

Heavy Duty Grass Stabilization System





What is BERA® Grass Fix Eco+ HD?

BERA® Grass Fix Eco⁺ HD is an ultra-strong method to reinforce your green areas. It is an unique product to be implemented in the stabilization of grassed area's such as road embankments, overflow parkings and emergency roads. Most grass pavers made of concrete, tend to heat up causing the grass to dry out and scorch, creating discomfort for bare foot pedestrians. Due to the low thermal conductive properties of HDPE, BERA® Grass Fix Eco⁺ HD solves this problem. Furthermore the sheets are designed with water collection at the bottom for better moisture control of the soil. Integrated interlocking is provided.

Applications in landscaping:

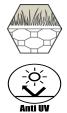
- Landscaping greened urban areas
- Erosion control for slopes
- Parking and grass driveways
- Road, river and pond embankments
- Emergency and service access routes
- Railway and tram tracks
- Camping and resorts

Applications in agriculture:

- Farm access roads
- Cattle and feeding areas
- Soil reinforcement and erosion control

Features and benefits of BERA® Grass Fix Eco⁺ HD:

- Environmentally friendly solution, fully recyclable strong stabilization product
- Strength empty up to 270 T/m² for all heavy duty purposes, filled depending on material use, up to 800 T/m²
- Versatile honeycomb modules with integrated water channels, sheet height 6 cm
- Secure interlocks keeping sheets perfectly together, providing a stable base for all trafficked area's
- Fully porous, yet retaining additional humidity for the growth of the grass
- Easily cut around obstacles such as trees, shrubs or fences
- European Union manufacturing following directives of REACH, ISO9001 and 14001



① for Heavy Duty grassed parkings & driveways

UV stable

Environmental and Engineering Excellence

BERA® Grass Fix Eco⁺ HD is manufactured in the Czech Republic under stringent Quality and Environmental Control. The full process includes processing post-industrial plastic waste into a fully recyclable ultra-strong stabilization product. The well developed infrastructure to minimize our delivery carbon footprint underlines our corporate vision in providing environmentally sustainable solutions.

BERA[®] Grass Fix Eco⁺ HD has 60 mm deep, open cell to ensure the highest vertical strength whilst allowing the grass to grow. Integrated water channels and secure interlocking systems provides stability and lateral strength for slopes and heavy duty use with grass and soil.

Professional construction preparation methods and well drained foundations will ensure continued high performance of BERA® Grass Fix Eco+ HD for many years.

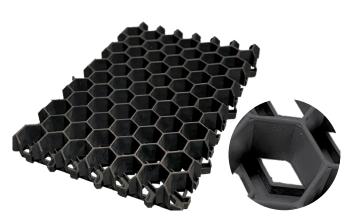
TECHNICAL SPECIFICATION*

| GENERAL | | |
|--------------------------------------|---|---|
| Material | : | 100% recycled HDPE |
| Manufacturing technique | : | High precision injection moulding |
| Manufacturing standards | : | REACH, ISO9001, IATF 16949 |
| Application standards | : | DIN 14090 |
| UV and frost resistance | : | Included |
| Colour | : | black or green |
| Cell structure | : | Honeycomb, diameter 5.5cm |
| Water accumulation | : | Included |
| Interlocking | : | Included |
| PHYSICAL DATA | | |
| Standard sheet size | : | 56.5 x 38 x 6.0 cm |
| Tolerance dimensions | : | +/- 2% |
| Surface per sheet | : | 0.215 m ² |
| Quantity per m ² | : | 4.65 |
| Weight per sheet, approx. | : | 1.75 kg |
| Weight per m ² , approx. | : | 8.1 kg |
| Strength, empty EN 124-1:2017 | : | >270 T/m ² |
| Strength, filled depending upon fill | : | up to 800 T/m ² |
| PACKING | | |
| Per pallet | | $68 \text{ pieces} = 14.62 \text{ m}^2$ |
| Pallet dimensions | | 120 x 80 x 117 cm |
| Weight | | 134 kg |
| | | |

*All data are subject to change without further notice

LAYING INSTRUCTIONS





1. Foundation

The foundation method will depend on the local conditions of the soil and the expected load during usage. The foundation needs to be determined by specialists in order to reach the desired results. Below are the typical guidelines:

A foundation of 20 - 40 cm compacted crushed stones and gravel (depending on the load) will form a permeable subbase. For vehicle use it is recommended that a non-woven geo-textile of 300 - 500 g/m² is laid over the compacted crushed stones and gravel in order to separate it from base layer (see below). Instability of the surface may result if this is not done.

2. Base preparation for BERA® Grass Fix Eco+ HD

A levelled base of mixed sand and crushed stone with a thickness of 5-7 cm should be placed on top of the geo-textile sheet. Levelling recommended to be done at temperatures not below 3°C. Edging is required to prevent sheets from shifting during usage. BERA® Edging Systems are available upon request and come complete with stakes for quick installation. To allow the sheets to expand during high ambient temperatures, it is recommended that an expansion space of approx. 5 cm be left between edges and obstacles, depending on the total surface and width.

3. BERA® Grass Fix Eco+ HD sheets

After completing the foundation, base and edging, the sheets can be laid quickly. Stretcher bond pattern for additional stability. Pallets with 68 sheets (14.62 m²) can be positioned close to the working area and no tools are required for the laying. For slopes or banks additional anchoring may be required. Use compacting machines if and when required. For adjustment of the sheets at corners or obstacles a MACHINE circular saw can be used.

4. Grass

Drought resistant grasses, appropriate to the area and climatic conditions should be used. After filling the honeycomb sheets with a mixture of sand, peat and soil (approx 40/30/30%) watering of the BERA® Grass Fix Eco⁺ HD sheets is recommended prior to sowing. Use a suitable fertilizer and water frequent to ensure fast and consistent grass growth. After some time the soil mixture used to fill the sheets will compact by about 1 cm leaving sufficient space for the grass to grow undamaged. Normal lawn maintenance including watering, fertilizing and cutting should be done at regular intervals.





Babelia and the trademark of BERA B.V. of The Netherlands, a company which develops stabilization systems, eco systems and prestigious outdoor living concepts.

With the company's historical roots & wealth of know-how in landscaping and architectural fields, they create innovative and environmentally sustainable solutions, supplied throughout Europe, the Middle-East, South Africa and S-E Asia regions.

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