



GEOCELL PRODUCT BROCHURE



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Geocells

Geocells are three-dimensional honeycomb structures made from high-density polyethylene (HDPE) used for soil stabilization, erosion control, and load support. They provide superior confinement and distribute loads evenly across weak or unstable ground.

Features:

- High load-bearing capacity
- Excellent flexibility and durability
- UV and chemical resistance
- Lightweight and easy to install
- Environmentally friendly material

Advantages:

- Reduces soil erosion and displacement
- Enhances ground stability
- Minimizes maintenance costs
- Improves load distribution on soft soils
- Suitable for various terrains and conditions

Applications:

- Road and railway base stabilization
- Slope and embankment protection
- Retaining wall reinforcement
- Channel and drainage protection
- Erosion control on riverbanks and shorelines



The Prime Geo Cell system is engineered for high-strength soil confinement and load distribution in heavy duty foundation, pavement and reinforcement applications. infrastructure conditions.

Prime Geo Cell							
Material Properties		Unit	Product Code				
Weld Spacing ($\pm 3\%$)		MM	PT 330	PT 356	PT 445	PT 660	PT 712
Cell Depth ($\pm 3\%$)		MM	75,100,125,150,200,250,300				
Expanded Cell Dimensions ($\pm 3\%$)	Width	MM	244	259	320	488	508
	Length	MM	210	224	287	436	475
Expanded Cell Area (13%)		Cm ²	250	289	460	1000	1206
Nominal Expanded Section Dimension (+3%)	Width	M	2.44	2.59	3.20	4.88	5.08
	Length	M	6.10	6.50	8.32	12.64	13.78
Nominal Expanded Section Area		M ²	14.90	16.82	26.63	61.70	70.00

Material Properties	Reference Method	Unit	Values
Environmental Stress Cracking Resistance	ASTM D 1693	HRS	>5000
Polymer Density	ASTM D 1505	g/cm ³	0.935-0.965
Carbon Black Content	ASTM D 1603	%	Min 2%
Material	Mixture of different polyethylene & additives		
Texture	The polyethylene strip features multiple rhomboidal embossments uniformly distributed across both sides of the strip. The indentation pattern has a surface vdensity ranging between 22 and 32 per cm ² .		
Perforations	The polyethylene strip is perforated with horizontal rows of holes, each up to 10 mm in diameter. The total perforated area is less than 12% of the overall cell surface area.		

Notes:

All reported values represent arithmetic mean results unless otherwise specified; specimens are cut from one roll sample and taken across its full width.

The stated properties may vary slightly due to changes in manufacturing, storage, handling or shipping conditions.

Test-values may differ when measured in other laboratories due to procedural or environmental differences.

For any technical enquiries, sales information or alternative cell depths/sizes, please contact us at info@primeterratech.com

