



# GeoGrid<sup>®</sup> Cellular Paving System

Recommended Installation, Handling & Storage Guide



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### Installation

GeoGrid<sup>®</sup> is a new innovative ground reinforcement and stabilisation product for use in the permanent reinforcing of soft ground for the movement or parking of vehicles and for stabilizing soft earth banks. GeoGrid<sup>®</sup> is a modular, open design grid tile, manufactured in recycled low-density polyethylene. It is tough, flexible, easy to install and allows natural drainage.

The method of installation is determined by existing ground conditions as well as the end use and weight loading requirements. The methods described below provide general guidance only and do not form part of any contract with the user. We advise that the method of installation should be undertaken in accordance with your designers specification and drawings and the relevant Health and Safety requirements.

Prior to use the GeoGrid<sup>®</sup> Pavers should be stored to prevent excessive mud, wet concrete or other damaging materials from coming into contact with and affixing to the GeoGrid<sup>®</sup>.

The grid structure can be filled with different materials such as soils (to support plant or grass establishment) or gravel / aggregates. We recommend that detailed design, specification and installation advice is sought from appropriately qualified civil and structural engineers.

## **Key Product Details**

Material:	<ul><li> 100% Recycled High Density Polyethylene (HDPE)</li><li>Withstands frost and UV radiation</li></ul>
Natural stability:	Temperature -30 to +1800C
Axle weight load:	Standard - 25 tonnes* / Premium - 35 tonnes*
Max load per m <sup>2</sup> :	Standard - 400 tonnes* / Premium - 500 tonnes*
Grid dimensions:	495 mm x 495 mm x 40 mm
Wall thickness:	Standard - 3 mm / Premium - 5 mm
Weight Per Grid:	Standard - 1.1 kg / Premium - 1.6 kg
Weight Per 1m <sup>2</sup>	Standard - 4.4 kg / Premium - 6.4 kg
Packaging:	<ul> <li>Pre-connected 1m<sup>2</sup> sections - 4 grids</li> </ul>
	• 60 layers of 4 grids per pallet
	• 240 grids per pallet
	<ul> <li>Pallet size and area required per pallet 105 cm x 120 cm / 220 cm (60 m<sup>2</sup>)</li> </ul>
	• 26 pallets per standard articulated lorry
Country of Manufacture:	Made in Europe

\* Tested at the National Physical laboratory,UK. Under BSEN124: 1994 Dimensions may be subject to nominal variation

# Installing GeoGrid®



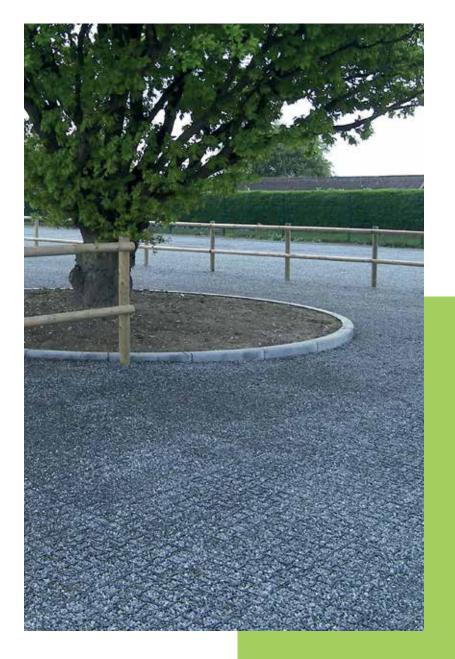
## Installing GeoGrid<sup>®</sup> with grass infill

- Existing turf and soil should be removed to a depth of ≥ 75mm over the area where GeoGrid<sup>®</sup> is required (with allowance made for edge retaining boards or kerbs as required). This formation layer should be levelled and lightly consolidated.
- 2. Edge retaining boards or kerbs should then be installed as required.
- 3. Place 4-14mm diameter gravel or aggregate (BS EN 13242) to a depth of 35mm spreading evenly over the prepared area.
- 4. Place the GeoGrid<sup>®</sup> on top of the gravel / aggregate and connect using the interlocking system and progressing over the area in both directions, As an option to ensure a greater degree of stability of the GeoGrid<sup>®</sup>, pins or hoops can be used to pin the GeoGrid<sup>®</sup> into the formation layer. GeoGrid<sup>®</sup> can be cut to shape using a hand or power saw to follow curves or fit around obstacles as required.
- 5. GeoGrid® can then be firmed in place using a light vibrating compaction plate.
- 6. The GeoGrid<sup>®</sup> cells should then be filled with an appropriate propriety soil mix material to about 5mm below the top of the cells. The soil mix material should be suitable to encourage and maintain healthy grass growth. Again light compaction is recommended to settle the soil mix.
- 7. Undertake a seeding, fertilising and watering programme to establish the grass sward, with top dressing as necessary to cover the seed and encourage germination. The GeoGrid<sup>®</sup> cells should not be overfilled.
- 8. Although the surface may be trafficked straight away, it is advisable to first allow the grass to become established before use.
- It should be noted that instead of seeding, a thin-cut turf layer can be rolled into the GeoGrid<sup>®</sup> as an alternative method of grass establishment.

## Installing GeoGrid<sup>®</sup> with gravel infill

- Existing turf and soil should be removed to a depth of ≥ 75mm over the area where GeoGrid<sup>®</sup> is required (with allowance made for edge retaining boards or kerbs as required). This formation layer should be levelled and lightly consolidated.
- 2. Edge retaining boards or kerbs should then be installed as required.
- 3. Place a layer of stabilisation mesh flat on top of the formation layer using pins to hold in place as necessary. In circumstances where it is necessary to prevent ingress and migration of contaminants a layer of geo textile fabric (of the required specification) can be placed above the formation layer before installation of the stabilisation mesh.
- **4.** Place 4-14mm diameter gravel or aggregate to a depth of 35mm spreading evenly over the stabilisation mesh ensuring that the mesh is not left exposed.
- 5. Place the GeoGrid<sup>®</sup> on top of the gravel / aggregate and connect using the interlocking system and progressing over the area in both directions. As an option to ensure a greater degree of stability of the GeoGrid<sup>®</sup>, pins or hoops can be used to pin the GeoGrid<sup>®</sup> into the formation layer. GeoGrid<sup>®</sup> can be cut to shape using a hand or power saw to follow curves or fit around obstacles as required.
- 6. GeoGrid® can then be firmed in place using a light vibrating compaction plate.
- The GeoGrid<sup>®</sup> cells should then be filled with the specified gravel or aggregate, for example, clean, well-graded angular material within the range 6-14mm diameter.
- 8. Use a light vibrating compaction plate to consolidate the surface.
- **9.** Any low spots can be refilled and compaction repeated until satisfied with final compaction. 10. The surface can be trafficked straight away.





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