Biaxial Geogrid

KEYMAY

KEYMAY's Biaxial Geogrids are used to improve the performance of aggregate base course materials supporting both paved and unpaved roads. The geogrid provide confinement (lateral stability) of unbounded base courses improving the vertical stress distribution characteristics. Confinement is achieved by the geogrids restraining the lateral and vertical deformation of the aggregate, which is locked into the aperture openings of the product during placement and compaction of the aggregate. The reinforcement (strength) is achieved by applying vertical stress causing the lateral and vertical deformation of both the aggregate and the geogrid.

PP BIAXIAL GEOGRID												
INDEX PROPERTIES	TEST METHOD	UNIT	EP1515		EP2020		EP2525		EP3030		EP4040	
			MD	TD	MDW	TD	MD	TD	MD	TD	MD	TD
Polymer	-	-	PP		PP		PP		PP		PP	
Minimum Carbon Black	ASTM D-4218	%	2		2		2		2		2	
Tensile Strength @ 2% strain	ASTM D-6637	kN/m	5		7		9		10.5		14	
Tensile Strength @ 5% strain	ASTM D-6637	kN/m	7		14		17		21		28	
Ultimate Tensile Strength	ASTM D-6637	kN/m	15		20		25		30		40	
Strain @ Ultimate Strength	ASTM D-6637	%	13	10	13	10	13	13	13	10	13	10
STRUCTURAL INTEGRITY												
Junction Efficiency	GRI GG2	%	93		93		93		93		93	
Flexural Rigidity	ASTM D-1388	mg-cm	700,000		1,000,000		750,000		2,000,000		10,000,000	
Aperture Stability	COE Method	mm-N/deg	646		707		707		0.75		2,104	
DIMENSIONS												
Roll Width	-	m	3.95									
Roll Length	-	m	50									
Roll Weight	-	kg	39		50		60		72		105	

1515 BIAXIAL GEOGRID			
MINIMUM AVERAGE ROLL VALUES (MARV)			
PROPERTIES	**STANDARD**	**UNIT**	**EP 1515**
MECHANICAL			
MD Tensile Strength @ 2% strain	ASTM D-6637	KN/m	5
XMD Tensile Strength @ 2% strain			5
MD Tensile Strength @ 5%			7
XMD Tensile Strength @ 5%			7
MD Ultimate Tensile Strength			15
XMD Ultimate Tensile Strength			15
MD Strain @ Ultimate Strength			13
XMD Strain @Ultimate Strength			10
STRUCTURAL INTEGRITY			
Junction Efficiency	GRI GG2	%	93
Flexural Rigidity	ASTM D-1388	Mg-cm	700,000
Aperture Stability	COE Method	mm-N/deg	646
DIMENSIONS			
Roll Width		m	3.95
Roll Length		m	50

2020 BIAXIAL GEOGRID			
MINIMUM AVERAGE ROLL VALUES (MARV)			
PROPERTIES	**STANDARD**	**UNIT**	**EP 2020**
MECHANICAL			
MD Tensile Strength @ 2% strain	ASTM D-6637	KN/m	7
XMD Tensile Strength @ 2% strain			7
MD Tensile Strength @ 5%			14
XMD Tensile Strength @ 5%			14
MD Ultimate Tensile Strength			20
XMD Ultimate Tensile Strength			20
MD Strain @ Ultimate Strength			15
XMD Strain @Ultimate Strength			13
STRUCTURAL INTEGRITY			
Junction Efficiency	GRI GG2	%	93
Flexural Rigidity	ASTM D-1388	Mg-cm	1,000,000
Aperture Stability	COE Method	mm-N/deg	707
DIMENSIONS			
Roll Width		m	3.95
Roll Length		m	50

2525 BIAXIAL GEOGRID			
MINIMUM AVERAGE ROLL VALUES (MARV)			
PROPERTIES	**STANDARD**	**UNIT**	**EP 2525**
MECHANICAL			
MD Tensile Strength @ 2% strain	ASTM D 6637	KN/m	9
XMD Tensile Strength @ 2% strain			9
MD Tensile Strength @ 5%			17
XMD Tensile Strength @ 5%			17
MD Ultimate Tensile Strength			25
XMD Ultimate Tensile Strength			25
MD Strain @ Ultimate Strength			13
XMD Strain @Ultimate Strength			13
STRUCTURAL INTEGRITY			
Junction Efficiency	GRI GG2	%	93
Flexural Rigidity	ASTM D 1388	Mg-cm	750,000
Aperture Stability	COE Method	mm-N/deg	707
DIMENSIONS			
Roll Width		m	3.95
Roll Length		m	50

3030 BIAXIAL GEOGRID			
MINIMUM AVERAGE ROLL VALUES (MARV)			
PROPERTIES	**STANDARD**	**UNIT**	**EP 3030**
MECHANICAL			
MD Tensile Strength @ 2% strain	ASTM D 6637	KN/m	10.5
XMD Tensile Strength @ 2% strain			10.5
MD Tensile Strength @ 5%			21
XMD Tensile Strength @ 5%			21
MD Ultimate Tensile Strength			30
XMD Ultimate Tensile Strength			30
MD Strain @ Ultimate Strength			13
XMD Strain @Ultimate Strength			13
STRUCTURAL INTEGRITY			
Junction Efficiency	GRI GG2	%	93
Flexural Rigidity	ASTM D 1388	Mg-cm	2,000,000
Aperture Stability	COE Method	mm-N/deg	0.75
DIMENSIONS			
Roll Width		m	3.95
Roll Length		m	50