



*The miracles of science™*

## **DUPONT™ PLANTEX® GROUNDGRID®**

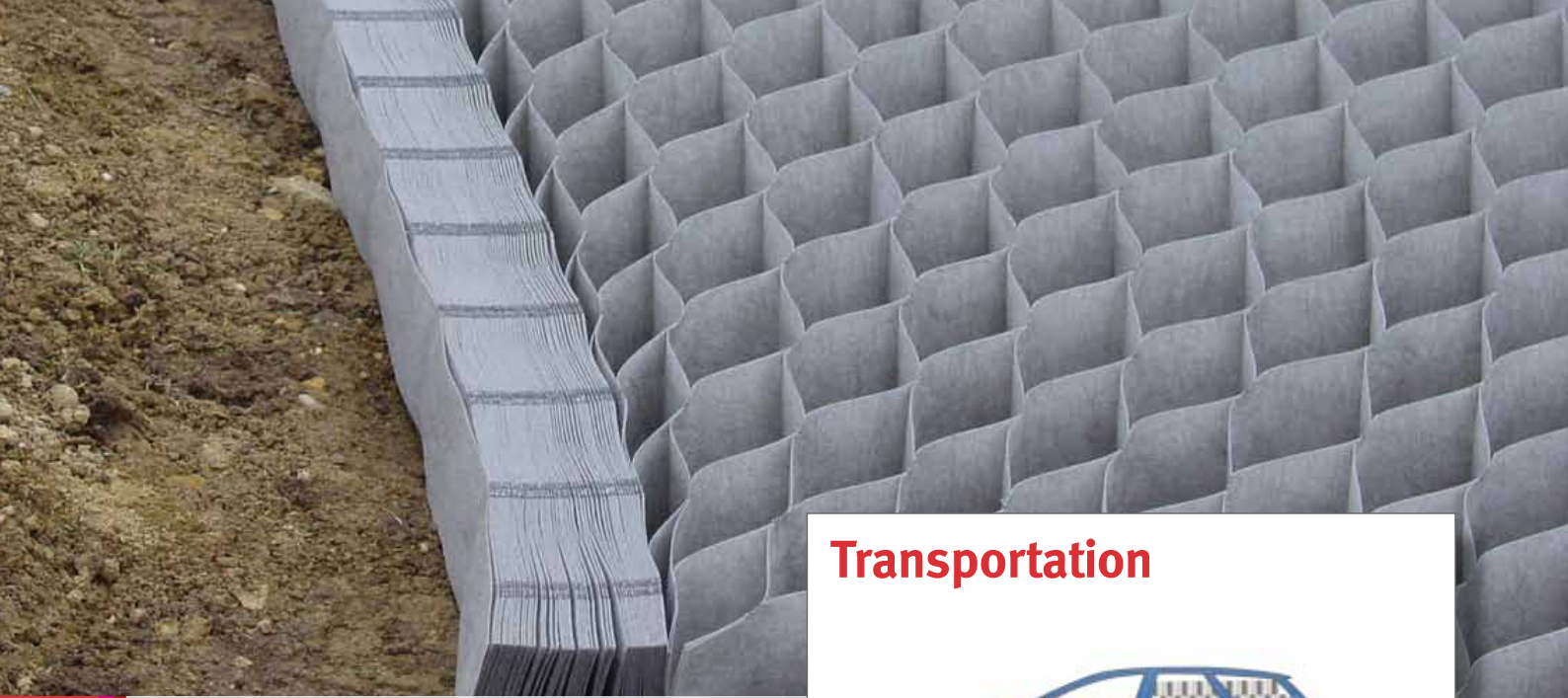
### **The smart solution for gravel stability**

Create a stable yet water permeable surface while minimising gravel migration and the risk of sinking from pedestrian or vehicular traffic.

DuPont™ Plantex® GroundGrid® also establishes an infiltration buffer against heavy rainfall and prevents damage from ruts and puddles.

