

CHANGZHOU ALCO INTERNATIONAL CO.,LTD.

THICKNESS:	20mm	25mm
Face side Aluminium thickness:	1.00mm	1.00mm
Back side Aluminium thickness:	1.00mm	1.00mm
Panel weight: (kg/m ²)	7.4	7.8
The mechanical properties:		
Moment of inertia I (cm ⁴ /m)	19.85	31.67
Section modulus W (cm ³ /m)	19.00	24.00
Plate stiffness $E \cdot I$ (KNcm ² /m)	139000	221700
Aluminium Alloy:	AA3003	
Modulus of Elasticity (N/mm ²)	70000	
Tensile Strength (N/mm ²)	Rm≥220	
0.2% Yield stress (N/mm ²)	Rp0.2≥130	
Elongation: (EN485-2:1994)	A50≥8	
Linear thermal expansion:	2.4mm/m 100°C temperature difference	
Surface coating:	PVdF	
Gloss (initial value)	30%-45%	
Pencil hardness:	HB-F	
Aluminium honeycomb core:		
Cellular size	1/4"(6.3mm)	
Density:	About 80kg/ m ³	
Compressive strength (MIL-STD-401)	4N/ mm ²	
Acoustic property:		
Acoustical absorption coefficient a_3	0.05	
Sound insulation index (According to ISO717-1) R_w (dB)	23	25
Thermal performance:		
Heat conductivity coefficient λ^* (W/(m ² ·K))	2.25	2.70
Thermal resistance value R (1/Λ) (m ² K/W)	0.0089	0.0093
Heat transfer coefficient U (K) (W/(m ² ·K))	5.59	5.575

* Heat conductivity coefficient “ λ ” is based on panel thickness.

CHANGZHOU ALCO INTERNATIONAL CO.,LTD.

THICKNESS:	10mm	15mm
Face side Aluminium thickness:	1.00mm	1.00mm
Back side Aluminium thickness:	0.50mm	1.00mm
Panel weight: (kg/m ²)	5.3	7.0
The mechanical properties:		
Moment of inertia <i>I</i> (cm ⁴ /m)	3.13	10.78
Section modulus <i>W</i> (cm ³ /m)	4.63	14.00
Plate stiffness <i>E·I</i> (KNcm ² /m)	21900	75500
Aluminium Alloy:	AA3003	AA3003
Modulus of Elasticity (N/mm ²)	70000	
Tensile Strength (N/mm ²)	R _m ≥ 125	R _m ≥ 220
0.2% Yield stress (N/mm ²)	R _{p0.2} ≥ 80	R _{p0.2} ≥ 130
Elongation: (EN485-2:1994)	A ₅₀ ≥ 5	A ₅₀ ≥ 8
Linear thermal expansion:	2. 4mm/m 100℃ temperature difference	
Surface coating:	PVdF	
Gloss (initial value)	30%-45%	
Pencil hardness:	HB-F	
Aluminium honeycomb core:		
Cellular size	1/4”(6.3mm)	
Density:	About 80kg/ m ³	
Compressive strength (MIL-STD-401)	4N/ mm ²	
Acoustic property:		
Acoustical absorption coefficient <i>a₃</i>	0. 05	
Sound insulation index (According to ISO717-1) <i>R_w</i> (dB)	21	22
Thermal performance:		
Heat conductivity coefficient <i>λ*</i> (W/(m ² ·K))	1.35	1.78
Thermal resistance value <i>R</i> (1/Λ) (m ² K/W)	0.0074	0.0084
Heat transfer coefficient <i>U</i> (K) (W/(m ² ·K))	5.64	5.605

* Heat conductivity coefficient “ λ ” is based on panel thickness.