

## Technical Data Sheet DIBOND®

Panel thickness :			2 mm	3 mm	4 mm	6 mm
Thickness of aluminium layer			0.30 mm			
Weight	[kg/m <sup>2</sup> ]		2.90	3.80	4.75	6.60
<b>Technical Properties :</b>						
Section Modulus	W [cm <sup>3</sup> /m]		0.51	0.81	1.11	1.71
Rigidity	E·I [kNcm <sup>2</sup> /m]		345	865	1620	3840
Alloy of Aluminium layer			EN AW-5005A (AlMg1), H44, according EN 485-2			
Modulus of Elasticity [N/mm <sup>2</sup> ]			70'000			
Tensile Strength of Aluminium [N/mm <sup>2</sup> ]			R <sub>m</sub> 145 - 185			
Proof Stress (0.2) [N/mm <sup>2</sup> ]			R <sub>p0.2</sub> 110 - 175			
Elongation [%]			A <sub>50</sub> ≥ 3			
Linear Thermal Expansion			2.4 mm/m at 100°C temperature difference			
<b>Core :</b>						
polyethylene, type LDPE [g/cm <sup>3</sup> ]			0.92			
<b>Surface :</b>						
Lacquering			Modified-Polyester-Coating			
Gloss (Initial value)			30 - 85 %			
Hardness (pencil hardness)			HB - F			
<b>Schalltechnische Eigenschaften:</b>						
Sound Absorption Factor α <sub>s</sub>			0.05			
Sound Transmission Loss	R <sub>w</sub> [dB]		23	24	25	26
Loss Factor	d		0.0048	0.0057	0.0072	0.0102
<b>Thermal Properties :</b>						
Thermal Resistance	1/Λ [m <sup>2</sup> K/W]		0.0047	0.0080	0.0113	0.0180
Thermal Transmission Coefficient	k [W/m <sup>2</sup> K]		5.72	5.61	5.50	5.30
Range of Application [°C]			-50...+80			

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