

Woven Geotextiles

MIRAFI®

Mirafi® X-Series Woven Polypropylene Geotextiles

for Sedimentation Control, Soil Separation, and Road Base Stabilization

PRODUCT DESCRIPTION

Mirafi® X-Series products are woven geotextiles comprised of UV stabilized polypropylene slit film. Mirafi® X-Series Woven Polypropylene Geotextiles provide excellent puncture and tear resistant properties in addition to high tensile strengths.

FEATURES AND BENEFITS

- **Construction.** Woven construction offers excellent resistance to installation abuse;
- **Strength.** High modulus provide outstanding performance in a wide range of applications;
- **Flow.** Uniform openings provide excellent filtration and flow characteristics;
- **Fabrication.** Mirafi® Silt Fence is prefabricated using Mirafi® 100X geotextile and 3.2 cm (1.25") nominal square hardwood posts. Mirafi® Silt Fence is available with 2.5 m (8.3') or 3 m (10') post spacings.
Mirafi® Envirofence is prefabricated using Mirafi® 100X, 3.2 cm (1.25") nominal square hardwood posts, and a net backing for additional support. Mirafi® Envirofence is available with 2.5 m (8.3') post spacings. All Mirafi® prefabricated silt fence products are ready for immediate installation upon delivery;
- **Cost.** Mirafi® 500X/600X geotextiles were developed to improve the economics and performance of roadway systems by reducing the amount of aggregate required, increasing the design life and reducing the maintenance cost, preventing periodic oversteering of the subgrade, and eliminating costly project delays by allowing all-weather construction. In addition, panels can be sewn together in the factory or in the field, providing cross-roll direction strength to facilitate installation, and providing reinforcement strength.

APPLICATIONS

Mirafi® 100X and 100CX

Mirafi® 100X and 100CX are predominantly used for sedimentation control applications. Controlling the run-off is advantageous to owners, contractors, and engineers who face the economic costs associated with site sediment loss. Installed correctly, these sediment control geotextiles in silt fence structures function as a filter and a run-off flow velocity check. Fine-grained sediment is trapped by the geotextile while storm water run-off passes through the geotextile at a moderate rate.

Mirafi® 500X

Mirafi® 500X applications include separation under parking lots, residential streets, and roadways. Mirafi® 500X is used over good to moderate strength subgrades for separation and confinement of base materials. Mirafi® 500X is also utilized over moderate to poor subgrades for separation, confinement, and stabilization of base material. Mirafi® 500X meets AASHTO M288-96 Specifications for Stabilization and Separation - Class 3.

Mirafi® 600X

Mirafi® 600X is used for separation and stabilization over very weak subgrades; and separation, confinement, and reinforcement for critical roadways and site construction where very coarse, angular, and abrasive base material is required. Mirafi® 600X provides stabilization and reinforcement when heavy loads are expected. Mirafi® 600X is effective in the construction of low embankments over weak subgrades, eliminating the need for costly excavation and replacement with expensive fill. Mirafi® 600X meets AASHTO M288-96 Specifications for Stabilization and Separation - Class 1.



Mirafi® Silt Fence with posts used for sedimentation control



Mirafi® 500X used for separation under residential street

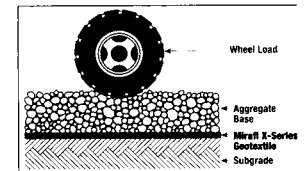


Mirafi® 600X used for stabilization in roadway repair

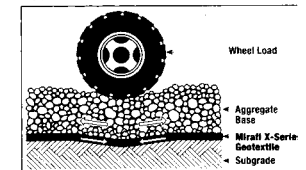
Mirafi® X-Series Technical Data

Property	Test Method	Units	100CX	100X	500XL	500X	600X
Grab Tensile Strength ¹	ASTM D 4632	kN (lbs)	0.40 (90)	0.55 (124)	0.62 (140)	0.90 (200)	1.40 (315)
Grab Tensile Elongation	ASTM D 4632	% MD / CD	15 / 15	15 / 15	15 / 10	15 / 10	15 / 10
Trapezoid Tear Strength	ASTM D 4533	kN (lbs)	0.22 (50)	0.29 (65)	0.20 (45)	0.33 (75)	0.53 (120)
Mullen Burst Strength	ASTM D 3786	kPa (psi)	1376 (200)	2060 (300)	2240 (325)	2756 (400)	4134 (600)
Puncture Strength	ASTM D 4833	kN (lbs)	0.22 (50)	0.26 (60)	0.29 (65)	0.40 (90)	0.53 (120)
UV Resistant after 500 hours	ASTM D 4355	% Strength	70	70	70	70	70
Apparent Opening Size	ASTM D 4751	mm (US Sieve)	0.60 (30)	0.60 (30)	0.60 (30)	0.30 (50)	0.425 (40)
Permittivity	ASTM D 4491	sec ⁻¹	0.1	0.1	0.05	0.05	0.05
¹ Values apply to both machine and cross-machine directions							
Packaging							
Roll Width		m (ft)	0.9 (3)	0.9 (3)	3.8 (12.5)	3.8 (12.5) 5.3 (17.5)	3.8 (12.5) 5.3 (17.5)
Roll Length		m (ft)	various	100 (330)	154 (504)	132 (432) 94.2 (309)	110 (360) 78.7 (258)
Est. Gross Weight		kg (lbs)	various	12 (26)	95 (190)	95 (210)	109 (240)
Roll Area		m ² (yd ²)	various	92 (110)	585 (700)	502 (600)	418 (500)

Subgrade/Aggregate Separation



Aggregate Confinement



Subgrade Load Distribution

