Table 1-10-2. Physical Property Requirements for Railroad Track Separation/Stabilization

## **Typical Weight**

Test methods for Nonwoven Geotextiles	Regular	Heavy	Extra Heavy
	10-12 Oz/Sq Yd* Mirafi S1000	12-16 Oz/Sq Yd* Mirafi S1200	16-20 Oz/Sq Yd* Mirafi S1600
Grab Tensile Strength – ASTM D4632 lbs (N)	175 (775)	225 (1000)	350 (1555)
Elongation at Failure – ASTM D4632 (%)	20	20	20
Mullen Burst Strength – ASTM D3786 psi (kPa)	400 (2750)	450 (3100)	620 (4270)
Planar Water Flow/Transmissivity – ASTM D4716 (Sq ft/min x 10 <sup>-3</sup> @ Normal Stress of 3.5 psi and i = 1.0)	2 (.18)	4 (.37)	6 (.56)
Coefficient of Normal Permeability (K) (cm/sec) ASTM D4491	0.1	0.1	0.1
Permittivity ASTM D4491 (Sec. 1)	0.30	0.25	0.20
Apparent Opening Size ASTM D4751 (U.S. Standard Sieve No.) U.S. Standard Sieve Number larger than	70	70	70
Trapezoid Tear Strength – ASTM D4533 lbs (N)	100 (444)	125 (555)	150 (665)
Puncture Strength – ASTM D4833 lbs (N)	110 (485)	150 (665)	185 (820)
Abrasion Resistance ASTM D4886 % strength retained in breaking load	80**	80**	80**

<sup>\*</sup>Mass per unit area: The values indicated for the classifications of material are for information only. It is recommended that the selection of material be based on the above recommended index property values shown in these tables. Material selection should not be limited by mass per unit area; i.e., geotextiles may accomplish the same purposes with more or less mass per unit area.

<sup>\*\*</sup>Abrasion resistance of geotextiles (sandpaper/sliding block method). The abrasion resistance of geotextiles is application specific. The Engineer should evaluate the specific application to determine the site-specific requirements for the application in question.