

Decking Vintage Technical Sheet

Model	Photo	Dimension
UH02		138.0×22.5 mm (5.4×0.9 in)

NO.	Property	Test Method	Test results	Remark
1	Abrasion resistance	ASTM D4060-10	28.4mg(1000cycles)	
2	Brinell hardness	EN15534	8.2N/mm ²	
3	Boiling test	EN15534	Water absorption in weight: 2.30%	
4	Bond Strength	EN319	Average Bond Strength>2.3MPa No obvious abruption and damage after test	
5	Coefficient Linear Thermal Expansion	ASTM D696	38.9×10 ⁻⁶ mm/mm °C	
		EN15534	37.0×10 ⁻⁶ K ⁻¹	
6	Creep behaviour	EN15534	ΔS: 1.61 mm, ΔSr: 1.20 mm	Span:350mm
7	Content of pentachlorophenol	EN14041	Non Detected	
8	Creep Recovery	ASTM D7032	Creep Recovery after 24h: 93%	
9	Degree of chalking	EN15534	Rating 0, no chalking	
10	Fire Resistance	ASTM E84	Flame Spread Index(FSI): 85 Smoke Developed Index(SDI): 300	
		EN13501-1 EN ISO9239-1 EN ISO11925-2	Reaction to fire classification: Cfl-s1	

NO.	Property	Test Method	Test results	Remark
11	Falling mass impact resistance	EN15534	Max Crack length(mm): No crack. Max Residual Indentation(mm): 0.17	
12	Formaldehyde Content	EN717-1	Non Detected	
		ASTM D6007-14	Non Detected	
13	Flexural properties	EN15534	Bending Strength: 25.0Mpa, Modulus of elasticity: 3.07Gpa, Maximum load: 3470N, Deflection at 500N: 1.05mm	Span:350mm
		ASTM D6109	MOR: 21.2MPa, MOE: 4305MPa	Span:365mm
14	Heavy Metal Content	EPA3051	Sb: ND, As: ND, Se: ND, Sn: ND	
15	Heat reversion	EN15534 EN479	0.17% (Test temperature: 100°C)	
16	Heat build-up	EN15534	$\Delta T = -2.7^{\circ}\text{C}$	
17	Impact Resistance	ASTM D4226	MFE > 396J	
18	Lead Content Test	EUNo.628/2015	Non Detected	
19	Mould Resistance	ASTM G21	Rating 0	
20	Moisture Content	EN15534 EN322	0.50%	
21	Moisture resistance under cyclic test conditions	EN15534	Original MOR: 25.0 Mpa After exposure, MOR: 25.4 Mpa, Increase: 1.6%	Span:350mm
22	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)	

NO.	Property	Test Method	Test results	Remark
23	Pb, Cd, Hg, Cr6+	RoHS-IEC62321	Pb: ND, Cd: ND, Hg: ND, Cr ⁶⁺ : ND	
24	Resistance to scratch test	ISO4586-2	Rate 2	
25	Resistance to indentation	EN15534	Apply 2000N load Brinell hardness: 72Mpa, Rate of elastic recovery: 65%	
26	Resistance to artificial weathering	EN15534 ISO4892-2	After 2000h exposure $\Delta E^*=1.09$, Grey Scale=4-5	
27	Rockwell Hardness	ASTM D785	78.7R	
28	Slip Resistance	UNE-EN 12633	Class 3	
29	Swelling and water absorption (24hours immersion)	EN15534	①Swelling: 0.04% in thickness, 0.01% in width, 0.02% in length. ②Water absorption: 1.30%	
30	Swelling and water absorption (28days immersion)	EN15534	①Swelling: 0.60% in thickness, 0.10% in width, 0.20% in length. ②Water absorption: 3.90%	
31	SRI Testing	ASTM C1549, ASTM C1371, ASTM E1980	19	
32	Thermal Resistance	ASTM C518-2010	Thermal conductivity: 0.1589W/(m·k) Thermal resistance: 0.0830(m ² ·K)/W	
33	Thermal conductivity	EN14041	0.19738W/m·K	
34	UV Weathering test	ASTM G154	After 3000 hours test, Grey Scale 4-5, $\Delta E^*=1.42$	
35	Uplift Resistance	ICC-ES AC174 ASTM E330	Average ultimate load ≥ 427 psf	
36	VOC&TVOC	ASTM D5116-11	Non Detected	