


# Tech Data Sheet - Marina Board (US71H)

Model	Photo	Dimension
US71H		210 x 36 mm (8.3 x 1.4 in)

NO.	Property	Test Method	Test results	Remark
1	Abrasion resistance	ASTM D4060-10	33mg(1000cycles)	
2	Brinell hardness	EN1534	8.2N/mm <sup>2</sup>	
3	Boiling test	EN15534	Water absorption in weight: 0.49%	
4	Bond Strength	EN319	Average Bond Strength>2.3MPa No obvious abruption and damage after test	
5	Coefficient Linear Thermal Expansion	ASTM D696	35.6×10 <sup>-6</sup> mm/mm °C	
		EN15534	34.0×10 <sup>-6</sup> K <sup>-1</sup>	
6	Creep behaviour	EN15534	△ S:4.39mm, △ Sr:4.35mm	Span: 600mm
7	Creep Recovery	ASTM D7032	Creep Recovery after 24h: 82.2%	
8	Degree of chalking	EN15534	Rating 0, no chalking.	
9	Fire resistance	AS1530.8.1.2007	BAL29	
		ASTM E84	Flame Spread Index(FSI): 85 Smoke Developed Index(SDI): 300	
		AS/NZS1530.3-1999	Ignitability Index: 13 Range 0-20 Spread of Flame Index: 6 Range 0-10 Heat Evolved Index: 4 Range 0-10 Smoke Developed Index: 3 Range 0-10	
10	Falling mass impact resistance	EN15534	Max Crack length(mm): No crack. Max Residual Indentation(mm): 0.14	

NO.	Property	Test Method	Test results	Remark
11	Formaldehyde Content	EN717-1	Non Detected	
		ASTM D6007-14	Non Detected	
12	Flexural properties	EN15534	Bending Strength: 15.6Mpa, Modulus of elasticity: 2.58Gpa, Maximum load: 4573.8N	Span: 600mm
13	Heavy Metal Content	EPA3051	Sb:ND, As:ND, Se:ND, Sn:ND	
14	Heat reversion	EN15534 EN479	Test temperature: 100°C : 0.20%	
15	Heat build-up	EN15534	△ T=-3.1°C	
16	Impact Resistance	ASTM D4226	MFE>396J	
17	Lead Content Test	EUNo.628/2015	Non Detected	
18	Mould resistance	ASTM G21	Rating 0	
19	Moisture Content	EN15534 EN322	0.83%	
20	Moisture resistance under cyclic test conditions	EN15534	Original MOR: 36.3Mpa After exposure, MOR: 32.1Mpa, Decrease: 11.7%.	
21	Neutral salt spray test	ASTM B117-2011	After 200 hours tests, there was no visible change appeared on the surface: Front surface: △ E*=1.22 , Grey Scale: 4-5 Back surface: △ E*=1.06 , Grey Scale: 4-5	
		EN15534 ISO9227	△ E*=1.42, Grey Sale=4 (Exposure 96h)	
22	Pb, Cd, Hg, Cr <sup>6+</sup>	RoHs-IEC62321	Pb:ND, Cd:ND, Hg:ND, Cr <sup>6+</sup> :ND	
23	Resistance to scratch test	ISO4586-2	Rate 2	
24	Resistance to artificial weathering	EN15534 ISO4892-2	After 2000h exposure △ E*=1.09, Grey Sale=4-5	
25	Rockwell Hardness	ASTM D785	78.7R	

NO.	Property	Test Method	Test results	Remark
26	Slip Resistance	AS4586:2013	P5	
		CENTS12633(2014), CENTS16165(2012)	Pendulum Testing: Dry condition: PTV46 Wet condition: PTV34	
		EN15534-1, EN15534-4	Pendulum test: Longitudinal: 44; Horizontal: 56 Indination plan test: Angle: 2 5.0°, Rating: Class C	
27	Swelling and water absorption (24hours immersion)	EN15534	① Swelling: 0.06% in thickness, 0.03% in width, 0.03% in length. ② Water absorption: 0.49%	
28	Swelling and water absorption (28days immersion)	EN15534	① Swelling: 0.67% in thickness, 0.04% in width, 0.07% in length. ② Water absorption: 0.27%	
29	SRI Testing	ASTM C1549, ASTM C1371, ASTM E1980	19	
30	Surface Bond quality	EN319	>2.08MPa	
31	Thermal Resistance	ASTM C518-2010	Thermal conductivity: 0.1589W/(m·k) Thermal resistance: 0.0830(m <sup>2</sup> ·k)/W	
32	Thermal conductivity	CE (EN14041(2004))	0.19738W/m·K	
33	UV Weathering test	ASTM G154	After 3000 hours test, Grey Scale3, Δ E*=3.56	
34	Uplift Resistance	ICC-ES AC174 ASTM E330	Average ultimate load ≥430psf	
35	VOC&TVOC	ASTM D5116-11	Non Detected	
36	Water absorption	ASTM D1037	Water absorption(24h): 0.12%	