

## Mirafi® PET High-Strength Woven Polyester Geotextiles for Soil Reinforcement Applications

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® PET High-Strength Geotextiles Make:

- **Reinforcement Strength.** Higher ultimate tensile strength properties per ASTM D4595 than any comparable reinforcement product.
- **Creep Resistance.** Polyester fibers provide excellent creep resistance which results in higher long term design strengths per GRI-GT7 requirements.
- **Soil Interaction.** Excellent soil confinement resulting in greater load distribution.
- **Roll Sizes.** Mirafi® PET geotextiles come in multiple roll sizes to fit your project requirements. Further, panels can be sewn together, in the factory or field, providing cross-roll direction strength to facilitate installation.
- **Cost.** Woven reinforcement geotextiles provide cost effective strengths for reinforced soil structures.

### APPLICATIONS

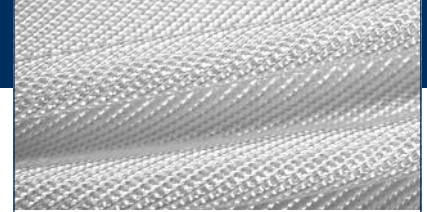
Because of their flexibility and versatility, Mirafi® PET geotextiles are used in a variety of soil reinforcement applications, including embankments on soft foundations, retaining walls, and steepened slopes. Environmental applications include liner support, voids bridging, and reinforcement over soft, hazardous pond closures. For any application where long term design of earth reinforcement structures are involved, Mirafi® PET Woven Polyester Geotextiles are logical choices.

### INSTALLATION GUIDELINES\*

#### Site Preparation

Place geotextile directly on the prepared site. It is advisable to leave vegetative cover such as grass and weeds in place to provide a support matting for construction activities.

Before unrolling the geosynthetic, verify the roll identification, length, and installation location with the contract drawings. While unrolling the geosynthetic, inspect it for damage or defects. Damage that occurs during storage, handling, or installation shall be repaired as directed by the Engineer.



Mirafi® PET Woven Polyester Geotextile

Orientation of the geosynthetic is of extreme importance since geosynthetics vary in strength with direction. The geosynthetic panel length should be measured in the field then the geosynthetic should be rolled out and cut to the measured length using a razor blade, scissors, sharp knife, or equivalent.

Installation of the geotextile must conform to the lines and grades as drawn by the engineer. This may require large roll or panel placement, using manual positioning or equipment-assisted deployment.

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



## Mirafi® PET High-Strength Woven Polyester Geotextiles for Soil Reinforcement Applications

PROPERTIES	Test Method	Units	PET70/70	PET100	PET150	PET200	PET300	PET 400/50	PET 600/100	PET 1000/100
<b>Wide Width Tensile Strength</b>										
Strength @ Ultimate (MD)	ASTM	lbs/ft	4800	7200	10283	13800	20580	27417	41124	68522
	D4595	(kN/m)	(70.0)	(105.1)	(150.0)	(201.4)	(300.4)	(400.0)	(600.0)	(1000.0)
Strength @ 5% Strain (MD)	ASTM	lbs/ft	1080	2400	3600	6000	8400	9594	14400	27409
	D4595	(kN/m)	(15.8)	(35.0)	(52.5)	(87.6)	(122.6)	(140.0)	(210.0)	(400.0)
Creep Reduced Strength (MD) <sup>1</sup>	ASTM	lbs/ft	2880	4320	6170	8280	12348	16447	24674	41113
	D5262	(kN/m)	(42.0)	(63.0)	(90.0)	(120.8)	(180.2)	(240.0)	(360.0)	(600.0)
Long Term Design Strength (MD) <sup>1</sup>	GRI-GT7	lbs/ft	2280	3420	4877	6545	10205	13590	20392	33980 <sup>1</sup>
	(sand, silt, clay)	(kN/m)	(33.2)	(49.9)	(71.2)	(95.5)	(148.9)	(198.3)	(298.0)	(496.0)

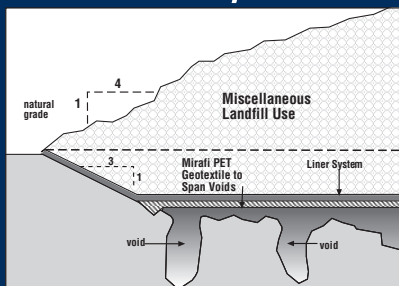
### PACKAGING

Roll/Width		ft(m)	15(4.5)	15(4.5)	15(4.5)	15(4.5)	15(4.5)	16.4(5)	16.4(5)	16.4(5)
Roll/Length		ft(m)	300(91.5)	300(91.5)	300(91.5)	300(91.5)	300(91.5)	656(200)	492(150)	328(100)
Area		yd <sup>2</sup> (m <sup>2</sup> )	500(418)	500(418)	500(418)	500(418)	500(418)	1195(1000)	896(750)	598(500)

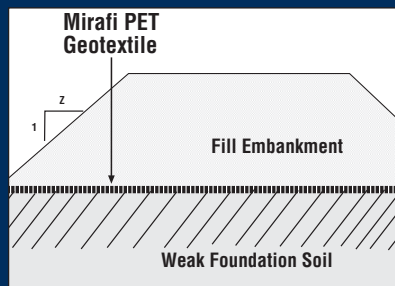
NOTE: All Mechanical Properties and Hydraulic Properties shown are Minimum Average Roll Values (MARV). MD: Machine Direction, CD: Cross-Machine Direction

<sup>1</sup>Machine Direction; based on third party testing

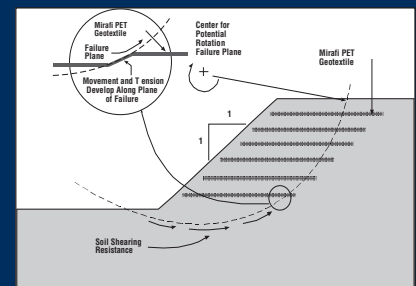
### Mirafi® PET Woven Polyester Geotextiles



**Landfill Liner Reinforcement**



**Embankments Over Soft Soils**



**Reinforced Soil Slope**

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