

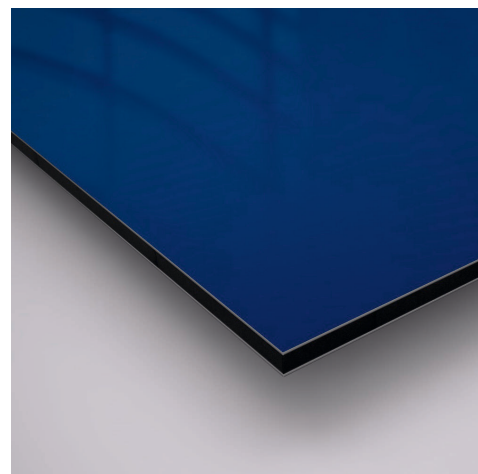
Technical data

CODE:**PRODUCT:**

ACP 0,12 - 0,15 - 0,18 - 0,21 - 0,3 - 0,5

NOTE:

TECHNICAL DATA

IMAGE:**LAST UPDATE:**

7/2021

ALUMINIUM COMPOSITE PANEL

| Thickness (mm) | 4 mm 0,50 mm AL | 3 mm 0,30 mm AL | 3 mm 0,21 mm AL | 3 mm 0,18 mm AL | 3 mm 0,15 mm AL | 3 mm 0,12 mm AL |
|---------------------------------------|---|--------------------|--------------------|--------------------|--------------------|--------------------|
| Weight (kg/m ²) | 5,8 | 4,25 | 4,1 | 4,08 | 4,05 | 4 |
| Standard Size | 1220 mm, 1500 mm, 2000 mm | | | | | |
| Thickness | +/- 0,2 mm | | | | | |
| Width | +/- 2 mm | | | | | |
| Length | +/- 3 mm | | | | | |
| Diagonal | +/- 5 mm | | | | | |
| Painting | PE COATING, 16 +/- 1 mm microns | | | | | |
| Hardness (Pencil hardness) | H | | | | | |
| Gloss level tolerance | ± 5% | | | | | |
| Temperature Resistance | From -40°C to +80°C | | | | | |
| Impact Strenght (kg/cm ²) | 42 | | | | | |
| Boiling Water Resistance | Boiling for 2 hrs without change | | | | | |
| Acid Resistance | Immerse Surface in 2% Hc1 for 24 hrs without change | | | | | |
| Alkali Resistance | Immerse Surface in 2% NaOH for 24 hrs without change | | | | | |
| Oil Resistance | Immerse Surface in 20# engine oil for 24 hrs without change | | | | | |
| Solvent Resistance | Cleaned 100 times with Dimethylbenzene without change | | | | | |
| Cleaning Resistance | > 1000 times without change | | | | | |
| Peel Strength (Newton/mm) | >5 | | | | | |
| Bending Strength | 90 MPa | | | | | |

| Panel thickness (mm) | 2 | 3 | 4 | 6 |
|--|--|-------------------------------|-------------------------------|-------------------------------|
| Technical properties | | | | |
| Moment of inertia I [cm ⁴ /m] | 0,049 | 0,123 | 0,231 | 0,548 |
| Section modulus W [cm ³ /m] | 0,51 | 0,81 | 1,11 | 1,71 |
| Rigidity E·J [kNcm ² /m] | 345 | 865 | 1620 | 3840 |
| Alloy/ condition of the cover sheets | 1100 H18 | 1100 H18 | 1100 H18 | 1100 H18 |
| Modulus of elasticity [N/mm ²] | 70,000 | 70,000 | 70,000 | 70,000 |
| Tensile strength of the cover sheet [N/mm ²] | R _m : 145 - 185 | R _m : 145 - 185 | R _m : 145 - 185 | R _m : 145 - 185 |
| 0,2% proof stress | R _{p0,2} : 110 - 175 | R _{p0,2} : 110 - 175 | R _{p0,2} : 110 - 175 | R _{p0,2} : 110 - 175 |
| Enlogation | A ₅₀ ≥ 3% | A ₅₀ ≥ 3% | A ₅₀ ≥ 3% | A ₅₀ ≥ 3% |
| Linear thermal expansion | 2,4 mm/m at 100°C temperature difference | | | |
| Acoustical properties | | | | |
| Sound absorption factor α _s | 0,05 | 0,05 | 0,05 | 0,05 |
| Airborne sound insulation index R _w [dB] | 23 | 24 | 25 | 26 |
| Loss factor d | 0,0048 | 0,0057 | 0,0072 | 0,0102 |
| Thermal properties | | | | |
| Thermal resistance 1/λ [m ² K/W] | 0,0047 | 0,0080 | 0,0113 | 0,0180 |
| Heat transition coefficient k [W/m ² K] | 5,72 | 5,61 | 5,50 | 5,30 |
| Water absorption [%] DIN 53495 | 0,01 | 0,01 | 0,01 | 0,01 |
| Static charge | no antistatic treatment necessary | | | |