Innovative Geotextiles

MIRAFI

product

Mirafi[®] Construction Products offers a wide range of woven geotextiles for sediment control applications. These fabrics are cost-effective elements which improve and enhance modern construction techniques in a variety of civil engineering applications.

PRODUCT DESCRIPTION

Mirafi[®] Silt Fence structures, specially developed fabrics on supporting posts, are designed for efficient control of sediment run-off from construction sites. This sediment, left unchecked, can clog and pollute native waterways and damage natural areas. Controlling the run-off (an increasing environmental concern) is advantageous to owners, contractors and engineers who face the economic costs associated with site sediment loss. Installed correctly in the field, the

luct Mirafi[®] Silt Fence Prefabricated Silt Fence Structures for Sediment Control

sedimentation control fabric in silt fence structures functions as a filter and a runoff flow velocity check. Fine-grained sediment is trapped by the fabric while storm water run-off may pass through the fabric at a moderate rate.

FEATURES AND BENEFITS

Mirafi® Silt Fence is prefabricated with posts and is ready for immediate installation upon delivery to your site. The prefabricated system has a number of unique features and advantages:

- Complete prefabricated system incorporating Mirafi[®]100X woven fabric
- 3.2cm (1-1/4") nominal square hardwood posts
- Available in 2.5m (8.3ft) and 3.0m (10.0ft) post spacings.

Mirafi[®] Envirofence[®] is recommended for use as sediment control when additional strength and support are required. Envirofence features include:

- Complete pre-fabricated system incorporating Mirafi[®]100X woven fabric
- 3.2cm (1-1/4") nominal square hardwood posts
- Additional plastic net backing for reinforced support
- Available in 2.5m (8.3ft) post spacings

Mirafi[®]Silt Fence Fabrics

Mirafi[®] also provides you with an assortment of UV stabilized, nonfabricated sediment control fabrics in a choice of lengths. Each fabric is designed to meet the specifications and regulations for sedimentation control required by local governmental agencies.



Mirafi® Silt Fence used in erosion control application.



Mirafi® prefabricated Silt Fence.



Technical Data



Innovative Geotextiles

product

Mirafi[®] Silt Fence Prefabricated Silt Fence Structures for Sedimentation Control

Mirafi[®] Silt Fence Technical Data (All values are minimum average roll values)

PROPERTY	TEST METHOD	UNITS	SILT FENCE (100X) MINIMUM AVERAGE ROLL VALUES	ENVIROFENCE® (100X) MINIMUM AVERAGE ROLL VALUES
Grab Tensile Strength (machine direction)*	ASTM D 4632	N (lbs)	550 (124)	550 (124)
Grab Tensile Strength (cross-machine direction)*	ASTM D 4632	N (lbs)	550 (124)	550 (124)
Grab Tensile Elongation	ASTM D 4632	%	15/15	15/15
Mullen Burst Strength	ASTM D 3786	kPa (psi)	2060 (300)	2060 (300)
Trapezoid Tear Strength	ASTM D 4533	N (lbs)	290 (65)	290 (60)
Permittivity	ASTM D 4491	Sec ⁻¹	0.10	0.10
Water Flow Rate	ASTM D 4491	l/min/m² (gal/min/ft²)	405 (10)	405 (10)
Ultraviolet Stability	ASTM D 4355	%	70	70

* Envirofence working strength is enhanced further by the incorporation of a polymeric mesh providing a tensile strength of 140 lbs/ft (typical) in both machine and cross machine directions.

Mirafi[®] Silt Fence Packaging

SILT	LENGTH m (ft)	FABRIC	POST	POST	SHIPPING
FENCE TYPE		WIDTH m(ft)	LENGTH m(ft)	SPACING m(ft)	WEIGHTS kg(lbs)
Mirafi® Silt Fence	30.5 (100)	0.9 (3)	1.22 (4)	2.5 (8.3)	23 (50)
	30.5 (100)	0.9 (3)	1.22 (4)	3.0 (10)	20 (45)
Mirafi [®] Envirofence [®]	30.5 (100)	0.9 (3)	1.22 (4)	2.5 (8.3)	25 (55)
100CX (Fabric Only)	varies	0.9 (3)		_	varies
100X (Fabric Only)	100.6 (330)	0.9 (3)			12 (26)

Mirafi[®] Silt Fence Installation Guidelines

Toe-In Methods



- A. With Trench
- Excavate a 15.2 cm x 15.2 cm (6" x 6") trench along lower perimeter of site.
- Unroll silt fence one section at a time. Posts should be positioned on downstream side of fence
- Drive post into ground and lay the toe-in fabric flap in bottom of trench. Backfill trench, and tamp ground as shown in diagram above.
- B. Without Trench
- Toe-in can also be accomplished by laying the fabric flap on untrenched ground and piling and tamping soil over the flap at the base of structure.



TOP VIEW

 Position posts to overlap as shown above, making certain that fabric folds around each post one full turn.

Section A

• Drive posts tightly together and secure tops of posts by tying off with cord or wire to prevent flow-through of built-up sediment at joint.



- Overlap posts as shown in previous section to prevent flowthrough.
- Drive posts firmly together and tie off tops of posts to prevent separation.

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CORPORATE OFFICE

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WARRANTY

Mirafi[®] 100X w/posts

Mirafi[®] Silt Fence is a silt fence structure, which encompasses Mirafi[®]100X, a woven fabric comprised of high tenacity polypropylene yarns. Mirafi[®] Silt Fence is prefabricated with 3.2cm (1.25") nominal square hardwood posts and is ready for immediate installation upon delivery.

Mechanical Properties (Fabric)	Test Method	Unit	Minimum Average Roll Value	
(Fabric)			MD	CD
Grab Tensile Strength	ASTM D 4632	N (lbs)	550 (124)	550 (124)
Grab Tensile Elongation	ASTM D 4632	%	15	15
Trapezoid Tear Strength	ASTM D 4533	N (lbs)	290 (65)	290 (65)
Mullen Burst Strength	ASTM D 3786	kPa (psi)	2060	(300)
Puncture Strength	ASTM D 4833	N (lbs)	266	(60)
Apparent Opening Size (AOS)	ASTM D 4751	mm	0.600	
Apparent Opening Size (AOS)		(U.S. Sieve)	(30)	
Permittivity	ASTM D 4491	sec ⁻¹	0.	10
Elow Pata	ASTM D 4491	l/min/m ²	405	
Flow Kale		(gal/min/ft ²)	(10)	
UV Resistance (at 500 hours)	ASTM D 4355	% strength retained	7	0

Physical Properties	Test Method	Unit	Typical Value	
Fabric Weight	ASTM D 5261	g/m^2 (oz/yd ²)	108 (3.2)	
Fabric Thickness	ASTM D 5199	mm (mils)	0.38 (15)	
Post Spacing		m (ft)	2.5 (8.3)	3.0 (10.0)
Roll Dimensions		m	0.9 x 30	0.9 x 30
(width x length)		(ft)	(3 x 100)	(3 x 100)
Estimated Roll Weight		kg (lbs)	23 (50)	20 (45)

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