

### Penteco EGA-304

### 4" Cell Depth

### HDPE Geocell

- ❖ **Reinforcement**
- ❖ **Erosion Control**
- ❖ **Load Support**
- ❖ **Retaining Wall**

Geocells are a three-dimensional cellular system used to confine and stabilize fill materials within retaining walls, embankments, and other reinforced soil mass structures. The confinement of fill within the geocell prevents lateral spreading and erosion while allowing for vertical drainage. This results in a more stable and durable structure with a smaller footprint than traditional methods.

Geocells are mostly used to improve the load-bearing capacity of weak soils, making them an essential component of many construction projects. In addition, geocell-reinforced soil is highly resistant to erosion, making it an ideal choice for use in areas that are prone to flooding or severe weather conditions.

| EGA-304                                  |             |                                  |                                   |
|------------------------------------------|-------------|----------------------------------|-----------------------------------|
| Property                                 | Test Method | Imperial                         | Metric                            |
| Polymer Density                          | ASTM D-1505 | (58.4 - 60.2) lb/ft <sup>3</sup> | (0.935 - 0.965) g/cm <sup>3</sup> |
| Stress Crack Resistance                  | ASTM D-5397 | >400 hrs                         | >400 hrs                          |
| Stress Crack Resistance                  | ASTM D-1693 | 6000 hrs                         | 6000 hrs                          |
| Carbon Black Content                     | ASTM D-1603 | 1.5 % min (by weight)            | 1.5 % min (by weight)             |
| Nominal Sheet Thickness BEFORE Texturing | ASTM D-5199 | 50 mil - 5%, + 10%               | 1.27 mm - 5%, + 10%               |
| Nominal Sheet Thickness AFTER Texturing  | ASTM D-5199 | 60 mil - 5%, + 10%               | 1.52 mm - 5%, + 10%               |
| Dimensions                               |             |                                  |                                   |
| Cell Depth                               | Measured    | 4"                               | 100 mm                            |
| Seam Peel Strength                       | Measured    | 320 lbf                          | 1420 N                            |
| Percent Cell Wall Open Area              | Measured    | 11 ± 1 %                         | 11 ± 1 %                          |
| Cell Size (nominal-expanded)             | Measured    | (12.6 x 11.3) in                 | (320 x 287) mm                    |
| Section Size (nominal-expanded)          | Measured    | (8.4 x 27.4) ft                  | (2.56 x 8.35) m                   |
| Section Size (minimum-expanded)          | Measured    | (9.2 x 24.8) ft                  | (2.8 x 7.6) m                     |
| Section Size (maximum-expanded)          | Measured    | (7.6 x 30) ft                    | (2.3 x 9.1) m                     |

#### Notes:

- (1) Polyethylene strip shall be textured with a multitude of rhomboidal (diamond shape) indentations.
- (2) The rhomboidal indentations shall have a surface density of 140 to 200 per in<sup>2</sup>(22 to 31 per cm<sup>2</sup>).
- (3) The Nominal Sheet Thickness is an average thickness of the sheet, taken from the mean of 10 readings.
- (4) Penteco is a distributor for this product with manufacturing partner based out of USA.
- (5) Manufacturer's data sheet provided at time of purchase.

**DISCLAIMER:** The data above represents the manufacturer's laboratory testing of their product. It is the user's responsibility to determine the suitability of the products. Penteco is a distributor for these products through its manufacturing partners. Penteco provides the manufacturers data sheet at the time of sale. Penteco and manufacturing partners assume no liability, nor can they provide any warranty, without having additional information regarding the use of the products. The same goes for any infringement on patents - no permission can be granted without further disclosure.

Distributed by

