

TECHNICAL DATA SHEET (TDS)



Product: HDPE Geocell

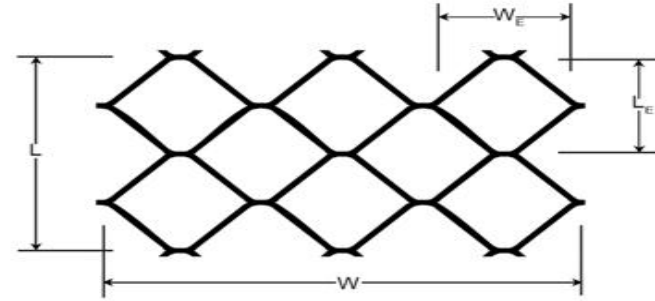
Brand:	Geoleed
Material:	HDPE
Application:	Base Reinforcement / Soil Stabilization

Description: HDPE Geocell is a lightweight, expandable cellular confinement system made from High-Density Polyethylene (HDPE) strips which are ultrasonically welded together to form a strong, three-dimensional honeycomb-like structure.

1. MATERIAL PROPERTIES (HDPE Strip)

Property	Test Method	Unit	Value
Leed material	-	-	HDPE(No recycled material allowed)
Polymer Density	ASTM D1505	g/cm ³	0.940 - 0.960
Environmental Stress Crack Resistance (ESCR)	ASTM D1693	hours	> 5000
Carbon Black Content	ASTM D4218	%	≥ 2.0
Resistance to weathering	BS EN12224	%	> 90
Resistance to oxidation	EN ISO13438	%	> 90
Oxidative Induction Time	ASTM D 5885	minutes	400
Nominal Strip Thickness	ASTM D5199	mm	1.65 (± 0.1)
Texture	-	-	Surface texturing consists of a multiple of rhomboidal indentations, over the entire strip area on both sides of the strip.
Material Perforation	-	-	The polyethylene strip shall be perforated with horizontal rows of maximum 10mm diameter holes. Cell perforations area shall not exceed 12% of cell surface area.
Seam hang Strength	ASTM D 751	-	The geocell panel shall have been evaluated for long term hang strength and shall pass after a min.7 days
Geocell Connection	-	-	The geocell welds and cell center will be punched with slots of 30mm in width(±3mm) and 10mm in height(±2mm)
Cell depth	-	mm	50,75,100,150,200,250,300
Weld Distance(mm ±3%)	245	330	356 445 600 712

Dimensions



Weld Distance(mm ±3%)	245	330	356	445	600	712
Expanded Cell Size (W × L)(mm)	182 × 159	250 × 210	260 × 225	320 × 288	483 × 439	510 × 475
Expanded Cell Numbers (W × L)	13 × 34	10 × 34	9 × 34	8 × 34	5 × 34	5 × 34
Expanded Section Size (WE × LE)(m)	2.40 × 5.40	2.52 × 7.14	2.36 × 7.65	2.58 × 9.80	2.42 × 15.0	2.58 × 16.15
Expanded Cell Size (m ²)(±5%)	13	18	18.1	25.3	36.3	41.7

- Note:
- # Standard stripe are Black Green Yellow, Tan and other colors GeoLeed® available upon request.
 - # Different Welding distance and section size can be customized.
 - # The product defaults to textured and perforated with 10mm diameter holes .It can be removed or change to 7.5mm diameter holes and strip holes if ask.
 - # Different thickness available upon request.
 - # The company's products have passed TRI testing.

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