



Envirogrid® is a three dimensional cellular confinement system that provides confinement and reinforcement to granular material. Therefore it can be used for load support, erosion control, slope protection and for retaining wall construction. The Envirogrid® 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.

DX2 Geosyntex, Inc.
Lawrenceville, GA 30046
770-682-1758
www.dx2.net

MATERIAL PROPERTIES	TEST METHOD	UNIT	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	>400
Environmental Stress Crack Resistance	ASTM D 1693	hours	6000
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%

*Polyethylene strip shall be textured with a multitude of rhomboidal (diamond shape) indentations. The rhomboidal indentations shall have a surface density of 140 to 200 per in² (22 to 31 per cm²).

¹ The Nominal Sheet Thickness is an average thickness of the sheet, taken from the mean of 10 readings.

Product	Nominal-Expanded Cell Size (width x length) in (mm)	Nominal-Expanded Cell Area in ² (cm ²)	Nominal-Expanded Section (width x length) ft (m)	Nominal-Expanded Section Area ft ² (m ²)	Minimum-Expanded Section (width x length) ft (m)	Maximum-Expanded Section (width x length) ft (m)	Cell Depth in (mm)	Seam Peel Strength lbf (N)	Percent Cell Wall Open Area (%)	Seam Hang Strength
EGA20	10.2 x 8.8 (259 x 224)	44.8 (289)	8.4 x 21.4 (2.56 x 6.52)	180 (16.7)	9.2 x 19.4 (2.8 x 5.9)	7.6 x 23.3 (2.3 x 7.1)	3 (75)	240 (1060)	16 ± 1%	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.
							4 (100)	320 (1420)	11 ± 1%	
							6 (150)	480 (2130)	16 ± 1%	
							8 (200)	640 (2840)	11 ± 1%	
EGA30	12.6 x 11.3 (320 x 287)	71.3 (460)	8.4 x 27.4 (2.56 x 8.35)	230 (21.4)	9.2 x 24.8 (2.8 x 7.6)	7.6 x 30.0 (2.3 x 9.1)	3 (75)	240 (1060)	16 ± 1%	
							4 (100)	320 (1420)	11 ± 1%	
							6 (150)	480 (2130)	16 ± 1%	
							8 (200)	640 (2840)	11 ± 1%	
EGA40	20 x 18.7 (508 x 475)	187 (1206)	8.4 x 45 (2.56 x 13.72)	378 (35.14)	9.2 x 40.9 (2.8 x 12.5)	7.6 x 49.7 (2.3 x 15.1)	3 (75)	240 (1060)	16 ± 1%	
							4 (100)	320 (1420)	11 ± 1%	
							6 (150)	480 (2130)	16 ± 1%	
							8 (200)	640 (2840)	11 ± 1%	

All products can also be offered in XLW sizes. XLW panels are double the width of standard panels, measuring 16.8 ft (5.12 m) wide.

This information is provided for reference purposes only and is not intended as a warranty or guarantee. Geo Products, LLC assumes no liability in connection with the use of this information. Check with Geo Products, LLC for current, standard minimum quality assurance procedures. GPES Rev 1/2020



DX2 Geosyntex, Inc.

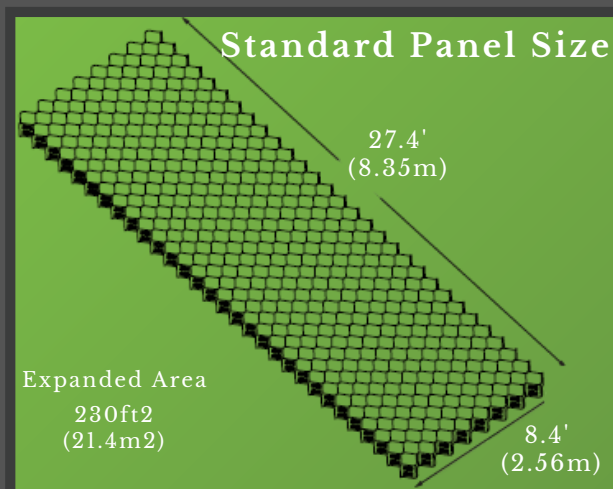
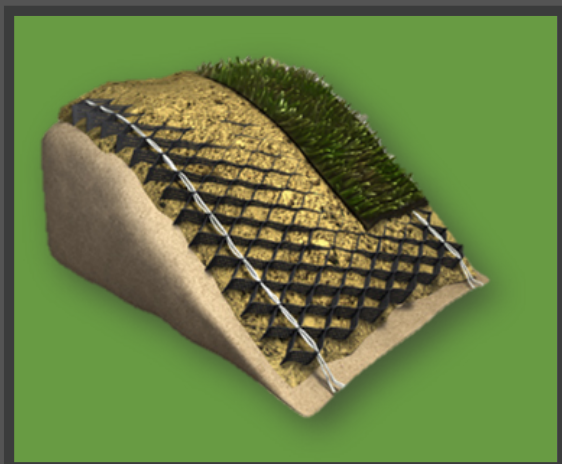
EnviroGrid® Geocell | Geo Products, LLC

