

4MANN ALUMINUM COMPOSITE PANEL

TECHNICAL DATA SHEET 4F (PLATINUM) – 4MM

PARAMETERS	ASTM STD.	UNIT	Tolerance ±	Exterior / Interior
				4F - Platinum
				4MM
Physical Properties of panel				
Thickness of Panel	-	[mm]	±0.20	4.00
Weight of Panel	-	[kg/m ²]	± 5 %	5.60
Specific Gravity of Panel	ASTM D 792	[g/cm ³]	±5%	1.40
Adhesive Film Thickness	-	µm	±5	70
Protective Film Thickness	-	µm	±5	85
LDPE Core Density	ASTM D 792	µm	±5%	0.97
Skin Properties				
Thickness of Skin	-	[mm]	±0.02	0.50
Aluminum Alloy	ASTM B209M	-	-	AA 1xxx/3xxx
Temper	ASTM B209M	-	-	H18/H16
Tensile Strength	ASTM E8	[N/mm ²]	±5	150
0.2% Proof Stress	ASTM E8	[N/mm ²]	±5	120
Elongation	ASTM E8	[%]	±2	5
Coat/Paint Properties				
Surface Finish	-	-	-	PVDF Coated
Dry Film Thickness (Coating)	ASTM D7091	µm	±5	30
Gloss (Initial Value)	ASTM D523	[%]	±5	30
Chemical Resistance (5% HCL -24 hrs)	ASTM D 1308	Visual	Passes	Passes
Cross Hatch	ASTM D 3359	Visual	Passes	100/100 (No Color Peel off)
Reverse Impact (50 cm)	ASTM D 2794	cm	Passes	Passes
Solvent Rub Test (MEK test)	ASTM D 5402	DR	Passes	No Decoloration, Passes
Pencil Hardness Test	ASTM D 3363	HB	Passes	2HB, Passes
Humidity Test	ASTM D 2247	%	Passes	No Color Peel off, Passes
T-Bend Flexibility	ASTM D 4145	T	Passes	>2T
Acoustical Properties of panel				
Sound Transmission Loss Rw	ASTM E90	[db]	-	26
Thermal Properties of panel				
Heat Transition Coefficient U	ASTM C1363	[W/m ² K]	-	5.53
Linear Thermal Expansion	ASTM D696	[mm/m/°C]	-	2.3 (at 100 °C)
Continuous use Temperature	ASTM C1363	[°C]	-	-50...+80