

## Test Values of Merino MR+ Grade Laminate as per (EN438-3) Thickness :1.00mm $\,$

Properties	Test Method as per EN 438-2 CLAUSE NO.	Property or attribute	Unit (max or min)	Values as per EN 438-3	Merino Value
Thickness Maximum Variation	5		mm	±0.10mm	±0.10mm
Length & Width	6		mm	+10mm -0.0mm	+10mm -0.0mm
Density	EN ISO 1183	Density	g/cm³	≥1.35	>1.35
Resistance to Surface wear	10	Wear Resistance	Revolution (min)	≥350	>1000
Resistance to Impact by Small diameter Ball	20	Spring Force	N(min)	≥20	>20
Resistance to Scratching	25	Force	Rating (see annex a)	3	≥3
Dimensional stability at elevated temperature	17	Cumulative dimensional change	% long % Cross	≤ 0.55 ≤ 1.05	<0.45 < 0.90
Resistance to immersion in boiling water	12	Appearance	Grade (min) Gloss Finish Other finish	3 4	>3 >4
Resistance to dry Heat at 180°C	16	Appearance	Grade (min) Gloss Finish Other finish	3 4	>3 >4
Resistance to Staining	26	Appearance	Rating Group-1&2	≥5	5
			Group-3	≥4	≥4
Resistance to water vapor	14	Appearance	Grade (min) Gloss Finish Other finish	3 4	>3 >4
Light Fastness ( Xenon arc)	27	Contrast	Gray Scale Rating	4 to 5	>4
Resistance to cigarette burn	30	Appearance	Grade (min)	3	>3
Gloss Level at 60° angle		Appearance		>105	>110
Micro Scratch Resistance Gloss Retained (%)	ASTM D-6037	Appearance		≥95	>95

**Note**: All our products comply to applicable standards, but results may differ based on the application and handling of the product. Please Refer <a href="http://www.merinolaminates.com/warranties.aspx">http://www.merinolaminates.com/warranties.aspx</a> for warranty clauses.