EGA 30

SLOPE APPLICATION

J-HOOKS

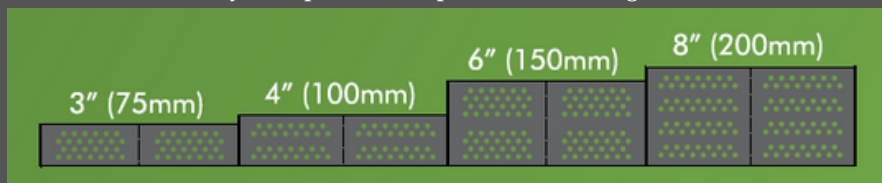
The product quoted is EGA 30.
Detailed information on the product and dimensions are below:



Custom panel sizes are offered. Please reference your quote for dimensions.

Cell Heights

Please reference your quote for specific cell height.



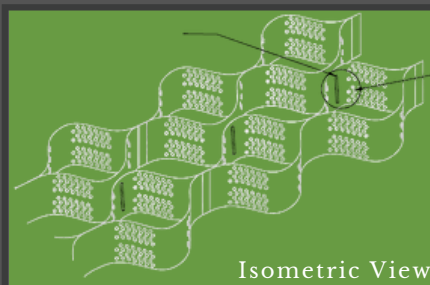
Cell Dimensions

12.6in x 11.3in
320mm x 287mm

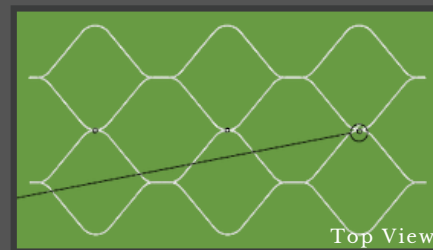
EGA 30

EnviroLock™

EnviroLocks™ are used to connect the panels side by side, top and bottom. EnviroLocks™ have a 310lb break strength. There are 100 EnviroLocks™ per bag.



Isometric View

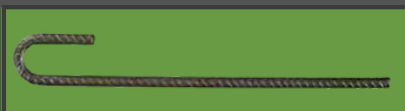


Top View

J-Hooks

J-Hooks are used to stabilize the panels by keeping the cell walls flush with the ground surface. The following lengths are offered:

12 inch | 16 inch | 18 inch | 24 inch



EnviroGrid® Geocell

EGA30



EnviroGrid® EGA 30 standard sections are manufactured from 58 strips of HDPE, resulting in a section length of 29 cells and 8 cells wide. Each strip is the appropriate width and 142 inches (3.6m) in length. Weld spacing is 17.5 in ± .12 in (446 ± 3mm). Cell density is 22 cells per meter squared. Cell walls are textured and if perforations are required 11-16% ± 2% of the cell wall is removed.

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Material Properties	Test Method	Unit	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	> 400
Environmental Stress Crack Resistance	ASTM D 1693	hours	6000
Carbon Black Content	ASTM D 1603	% by weight	1.5% minimum
Nominal Sheet Thickness	ASTM D 5199	mil (mm)	50 (1.27) -5%, +10%

Polyethylene strip shall be textured with a multitude of rhomboidal (diamond shape) indentations. The rhomboidal indentations shall have a surface density of 140 to 200 per in² (22 to 31 cm²).

