

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 ¹	AASHTO R50-09	---	1.40	
Subgrade M_R Improvement / Increase ²	AASHTO R50-09	lb/in ² (MPa)	9,000 (62.0)	
Cyclic Tensile Modulus: J_{cyclic} ³	ASTM D7556	kip/ft (kN/m)	MD	CD
			60 (876)	160 (2,336)
Resilient Interface Shear Stiffness: G_i ³	ASTM D7499	kip/in ² (MPa)	329 (2,268)	
Traffic Benefit Ratio: TBR ^{4,5,6}	AASHTO R50-09	---	9.0 / 13.1 / 39.0	
Interaction Coefficient: C_i ⁷	ASTM D6706	---	0.90	
Pore Pressure Dissipation Ratio ⁴	Measured	---	2.0	
Typical Dynamic Filtration Pore Size O_{95} / O_{50} ⁸	ASTM D6767	microns	337 / 192	
Maximum Percent Open Area: MPOA ⁹	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 ² (l/min/m ²)	75 (3,056)
Permittivity (MARV)	ASTM D4491	sec ⁻¹	1.0
UV Resistance (at 500 hours exposure)	ASTM D4355	% strength retained	90

DX2 Geosyntex, Inc.
307 Industrial Park Dr., Lawrenceville, Georgia 30046
770-682-1758 Fax 770-339-0223
www.dx2.net

