









EnviroGrid® EGA 40 is a three-dimensional cellular confinement system that provides confinement and reinforcement to granular material for load support erosion control, slope protection and retaining wall applications.



EnviroGrid® EGA 40 sections are manufactured from 58 strips of HDPE, resulting in a section length of 29 cells. Each strip is the approved width and 142 inches (3.6m) in length.

| PROPERTY | TEST METHOD | ENGLISH | METRIC |
|---|--------------|----------------------------------|---------------------------------|
| Cell Depth 4 Cell Depths Available | Measured | 3 , 4 , 6 , 8 inches | 75 , 100 , 150 , 200 mm |
| Expanded Cell Size (length x width) Nominal | Measured | 20 x 18.7 inches | 508 x 475 mm |
| Expanded Cell Area Nominal | Measured | 187 in | 1,206 cm |
| Expanded Section Area Nominal | Measured | 378 f ² | 35.14 m² |
| Expanded Section Size (width x length) Nominal | Measured | 8.4 x 45 ft | 2.56 x 13.72 m |
| Expanded Section Size (width x length) Minimum | Measured | 9.2 x 40.9 ft | 2.8 x 12.5 m |
| Expanded Section Size (width x length) Maximum | Measured | 7.6 x 49.7 ft | 2.3 x 15.1 m |
| Seam Peel Strength (Minimum (>) | | 80 lbf/in | 142 N/cm |
| Seam Peel Strength ⁽¹⁾ Long Term | See Notes | 160 lb | 710 N |
| Internal Junction Efficiency ⁽²⁾ (>) | See Notes | 100 % | 100 % |
| Mechanical Junction Efficiency ⁽²⁾ (>) | See Notes | 100 % | 100 % |
| Peak Friction Angle Ratio ⁽³⁾ | | 0.95 | 0.95 |
| Environmental Stress Crack Resistance | ASTM D-1693 | 5,000 hours | |
| Oxidation Resistance ⁽⁵⁾ (>) | EN ISO 13438 | 100 | years |
| Weathering Resistance ⁽⁶⁾ | EN ISO 12224 | 100 | % |
| Polymer Density | ASTM D-1505 | 0.935 x 0.965 lb/ft ³ | 0.935 x 0.965 g/cm ³ |
| Flexural Storage Modulus (>) | ISO 6721 | 800 MPA | 800 MPA |

| PROPERTY | TEST METHOD | ENGLISH | METRIC |
|--|-------------|---------------------------|---------------------------|
| Carbon Black Content ⁽⁴⁾ | ASTM D-1603 | 1.5 - 2 % | 1.5 - 2 % |
| Texture Density Shape: Romboidal | | 22 - 31 indentations /cm² | 22 - 31 indentations /cm² |
| Sheet Thickness (before/after texturing) | ASTM D-5199 | 50 - 60 mils (-5% +10%) | 1.27 - 1.52 mm (-5% +10%) |

⁽¹⁾ A 4" (100mm) wide seam sample shall support a 160lb (72.5kg)load for a period of 7 days minimum in a temperature-controlled environment undergoing a temperature change on a 10 hour cycle from ambient room to 130°F (54°C). Ambient room temperature per ASTM E 41.

⁽²⁾ Junction efficiency determined as a percentage of junction performance (EN ISO 13426-1) to perforated strip performance (EN ISO 10319).

⁽³⁾ Value for clean granular infill material.

⁽⁴⁾ Standard black HDPE strips. For tan/green EnviroGrid®, hindered amine light stabilizer (HALS) content will be 2.0% by weight of carrier.

⁽⁵⁾ Predicted to be durable for a minimum of 100 years in natural soil with a pH between 4 and 9 and at soil temperature <25°C. Testing was conducted at 100°C.

⁽⁶⁾100% of original tensile strength retained following exposure to intense UV radiation and accelerated weathering in accordance with EN 12224.