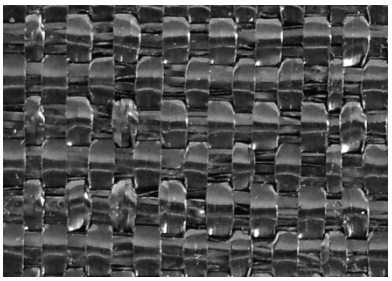
Carthage Mills | **Series Profile**

Geotextiles | Erosion Control | Geogrids | Geomembranes

FX® Woven Slit-Film Polypropylene Geotextiles

SEPARATION | STABILIZATION

CARTHAGE MILLS' FX SLIT-FILM SERIES OF WOVEN POLYPROPYLENE GEOTEXTILES



SERIES DESCRIPTION

Carthage Mills' FX Series of woven slit film geotextiles offers immediate and cost effective solutions for most separation and many stabilization applications. By providing and maintaining *separation* of the aggregate and subgrade soils, the system life of both paved and unpaved roadways is extended significantly. In unpaved applications, the aggregate remains useful throughout the entire life of the job, and access to work sites remains trouble free through all types of weather. *Stabilization* is provided primarily by their high strength at low elongation that distributes loads and reduces or eliminates rutting.

Most all types of geotextiles are excellent separators of aggregate and subgrade. However, only 'woven' geotextiles have the high modulus – resistance to stretch – necessary to provide *stabilization* over soft or poorly drained soils.

FX-55 is a medium weight geotextile and the one most frequently used in DOT and private engineered projects.

FX-66 is a heavier weight geotextile typically used when higher than average stabilization is required.

FEATURES AND BENEFITS

Carthage Mills' FX Slit-Film Series of woven polypropylene geotextiles are designed to provide cost-saving solutions in a wide range of applications and varying site conditions.

- SEPARATION
  Prevents dissimilar materials from intermixing, thereby extending the system lives of both paved and unpaved applications.
- STABILIZATION
  Higher tensile modulus at low strains delivers immediate support and load distribution in moderate subgrade conditions.
- DURABILITY
  Excellent resistance to installation damage assures long-term performance.
- COST SAVINGS AND EFFECTIVENESS
  Low-cost and High performance assures savings in *structural materials, labor costs* and *future maintenance* for many civil engineering applications.

APPLICATIONS

The Carthage Mills' FX Series of woven slit-film geotextiles are ideal:

- As a road base separation layer under driveways and streets, parking, storage and staging areas, roadways, airport runways, paving blocks, and access/haul roads.
- In wrapped-face retaining walls. ▪ Foundation stabilization
- Daily landfill covers

AASHTO M288-15 Specification:

> FX-50 and FX-55 exceed the requirements for SEPARATION and STABILIZATION / Class 3.

> FX-60 and FX-66 exceed the requirements for SEPARATION and STABILIZATION / Class 2.

> FX-66 exceeds the requirements for SEPARATION and STABILIZATION / Class 1.

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Since 1958: America's *First* Geotextile Company

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FX® Slit-Film Series of Woven Geotextiles

Carthage Mills **FX® Slit-Film Series** of woven geotextiles are made of high-tenacity polypropylene yarns woven into a stable network. The **FX® Slit-Film Series** of woven geotextiles achieves higher tensile strengths at low elongation (high modulus); is inert to biological degradation; and resistant to naturally encountered chemicals, alkalis, and acids.

PROPERTY	METHOD	UNIT	FX®-22	FX®-55	FX®-60	FX®-66
☐ **Mechanical**						
Grab Tensile Strength	ASTM D 4632	lbs	152 x 141	200	250	315
Grab Tensile Elongation		%	19%	15%	15%	15%
Trapezoidal Tear	ASTM D 4533	lbs	67	75	90	113
CBR Puncture	ASTM D 6241		526	700	900	900
☐ **Endurance**						
UV Resistance	ASTM D 4355	% @ 500 hrs	90%	70%	70%	70%
☐ **Hydraulics / Filtration**						
Permittivity	ASTM D 4491	sec^{-1}	0.09	0.05	0.05	0.05
Water Flow Rate		gpm/ft^2	7	4	4	4
Apparent Opening Size (AOS)	ASTM D 4751	US Std Sieve	40-50	40	40	40
☐ **Physical**						
Standard Roll Sizes	Measured (Typical)	ft (yd^2)	12.5 x 504 (700 yd^2) 15 x 420 (700 yd^2) 17.5 x 360 (700 yd^2)	12.5 x 432 (600 yd^2) 15.0 x 360 (600 yd^2) 17.5 x 309 (600 yd^2)	12.5 x 432 (600 yd^2) 15.0 x 360 (600 yd^2) 17.5 x 309 (600 yd^2)	12.5 x 360 (500 yd^2) 15.0 x 300 (500 yd^2) 17.5 x 258 (500 yd^2)

NOTES: Mullen Burst Strength ASTM D 3786 is no longer recognized by ASTM D35 on Geosynthetics. Puncture Strength ASTM D 4833 is not recognized by AASHTO M 288 and has been replaced with CBR Puncture ASTM D 6241.

- Unless otherwise stated, all values stated here are Minimum Average Roll Values (MARV); are calculated as the Typical minus two standard deviations; and are based on a 97.7% confidence level.
- The properties reported above are effective 12/01/18 and subject to change without notice.

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