# **HDPE Geocells**



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### **DESCRIPTION:**

A robust three dimensional cellular confinement system fabricated from textured and perforated strips of high density polyethelyne (HDPE) with ultrasonically welded joints designed to improve soil stabilisation, reduce erosion, and increase load support.

#### **APPLICATIONS:**

TERRAM Geocells have been manufactured for over 25 years, the new HDPE manufacturing technology and raw material gives improved performance and faster installation. Typical uses include:-

- Slope erosion control for topsoil and vegetation.
- Load platforms & road subbase stabilisation.
- Tree Root Protection (TRP).



#### **FEATURES & BENEFITS:**

- Stiff HDPE material does not easily flatten and allows fast filling of the cells.
- Strong joints with excellent load transfer gives improved stabilisation of all fill materials + higher bearing capacity.
- UV stabilised material with excellent long term durability in all soil types.
- Full depth stabilisation of all granular fills reducing the amount of imported material required by 50%.
- Allows the use of local infill material such as sand removing the cost of importing traditional pavement subbase materials.
- Reduces bearing pressures helping to control differential settlement in soft and variable strength ground.
- Holes in the cell walls provide fixing points for helical pins allowing faster installation & reduced repetitive manual activity.







European Association of Geosynthetic product Manufacturers



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# Geocells

# **Product Data Sheet**

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## INTENDED USE/FUNCTIONS:



### INTENDED APPLICATIONS:



				Р	anel Grad	les		
PHYSICAL PROPERTIES	Test Method	Unit	TG330	TG356	TG445	TG660	TG712	
Weld spacing		mm	330	356	445	660	712	
Cell Depth		mm	75, 100, 125, 150, 200					
Cell Width (W) <u>+</u> 3%		mm	224	259	320	488	508	
Cell Length (L) <u>+</u> 3%		mm	210	224	287	436	475	
Nominal panel width		m	2.4	2.5	2.5	2.4	2.5	
Nominal panel length		m	6.1	6.5	8.3	12.6	13.7	
Polymer density	ASTM D 1505	g/cm <sup>3</sup>	0.935-0.965					
Environmental Stress Crack Resistance	ASTM D 1693	Hours	>5000					
Carbon Black content	ASTM D 1603	%			min. 2			
Nominal sheet thickness (post texturing)	ASTM D 5199	mm			min. 1.2			
Material		Compound of polyethylene and additives						
Texture	Multiple rhomboidal indentations							
Perforations	<10mm diameter holes, horizontal rows <12% cell wall surface area							
Colour					Black			
MECHANICAL PROPERTIES	Cell depth	mm	75	100	125	150	200	
Seam Peel Strength <u>+</u> 5%	EN ISO 13426-1	Ν	915	1220	1525	1830	2440	
DURABILITY PROPERTIES								
Weathering (UV Exposure)	EN 12224	Days			30			
Combined ageing (Oxidation, temperature & moisture)	EN ISO 13438	Service Life			100 years			
STOCKED GRADES *			TG356	TG356	TG356	TG445	TG445	
Nominal Panel size		m	2.5 x 6.5 2.5 x 8.			x 8.3		
Cell depth		mm	100	150	200	100	150	
Panel Weight		kg	26.8	40.2	53.7	27.1	40.7	
Panels per pallet			20	14	10	20	14	
Gross pallet weight		kg	556	583	557	562	590	

PACKAGING & Terram Geocell panels are supplied flat packed on pallets with banding straps and identification labels. **IDENTIFICATION** STORAGE Geocell panel pallets shall be stored on stable/ level ground, stacked not more than two packs high and no other materials shall be placed on top. Can be stored outdoors when packaged, but should be protected from exposure to UV. All materials should be stored in accordance with good health and safety practice and in accordance with local laws. Terram Geocells are supplied having met internal quality requirements in accordance with our Quality Management QUALITY system which is certified to BS EN ISO 9001:2015. NOTES Reported values are nominal unless otherwise stated. Reported values related to durability testing are generally based on the lowest grade of Terram geotextile within a family. \* These figures relate to stocked product grades, weights and pack sizes only. Gross pallet weights are provided is for lifting guidance only and do not form part of quality control procedures. Other grades and depths are available on request (made to order). For further information please contact Terram customer care team as detailed below. ADDITIONAL Refer to the Terram Specification, Design and Installation guides for advice on product grade selection, installation, fixing, INFORMATION jointing and filling.

How else can we help? Get in touch with us

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