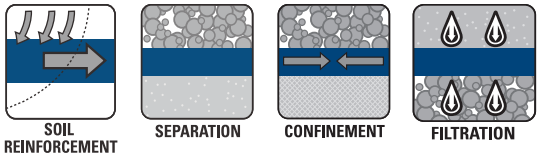
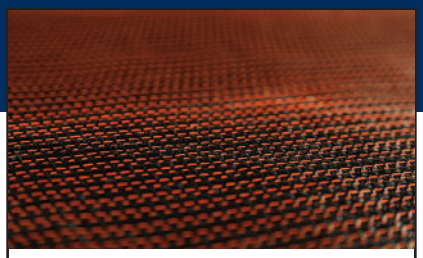
TENCATE Mirafi®



Mirafi® RS*i* - Series Woven Geosynthetics

for Soil Stabilization and Base Course Reinforcement Applications



Mirafi® RS*i*-Series Woven Geosynthetic

TenCate develops and produces materials that deliver increased performance, reduce costs and measurable results to provide advanced solutions utilizing patent pending Mirafi® RS*i* geosynthetics that make a difference.

The Difference Mirafi® RS*i*-Series Woven Integrated* Geosynthetics Make:

- Modulus. Separation. Confinement. Water flow. Orange product identification. ***Superior integration*.***
- Reinforcement Strength. Higher tensile modulus properties than the leading stabilization products.
- Separation and Filtration. Unique double layer construction provides a wide range of pore sizes for an excellent separation factor, superior filtration and flow characteristics of a fine to coarse sand layer.
- Soil and Base Course Interaction. Excellent soil and base course confinement resulting in greater load distribution.
- Durability. Robust damage resistance for moderate to severe stress installations.
- Roll Sizes. Mirafi® RS*i*-Series geosynthetics come in several roll sizes to fit project requirements.
- Seams. Panels can be seamed in the factory or field, providing cross-roll direction strength to facilitate efficient installation.

APPLICATIONS

When superior performance, flexibility and versatility are necessary, Mirafi® RS*i*-Series geosynthetics make the difference for varying application needs including: base course reinforcement and subgrade stabilization for road, runway and railway construction; embankment stabilization on soft foundations; reinforcement for mechanically stabilized earth (MSE) structures; liner support, voids bridging, reinforcement over soft hazardous pond closures and other environmental market applications.

INSTALLATION GUIDELINES**

Geosynthetic Placement

Place the geosynthetic directly on prepared surface. It is advisable to leave vegetative cover such as grass and weeds in place to provide a support matting for construction activities. The geosynthetic should be deployed flat and tight with no wrinkles or folds. The rolls should be oriented as shown on plans to ensure the principal strength direction of the material is placed in the correct orientation. Adjacent rolls should be overlapped or seamed as a function of subgrade strength (CBR). Prior to fill placement, Mirafi® RS*i*-Series geosynthetics should be held in place using suitable means such as pins, soil, staples or sandbags to limit movement during fill placement.

Fill Placement

Fill should be placed directly over Mirafi® RS*i* geosynthetic in 8in (20cm) to 12in (30cm) loose lifts. For very weak subgrades, 18in (45cm) lifts or thicker lifts may be required to stabilize the subgrade, as directed by the engineer. Most rubber-tired vehicles can be driven at slow speeds, less than 10mph (16km/h) and in straight paths over the exposed geosynthetic without causing damage. Sudden braking and sharp turning should be avoided. Tracked construction equipment should not be operated directly upon the geosynthetic. A minimum fill soil thickness of 6in (15cm) is required prior to operation of tracked vehicles over the geosynthetic. Turning of tracked vehicles should be kept to a minimum to prevent tracks from displacing the fill and damaging the geotextile.

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

Visit www.mirafi.com for a demonstration video

Breakthrough Research: TenCate Mirafi® Geosynthetic Outperforms Others in Independent Full-Scale Study.

Protective & Outdoor Fabrics
Aerospace Composites
Armour Composites
Geosynthetics
Industrial Fabrics
Synthetic Grass

TENCATE materials that make a difference

*Integration refers to the overall set of described characteristics based on a review of technical specifications for comparable products published by their respective manufacturers. Individual characteristics of these products vary and may meet, exceed, or fall below one or more of the above described individual characteristics.

