Decking Naturale(Solid) Technical Sheet

Model	Photo	Dimension
US01		5.5 x 0.9 in (138 x 22.5 mm)
US07		5.5 x 0.9 in (138 x 22.5 mm)

NO.	Property	Test Method	Test results	Remark
1	Abrasion resistance	ASTM D4060-10	33mg(1000cycles)	
2	Brinell hardness	EN15534	8.2N/mm2	
3	Boiling test	EN15534	Water absorption in weigth: 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^{-6} mm/mm℃	
		EN15534	34.0×10^{-6} K^{-1}	
6	Creep behaviour	EN15534	△ S:4.39mm, △ Sr:4.35mm	Span:400mm
7	Content of pentachlorophenol	CE (EN14041(2004))	2.99ppm	
8	Creep Recovery	ASTM D7032	Creep Recovery after 24h: 82.2%	

NO.	Property	Test Method	Test results	Remark
9	Degree of chalking	EN15534	Rating 0, no chalking.	
10	Fire Resistance	ASTM E84	Flame Spread Index(FSI): 85 Smoke Developed Index(SDI): 300	
11	Falling mass impact resistance	EN15534	Max Crack length(mm): No crack. Max Residual Indentation(mm): 0.14	
12	Formaldehyde Content	EN717-1	Non Detected	
		ASTM D6007-14	Non Detected	
13	Flexural properties	EN15534	Bending Strength:36.3Mpa, Modulus of elasticity:3.72Gpa, Maximum load:4286N, Deflection at 500N:1.23mm	Span:400mm
		ASTM D6109	MOR:26.3MPa, MOE:2620MPa	Span:368mm
14	Heavy Metal Content	EPA3051	Sb:ND, As:ND, Se:ND, Sn:ND	
15	Heat reversion	EN15534 EN479	Test temperature: 100℃ :0.20%	
16	Heat build-up	EN15534	△ T=-3.1℃	
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	0.83%	
21	Moisture resistance under cyclic test conditions	EN15534	Original MOR: 36.3Mpa After exposure, MOR: 32.1Mpa, Decrease: 11.7%.	
22	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 Scale=4 (Exposure 96h)	

NO.	Property	Test Method	Test results	Remark
23	Pb, Cd, Hg, Cr^{6+}	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 △ E*=1.09, Grey Scale=4-5	
27	Rockwell Hardness	ASTM D785	78.7R	
28	Slip Resistance	AS/NZS 4586	1. Wet Pendulum Testing: Longitudinal:30; Horizontal:42 2. Oil Ramp Testing: Longitudinal:Rating:R11; Horizontal:Rating:R11	
		CENTS12633(2014) CENTS16165(2012)	Pendulum Testing: Dry condition: PTV46 Wet condition: PTV34	
		EN15534-1, EN15534-4	Pendulum test:Longitudinal:44; Horizontal:56 Inclination plan test:Angle:25.0°, Rating:Class C	
		DIN51130	Oil-wet ramp test: Angle:19.7° Rating:R11	
		DIN51097	Wet-load ramp test: Front View:Angle:31.2° Rating:C Back View:Angle:29.0° Rating:C	
		EN15534 CEN/TS15676	Pendulum test:Longitudinal:59; Horizontal:69 Inclination plan test:Angle:38.2°, Rating:Class C	
29	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%	
30	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%	
31	SRI Testing	ASTM C1549, ASTM C1371, ASTM E1980	19	
32	Surface Bond quality	EN319	>2.08MPa	

NO.	Property	Test Method	Test results	Remark
33	Thermal Resistance	ASTM C518-2010	Thermal conductivity: 0.1589W/(m·k) Thermal resistance: 0.0830(m^2·K)/W	
34	Thermal conductivity	CE (EN14041(2004))	0.19738W/m·K	
35	UV Weathering test	ASTM G154	After 3000 hours test, Grey Scale3, △ E*=3.56	
36	Uplift Resistance	ICC-ES AC174 ASTM E330	Average ultimate load ≥430psf	
37	VOC&TVOC	ASTM D5116-11	Non Detected	
38	Water absorption	ASTM D1037	Water absorption(24h): 0.12%	