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# ■ FX® High-Strength Polyester (PET) Geotextiles

**SEPARATION | REINFORCEMENT | CONFINEMENT** 

### CARTHAGE MILLS' FX® HIGH-STRENGTH SERIES (PET) OF WOVEN POLYESTER GEOTEXTILES



#### **■ SERIES DESCRIPTION**

Carthage Mills' FX High-Strength Series (PET) of woven polyester geotextiles were developed for the most demanding applications of reinforcement and confinement.

The FX High-Strength Series (PET) is produced of 100% high-tenacity, high molecular weight, multifilament filament polyester (PET) yarns. They deliver the higher ultimate tensile strength properties, resistance to installation damage, and exceptional creep resistance and soil interaction that results in higher long-term design strengths (LTDS) per GRI-GT7.

Carthage Mills can custom manufacture FX High-Strength (PET) geotextiles to meet individual project specifications up to approximately **70,000 lbs/ft Ultimate**  **Tensile**; in custom roll sizes; and with minimal lead times meeting difficult delivery requirements.

#### **■ FEATURES AND BENEFITS**

Carthage Mills' FX High-Strength Series (PET) of woven polyester geotextiles are designed to provide cost-saving solutions in a wide range of applications and varying site conditions, making them the logical choice for the most demanding of applications.

- CREEP RESISTANCE
   The high-tenacity, high molecular weight, multifilament filament polyester (PET) yarns and weaving process delivers higher long-term design strengths (LTDS).
- REINFORCEMENT
   High tensile modulus at low strains and excellent soil interaction delivers immediate support in severe conditions.
- DURABILITY
   Superior resistance to installation damage assures long-term performance.
- HIGH SEAM STRENGTHS
   Easily sewn in the factory or the field high to wide widths and

- significantly decrease installation time.
- CUSTOM MANUFACTURE WITH MINIMAL LEAD TIMES
   Manufactured to 'project specifications' with minimal lead times and on-time delivery.

#### APPLICATIONS

The combination of strengths, durability, creep resistance and soil interaction make Carthage Mills' FX High-Strength Series (PET) of woven polyester geotextiles unique in their ability to deliver in:

- Reinforcement for permanent and temporary Mechanically Stabilized Earth (MSE) structures or walls
- Embankments and Dikes on soft soils and foundations
- Voids Bridging in landfills (liner support); Highways and Runways
- Reinforcement in steepened slopes
- Capping/Closures in landfills and other hazardous waste sites
- Geotextile tubes: Containment
- Most any reinforcement application that requires: High Creep Resistance, High Tensile Modulus, Tremendous Durability and Long-Term Design Strength (LTDS)









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## FX® High-Strength Series (PET) of Woven Geotextiles

Carthage Mills' FX® High-Strength Series (PET) of woven geotextiles are composed of high-tenacity, high molecular weight, multifilament polyester (PET) yarns that are woven into a stable network placed under tension, are inert to biological degradation, and resistant to naturally encountered chemicals, alkalis and acids.

**NOTE:** Carthage Mills can custom manufacture FX® High-Strength polyester geotextiles to meet individual project specifications up to approximately 70,000 lbs/ft (1,022 kN/m) Ultimate Tensile Strength; with minimal lead times and meeting difficult delivery requirements. Call for a Custom Quotation and delivery schedule.

PROPERTY	METHOD	UNITS	FX®-100PET	FX®-150PET	FX®-200PET	FX®-300PET
☐ Mechanical/Reinforcement  Tensile Strength @ Ultimate  Tensile Strength @ 5% Strain	ASTM D 4595	lbs/in lbs/ft (kN/m)	(MD) 570.8 6,850 (100.0) 200 2,400 (35.0)	(MD) 856.25 10,275 (150.0) 300 3,600 (52.5)	(MD) 1,141.6 13,700 (200.0) 500 6,000 (87.6)	(MD) 1,712.5 20,550 (300.0) 700 8,400 (122.6)
Factory Sewn Seam - (CD)	ASTM D 4884	lbs/in lbs/ft (kN/m)	141.6 1,700 (24.8)	141.6 1,700 (24.8)	141.6 1,700 (24.8)	141.6 1,700 (24.8)
□ Physical  Standard Roll Dimensions/Packaging (1)	Measured (Typical)	ft / yd² (m / m²)	16.41 ft x 328.1 ft 598 yd <sup>2</sup> (5.0 m x 100.0 m 500 m <sup>2</sup> ) 16.41 ft x 984.3 ft 1794 yd <sup>2</sup> (5.0 m x 300.0 m 1500 m <sup>2</sup> )	16.41 ft x 328.1 ft 598 yd <sup>2</sup> (5.0 m x 100.0 m 500 m <sup>2</sup> ) 16.41 ft x 984.3 ft 1794 yd <sup>2</sup> (5.0 m x 300.0 m 1500 m <sup>2</sup> )	16.41 ft x 328.1 ft 598 yd <sup>2</sup> (5.0 m x 100.0 m 500 m <sup>2</sup> ) 16.41 ft x 984.3 1794 yd <sup>2</sup> (5.0 m x 300.0 m 1500 m <sup>2</sup> )	16.41 ft x 328.1 ft 595 yd <sup>2</sup> (5.0m x 100.0m 500 m <sup>2</sup> ) 16.41 ft x 656.2 ft 1196 yd <sup>2</sup> (5.0 m x 200.0 m 1000 m <sup>2</sup> ) 16.41 ft x 984.3 ft 51,794 yd <sup>2</sup> (5.0 m x 300.0 m 1500 m <sup>2</sup> )

<sup>(1)</sup> Custom lengths and factory fabricated wide width panels are available by Special Order.

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Unless otherwise stated, all values stated here are Minimum Average Roll Values (MARV)

<sup>■</sup> The properties reported above are effective 01-01-18 and subject to change without notice.