*[www.plantexpro.dupont.com](http://www.plantexpro.dupont.com)*





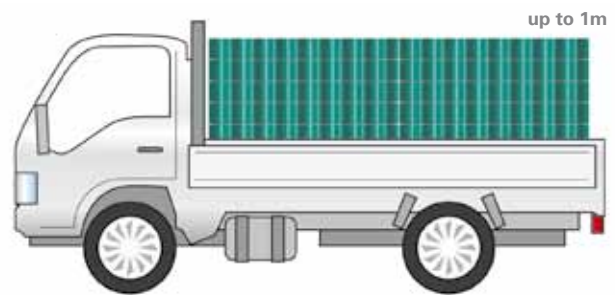
## PRODUCT

DuPont™ Plantex® GroundGrid® employs the natural strength of a three-dimensional honeycomb structure together with thermally bonded non-woven technology. This advanced product is environmentally harmless and available in different cell sizes for various applications.

## Transportation



DuPont™ Plantex® GroundGrid®: 100 m<sup>2</sup>



Rigid Geocells: 100 m<sup>2</sup>

## PRODUCT DIMENSIONS

Cell dimensions	Base fabric weight	Covered surface	Product format when packed	Weight (Bloc of 10m <sup>2</sup> )
55 x 50 mm	190 g/m <sup>2</sup>	10 sqm (1,25m x 8m)	1,65 m x ~16 cm	4.7 kg
110 x 50 mm	290 g/m <sup>2</sup>		1,65 m x ~13 cm	3,5 kg
110 x 100 mm	290 g/m <sup>2</sup>		1,65 m x ~13 cm	6,9 kg



## APPLICATION

	Driveways	Car park	Pathway	Patio	Wine cellar	Golf cart paths	Football fields	Forest paths	Cycling lanes	Pond edges	Park & pathways	Cemetery
Recommended cell size width x height in mm												
55 x 50	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
110 x 50	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
110 x 100	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Gravel type												
Crushed gravel - Not friable	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Crushed gravel - Any type	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Crushed gravel - Expanded Clay	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Gravel size												
55 x 50: 8/16 mm	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
110 x 50: 16/40 mm	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
110 x 100: 16/40 mm	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Gravel quantity per m <sup>2</sup> (1m <sup>3</sup> = 1000l)												
55 x 50: 80 l/m <sup>2</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
110x100: 130 l/m <sup>2</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
110x 50: 80 l/m <sup>2</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Geotextile recommended												
Geoproma® or Typar® SF	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓



## PRODUCT BENEFITS AT A GLANCE

# Gravel stabilisation

### Product properties

- Minimises gravel migration
  - No rutting
  - No material breakage, so no risk of sharp edges
  - Natural look of product
- Sustainable product technology, 100% thermally bonded nonwoven technology

### Installation

- Flexible, can be adjusted easily to various ground formations
- Easily installed by DIY or by professional gardeners/landscapers
- Simple to cut to size with standard scissors
- Easy to transport by car, lightweight with a package size of only 1,65 m x ~15cm for a 10 m<sup>2</sup> installed surface

### Cost performance ratio

- High cost performance ratio, long lifetime investment when correctly installed

### Product in use

- Not slippery in wet conditions (or if not well covered with gravel) thanks to its non-woven textile structure
- Suitable for wheelchairs, prams and buggies, bicycles, motorcycles, garden furniture... even high heels: No sinking
- Creates a water buffer during heavy rainfall to allow slow water infiltration into the soil: No puddles and no surface water runoff

### Maintenance

- Low maintenance, only requires a maintained coverage with a top layer of gravel preventing exposure of the cells

