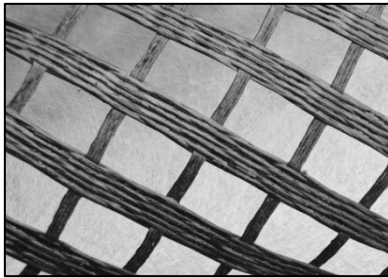




GX[®] Geogrids

AGGREGATE REINFORCEMENT | SOIL REINFORCEMENT

CARTHAGE MILLS' GX[®] SERIES OF WOVEN / COATED HIGH-TENACITY POLYESTER UNIAXIAL GEOGRIDS



■ SERIES DESCRIPTION

Carthage Mills' GX[®] Geogrids are manufactured from high-tenacity, high molecular weight polyester (PET) fibers in a full range of tensile strengths designed to meet the most demanding soil reinforcement applications; including Ultimate Tensile up to 29,750 lbs/ft.

GX[®] Geogrids are woven in a stable, interlocking grid, placed under tension and polymer coated to provide excellent resistance to chemical and biological degradation within the pH range common to buried reinforcement applications.

The special polymer coating of GX[®] Geogrids also increases the dimensional stability of the product enhancing soil interaction properties and protecting against construction related installation damage.

■ FEATURES AND BENEFITS

The ultimate design properties of Carthage Mills' GX[®] Geogrids were carefully targeted by engineers who play an active role in the actual design and construction of segmental retaining walls. They provide the *most efficient* long-term design strengths (LTDS) in the industry.

- SUPERIOR LONG-TERM DESIGN STRENGTH (LTDS)
GX[®] Geogrids feature exceptional long-term creep rupture performance. Combined with rugged resistance to installation damage and the durability of high tenacity PET fibers, GX[®] Geogrids provide the most efficient design strengths available in the market.
- EXCELLENT SOIL INTERACTION
GX[®] Geogrids deliver immediate tensile reinforcement to the soil or aggregate fill ensuring top performance of the reinforced structure.
- COST EFFECTIVE
Industry leading LTDS and interaction efficiency minimizes the number of geogrid layers required in the design.
- COMPREHENSIVE TESTING PROGRAM
GX[®] Geogrids have been tested in

accordance with the most rigorous standards of our industry ensuring credible data upon which the most demanding MSE designs rely.

■ ROLL SIZES

GX[®] Geogrids are available in standard 6' roll *width* allowing for easy shipping to, and handling at the project site. The standard 300' roll *length* is optimum for minimizing cut waste at the end of the roll. GX[®] Geogrids are also available in 12' and 17' wide rolls.

■ APPLICATIONS

Carthage Mills' GX[®] Geogrids are used in a wide variety of soil and aggregate reinforcement applications.

- Segmental Retaining Wall (SRW) Reinforcement
- Mechanically Stabilized Earth (MSE) structures or walls (Temporary and Permanent)
- Steepened slopes
- Veneer Reinforcement
- Voids Bridging
- Earth filled Embankments over soft soils; Dikes and Levees
- Welded wire-form faced walls i.e. Palisades[®]





■ GX[®] Series of Geogrids – Physical Property Table

Carthage Mills' GX[®] Geogrids are manufactured of high tenacity, high molecular weight, polyester yarns, woven into a stable interlocking grid, placed under tension, and then PVC coated to provide damage protection during installation. They are developed for the reinforcement of steepened slopes and segmental retaining walls; and can be custom manufactured with Ultimate Tensile Strengths up to xx,xxx lbs/ft.

Carthage Mills' GX[®] Geogrids are biologically inert, resistant to naturally encountered chemicals, alkalis, and acids, and resistant to ultra violet exposure.

PROPERTY	METHOD	UNIT	GX [®] -150	GX [®] -300	GX [®] -500	GX [®] -800	GX [®] -1000
□ Mechanical							
Wide Width Tensile (Ult)	ASTM D 6637	lb/ft	1700	3250	4500	7315	9790
Wide Width Tensile @ 5% Strain			801	1080	1202	2023	2423
Creep Reduced Strength	ASTM D 5262		1156	2211	3061	4976	6660
Long Term Design Strength (LTDS)	NCMA		1011	1879	2601	4228	5658
□ Physical (Typical)							
Mass Per Unit Area	ASTM D 5261	oz/yd ²	5.3	6.9	8.7	11.5	13.5
Aperture Size (MD x XMD)	Measured	in	0.55 x 0.71	0.87 x 0.98	0.87 x 0.98	0.91 x 0.91	0.95 x 1.15
Roll Dimensions (W x L)		ft	6 x 300 (12' and 17' wide available by request)				
Roll Area		yd ²	200				
Roll Handling Weight		lbs	75	91	113	148	174

1. All values reported in this table are M.A.R.V. unless otherwise stated. Statistically, these values yield a 97.7% probability that any sample of geogrid tested will exceed the value reported.
2. Tensile strength reported for GX-150 is the same in both the machine and cross-machine directions. It is a biaxial strength product.
3. Long Term Design Strength (LTDS) values reported above are typical for performance of the geogrid in a silty sand soil. LTDS varies with soil type.
4. The properties reported for Carthage Mills GX[®] Geogrids are effective 03/01/11 and subject to change without notice

$$LTDS = \frac{T_{Ultimate}}{RF_{CR} \times RF_{ID} \times RF_D}$$

Partial Reduction Factors: RF_{CR}= for creep deformation
 RF_{ID} = for installation damage (silty sand)
 RF_D = for biological and chemical degradation

Seller makes no warranty, expressed or implied, concerning the product furnished hereunder other than at the time of delivery it shall be of the quality and specification stated herein. Any implied warranty of fitness for a particular purpose is expressly excluded, and, to the extent that it is contrary to the foregoing sentence, any implied warranty of merchantability is expressly excluded. Any recommendations made by seller concerning the uses or applications of said product are believed reliable and seller makes no warranty of results to be obtained. If the product does not meet Carthage Mills current published specifications, and the customer gives notice to Carthage Mills before installing the product, then Carthage Mills will replace the product without charge or refund the purchase price.