





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 |  | <p>1.9 x 1.8 in (47.5 x 45.5 mm)</p> |
| US45 |  | <p>3.1 x 1.1 in (79 x 27 mm)</p> |
| US46 |  | <p>2.2 x 2.3 in (55 x 59 mm)</p> |
| US47 |  | <p>3.9 x 2.1 in (99.5 x 54.5 mm)</p> |

| 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 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 | 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 °C :0.17% | |
| 12 | Heat build-up | EN15534 | $\Delta T = -2.7^\circ\text{C}$ | |
| 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: $\Delta E^* = 1.22$, 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 |
|-----|---|--|---|--------|
| 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 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 ·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 Detected | |
| 30 | Water absorption | ASTM D1037 | Water absorption(24h): 0.12% | |
| 31 | Installation Span | Manufacturers Specification | 16"(406mm) on center | |