

## SECTION 737—GEOCELL

**737.1 GENERAL**—From a manufacturer listed in [Bulletin 15](#) and conforming to the following requirements:

**(a) Physical Requirements.**

- Sheet material High -density polyethylene (HDPE)
- UV Stabilization 2% carbon black, [ASTM D 1603](#)
- Sheet surface Sheet, non-perforated, smooth or textured
- Sheet density 0.940 g/cm<sup>3</sup> (58.7 pounds per cubic foot) minimum, [ASTM D 1505](#)
- Nominal sheet thickness 1.2 mm (47 mils) minimum, [ASTM D 5199](#)
- Cell wall joints Assemble each joint with 20 mm (3/4-inch) maximum melt pools using continuous or uniformly spaced ultrasonic spot welding. Space welded joints conforming to the requirements of Table A for the Class of geocell.
- Cell wall joint tensile peel strength Conform to the requirements of Table B, when tested according to Department of the Army Technical Report GL-86-19, Appendix A, Section 3.C.

**TABLE A**  
**Geocell Classification and Welded Joint Spacing**

Geocell Class	Welded Joint Spacing mm (inches)
A (Standard Cell)	330 ± 3 (13.0 ± 0.12)
B (Standard Cell Plus)	355 ± 3 (14.0 ± 0.12)

**TABLE B**  
**Cell Wall Joint Tensile Peel Strength**

Cell Depth mm (Inches)	Minimum Joint Tensile Peel Strength
102.0 (4)	1 420 N (320 lbs.)
152.0 (6)	2 130 N (480 lbs.)
203.0 (8)	2 840 N (640 lbs.)

**(b) Certification.** Certify each shipment as specified in [Section 106.03\(b\)3](#). Visibly label all shipments on the geocell, or its container, with the manufacturer's name and model number or trade name.