

4MANN ALUMINUM COMPOSITE PANEL

TECHNICAL DATA SHEET FIRE RETARDENT – Class B1 (DIN 4102:1)

PARAMETERS	ASTM STD.	UNIT	Tolerance ±	Exterior / Interior
				4FR - Platinum
				4MM
Physical Properties of panel				
Thickness of Panel	-	[mm]	±0.20	4.00
Weight of Panel	-	[kg/m ²]	± 5 %	6.50
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	140
0.2% Proof Stress	ASTM E8	[N/mm ²]	±5	110
Elongation	ASTM E8	[%]	±2	6
Dry Film Thickness	ASTM D7091	µm	±5	30
Modulus of Elasticity	ASTM E8	[N/mm ²]	±5	70,000
Surface				
Surface Finish	-	-	-	PVDF Coated
Gloss (initial value)	ASTM D 523	%	±5	30
Acoustical Properties				
Sound Transmission Loss Rw	ASTM E 90	[db]	-	26
Thermal Properties				
Heat Transition Coefficient U	ASTM C1363	[W/m ² K]	-	5.53
Linear Thermal Expansion	ASTM D 696	[mm/M/°C]	-	2.3 (at 100 °C)
Continuous use Temp.	ASTM C1363	[°C]	-	-50...+80
Core Properties				
Density of core	ASTM D792	[gm/cm ³]	±5%	1.26
Compounds (Contain ATH & Oxide of Mg & Cu)	-----	%	-	100% Fire Retardant LDPE
Fire Properties & Classification				
Classification	DIN 4102 (Brandschacht Test)			
Fire Behavior (Average Rest Length of Burning)	350mm to 450 mm with Smoke Temperature 125 °C to 170 °C			
Smoke Density	Smoke Density 10 to 15%			
Surface Flaming & Edge Flaming for 20 Sec.	The tip of flame does not reach the reference mark and the filter paper below the sample does not Burn			