



TeMa – CELL HD

Functions: Slope Protection, Channel Linings, Ground Stabilization, Erosion Control, Embankment Protection and Retaining Walls

STRUCTURE: TeMa-CELL HD is an expandable geocell system made from textured HDPE and available in a variety of cell dimensions, heights and panel sizes with perforated or non-perforated side walls.

BASE MATERIAL

Material Composition	Blends of Polyethylene with average density of 0.9425gsm, up to 0.965gsm.		ASTM D 1505
Colour	Black with other colours available on request.		
Stabilizer	Carbon Black content 1% - 2% by weight	Hindered Amine light stabilizer (HALS) 1 – 2% by weight	
ESCR	Passed		ASTM D 1693

CELL SECTIONS

Grade	Height (cm)	Nominal Size (cm)	Area (cm ²)	No. Cells /Width	Panel (m ²)
GG 6	50, 65, 75, 100, 125, 150, 200*	63.0 x 52.9	1 666	4	2.62 x 20.10
GG 8		55.6 x 46.7	1 290	5	2.91 x 17.74
GG8.5		52.7 x 44.4	1 170	5	2.78 x 16.90
GG 10		48.8 x 41.0	1 000	5	2.57 x 15.58
GG 15T1		40.7 x 34.2	696	7	2.97 x 13.00
GG 20B		34.2 x 28.7	491.0	9	3.18 x 10.90
GG 20		33.0 x 27.7	457.0	9	3.09 x 10.52
GG 34		26.4 x 22.2	293.1	10	2.78 x 8.44
GG 40		24.4 x 20.5	250.1	10	2.57 x 7.79

STRIP PROPERTIES

Surface Treatment	Textured with a multitude of rhomboidal indentations in depth of 0.2 – 0.5mm	Perforated with multi-horizontal rows of holes of 20mm** dia. each	
Strip Thickness	1.40mm (-10% to +10%)		ASTM D 5199

WELDED JOINTS***

Short-term Strength	Shear Weld Strength	Peel Weld Strength	Split Weld Strength	EN ISO 13426-1
	Method A	Method B	Method C	
	22.5 kN/m	12.7 kN/m	24.2 kN/m	
Long Term Strength (Hang Test)	A sample of 100mm wide shall support a 72.5kg load for a period of min. 30 days in an ambient temperatures of 23°C ± 2°C		Passed	

OTHER TENSILE PROPERTIES

Property	Cell Height	Strength	Method
Full Perforated Strip Strength Properties	75, 100, 150, 200 mm* (±3mm)	19.5 kN/m	Test method based on ISO 10319 adapted to Geocells
Connection of two adjacent sections by specialist screws		19.4 kN/m	

* Other heights are available on request

** 10mm dia. Holes are also available

*** The Welding is Ultrasonic welding



The information given in this datasheet is to the best of our knowledge true and correct. TeMa SA reserves the right to change its product specifications at any time. It is the responsibility of the specifier and purchaser to ensure that product specifications used for the design and procurement purposes are current and consistent with the products used in each instance.

Tema South Africa (Pty) Ltd

Unit 2 Meadowview Office Park, 79 Watt Street, Meadowdale 1609, Gauteng, South Africa

T: +27 (0)72 873 0101

F: +27 (0)86 511 7062

E: temaSA@temacorporation.com

W: www.temaSA.co.za