

ENVIROGRID® GEOCELL

PRODUCT SPECIFICATIONS

EnviroGrid® 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® 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. Each EnviroGrid® product is manufactured in cell heights of 3", 4", 6", and 8". Custom sizes are able to be manufactured upon request.

PRODUCT PERFORMANCE

STRUCTURAL INTEGRITY, DURABILITY

EXPANSION - NOMINAL					MINIMUM	MAXIMUM
PRODUCT CODE	CELL SIZE width x length (in)	CELL AREA in^2	SECTION width x length (ft)	SECTION AREA ft^2	SECTION width x length (ft)	SECTION width x length (ft)
EGA 20	10.2 x 8.8	44.8	8.4 x 21.4	180	9.2 x 19.4	7.6 x 23.3
EGA 30	12.6 x 11.3	71.3	8.4 x 27.4	230	9.2 x 24.8	7.6 x 30.0
EGA 40	20 x 18.7	187	8.4 x 45	378	9.2 x 40.9	7.6 x 49.7

PRODUCT PERFORMANCE

STRUCTURAL INTEGRITY, DURABILITY

MATERIAL PROPERTIES	VALUE	MATERIAL PROPERTIES	TEST METHOD	VALUE
SEAM PEEL STRENGTH - <i>MINIMUM</i>	>80 lbf/in	ENVIRONMENTAL STRESS CRACK RESISTANCE	ASTM D 1693	>5,000 hours
SEAM PEEL STRENGTH - <i>LONG TERM</i> ¹	160 lb	OXIDATION RESISTANCE	EN ISO 13438	>100 years
INTERNAL JUNCTION EFFICIENCY	>100%	WEATHERING RESISTANCE	EN 12224	100%
MECHANICAL JUNCTION EFFICIENCY	>100%			
PEAK FRICTION ANGLE RATIO	0.95			

MATERIAL PROPERTIES

MATERIAL PROPERTIES	TEST METHOD	VALUE
POLYMER DENSITY	ASTM D 1505	0.935 -0.965 G/CM^3
FLEXURAL STORAGE MODULUS	ISO 6721	>800 MPA
CARBON BLACK CONTENT	ASTM D 1603	1.5-2.0%
TEXTURE DENSITY (SHAPE: RHOMBOIDAL)	-	22-31 indentations cm^2
SHEET THICKNESS - BEFORE TEXTURE	ASTM D 5199	50 mil -5%, +10%
SHEET THICKNESS - AFTER TEXTURE	ASTM D 1599	60 mil -5%, +10%

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