

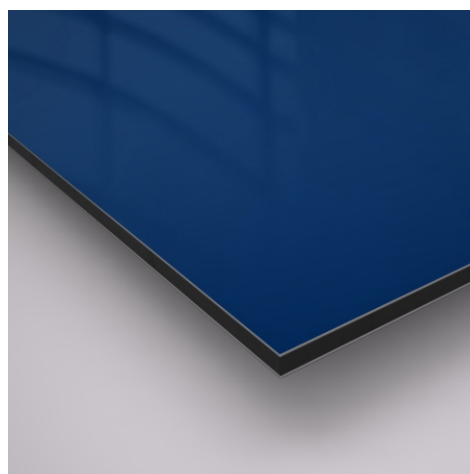
Technical data

CODE:**PRODUCT:**

ACP 0,12 - 0,15 - 0,18 - 0,21 - 0,3 - 0,5

NOTE:

TECHNICAL DATA

IMAGE:**LAST UPDATE:**

7/2021



CATEGORY

BOARD MATERIALS

ALUMINIUM COMPOSITE PANEL

Thickness (mm)	4 mm 0,50 mm AL	3 mm 0,30 mm AL	3 mm 0,21 mm AL	3 mm 0,18 mm AL	3 mm 0,15 mm AL	3 mm 0,12 mm AL
Weight (kg/m ²)	5,8	4,25	4,1	4,08	4,05	4
Standard Size	1220 mm, 1500 mm, 2000 mm					
Thickness	+/- 0,2 mm					
Width	+/- 2 mm					
Length	+/- 3 mm					
Diagonal	+/- 5 mm					
Painting	PE COATING, 16 +/- 1 mm microns					
Hardness (Pencil hardness)	H					
Gloss level tolerance	± 5%					
Temperature Resistance	From -40°C to +80°C					
Impact Strenght (kg/cm ²)	42					
Boiling Water Resistance	Boiling for 2 hrs without change					
Acid Resistance	Immerse Surface in 2% Hc1 for 24 hrs without change					
Alkali Resistance	Immerse Surface in 2% NaOH for 24 hrs without change					
Oil Resistance	Immerse Surface in 20# engine oil for 24 hrs without change					
Solvent Resistance	Cleaned 100 times with Dimethylbenzene without change					
Cleaning Resistance	> 1000 times without change					
Peel Strength (Newton/mm)	>5					
Bending Strength	90 Mpa					
% of recycled material in core	100%					

Panel thickness (mm)	2	3	4	6
Technical properties				
Moment of inertia I [cm ⁴ /m]	0,049	0,123	0,231	0,548
Section modulus W [cm ³ /m]	0,51	0,81	1,11	1,71
Rigidity E·J [kNcm ² /m]	345	865	1620	3840
Alloy/ condition of the cover sheets	1100 H18	1100 H18	1100 H18	1100 H18
Modulus of elasticity [N/mm ²]	70,000	70,000	70,000	70,000
Tensile strength of the cover sheet [N/mm ²]	R _m : 145 - 185	R _m : 145 - 185	R _m : 145 - 185	R _m : 145 - 185
0,2% proof stress	R _{p0,2} : 110 - 175	R _{p0,2} : 110 - 175	R _{p0,2} : 110 - 175	R _{p0,2} : 110 - 175
Enlogation	A ₅₀ ≥ 3%	A ₅₀ ≥ 3%	A ₅₀ ≥ 3%	A ₅₀ ≥ 3%
Linear thermal expansion	2,4 mm/m at 100°C temperature difference			
Acoustical properties				
Sound absorption factor α _s	0,05	0,05	0,05	0,05
Airborne sound insulation index R _w [dB]	23	24	25	26
Loss factor d	0,0048	0,0057	0,0072	0,0102
Thermal properties				
Thermal resistance 1/λ [m ² K/W]	0,0047	0,0080	0,0113	0,0180
Heat transition coefficient k [W/m ² K]	5,72	5,61	5,50	5,30
Water absorption [%] DIN 53495	0,01	0,01	0,01	0,01
Static charge	no antistatic treatment necessary			