



CX-GC20, CX-GC30, CX-GC40 Geocell

Standard sections are manufactured from 58 strips of HDPE, resulting in a section length of 29 cells. Cell walls are textured and if perforations are required 13% ± 3% of the cell wall is removed. Polyethylene strip shall be textured and with a multitude of rhomboidal (diamond shape) indentations. The rhomboidal indentations shall have a surface density of 22 to 31 per cm² (140 to 200 per in²).

Color: Standard strips are black. (Tan, Green, other colors with no heavy metal content available upon request)
Stabilizer: Hindered amine light stabilizer (HALS) 2.0% by weight of carrier

MATERIAL PROPERTIES

Description	Test Method	Units	Test Value
> Polymer Density	ASTM D 1505	lb/ft ³ (g/cm ³)	58.4-60.2 (0.935-0.965)
> Environmental Stress Crack Resistance	ASTM D 5397	hours	5,000
> Carbon Black Content	ASTM D 1603	% by weight	1.5% minimum
> Nominal Sheet Thickness ⁽¹⁾ before texturing	ASTM D 5199	mil (mm)	50 (1.27) -5%, +10%
> Nominal Sheet Thickness ⁽¹⁾ after texturing	ASTM D 5199	mil (mm)	60 (1.52) -5%, +10%
> Resistance to Oxidation ²	EN ISO 13438	years	≥50
> Resistance to Weathering ³	EN 12224	%	100

PHYSICAL PROPERTIES

Description	Distance b/n Welds	Cell Width (+/- 10%)	Cell Length (+/- 10%)	Cell per yd ² (m ²)	Cell Area (+/-1%)	Panel Width	Panel Length	Expanded Panel Area
> CX-GC20	14" (350 mm)	10.2" (259 mm)	8.4" (224 mm)	28.9 (34.6)	44.8 in² (289 cm ²)	8.4' (2.56 m)	21.4' (6.52m)	179ft² (16.6m ²)
> CX-GC30	17.5" (445 mm)	12.6" (287mm)	11.3" (320 mm)	18.2 (21.7)	71.3in² (460 cm ²)	8.4' (2.56 m)	27.4' (8.35m)	230ft² (21.3m ²)
> CX-GC40	28" (711 mm)	20" (508 mm)	18.7" (475mm)	6.9 (8.3)	187 in² (1,206 cm ²)	8.4' (2.56m)	45' (13.72 m)	378 ft² (35m ²)

> Cell Depth	in (mm)	2 (50)	3 (75)	4 (100)	6 (150)	8 (200)
> Minimum Seam Peel Strength	lbf (N)	160 (710)	240 (1065)	320 (1420)	480 (2130)	640 (2840)
> Minimum Seam Hang Strength	A 4 in (102mm) weld joint supporting a load of 160 lbs (72.5 kg) for 30 days minimum or a 4 in (102mm) weld joint supporting a load of 160 lbs (72.5 kg) for 7 days minimum while undergoing temperature change from 74°F (23°C) to 130°F (54°C) on a 1 hour cycle.					

Notes:

- 1) Value is a percentage of junction performance (EN ISO 13426-1) to perforated strip performance (EN ISO 10319).
- 2) Predicted to be durable for a minimum of 50 years in natural soil with a pH between 4 and 9 and at a soil temperature < 25°C.
- 3) 100% of original tensile strength retained following exposure to intense UV radiation and accelerated weathering in accordance with EN 12224.
- 4) Data is accurate as of 7/01/2025

Carthage Mills assumes no liability for the accuracy or completeness of this information or for the ultimate use by the purchaser. Carthage Mills disclaims any and all express, implied, or statutory standards, warranties or guarantees, including without limitation any implied warranty as to merchantability or fitness for a particular purpose or arising from a course of dealing or usage of trade as to any equipment, materials, or information furnished herewith. This document should not be construed as engineering advice.