


Grad Cladding Technical Sheet

| Model | Photo | Dimension |
|-------|---|---------------------------|
| US115 |  | 119×20 mm (4.7×0.8 in) |

| NO. | Property | Test Method | Test results | Remark |
|-----|--------------------------------------|------------------|---|--------|
| 1 | Boiling test | EN15534 | Water absorption in weight: 0.58% | |
| 2 | Coefficient Linear Thermal Expansion | ASTM D696 | 35.6×10^{-6} mm/mm °C | |
| | | EN15534 | 34.0×10^{-6} K ⁻¹ | |
| 3 | Degree of chalking | EN15534 | Rating 0, no chalking | |
| 4 | Falling mass impact resistance | EN15534 | Max Crack length(mm): No crack. Max Residual Indentation(mm): 0.14 | |
| 5 | Formaldehyde Content | EN717-1 | Non Detected | |
| | | ASTM D6007-14 | Non Detected | |
| 6 | Heavy Metal Content | EPA3051 | Sb: ND, As: ND, Se: ND, Sn: ND | |
| 7 | Heat reversion | EN15534 EN479 | 0.12% (Test temperature: 100°C) | |
| 8 | Heat build-up | EN15534 | $\Delta T = -3.1^\circ\text{C}$ | |
| 9 | Lead Content Test | EUNo.628/2015 | Non Detected | |
| 10 | Mould resistance | ASTM G21 | Rating 0 | |

| NO. | Property | Test Method | Test results | Remark |
|-----|---|--|--|--------|
| 11 | Moisture Content | EN15534 EN322 | 0.43% | |
| 12 | 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) | |
| 13 | Pb, Cd, Hg, Cr6+ | RoHs-IEC62321 | Pb: ND, Cd: ND, Hg: ND, Cr ⁶⁺ : ND | |
| 14 | Resistance to artificial weathering | EN15534 ISO4892-2 | After 2000h exposure $\Delta E^*=1.09$, Grey Scale=4-5 | |
| 15 | Swelling and water absorption (24hours immersion) | EN15534 | ①Swelling: 0.45% in thickness, 0.01% in width, 0.02% in length. ②Water absorption: 0.24% | |
| 16 | Swelling and water absorption (28days immersion) | EN15534 | ①Swelling: 1.52% in thickness, 0.06% in width, 0.18% in length. ②Water absorption: 1.85% | |
| 17 | SRI Testing | ASTM C1549, ASTM C1371, ASTM E1980 | 19 | |
| 18 | Thermal Resistance | ASTM C518-2010 | Thermal conductivity: 0.1589W/(m·k) Thermal resistance: 0.0830(m ² ·K)/W | |
| 19 | UV Weathering test | ASTM G154 | After 3000 hours test, Grey Scale 4-5, $\Delta E^*=1.42$ | |
| 20 | VOC&TVOC | ASTM D5116-11 | Non Detected | |