

400 UNIAXIAL

Geogrid

Material: High tenacity polyester (PET) yarn, knitted into a stable geogrid and polymer coated.

Properties: Resistant to biological degradation, alkalis, acids, and naturally occurring chemicals.

Applications: Used for soil reinforcement in retaining walls, reinforced slopes, subgrade stabilization, embankments over soft soils, landfill expansions, and surcharged embankments.

Manufacturing: Produced in ISO 9001:2015 certified facilities with stringent quality control, accredited by GAI-LAP and NABL.

TENSILE PROPERTIES	UNITS	MARV (MD)
Ultimate Tensile Strength ASTM D6637 (Method B)	lbs/ft (kN/m)	27408 (400)

MINIMUM ROLL VALUE (MD)	UNITS	VALUE
Creep Limited Strength 114-year design life	lbs/ft (kN/m)	19033 (258.1)
Long Term Design Strength (LTDS) uses RFcr, RFID, and RFD below	lbs/ft (kN/m)	16324 (238.2)

REDUCTION FACTORS	UNITS	FACTOR
Creep Reduction Factor 20 C, 114-year design life	RFCR	1.44
Installation Damage Factor ASTM D5818	RFID	1.06
Environmental Effects Factor GRI GG7 / GRI GG8	RFD	1.10

PHYSICAL PROPERTIES	UNITS	ROLL SIZE
Roll Dimensions width x length	m	2.4m x 100m 3.8m x 100m
Roll Area calculated from offered roll sizes	yd2 (m2)	287 (240) 454 (380)

MOLECULAR PROPERTIES	UNITS	VALUE
Molecular Weight GRI GG8 / ASTM D4603	g/mol min.	25,000
Carboxyl End Group (CEG) GRI GG7 / ASTM D7409	mmol/kg max.	30

1 75-year design life

2 Values based on soils with classifications of sand, silt or clay (SW, SP, SP-SM, SM, SC, CL, ML) RFcr=1.44, RFID=1.06, RFD=1.10
Adjustable to other soil types.

3 Roll sizes listed are current Geomods offered sizes per client direction: 2.4m x 100m, 3.8m x 100m.