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HDPE GEOCELL

1.Introduction:

Geocell is three dimensional, honeycomb like structures manufactured from high density polyethylene and jointly welded by ultrasonic technique. It is flexible to fold during the transport and installation on construction site. The geocell nets will be filled with soils, granular, cements or other on-site infill materials when stretched into web structures, which has powerful and rigid confinement in the lateral and vertical sides.

2.Specifications:

1.Cell depth: 50mm,100mm,150mm,200mm,250mm

2. Welding space: 330mm~1600mm

3. Thickness:

(1)1.0mm~1.2mm for smooth geocell(2) 1.5mm~1.7mm for textured geocell

4. Appearance: smooth/textured



3.Features:

- 1) Light material, resistant to wear, stable in chemical properties, anti-aging, resistant to acids and alkalis, applicable to different soil and desert and other geological conditions.
- 2)High limit on lateral direction, anti-skidding, anti-deformation, effectively enhance the supporting ability and scattered load function of roadbed.
- 3) High carrying capacity and good dynamic performance and high erosion ability
- 4) The geometry size can be changed to meet different needs of the project, such as height and welding distance.
- 5)Retractable and small loading volume, convenient joint, speed construction.
- 6)Local material can be used during construction, reduce the construction cost, easy to be transported after folding together.





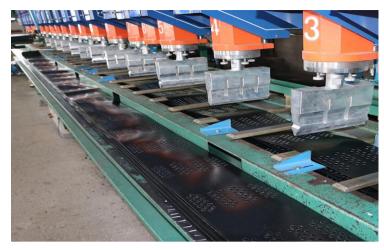
4.Technical Parameters:

Material Properties	Unit					Test Method
Cell Depth	mm	75	100	150	200	
Polymer Density	g/cm3		0.935	ASTM D 1505		
Enviromental Stress Crack Resistance	Hours		>4	ASTM D 5397		
Enviromental Stress Crack Resistance	Hours		60	ASTM D 1693		
Carbon Black Content	%		1.5% - 2	ASTM D 1603		
Nominal Sheet Thickness Before Texturing	mm		1.27 -59	ASTM D 5199		
Nominal Sheet Thickness After Texturing	mm		1.52-5%	ASTM D 5199		
Strip Puncture Resistance	N		45	ASTM D 4833		
Seam Peel Strength	N	1065	1420	2130	2840	EN ISO13426-1B
Seam Efficiency	%		10	GRI-GS13		
Nominal Expanded Cell Size (width x length)	mm		320x287,4			
Nominal Expanded Panel Size (width x length)	m	2.56x8	3.35, 4.5x5.0			

Product Type	Height (mm)	Welding Distance(mm)	Thickness (mm)	Seam Peel Strength of Welding Point(N/cm)	Tensile Strength of Connection of Cells(N/cm)	Tensile Strength at Yield of Each Sheet(N/CM)
smooth and Not Perforated	50≤H≤250	330≤A≤1000	1.0~1.2	≥100	≥120	≥200
smooth and Perforated	50≤H≤250	330≤A≤1000	1.0~1.2	≥100	≥120	≥200
textured and Not Perforated	50≤H≤250	330≤A≤1000	1.5~1.7	≥100	≥120	≥200
textured and Perforated	50≤H≤250	330≤A≤1000	1.5~1.7	≥100	≥120	≥200

Remarks: Width of the product can be made according to the customer's demand, and the other special standards will be carried out by agreement or contact. (The product has passed CE & ISO9001:2008 & ISO14001:2004 certification)

5.Production &Packing:

















6. Applications:

- 1. Used for all kinds of road building, driveways, soil stabilization and embankment stabilization
- 2. Used to stabilize river embankments.
- 3. Used to prevent landslides.
- 4. Using Geocell construction can greatly reduce labor intensity and reduce the thickness of the roadbed, construction speed, good performance and greatly reduce the project cost.







