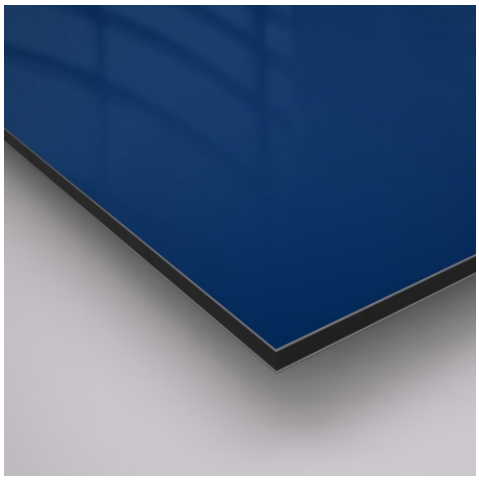
obchod@dencop.cz | +420 571 894 000
export@dencop.cz | +420 571 894 001

Technical data

CODE:	303260
PRODUCT:	ACP ECONOMY 0,05 x 3 mm
NOTE:	TECHNICAL DATA
IMAGE:	
LAST UPDATE:	2/2023

ALUMINIUM COMPOSITE PANEL

Thickness (mm)	3 mm 0,05 mm AL
Weight (kg/m²)	3,75
Standard Size	1220 mm, 1000 mm
Thickness	+/- 0,2 mm
Width	+/- 2 mm
Length	+/- 3 mm
Diagonal	+/- 5 mm
Painting	PE COATING, 8 +/- 1 mm microns
Hardness (Pencil hardness)	H
Gloss level tolerance	± 5%
Temperature Resistance	From -40°C to +80°C
Impact Strenght (kg/cm²)	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

Panel thickness (mm)	2	3	4	6
Technical properties				
Moment of inertia I [cm⁴/m]	0,049	0,123	0,231	0,548
Section modulus W [cm³/m]	0,51	0,81	1,11	1,71
Rigidity E·J [kNcm²/m]	345	865	1620	3840
Alloy/ condition of the cover sheets	1100 H18	1100 H18	1100 H18	1100 H18
Modulus of elasticity [N/mm²]	70,000	70,000	70,000	70,000
Tensile strength of the cover sheet [N/mm²]	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 [m²K/W]	0,0047	0,0080	0,0113	0,0180
Heat transition coefficient k [W/m²K]	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		