lives! – We recommend installing EQUINOX GRIDS upside down (cavities side facing up), and then filling them up with sand or gravel. You will get extra grips thus more comfort for your beloved animals.





6. USAGE AS A SUBLAYER FOR A WORK AREA

Our stabilization grids are designed to provide excellent trafficability. In the vast majority of situations, you can utilize EQUINOX GRIDS to create your work areas while significantly reducing the need for groundwork and foundation layers.

Two main scenarios can be easily identified.

Scenario 1 : Your soil is sufficiently load-bearing and draining, so no foundation is needed. In this case, we outline the necessary steps for installing our grids for equestrian usage.

Scenario 2 : Your soil is not sufficiently load-bearing and/or not adequately draining. It is advisable to consult a specialist in equestrian ground design or a construction company to obtain a load-bearing and permeable surface prior to installation.



For any advice regarding the implementation of your work area construction, we encourage you to consult a subject matter expert company.



6. USAGE AS A SUBLAYER FOR A WORK AREA

Scenario 1

1

Your soil is sufficiently load-bearing and draining

Your soil is sufficiently load-bearing to allow for the movement of construction machinery (trafficability greater than 25 MPa or 3,625 psi) and adequately permeable to drain rainwater within a timeframe suitable for your practice.

Step 1

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Lay a geotextile down on top of the leveled ground. Ideally, follow the construction standards for sports fields, particularly the leveling tolerance of 0.4" under a 10 Ft straightedge. The geotextile improves the load-bearing capacity of your surface and protects against the infiltration of fine particles into the working layer.

Step 2

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Lay your stabilization grids down, ensuring proper expansion gaps, with the cavities side facing up. They are immediately trafficable by construction machinery as long as the supporting ground is trafficable and sufficiently dry. If the ground deforms under the weight of the vehicles, it indicates that the ground is too wet or too soft thus inappropriate for such vehicles traffic.

Step 3

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We recommend filling EQUINOX GRIDS with a fine draining aggregate, such as washed crushed stone 0.08"/0.16" or 0.08"/0.25". This will improve the drainage of your work area as opposed to filling directly with equestrian soil, which has lower permeability.

Étape 4

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Installation of your equestrian footing (4" to 6") . In accordance with the specified system, your equestrian surface must allow for the vertical drainage of water at all times.c



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