

Cladding Naturale Technical Sheet

NO.	Property	Test Method	Test results
1	Abrasion Resistance	ASTM D4060	33mg (1000cycles)
2	Brinell hardness	EN1534	8.2N/mm2
3	Boiling test	EN15534	Water absorption in weigh: 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	$35.6 \times 10^{-6} \text{ mm/mm } ^\circ\text{C}$
		EN15534	$34.0 \times 10^{-6} \text{ K}^{-1}$
6	Content of pentachlorophenol	CE (EN14041(2004))	2.99ppm
7	Degree of chalking	EN15534	Rating 0, no chalking.
8	Fire Resistance	BS476-7	Class 2
		EN13501-1, EN ISO9239-1, EN ISO11925-2	Reaction to fire classification: Bfl-s1
		EN ISO 9239-1 EN ISO11925-2	classification: Bfl-s1
		GB8624, GB11785, GB8626, GB20286	Reaction to fire classification: GB8624B ₁ (B-s1, t1)
		ASTM E84	Flame Spread Index(FSI): 85 Smoke Developed Index(SDI): 300
9	Formaldehyde Content	EN717-1	Non Dectectable
10	Heavy Metal Content	EPA3051	Sb:ND, As:ND, Se:ND, Sn:ND
11	Heat reversion	EN15534 EN479	Test temperature:100 °C :0.17%
12	Heat build-up	EN15534	$\Delta T = -2.7^\circ\text{C}$
13	Lead Content Test	EUNo.628/2015	Non Dectectable
14	Mould resistance	ASTM G21	Rating 0

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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: $\Delta E^*=1.22$, Grey Scale: 4-5 Back surface: $\Delta E^*=1.06$, Grey Scale: 4-5
		EN15534 ISO9227	$\Delta E^*=1.42$, Grey Sale=4 (Exposure 96h)
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 $\Delta E^*=1.09$, Grey Sale=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 ·K)/W
27	Thermal conductivity	CE (EN14041(2004))	0.19738W/m·K
28	UV Weathering test	ASTM G154	After 3000 hours test, Grey Scale3, $\Delta E^*=3.56$
29	VOC&TVOC	ASTM D5116-11	Non Dectectable
30	Water absorption	ASTM D1037	Water absorption(24h): 0.12%