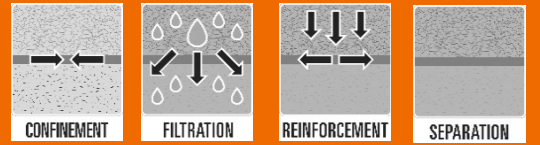


## Mirafi® RS580i



Mirafi® RS580i is a specially designed geosynthetic that integrates the key performance characteristics to maximize performance. Extensive performance testing has been performed per AASHTO and FHWA guidelines to validate performance for both paved and unpaved roads.

Roadway Design and Performance Properties	Guidance Document / Test Method	Unit	Design / Calibration Value	
Base Course $M_R$ Improvement Factor <sup>1</sup>	AASHTO R50-09	---	1.40	
Subgrade $M_R$ Improvement / Increase <sup>2</sup>	AASHTO R50-09	lb/in <sup>2</sup> (MPa)	9,000 (62.0)	
Cyclic Tensile Modulus: $J_{cyclic}$ <sup>3</sup>	ASTM D7556	kip/ft (kN/m)	MD	CD
			60 (876)	160 (2,336)
Resilient Interface Shear Stiffness: $G_i$ <sup>3</sup>	ASTM D7499	kip/in <sup>2</sup> (MPa)	329 (2,268)	
Traffic Benefit Ratio: TBR <sup>4,5,6</sup>	AASHTO R50-09	---	9.0 / 13.1 / 39.0	
Interaction Coefficient: $C_i$ <sup>7</sup>	ASTM D6706	---	0.90	
Pore Pressure Dissipation Ratio <sup>4</sup>	Measured	---	2.0	
Typical Dynamic Filtration Pore Size $O_{95} / O_{50}$ <sup>8</sup>	ASTM D6767	microns	337 / 192	
Maximum Percent Open Area: MPOA <sup>9</sup>	ASTM D6767	Percent	7.3	
Tensile Strength @ 2% Strain (MARV)	ASTM D4595	lb/ft (kN/m)	480 (7.0)	1,800 (26.3)
Tensile Strength @ 5% Strain (MARV)	ASTM D4595	lb/ft (kN/m)	1,440 (21.0)	4,380 (63.9)

Index Properties	Test Method	Unit	Roll Value	
Apparent Opening Size, AOS (Maximum Roll Value)	ASTM D4751	U.S Sieve (mm)	40 (0.425)	
Hydraulic Flow Rate (MARV)	ASTM D4491	gal/min/ft <sup>2</sup> (l/min/m <sup>2</sup> )	75 (3,056)	
Permittivity (MARV)	ASTM D4491	sec <sup>-1</sup>	1.0	
UV Resistance (at 500 hours exposure)	ASTM D4355	% strength retained	90	