

ALUTILE ALUMINIUM COMPOSITE PANEL

| CORE MATERIAL | |
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| Core material | Low density polyethylene |
| Density | 0.91-0.93g/cm ³ |
| Coefficient of the thermal expansion | 13.0x10 ⁻⁵ cm/cm/oC |
| Thermal conductivity | 0.30W/mxK |
| Specific transmission resistance | 1.2x10 ¹⁷ Ωcm |
| SPECIFICATION | |
| Overall panel thickness | 4mm |
| Rigidity of panel | 0.24KNm ² /m |
| Section modulus | 1.75m ³ /m |
| Weight of panels | 5.5~5.6kg/m ² |
| Alloy of cover sheets | A3003H16 OR AW5005A (A1Mg1) H42 |
| Linear thermal expansion | 2.4mm/m/100 oK |
| Temperature resistance | From -40oC+80oC |
| Flexural modulus span 20mm x 10 Kg/Sq. MM 4mm thick | Bending elastic modulus ≥2.0*10 ⁴ Mpa |
| Co-efficient of expansion x 10/Deg. C 4mm Thick | ≤3.0x 10 ⁻⁵ /mm°C (From -30°Cto 70°C) |
| Apparent thermal conductivity K CAL/MH.DEG. C 4mm thick | 0.35 Kcal/m.hr.°C |
| Bond strength Kg/Cm. Sq. 4mm thick | Peeling strength 1800D7N/mm |
| Shear resistance KG F/Sq. MM 4mm thick | ≥24MPa |
| FINISHES | |
| Coil coated finish | BECKER or PPG Kynar 500 and Hylar 5000 PVDF |
| Colour range | Any special colour available |
| Film thickness (ECCA-T1) | 26-29 μm |
| Specular gloss (ECCA-T2) | 32-35% |
| Degradation of gloss | Grade 1 |
| Pencil hardness (ECCA-T4) | 3H |
| Film adhesion after indentation is lesser or equal to 44 in lb | No cracks and no removal of skin occurs |
| Film adhesion after bending (ECCA-T7) | 1T |
| Resistance to cracking after bending (ECCA-T7) | T=1 |
| Formability (T-Bend) | 2T |
| Impact Resistance (Reverse Impact - Crosshatch) | No cracking or adhesion loss |
| Salt spray resistance tests (ECCA-T8, Din 50021) | No creeps, no blisters after 2000hrs of sample exposure |
| HCL | No change |
| H2SO4 | No change |
| Mortar | No change |
| Detergent | No change |
| Acid and alkali has no effect on the material (ECCA-T11) | No effect |
| Corrosion resistance | No change |
| MANUFACTURER'S PARTICULARS | |
| ISO9001 | YES |
| ISO14001 | YES |
| Years of manufacturing experience | 13 years manufacturing experience with Alutile |