No GroundGrid®

GroundGrid®



## TECHNICAL CHARACTERISTICS

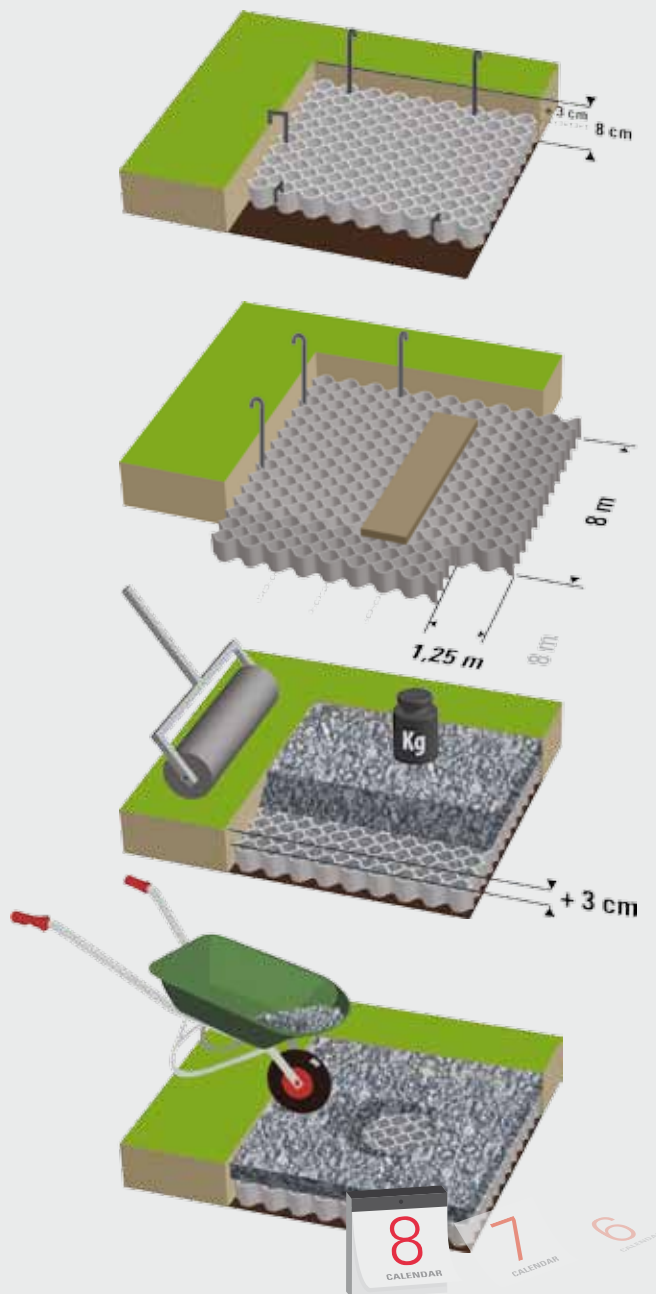
Fabric property	Norm	Value for cell size 55 x 50	Value for cell size 110 x 50, 110 x 100
Basis weight (g/m <sup>2</sup> )	EN ISO 9864	190	290
Thickness 2kN/m <sup>2</sup>	EN ISO 9863-1	0.54 mm	0.75 mm
Tensile strength	EN ISO 10319	13 kN/m	21 kN/m
Elongation at max strength	EN ISO 10319	55%	55%
Apparent opening size O <sub>90W</sub>	EN ISO 12956	80 µm	70 µm
Water permeability VI <sub>H50</sub>	EN ISO 11058	35 mm/s	15 mm/s

# INSTALLATION

The installation of DuPont™ Plantex® GroundGrid® is quick and easy. We recommend the process outlined below. The material can be cut into required dimensions or shapes using standard scissors. The application of a high-quality geotextile is recommended prior to installing DuPont™ Plantex® GroundGrid®.

Detailed installation instructions are available at [www.plantexpro.dupont.com](http://www.plantexpro.dupont.com)

## Installation



### 1<sup>st</sup> step

Remove soil equivalent to the GroundGrid® cell height + 3 cm. If installed on a slope, fix the grid with pegs at the edges.

### 2<sup>nd</sup> step

Stretch the cell grid to 8 m x 1.25 m. The cell grid needs to be in contact with the ground at all times.

### 3<sup>rd</sup> step

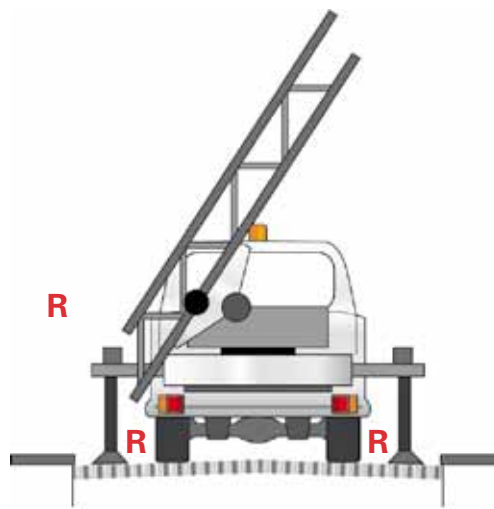
Add top cover of a minimum of 3 cm and then compact. After installation, regularly check the surcharge and re-fill if needed. The cells of DuPont™ Plantex® GroundGrid® should be covered at all times.

