PAVEMENT STRUCTURES
BASE COURSE REINFORCEMENT
SUBGRADE IMPROVEMENT BIAXIAL GEOGRID

GEO SF 11 is composed of high molecular weight, high tenacity multifilament polyester yarns that are woven into a stable network placed under tension. The high strength polyester yarns are coated with a polymer coating. GEO SF Geogrids are inert to biological degradation and are resistant to naturally encountered chemicals, alkalis and acids.

GEO SF11 INCREASES THE SERVICE LIFE OF PAVEMENT STRUCTURES BY IMPROVING:

CONFINEMENT OF BASE COURSE

1. Prevents lateral spreading of the base or sub-base aggregate
2. Allows for shear interaction to develop between the aggregate and the geogrid

INCREASE TENSILE STRENGTH OF AGGREGATE

1. **GEO SF 11** geogrid will reduce applied vertical pressure of heavy loads at depth of aggregate by spreading the load over a wider area.

REINFORCEMENT PROPERTIES		TEST METHOD	MARV VALUES lbs/ft	MARV VALUES kN/m
Ultimate Strength	MD XMD	ASTM-6637	2388 3870	34.9 56.5
Initial Modulus	MD XMD	ASTM-6637	178,000 172,900	2598 2524
Load at 2% Strain	MD XMD	ASTM-6637	526 578	7.68 8.43
Load at 5% Strain	MD XMD	ASTM-6637	1042 792	15.2 11.5
True in place strength after site damage testing based on TRI method of "installation" damage testing with coarse gravel (CG) and sandy gravel (SG).				
Load at 2% Strain	MD (GP) MD (SW)	ASTM 6637 + ASTM-5818 TRI/Method	401 490	5.8 6.5
Load at 2% Strain	XMD (GP) XMD (SW)	ASTM 6637 + ASTM-5818 TRI/Method	521 570	7.6 8.3
Load at 5% Strain	MD (GP) MD (SW)	ASTM 6637 + ASTM-5818 TRI/Method	795 972	11.6 14.1
Load at 5 % Strain	XMD (GP) XMD (SW)	ASTM 6637 + ASTM-5818 TRI/Method	715 781	10.4 11.4
Coefficient of Pullout Interaction		ASTM-6706 Sandy Gravel Sand	 $\underline{C_i = 1.0}$ $\underline{C_i = 1.0}$	
Aperture Size*		Measured	MD 1.0 in. XD 1.3 in.	

* Capability to make aperture to specific sizes. GP= Coarse Gravel SW= Well Groomed Gravel

Standard roll size is 12' x 150'

GeoCHEM, Incorporated
Web Site: http://www.geocheminc.com
Innovative Products and Services Since 1982
PH: 907.562.5755 / FAX: 907.562.3032

PAVEMENT STRUCTURES

BASE COURSE REINFORCEMENT
SUBGRADE IMPROVEMENT BIAXIAL GEOGRID

GEO SF 12 is composed of high molecular weight, high tenacity multifilament polyester yarns that are woven into a stable network placed under tension. The high strength polyester yarns are coated with a polymer coating. GEO SF Geogrids are inert to biological degradation and are resistant to naturally encountered chemicals, alkalis and acids.

GEO SF12 INCREASES THE SERVICE LIFE OF PAVEMENT STRUCTURES BY IMPROVING:

CONFINEMENT OF BASE COURSE

1. Prevents lateral spreading of the base or sub-base aggregate
2. Allows for shear interaction to develop between the aggregate and the geogrid

INCREASE TENSILE STRENGTH OF AGGREGATE

1. **GEO SF 12** geogrid will reduce applied vertical pressure of heavy loads at depth of aggregate by spreading the load over a wider area.

REINFORCEMENT PROPERTIES		TEST METHOD	MARV VALUES lbs/ft	kN/m
Ultimate Strength	MD XMD	ASTM-6637	2388 5268	34.9 76.8
Initial Modulus	MD XMD	ASTM-6637	178,000 235,000	2598 3432
Load at 2% Strain	MD XMD	ASTM-6637	526 797	7.7 11.6
Load at 5% Strain	MD XMD	ASTM-6637	1042 1129	15.2 16.5
True in place strength after site damage testing based on TRI method of "installation" damage testing with coarse gravel (CG) and sandy gravel (SG).				
Load at 2% Strain	MD (GP) MD (SW)	ASTM 6637 + ASTM 5818 TRI/Method	438 496	6.3 7.2
Load at 2% Strain	XMD (GP) XMD (SW)	ASTM 6637 + ASTM-5818 TRI/Method	664 752	9.7 11.0
Load at 5% Strain	MD (GP) MD (SW)	ASTM 6637 + ASTM-5818 TRI/Method	868 983	12.6 14.3
Load at 5 % Strain	XMD (GP) XMD (SW)	ASTM 6637 + ASTM-5818 TRI/Method	940 1065	13.7 15.5
Coefficient of Pullout Interaction		ASTM 6706 Sandy Gravel Sand	 Ci= 1.0 Ci= 1.0	
Aperture Size*		Measured	MD 1.0 in. XD 1.3 in.	

* Capability to make apertures to specific sizes
Standard roll size: 12' x 150'. Production of Master Roll lengths as well.

GP= Poorly Graded Gravel
SW= Well Groomed Gravel

GeoCHEM, Incorporated
Website: http://www.geocheminc.com
Innovative Products and Services Since 1982
PH: 907.562.5755 / FAX 907.562.3032