

Technical Data Sheet DIBOND®

Panel thickness :			2 mm	3 mm		
Thickness of aluminium layer			0.30 mm			
Weight		[kg/m ²]	2.90	3.80		
Technical Properties :						
Section Modulus	W	[cm ³ /m]	0.51	0.81		
Rigidity	E-I	[kNcm ² /m]	345	865		
Alloy of Aluminium layer			EN AW-5005A (AlMg1), H44, according EN 485-2			
Modulus of Elasticity			70'000 [N/mm ²]			
Tensile Strength of Aluminium			R _m 145 - 185 [N/mm ²]			
Proof Stress (0.2)			R _{p0.2} 110 - 175 [N/mm ²]			
Elongation			A ₅₀ ≥ 3 [%]			
Linear Thermal Expansion			2.4 mm/m at 100°C temperature difference			
Core :						
polyethylene, type LDPE			0.92 [g/cm ³]			
Surface :						
Lacquering			Modified-Polyester-Coating			
Gloss (Initial value)			30 - 85 %			
Hardness (pencil hardness)			HB - F			
Schalltechnische Eigenschaften:						
Sound Absorption Factor α _s			0.05			
Sound Transmission Loss R _w			23	24		
Loss Factor d			0.0048	0.0057		
Thermal Properties :						
Thermal Resistance 1/Λ			0.0047	0.0080		
Thermal Transmission Coefficient k			5.72	5.61		
Range of Application			-50...+80 [°C]			