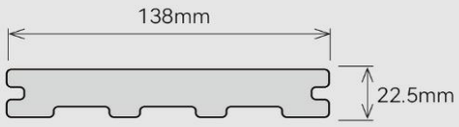
Technical Sheet
US53



NO.	Property	Test Method	Test results	Remark
1	Abrasion resistance	ASTM D4060	28.4mg(1000cycles)	
2	Brinell hardness	EN1534	8.2N/mm^2	
3	Boiling test	EN15534	Water absorption in weight: 0.50%	
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 °C	
		EN15534	34.0×10^{-6}K^{-1}	
6	Content of pentachlorophenol	EN14041	Non Detected	
7	Degree of chalking	EN15534	Rating 0, no chalking	
8	Falling mass impact resistance	EN15534	Max Crack length(mm): No crack. Max Residual Indentation(mm): 0.14	
9	Formaldehyde Content	EN717-1	Non Detected	
		ASTM D6007	Non Detected	

10	Flexural properties	ASTM D6109	Bending Strength: 17.3Mpa, Modulus of elasticity: 3.38Gpa, Maximum load: 3253N	Span:400mm
11	Fire Resistance	EN13501-1 EN ISO9239-1 EN ISO11925-2	Reaction to fire classfication: Cfl-s1	
12	Heavy Metal Content	EPA3051	Sb: ND, As: ND, Se: ND, Sn: ND	
13	Heat reversion	EN15534 EN479	0.20% (Test temperature: 100°C)	
14	Lead Content Test	EUNo.628/2015	Non Detected	
15	Mould Resistance	ASTM G21	Rating 0	
16	Moisture Content	EN15534 EN322	0.46%	
17	Neutral salt spray test	ASTM B117	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)	
18	Pb, Cd, Hg, Cr6+	RoHs-IEC62321	Pb: ND, Cd: ND, Hg: ND, Cr6+: ND	
19	Resistance to artificial weathering	EN15534 ISO4892-2	After 2000h exposure △E*=1.09, Grey Scale=4-5	
20	Rockwell Hardness	ASTM D785	78.7R	
21	Slip Resistance	DIN51130	Oil-wet ramp test: Angle: 13.0° , Rating: R10	Pattern: H55
22	Swelling and water absorption (24hours immersion)	EN15534	①Swelling: 0.43% in thickness, 0.01% in width, 0.01% in length. ②Water absorption: 0.13%	
23	Swelling and water absorption (28days immersion)	EN15534	①Swelling: 1.38% in thickness, 0.02% in width, 0.02% in length. ②Water absorption: 1.06%	

24	SRI Testing	ASTM C1549, ASTM C1371, ASTM E1980	19	
25	Thermal Resistance	ASTM C518	Thermal conductivity: 0.1589W/(m·k) Thermal resistance: 0.0830(m^2·K)/W	
26	Thermal Conductivity	EN14041	0.19738W/m·K	
27	UV Weathering test	ASTM G154	After 3000 hours test, Grey Scale 4-5, △E*=1.42	
28	Uplift Resistance	ICC-ES AC174 ASTM E330	Average ultimate load ≥ 427psf	
29	VOC&TVOC	ASTM D5116	Non Detected	