Physical Properties	Unit	Test Value				
Nominal - Expanded Cell Size (width x length)	in (mm)	12.6 x 11.3 (320 x 287)				
Nominal - Expanded Cell Area	in ² (cm ²)	71.3 (460)				
Nominal - Expanded Panel Size (width x length)	ft (m)	8.4 x 27.4 (2.56 x 8.35)				
Nominal - Expanded Panel Area	ft ² (m ²)	230 (21.4)				
Cell Depth	mm (in)	3 (75)	4 (100)	6 (150)	8 (200)	12 (300)
Seam Peel Strength	lbf (N)	240 (1060)	320 (1420)	480 (2130)	640 (2840)	960 (4260)
Seam Hang Strength	A 4 in (102 mm) 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.					

⁽¹⁾The Nominal Sheet Thickness is an average thickness of the sheet, taken from the mean of 10 readings.

EGA3050 Rev 1/2020

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INSTALLATION GUIDE FOR SLOPE APPLICATIONS

EnviroGrid® GeoCell

J-HOOKS



STEP 1

STEP 2

STEP 3

STEP 4

STEP 5



PREP

INSTALL GEOTEXTILE

EXPAND

ANCHOR

FILL

Prepare trench per engineer's specification.

Install a layer of geotextile per manufacturer's recommendation if required.

Deploy panels with first cell inside anchor trench.

Either pin geocell in trench or backfill trench to hold Envirogrid® in place.

Install J-hooks while deploying panels. Do this by expanding cells down the slope to clip location. Install J-hook and expand again. Work down the slope to avoid walking in cells.

OR

Expand panels completely and come back to install J-hooks. Connect sides with Envirolocks™.

Place infill.

Overfill at 1" to 2" and compact.



Panel Connection System

Property	Units	Value(s)
Connection Type	N/A	Mechanical, No tools necessary
Minimum Break Strength	Lb.	310
UV Resistance	N/A	Excellent
Color	N/A	Black





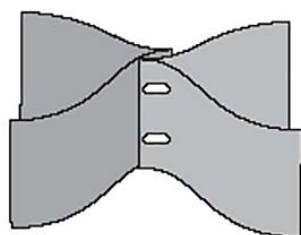
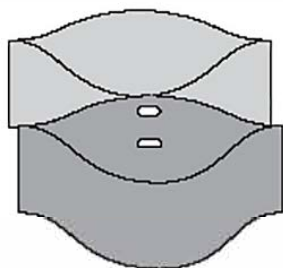
"Tongue"

ENVIRO LOCK

"Head"

Installation Procedure

6" 8" 12" ENVIROGRID® Panels
2 and 4 Slots



1. Align slots on cells of Adjacent Panels. 12" has 4 slots.

2. Pull EnviroLock tongue through bottom slot of both cell walls

3. Pull EnviroLock tongue up and back through the top slot of both cell walls.

4. Close EnviroLock by placing the tongue into the head and pulling tight.

5. Repeat for adjacent cells until all cells are attached.

1. Align slots on Fins of adjacent Panels

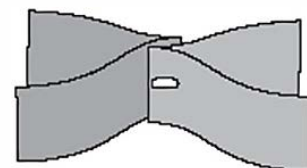
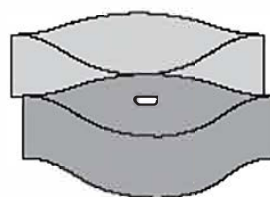
2. Pull EnviroLock tongue through bottom slot of both cell walls

3. Pull EnviroLock tongue up and back through the top slot of both cell walls.

4. Close EnviroLock by placing the tongue into the head and pulling tight

5. Repeat for adjacent cells until all cells are attached.

3" & ENVIROGRID® Panels
4" 1 Slot



1. Align single slot on cells of Adjacent Panels

2. Pull EnviroLock tongue under bottom of both cell walls

3. Wrap EnviroLock tongue back around the top of both cell walls

4. Close EnviroLock by placing the tongue into the head and pulling tight

5. Repeat for adjacent cells until all cells are attached.

1. Align single slot on Fins of Adjacent Panels

2. Push EnviroLock tongue through the slot of both cell walls

3. Wrap EnviroLock tongue under the bottom of both cell walls

4. Push EnviroLock tongue again through the slot of both cell walls

5. Close EnviroLock by placing the tongue into the head and pulling tight.

6. Repeat for adjacent cells until all cells are attached.