

SPARTAN ROAD GRID™ 11

BIAXIAL FIBERGLASS GEOGRID



Spartan Road Grid™ 11 fiberglass geogrid is specifically designed for asphalt reinforcement. Its optimal apertures allow asphalt particles to penetrate through the grid to achieve high interlock and effective bonding of the two asphalt lifts. Spartan Road Grid™ 11 is also polymer coated which ensures proper adhesion to the asphalt layers over the tack coat surface and further optimizes the chemical compatibility between the fiberglass reinforcement and the pavement overlay to create a solid bond of the asphalt layers over the tack coat surface. This bond ensures that the reinforcing grid is in a position to effectively accept and distribute tensile stresses.

It is self-adhesive and offers excellent heat resistance; minimal shrinkage at high temperatures; high chemical, physical and biological durability along with optimal elastic modulus and aperture size. It is biologically unaffected by soil microorganisms, inert to all chemicals normally found in the soil, and formulated to resist ultraviolet degradation.

TESTED PROPERTY	TEST METHOD	UNIT ENGLISH (METRIC)	VALUE ENGLISH (METRIC)	
			MD	XD
Ultimate Tensile Strength	ASTM D 6637	lbs/in (kN/m)	571 (100.0)	571 (100.0)
Tensile Strength at 2% Strain ⁽¹⁾	ASTM D 6637	lbs/in (kN/m)	456 (80.0)	456 (80.0)
Secant Stiffness EA at 2% Strain ⁽¹⁾	ASTM D 6637	lbs/in (kN/m)	22,847 (4,000)	22,847 (4,000)
Shrinkage Properties	Internal Test Method	%	Less than 0.5% at 200°C after 15 minutes	
Strain at Ultimate ⁽²⁾	ASTM D 6637	%	< 3	
Grid Material			Fiberglass Geogrid	
Coating			Polymeric with pressure sensitive self-adhesive backing	
Optimum Elasticity Modulus ⁽²⁾		psi (MPa)	10.6 x 10 ⁶ (73,000)	
Melting Point Coating	ASTM D 276	°F (°C)	> 752 (> 400)	
Melting Point Glass	ASTM C 338	°F (°C)	> 1,508 (> 820)	
Aperture Size (center to center of strand)	Nominal	inch (mm)	1.0 (25.4)	1.0 (25.4)
Mass/Unit Area ⁽²⁾	ASTM D 5261	oz/yd ² (g/m ²)	12.5 (420)	
TYPICAL ROLL DIMENSIONS				
Roll Width ⁽³⁾⁽⁴⁾	Minimum	ft (m)	5.0 (1.5) or 7.38 (2.25)	
Roll Length ⁽³⁾⁽⁴⁾	Minimum	ft (m)	328.08 (100.0) of 246.06 (75)	

Notes:

1. MARV – Minimum Average Roll Values

2. Mean

3. Minimum

4. Typical. Standard roll dimensions are shown. The products can be fabricated to custom lengths and widths to meet customer needs

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