


Decking Monarch Technical Sheet

Model	Photo	Dimension
US125		138×25.0mm (5.4×1.0 in)

NO.	Property	Test Method	Test results	Remark
1	Abrasion resistance	ASTM D4060-10	28.4mg (1000cycles)	
2	Boiling test	EN15534	Water absorption in weight: 0.70%	
3	Coefficient Linear Thermal Expansion	ASTM D696	35.6×10^{-6} mm/mm °C	
		EN15534	34.0×10^{-6} K ⁻¹	
4	Degree of chalking	EN15534	Rating 0, no chalking	
5	Falling mass impact resistance	EN15534	Max Crack length(mm): No crack. Max Residual Indentation(mm): 0.14	
6	Formaldehyde Content	EN717-1	Non Detected	
		ASTM D6007-14	Non Detected	
7	Flexural properties	ASTM D6109	Bending Strength: 15.7Mpa, Modulus of elasticity: 3.26Gpa, Maximum load: 3244.7N, Deflection at 500N: 1.78mm	Span:400mm
8	Heavy Metal Content	EPA3051	Sb: ND, As: ND, Se: ND, Sn: ND	
9	Heat reversion	EN15534 EN479	0.20% (Test temperature: 100°C)	

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10	Lead Content Test	EUNo.628/2015	Non Detected	
11	Mould resistance	ASTM G21	Rating 0	
12	Moisture Content	EN15534 EN322	0.48%	
13	Neutral salt spray test	ASTM B117-2011	After 200 hours tests, there was no visible change appeared on the surface: Front surface: $\Delta E^*=1.22$, Grey Scale: 4-5 Back surface: $\Delta E^*=1.06$, Grey Scale: 4-5	
		EN15534 ISO9227	$\Delta E^*=1.42$, Grey Scale=4 (Exposure 96h)	
14	Pb, Cd, Hg, Cr6+	RoHs-IEC62321	Pb: ND, Cd: ND, Hg: ND, Cr ⁶⁺ : ND	
15	Resistance to artificial weathering	EN15534 ISO4892-2	After 2000h exposure $\Delta E^*=1.09$, Grey Scale=4-5	
16	Rockwell Hardness	ASTM D785	78.7R	
17	Slip Resistance	DIN51130	Oil-wet ramp test: Rating: R10	
18	Swelling and water absorption (24hours immersion)	EN15534	①Swelling: 0.33% in thickness, 0.01% in width, 0.01% in length. ②Water absorption: 0.18%	
19	Swelling and water absorption (28days immersion)	EN15534	①Swelling: 1.08% in thickness, 0.02% in width, 0.03% in length. ②Water absorption: 1.12%	
20	SRI Testing	ASTM C1549, ASTM C1371, ASTM E1980	19	
21	VOC&TVOC	ASTM D5116-11	Non Detected	