

Technical data sheet ARMOCELL geocells



ARMOCELL geocell - 3D geosynthetic material made of strips connected together in perpendicular planes to form through-cells.

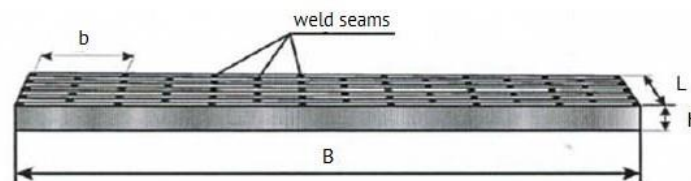
Geocells are available with either textured or plain smooth front surface of the facet. The ribs may be perforated.

Typical application:

Reinforcement of road structures and highway formations, roadside verges, site facilities, as well as protection of slopes, embankments, banks, drainage systems, ravines, ditches and pipeline trenches and related structures, underwater crossings against water erosion, scours and denudations.

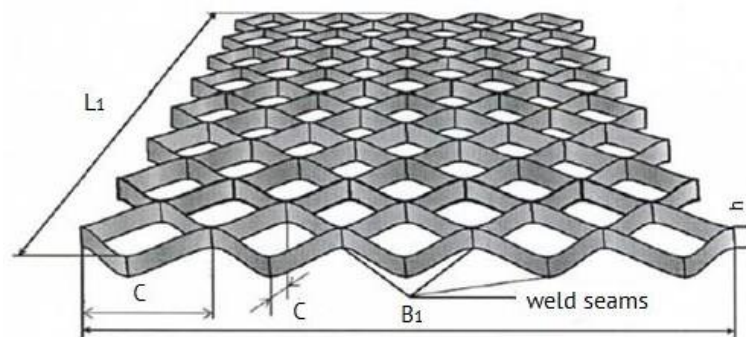
Package:

Geocell is produced as a rectangular folding module with an area of 22 square meters and a weight of 10 to 50 kg.



B - module width. L - module length, h - module height,
 b - pitch of weld

Figure 1 - A geocell module when folded



B₁ - module width, L₁ - module length, h - module height,
 C - cell diagonal.

Figure 2 - A geocell module when unfolded

Geometry of geocells

	ARMOCELL 200	ARMOCELL 300	ARMOCELL 400	ARMOCELL 600
Cell diagonal (C), mm	200 ±50	300 ±50	400 ±50	600 ±50
Height (h), mm	From 50 to 300 ±10	From 50 to 300 ±10	From 75 to 300 ±10	From 100 to 300 ±10
Module width when folded (B), mm	3700 ±50			
Module width when unfolded (B ₁), mm	3137 ±50	2780 ±50	2282 ±50	2567 ±50
Module length when unfolded (L ₁), mm	5400 ±50	4700 ±50	6000 ±50	5400 ±50
Module area when unfolded, S, sqm	16,7	13,00	13,68	14,00
Number of cells in a geocell module				
lengthwise	30	18	15	9
Breadthwise	10	8	5	4

Physical and mechanical parameters of geocell strips

	Thickness of a geocell strip, mm (+0.2; -0.1)						
	1.0*	1.1*	1.3	1.5	1.6	1.8	2.0
Tensile strength of a non-perforated strip, kN/m, not less than	18	19	17	20	22	28	30
Tensile strength of a perforated strip, kN/m, not less than	8	8.5	9	12	14	18	20
Strength of seam to strength of base material ratio, %, not less than - breaking loose / shearing	80/85						
Elongation of a non-perforated strip at maximum load, %, not more than	30						
Ultra-violet and microbial resistance, %, not less than	90						
Corrosive resistance, pH 3-10 (strength retention), %, not less than	90						
Frost resistance (30 cycles), %, not less than	90						
Funginertness, not higher than	PG113						
Flexibility at low temperatures on a rod with a diameter of (20±1) mm, at a temperature of, °C, not higher than	- 30						

**Extruded polyethylene geocells that have been radiation-modified by means of accelerated electrons.*

Regulatory document:

- In-house standard STO00205009-025-2018

Manufactured by:

STEKLONIT JSC Tramvaynaya 15, Ufa, 450027. Tel.: +7 347 293-76-00

Moscow office Leipzig business center, 11th floor 8/1 Academician Vargi st, Moscow, 117133. Tel.: +7 (495) 223-77-22

Web-site: www.steklonit.com, **e-mail:** info@steklonit.com