

STF P11 geogrid is composed of polypropylene resin which is extruded into a stable geogrid structure. STF P11 geogrid is inert to biological degradation and resistant to naturally encountered chemicals, alkalis, and acids. STF P11 increases roadbed and foundation bearing capacity, while prolonging the service life of each by the confinement of the base course. STF P11 prevents the lateral spreading of the base or sub-base aggregate and allows for shear interaction to develop between the aggregate and the geogrid. STF P11 geogrid will reduce the applied vertical pressure of heavy loads at depth of aggregate by spreading the load over a wider area.

PROPERTIES	TEST METHOD	MARV VALUES MD	MARV VALUES CMD
Ultimate Strength ¹	ASTM D6637	850 lbs.	1,300 lbs.
Tensile Strength at 2% ¹	ASTM D6637	280 lbs.	450 lbs.
Tensile Strength at 5% ¹	ASTM D6637	580 lbs.	920 lbs.
UV resistance	ASTM D4355	100% strength retained	
Aperture Size		1.28 in.	168.in.

MECHANICAL PROPERTIES	MARV VALUES MD	MARV VALUES CMD
Junction Efficiency ²	93%	93
Junction Strength	131 lbs.	131
Flexural Stiffness ³	250,000 mg-cm	
Aperture Stability ⁴	0.32 m-N/deg	
Resistance to UV Degradation ⁵	100%	

PHYSICAL PROPERTIES	TYPICAL VALUES
Rib Thickness	0.03 in.
Roll Size	13.1 x 246 ft.
Roll Weight	205 lbs.
Roll Area	358 yd ²

¹True resistance to elongation when initially subjected to a load determined in accordance with ASTM D 6637 without deforming test materials under load before measuring such resistance or employing "secant" or "offset" tangent methods of measurement so as to overstate tensile properties.

²Load transfer capability calculated as a % of ultimate tensile strength

³Resistance to bending force determined in accordance with ASTM D 5732. The overall Flexural Stiffness is calculated as the square root of the product of MD and CMD Flexural Stiffness values.

⁴Resistance to in-plane rotational movement measured by applying a 20kg-cm (2 m-N) moment to the central junction of a 9 inch x 9 inch specimen in accordance with U.S. Army Corps of Engineers Methodology for measurement of Torsional Rigidity.

⁵Tested according to ASTM D

