

**English Values<sup>1</sup>**

PROPERTY	TEST METHOD	UNIT	VALUE <sup>2</sup>	TRM 435	TRM 450	TRM 1051	TRM 1060	PYRAMAT
<b>PHYSICAL</b>								
Mass Per Unit Area	ASTMD-6566	oz/yd <sup>2</sup>	MARV	8.0	10.0	14.0	14.0	13.5
Thickness	ASTM D-6525	in	MARV	0.35	0.50	0.40	0.60	0.40
Light Penetration (% Passing)	ASTM D-6567	%	MARV	40	20	5	40	10
Color	Visual	-	-	Green	Green	Tan	Green, Tan	Green, Tan
<b>MECHANICAL</b>								
Tensile Strength	ASTM D-6818	lb/ft	MARV	225 x 175	400 x 300	300 x 225	275 x 225	4,000 x 3,000
Tensile Elongation	ASTM D-6818	%	Maximum	50	50	85	40	65
Resiliency	ASTM D-6524	%	MARV	80	90	80	80	80
Flexibility	ASTM D-6575	in-lbs	Average	0.015	0.026	0.022	0.026	0.534
<b>DURABILITY</b>								
UV Resistance @ 1000 hours	ASTM D-4355	%	MARV	80	80	80	80	90 <sup>3</sup>
<b>PERFORMANCE</b>								
Shear Stress <sup>4</sup>	Large Scale	lb/ft <sup>2</sup>	Maximum	5	8	8	8	12
Manning's "n" <sup>5</sup>	Calculated	-	Typical	0.025	0.025	0.026	0.026	0.028
Seedling Emergence <sup>6</sup>	ECTC Draft Method #4	%	Typical	-	144	-	-	750

**NOTES**

1. The listed property values are effective 7/01/2004 and are subject to change without notice.
2. MARV indicates minimum average roll value calculated as the typical minus two standard deviations. Statistically, it yields a 97.7% degree of confidence that any sample taken during quality assurance testing will exceed the reported value.
3. Value obtained after 3000 hours.
4. Maximum permissible shear stress has been obtained through vegetated testing programs featuring specific soil types, vegetation classes, flow conditions, and failure criteria. These conditions may not be relevant to every project nor are they replicated by other manufacturers. Please contact SI Geosolutions for further information.
5. Calculated as typical values from large-scale flexible channel lining test programs with a flow depth of 6 to 12 inches.
6. Calculated as percent increase in average plant biomass with tall fescue grass seed in sand 14 days after seeding versus traditional round monofilament TRMs and HPTRMs.

**Metric Values<sup>1</sup>**

PROPERTY	TEST METHOD	UNIT	VALUE <sup>2</sup>	TRM 435	TRM 450	TRM 1051	TRM 1060	PYRAMAT
<b>PHYSICAL</b>								
Mass Per Unit Area	ASTMD-6566	g/m <sup>2</sup>	MARV	271	340	475	475	455
Thickness	ASTM D-6525	mm	MARV	8.9	12.7	10.1	15.2	10.2
Light Penetration (% Passing)	ASTM D-6567	%	MARV	40	20	5	40	10
Color	-	-	-	Green	Green	Tan	Green, Tan	Green, Tan
<b>MECHANICAL</b>								
Tensile Strength	ASTM D-6818	kN/m	MARV	3.3 x 2.6	5.8 x 4.3	4.3 x 3.2	4.0 x 3.3	58.4 x 43.8
Tensile Elongation	ASTM D-6818	%	Maximum	50	50	85	40	65
Resiliency	ASTM D-6524	%	MARV	80	90	80	80	80
Flexibility	ASTM D-6575	mg-cm	Average	16,000	30,000	25,000	30,000	615,000
<b>DURABILITY</b>								
UV Resistance @ 1000 hours	ASTM D-4355	%	MARV	80	80	80	80	90 <sup>3</sup>
<b>PERFORMANCE</b>								
Shear Stress <sup>4</sup>	Large-Scale	Pa	Maximum	240	383	383	383	574
Manning's "n" <sup>5</sup>	Calculated	-	Typical	0.025	0.025	0.026	0.026	0.028
Seedling Emergence <sup>6</sup>	ECTC Draft Method #4	%	Typical	-	144	-	-	750

**NOTES**

- The listed property values are effective 7/01/2004 and are subject to change without notice.
- MARV indicates minimum average roll value calculated as the typical minus two standard deviations. Statistically, it yields a 97.7% degree of confidence that any sample taken during quality assurance testing will exceed the reported value.
- Value obtained after 3000 hours.
- Maximum permissible shear stress has been obtained through vegetated testing programs featuring specific soil types, vegetation classes, flow conditions, and failure criteria. These conditions may not be relevant to every project nor are they replicated by other manufacturers. Please contact SI Geosolutions for further information.
- Calculated as typical values from large-scale flexible channel lining test programs with a flow depth of 15 to 30 cm.
- Calculated as percent increase in average plant biomass with tall fescue grass seed in sand 14 days after seeding versus traditional round monofilament TRMs and HPTRMs.