All Weather Cladding Technical Sheet

Model	Photo	Dimension
US09		5.5 x 0.5 in (142 x 13 mm)
US30		5.5 x 0.5 in (142 x 13 mm)
US31		5.5 x 0.5 in (142 x 13 mm)

Model	Photo	Dimension
US44		1.9 x 1.8 in (47.5 x 45.5 mm)
US45		3.1 x 1.1 in (79 x 27 mm)
US46		2.2 x 2.3 in (55 x 59 mm)
US47		3.9 x 2.1 in (99.5 x 54.5 mm)

NO.	Property	Test Method	Test results	Remark
1	Abrasion Resistance	ASTM D4060	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	Content of pentachlorophenol	CE (EN14041(2004))	2.99ppm	
7	Degree of chalking	EN15534	Rating 0, no chalking.	
8	Fire Resistance	ASTM E84	Flame Spread Index(FSI): 85 Smoke Developed Index(SDI): 300	
9	Formaldehyde Content	EN717-1	Non Detected	
		ASTM D6007-14	Non Detected	
10	Heavy Metal Content	EPA3051	Sb:ND, As:ND, Se:ND, Sn:ND	
11	Heat reversion	EN15534 EN479	Test temperature:100℃ :0.17%	
12	Heat build-up	EN15534	△ T=-2.7℃	
13	Lead Content Test	EUNo.628/2015	Non Detected	
14	Mould resistance	ASTM G21	Rating 0	
15	Moisture Content	EN15534 EN322	0.83%	
16	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
17	Pb, Cd, Hg, Cr^{6+}	RoHs-IEC62321	Pb:ND, Cd:ND, Hg:ND, Cr^{6+}:ND	
18	Resistance to scratch test	ISO4586-2	Rate 2	
19	Resistance to indentation	EN15534	Apply 2000N load Brinell hardness: 60Mpa, Rate of elastic recovery: 64%	
20	Resistance to artificial weathering	EN15534 ISO4892-2	After 2000h exposure △ E*=1.09, Grey Scale=4-5	
21	Rockwell Hardness	ASTM D785	78.7R	
22	Swelling and water absorption (24hours immersion)	EN15534-1 EN15534-4	① Swelling: 0.43% in thickness, 0.02% in width, 0.03% in length. ② Water absorption: 0.11%	
23	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%	
24	SRI Testing	ASTM C1549 ASTM C1371 ASTM E1980	19	
25	Surface Bond quality	EN319	>2.08MPa	
26	Thermal Resistance	ASTM C518-2010	Thermal conductivity: 0.1589W/(m·k) Thermal resistance: 0.0830$(m^2 \cdot K)/W$	
27	Thermal conductivity	CE (EN14041(2004))	0.19738W/m·K	
28	UV Weathering test	ASTM G154	After 3000 hours test, Grey Scale3, △ E*=3.56	
29	VOC&TVOC	ASTM D5116-11	Non Detected	
30	Water absorption	ASTM D1037	Water absorption(24h): 0.12%	
31	Installation Span	Manufacturers Specification	16"(406mm) on center	