# TERRACELL

## CELLULAR CONFINEMENT SYSTEM



**TerraCell** is an innovative geosynthetic product providing solutions for difficult stabilization, erosion control, slope and retaining wall challenges. TerraCell, generically referred to as a "**geocell**," confines native or select fill materials and is the integral component of a **cellular confinement system.** 

TerraCell is a lightweight, flexible mat made of high density polyethylene strips. These strips are ultrasonically bonded together to form an extremely strong, honeycomb configuration. A variety of fill materials can be placed within the TerraCell system: soil, sand, aggregate, concrete, etc. The use of TerraCell and the appropriate fill material create numerous opportunities for versatile and economical solutions for many applications including:

- GROUND STABILIZATION
- SLOPE EROSION CONTROL
- RETAINING WALLS

- STREAM CROSSINGS
- CHANNEL EROSION CONTROL
- EMBANKMENTS

To satisfy the application, TerraCell is available in various heights and three different cell sizes: TerraCell 140 (small), TerraCell 175 (intermediate) and TerraCell 280 (large). It can be supplied in solid wall or perforated (to allow flow between cells) styles. Holes can be made in TerraCell to facilitate a tendoning system for some applications. TerraCell can be manufactured into custom sizes for specific requirements (i.e.; retaining wall fascia).

#### **EXPANDED DIMENSIONS**

#### - TerraCell 140

8.4 ft. x 21.4 ft. x cell height Panel Area: 180 sq. ft. (nominal) Cell Area: 10.2" x 8.8" (44.8 sq. inches nominal)

#### - TerraCell 175

8.4 ft. x 27.4 ft. x cell height Panel Area: 230 sq. ft. (nominal) Cell Area: 12.6" x 11.3" (71.3 sq. inches nominal)

#### - TerraCell 280

8.4 ft. x 45 ft. x cell height Panel Area: 378 sq. ft. (nominal) Cell Area: 20.0" x 18.7" (187 sq. inches nominal)

#### **CELL HEIGHT**

8", 6", 4", and 3"

#### COLOR

Black

#### **CUSTOM COLORS**

Tan and Green

### TERRACELL PRODUCT SPECIFICATIONS

TerraCell is manufactured from High Density Polyethylene (HDPE) to the following minimum standards:

PROPERTY	TEST METHOD	VALUE
Sheet Thickness	ASTM D-5199	50 mils, ± 5%
Density	<b>ASTM D-1505</b>	0.94 grams/cubic cm
Carbon Black Content	ASTM D-1603	1.5%
Environmental Stress Crack Resistance	ASTM D-1693	4000 hours

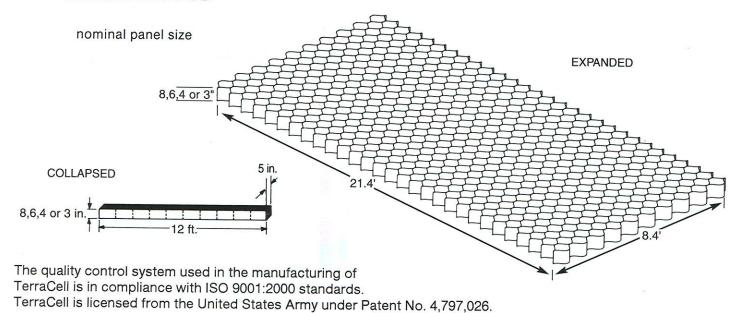
Cell joints are ultrasonically spot-welded with three (3) welds per inch uniformly spaced across the height of each strip. Seam strengths are the same across the entire height of the cell joint and meet the following minimum seam peel strengths (per US Army Corps of Engineers Technical Report GL-86-19, Appendix A).

CELL HEIGHT	SEAM PEEL STRENGTH	APPROXIMATE WEIGHT
8 Inch	640 lbs.	114 lbs.
6 Inch	480 lbs.	86 lbs.
4 Inch	320 lbs.	57 lbs.
3 Inch	240 lbs.	43 lbs.

Seam Hang Strength—A 102 mm (4.0 in.) weld joint supporting a load of 72.5 kg (160 lbs.) for 30 days minimum or a 102 mm (4.2 in.) weld joint supporting a load of 72.5 kg (160 lbs.) for 7 days minimum while undergoing temperature change from 23°C (74°F) to 54°C (130°F) on a 1 hour cycle.

Installation Temperature Range: 16°F to 110°F

#### TERRACELL 140



TerraCell and WEBTEC's broad line of geosynthetic products are marketed through a network of local distributors.



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