

TECHNICAL DATA SHEET GEOCELLS GEOMAXX®

No 01/SPK/2016/ENG

1. Producer:

GEO GLOBE POLSKA Spółka z ograniczoną odpowiedzialnością Spółka komandytowo – akcyjna
 Ul. Dzieńdziela 30, 43-190 Mikołów.

2. Product name:

Geocells GEOMAXX®, types GWS330, GWS356, GWS375, GWM462, GWL660, GWL712 and GWL750 with cell height: 50, 75, 100, 150, 200, 250 i 300 mm.

3. Typical applications of the product:

- a) anti-erosion protection of road buildings slopes
- b) road base stabilisation,
- c) foundations of roads reinforcing also during the construction works,
- d) vegetated slope stabilisation, non-vegetated slope protection coastal protection, channel /river lining,
- e) parking places for cars and vans,
- f) access roads and forest roads stabilisation
- g) reinforcement of upper layers of railroad bed and railway subgrade
- h) improvement and anti-erosion protection of slopes of railway earthen structures and bridgeheads
- i) counterfort walls construction

4. Declared technical properties:

No	Properties	Unit.	Required values ¹⁾ for Geocells GEOMAXX® with nominal cell height							Test method	
			50mm	75mm	100mm	150mm	200mm	250mm	300mm		
1	1	2	3	4	5	6	7	8	9	10	
Geocells HDPE (High density polyethylene)			Density; 0,94 - 0,965 g/cm ³							ASTM D 1505	
1	Strip width	mm	50 (±2)	75 (±2)	100 (±2)	150 (±3)	200 (±4)	250 (±5)	300 (±6)	Measuring instrument with 1 mm accuracy	
2	Strip thickness	mm	1,52 (±0,15)							Measuring instrument with 0,01 mm accuracy	
3	Strip texturated surface	-	Rhomboidal indentations with depth 0,6 mm (±0,05), with surface density from 22 to 32 per 1 cm ² of the strip								
4a	Strip maximum load (without perforation ²⁾ along strip	kN	1,05 (-0)	1,6 (-0)	2,1 (-0)	3,2 (-0)	4,2 (-0)	5,25 (-0)	6,3 (-0)	PN-EN ISO 10319:2010	
4b	Strip maximum load (perforated) along strip	kN	0,63 (-0)	0,96 (-0)	1,26 (-0)	1,92 (-0)	2,52 (-0)	3,15 (-0)	3,78 (-0)		
5	Elongation at maximum load, along strip	%	20 (±15)								
6	Seam strength, method A: Tensile shear ^{3),4)}	kN	1,05 (-0)	1,6 (-0)	2,1 (-0)	3,2 (-0)	4,2 (-0)	5,25 (-0)	6,3 (-0)	PN-EN ISO 13426-1:2005	
7	Seam strength, method B:Peeling ³⁾	kN	0,55 (-0)	0,8 (-0)	1,1 (-0)	1,65 (-0)	2,2 (-0)	2,75 (-0)	3,3 (-0)		
8	Seam strength, method C:Splitting ³⁾	kN	1,05 (-0)	1,6 (-0)	2,1 (-0)	3,2 (-0)	4,2 (-0)	5,25 (-0)	6,3 (-0)		

No	Properties		Unit.	Required values ¹⁾ for Geocells GEOMAXX [®] with nominal cell height						Test method	
				50mm	75mm	100mm	150mm	200mm	250mm		300mm
1	1		2	3	4	5	6	7	8	9	10
9	Distance between welds before expansion	GWS330 (TN,TP)	mm	330 (±2%)						Measuring instrument with 1 mm accuracy	
		GWS356 (TN,TP)		356 (±2%)							
		GWS375 (TN,TP)		375 (±2%)							
		GWM462 (TN,TP)		462 (±2%)							
		GWL660 (TN,TP)		660 (±2%)							
		GWL712 (TN,TP)		N/A	712 (±2%)						
		GWL750 (TN,TP)		N/A	750 (±2%)						
10	Cell length	GWS330 (TN,TP)	mm	203 (±10%)						Measuring instrument with 1 mm accuracy	
		GWS356 (TN,TP)		224 (±10%)							
		GWS375 (TN,TP)		250 (±10%)							
		GWM462 (TN,TP)		285 (±10%)							
		GWL660 (TN,TP)		406 (±10%)							
		GWL712 (TN,TP)		N/A	475 (±10%)						
		GWL750 (TN,TP)		N/A	500 (±10%)						
11	Cell width	GWS330 (TN,TP)	mm	246 (±10%)						Measuring instrument with 1 mm accuracy	
		GWS356 (TN,TP)		259 (±10%)							
		GWS375 (TN,TP)		260 (±10%)							
		GWM462 (TN,TP)		345 (±10%)							
		GWL660 (TN,TP)		492 (±10%)							
		GWL712 (TN,TP)		N/A	510 (±10%)						
		GWL750 (TN,TP)		N/A	520 (±10%)						
12	Nominal section width after expansion	GWS330 (TN,TP)	mm	2460 (±4%)						Measuring instrument with 1 mm accuracy	
		GWS356 (TN,TP)		2590 (±4%)							
		GWS375 (TN,TP)		2600 (±10%)							
		GWM462 (TN,TP)		2760 (±4%)							
		GWL660 (TN,TP)		2460 (±4%)							
		GWL712 (TN,TP)		N/A	2550 (±4%)						
		GWL750 (TN,TP)		N/A	2600 (±4%)						
13	Nominal section length after expansion	GWS330 (TN,TP)	mm	6100 (±4%)						Measuring instrument with 1 mm accuracy	
		GWS356 (TN,TP)		6720 (±4%)							
		GWS375 (TN,TP)		7500 (±4%)							
		GWM462 (TN,TP)		8550 (±4%)							
		GWL660 (TN,TP)		12200 (±4%)							
		GWL712 (TN,TP)		N/A	14250 (±4%)						
		GWL750 (TN,TP)		Nie dotyczy	15000 (±4%)						
Trwałość											
14	Oxidation resistance	%	Minimum strength after test exposure shall exceed 50 % of the initial strength						PN-EN ISO 13438:2006		
15	Microbiological resistance	%	Minimum strength after test exposure shall exceed 50 % of the initial strength						PN-EN 12225:2002		
¹⁾ The tolerances are given in brackets ²⁾ Perforated tape has a lower tensile strength. There must be at least 60% of the given value ³⁾ Lack of tolerance with a "+" means there is no restriction in this direction ⁴⁾ For perforated strip nominal value should be at least 60 % given value											

5. The conditions for the use of the product:

To be covered in the day of installation. Minimum declared durability : at least 25 years in natural soils with 4 <pH <9 and soil temperatures <25 ° C. Geocells GEOMAXX[®] shall be applied based on the technical project.