# DUPONT™ PLANTEX® GROUNDGRID® - TESTED PERFORMANCE

## Traffic and load suitability

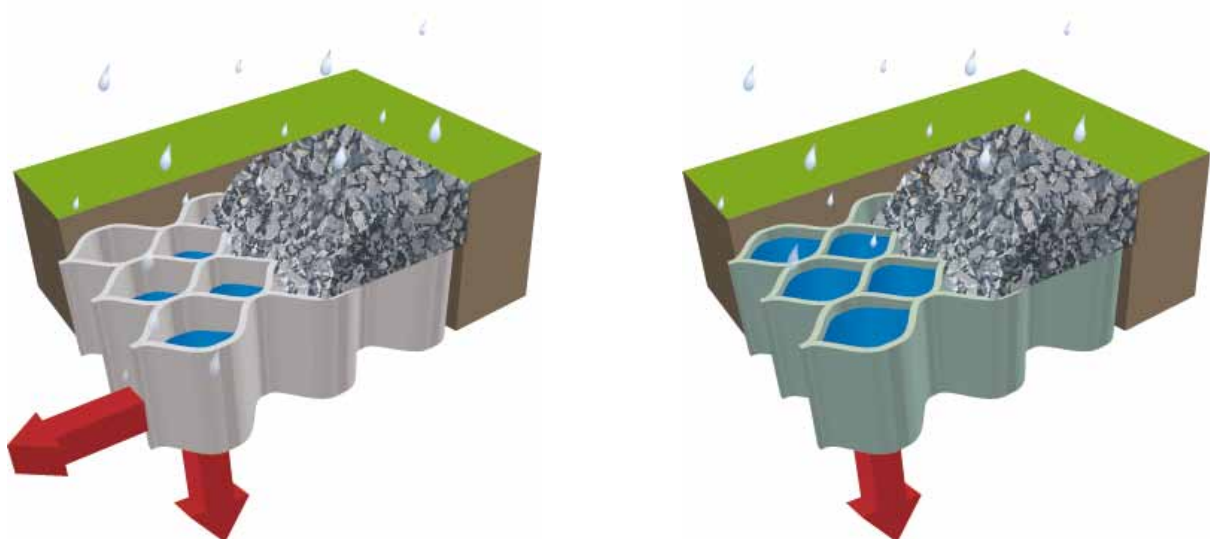
During laboratory simulation, Plantex® GroundGrid® resisted loads up to 340 ton/m<sup>2</sup> with minimum settlement, using a high quality infill material on a flat, solid sub-base.

The load bearing capacity of surfaces installed with Plantex® GroundGrid® depends on the subgrade bearing capacity, plus the infill material used and the compaction level, as the cells themselves have no inherent resistance to vertical loads.



In tests Plantex® GroundGrid® achieves the requirements shown here in load bearing against the support struts of a fire fighting vehicle.

## Sustainable drainage solutions



DuPont™ Plantex® GroundGrid®  
permeable in all directions

Rigid Geocells

# DUPONT™ PLANTEX® GROUNDGRID® - TESTED PERFORMANCE

## Product durability



DuPont™ Plantex® GroundGrid®



Rigid Geocells

No breaks or sharp edges if GroundGrid® becomes visible over time but for optimal use, some refill of the top layer is required from time to time.

Please visit our website to watch GroundGrid® video!  
[www.plantexpro.dupont.com](http://www.plantexpro.dupont.com)

Product safety information is available upon request. This information corresponds to our current knowledge on the subject. It is offered solely to provide possible suggestions for your own experimentation. It is not intended, however, to substitute for any testing you may need to conduct to determine for yourself the suitability of our products for your particular purposes. This information may be subject to revision as new knowledge and experience becomes available. Since we cannot anticipate all variations in actual end-use conditions, DuPont makes no warranties and assumes no liability in connection with any use of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent right.

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