

Castellation Cladding Technical Sheet

| Model | Photo | Dimension |
|-------|---|---------------------------------|
| UH46 |  | 121.5 x 25 mm (4.8 x 1.0 in) |
| UH61 |  | 196.5 x 25 mm (7.7 x 1.0 in) |
| UH50 |  | 75 x 54 mm (3.0 x 2.1 in) |
| UH51 |  | 75 x 77.5 mm (3.0 x 3.1 in) |

| NO. | Property | Test Method | Test results | Remark |
|-----|--------------------------------------|-------------------------|--|--------|
| 1 | Abrasion Resistance | ASTM D4060 | 33mg(1000cycles) | |
| 2 | Brinell hardness | EN15534 | 8.2N/mm ² | |
| 3 | Boiling test | EN15534 | Water absorption in weight: 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 °C | |
| | | 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 Dectectable | |
| | | ASTM D6007-14 | 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 | Δ T=-2.7°C | |
| 13 | Lead Content Test | EUNo.628/2015 | Non Dectectable | |
| 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: Δ E*=1.22, Grey Scale: 4-5 Back surface: Δ E*=1.06, Grey Scale: 4-5 | |
| | | EN15534 ISO9227 | Δ E*=1.42, Grey Sale=4 (Exposure 96h) | |

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|-----|---|--|---|--------|
| 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% | |
| 31 | Installation Span | Manufacturers Specification | 500mm on center | |