STF
Synteen Technical Fabrics, Inc.

PROUDLY MADE IN THE USA by Synteen
Lancaster, South Carolina

SYNTEEN SF12 BIAXIAL GEOGRID
BASE COURSE REINFORCEMENT AND SUBGRADE IMPROVEMENT

SF12 is composed of high molecular weight, high tenacity multifilament polyester yarns, woven into a stable network placed under tension. The high strength polyester yarns are PVC coated and are inert to biological degradation and are resistant to naturally encountered chemicals, alkalis and acids.

REINFORCEMENT PROPERTIES		TEST METHOD	MARV VALUES	
			Lbs/ft	kN/m
Ultimate Strength	MD	ASTM 6637	2,388	34.9
	XMD		5,268	76.8
Initial Modulus	MD	ASTM 6637	178,000	2,598
	XMD		235,000	3,432
Load (Tensile Strength) at 2% Strain	MD	ASTM 6637	526	7.7
	XMD		797	11.6
2% Secant Moduli	MD	ASTM 6637	26,300	383.6
	XMD		39,850	581.2
Load (Tensile Strength) at 5% Strain	MD	ASTM 6637	1,042	15.2
	XMD		1,367	19.9
5% Secant Moduli	MD	ASTM 6637	20,840	304
	XMD		27,340	398.8
True in place strength after site damage testing based on TRI method of "installation" damage testing with poorly graded gravel (GP) and well groomed gravel (SW).				
Load at 2% Strain	MD (GP)	ASTM 6637 & ASTM 5818	438	6.3
	MD (SW)		496	7.2
Load at 2% Strain	XMD (GP)	ASTM 6637 & ASTM 5818	664	9.7
	XMD (SW)		752	11.0
Load at 5% Strain	MD (GP)	ASTM 6637 & ASTM 5818	868	12.6
	MD (SW)		983	14.3
Load at 5 % Strain	XMD (GP)	ASTM 6637 & ASTM 5818	940	13.7
	XMD (SW)		1,065	15.5
Junction Strength (lb./junction)	MD	GRI-GG2	59.4	0.87
	XMD		64.8	0.95
FHWA Sum of Junctions – Strength (81 total junctions)	MD	GRI-GG2	4,851	70.8
	XMD		5,249	76.6
FHWA Sum of Junctions – Efficiency	MD	GRI-GG2	203%	
	XMD		100%	
Junction Strength (lb./junction)	MD	GRI-GG2	59.9	0.87
	XMD		64.8	0.95
Coefficient of Pullout Interaction		ASTM 6706 Sandy Gravel Sand	$C_i = 1.0$ $C_i = 1.0$	
Aperture Size *	MD	Measured	1.0	25
	XMD		1.0	25
Roll Dimensions 12' x 150' 15' x 150' 17' x 150'		Measured	200 square yards per roll 250 square yards per roll 283 square yards per roll	

GP - Poorly Graded Gravel * SW - Well Groomed Gravel   **Synteen can produce custom widths, apertures and master roll lengths.**