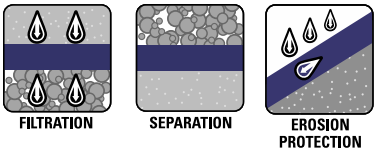
TENCATE Mirafi®



Mirafi® FW-Series Woven Geotextiles

for Engineered Filtration

Mirafi® FW Woven Geotextile

TenCate develops and produces materials that function to increase performance, reduce costs and deliver measurable results by working with our customers to provide advanced solutions.

The Difference Mirafi® FW-Series Engineered Filtration Geotextiles Make:

- Engineered Filtration. Resists clogging while maintaining flow rates in high gradient and dynamic flow conditions.
- Durability. High survivability rating in aggressive installation and loading conditions along with excellent resistance to chemicals in aggressive environments.
- Soil Interaction. Superior soil confinement resulting in greater load distribution.
- Unique Constructions. Manufactured with highly UV stabilized multifilament fibers which provide uniform opening size (AOS) while maintaining high long-term flow rates. Mirafi® FW-Series geotextiles are manufactured with specialized processes to produce unique physical and hydraulic properties not possible with standard geotextiles, woven or nonwoven.
- Seams. Panels can be sewn together in the factory or field, providing cross-roll direction strength to facilitate installation.

APPLICATIONS

Mirafi® FW-Series engineered filtration geotextiles are designed for long-term performance in problematic soil or site conditions to ensure clogging resistance, soil retention in erosion control, and subsurface drainage applications. Mirafi® FW-Series geotextiles are used underneath rip rap or concrete revetment systems along inland waterways and coastal shorelines to protect spillways and embankment dams from overtopping flow, encapsulating cut-off drains and collection systems surrounding landfills, filtration within dams. The geotextile is used adjacent to roadways and other critical structures, encapsulating leachate collection systems under landfills while maintaining long-term clogging resistance, and encapsulating edge drains for critical structures in problematic soils.

INSTALLATION GUIDELINES*

BANK STABILIZATION / ROCK (ARMOR) UNDERLAYMENT

Geotextile Placement

Place the geotextile in close contact with the soil, eliminating folds or excessive wrinkles both longitudinally and transversely. The geotextile need not be placed in tension before covering with riprap or other materials. Use care in placing the geotextile to avoid possible damage.

The geotextile can be joined by overlapping or sewing. Anchor the geotextile firmly at the top of the slope using an anchor trench. For maximum effectiveness, the trench should be at least 1m (3ft) from the crest of the slope and at least 0.6m (2ft) deep. Thoroughly compact soil in the trench to ensure good anchorage. When placing the geotextile along a stream or other places where water movements are expected, anchor the toe of the geotextile in a similar fashion as at the top to prevent scour beneath it.

* These guidelines serve as a general basis for installation. Detailed instructions are available from your TenCate representative.

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TENCATE materials that make a difference

TENCATE Mirafi®

Mirafi® FW Woven Geotextiles

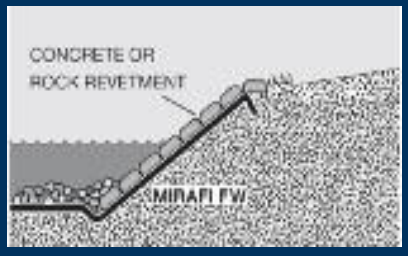
for Engineered Filtration

Property / Test Method	Units	FW300	FW402	FW403	FW404	FW500[1]	FW700
MECHANICAL PROPERTIES				**Minimum Average Roll Value**			
Grab Tensile Strength ASTM D4632							
MD	lbs (N)	400 (1780)	365 (1624)	425 (1891)	400 (1780)	375 (1669)	370 (1647)
CD	lbs (N)	335 (1491)	200 (890)	350 (1558)	315 (1402)	375 (1669)	250 (1113)
MD Elongation	%	20	24	21	15	15	15
CD Elongation	%	15	10	21	15	8	15
Trapezoid Tear Strength ASTM D4533							
MD	lbs (N)	145 (645)	115 (512)	145 (645)	150 (668)	120 (534)	100 (445)
CD	lbs (N)	125 (556)	75 (334)	125 (556)	165 (734)	120 (534)	60 (267)
CBR Puncture Strength ASTM D6241	lbs (N)	1250 (5563)	675 (3004)	1340 (5963)	1150 (5118)	1200 (5340)	950 (4228)
HYDRAULIC PROPERTIES				**Minimum Roll Value**			
Percent Open Area COE-02215	%	8	10	6	1	3	4
Permittivity ASTM D4491	sec^{-1}	1.50	2.10	0.96	0.90	0.20	0.28
Flow Rate ASTM D4491	$gal/min/ft^2$ ($l/min/m^2$)	115 (4685)	145 (5907)	70 (2852)	70 (2852)	15 (611)	18 (733)
Apparent Opening Size (AOS) ASTM D4751				**Maximum Opening Size**			
	US Sieve (mm)	30 (0.60)	40 (0.425)	40 (0.425)	40 (0.425)	50 (0.30)	70 (0.212)
UV Resistance after 500 hrs. ASTM D4355				**Minimum Test Value**			
	% Strength	90	90	90	90	70	90

Packaging	Units	FW300	FW402	FW403	FW404	FW500[1]	FW700
Roll Width	ft (m)	12.5 (3.8)	12.5 (3.8)	12.5 (3.8)	15 (4.57)	15 (4.57)	12 (3.7)
Roll Length	ft (m)	300 (91)	300 (91)	300 (91)	300 (91)	300 (91)	300 (91)
Area	yd^2 (m^2)	417 (348)	417 (348)	417 (348)	500 (418)	500 (418)	400 (334)

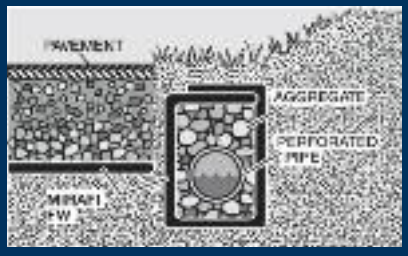
[1] Cross direction yarns are slit film

Mirafi® FW Woven Geotextiles



Shoreline Erosion Control

Leachate Collection System



Cut-off/Interceptor Drain Along a Roadway

PDS.FW1215

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ISO 9001 FM 61026

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