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Mirafi® RS*i* - Series Woven Geosynthetics

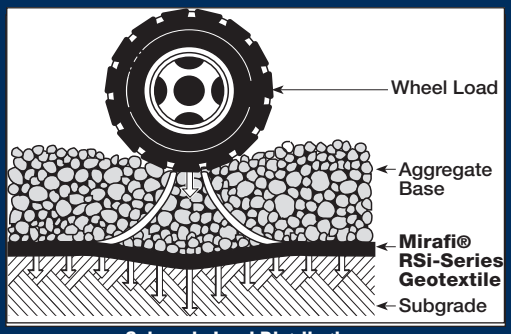
for Soil Stabilization and Base Course Reinforcement Applications

Mechanical Properties	Test Method	Unit	RS280*i*	RS380*i*	RS580*i*
			Typical Roll Value/Minimum Average Roll Value		
Tensile Strength @ 2% strain (MD)	ASTM D4595	lbs/ft (kN/m)	840 (12.3)/600 (8.8)	720 (10.5)/600 (8.8)	540 (7.9)/480 (7.0)
Tensile Strength @ 2% strain (CD)	ASTM D4595	lbs/ft (kN/m)	960 (14.0)/600 (8.8)	1200 (17.5)/1020 (14.9)	2160 (31.5)/1800 (26.3)
Tensile Strength @ 5% strain (MD)	ASTM D4595	lbs/ft (kN/m)	1980 (28.9)/1620 (23.6)	2100 (30.6)/1800 (26.3)	1560 (22.8)/1440 (21.0)
Tensile Strength @ 5% strain (CD)	ASTM D4595	lbs/ft (kN/m)	2100 (30.6)/1620 (23.6)	2580 (37.6)/2256 (32.9)	4920 (71.8)/4380 (69.3)
Flow Rate	ASTM D4491	gal/min/ft^2 (l/min/m^2)	70[1] (2852)	75[1] (3056)	75[1] (3056)
Permittivity	ASTM D4491	sec^{-1}	0.9[1]	0.9[1]	1.0[1]
Pore Size O_{50}	ASTM D6767	microns	196	185	185
Pore Size O_{95}	ASTM D6767	microns	345	365	350
Interaction Coefficient[2]	ASTM D6706	---	0.89[2]	0.89[2]	0.9[2]
Index Properties					
Apparent Opening Size (AOS)	ASTM D4751	U.S. Sieve (mm)	40 (0.425)	40 (0.425)	40 (0.425)
Factory Seam Strength	ASTM D4884	lbs/ft (kN/m)	n/a	2700 (39.4)[1]	3000 (43.8)[1]
UV Resistance (at 500 hours)	ASTM D4355	% strength retained	90[1]	90[1]	90[1]

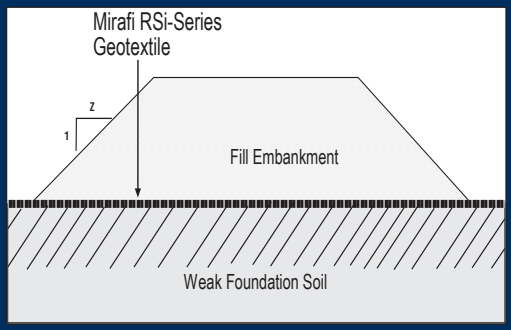
[1] Minimum Roll Value
[2] Interaction Coefficient value is for sand or gravel based on testing by SGI Testing Services.

Physical Properties	Unit	RS280*i*	RS380*i*	RS580*i*
Roll Width	ft (m)	15 (4.6) 17 (5.2)	15 (4.6) 17(5.2)	15 (4.6) 17 (5.2)
Roll Length	ft (m)	300 (91)	300 (91)	300 (91)
Roll Area	yd^2 (m^2)	500 (419) 567 (474)	500 (419) 567 (474)	500 (419) 567 (474)

Mirafi® RS*i*-Series Woven Geosynthetics



Subgrade Load Distribution



Embankments Over Soft Soils

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