SG 550

Uni-Axial Knitted Geogrid

STRATAGRID is geogrid reinforcement for soil. These high performance geogrids are constructed of high molecular weight and high tenacity polyester yarns utilizing a complex knitting process and polymer coating to provide superior engineering properties. Yarns are precision knitted into a dimensionally stable, uniform network of apertures providing significant tensile reinforcement capacity. STRATAGRID is engineered to be mechanically and chemically durable, in both the harsh construction installation phase and in aggressive soil environments (pH range from 3-9).

PROPERTY	TEST METHOD	ENGLISH	METRIC
Ultimate Strength	ASTM D-6637 Method A	8,150 lbs/ft	118.9 kN/m
Creep Limited Strength	ASTM D-5262/D-6992	5,258 lbs/ft	76.7 kN/m
LTDS (SW, SP, SM, SC)	LTDS or Tal	4,346 lbs/ft	63.4 kN/m
LTDS (GP, GW, GM, GC, SW, SP, SM, SC)	LTDS or Tal	4,157 lbs/ft	60.7 kN/m
LTDS (GW, GP, GM, GC)	LTDS or Tal	3,541 lbs/ft	51.7 kN/m
Molecular Weight (min.)	GRI GG8	-	25,000 g/mol
Carboxyl End Group Count (max.)	GRI GG7	-	30 Meg/kg
Aperture Size	Measured	0.85/0.35 x 0.95 in	21.6/8.9 x 24.1 mm

ROLL SIZE	AREA	WEIGHT
6' x 300'	200 sys	145 lbs
12' x 225'	300 sys	216 lbs

REDUCTION FACTOR	VALUE
RF(id) Soil - 20mm minus, D50 ≤ 0.2mm (SW, SP, SM, SC)	1.10
RF(id) Soil - 25mm minus, D50 ≤ 8mm (GP, GW, GM, GC, SW, SP, SM, SC)	1.15
RF(id) Soil - 50mm minus, D50 ≤ 20mm (GW, GP, GM, GC)	1.35
RF(d) (3 ≤ pH ≤ 9) (PET - CEG < 30, MW > 25,000)	1.10

SOIL INTERACTION COEFFICIENT	VALUE
Silts/Clay (ML, CL)	0.6 - 0.7
Sandy Silts & Clay (SC,GC)	0.7 - 0.8
Poorly-Graded Sand & Gravel, Silty Sand (GP, GM, SP, SM)	0.8 - 0.9
Well-Graded Gravel, Sand Gravel Mix, Well-Graded Sand (SW, GW)	0.9 - 1.0