



Technical data sheet

Tubond® aluminium composite panels with polyethylene core and 0,3mm aluminium layer. Specially recommended for 3D applications and bending. Due to their structure the aluminium composite panels are characterized by exceptional material rigidity while maintaining low weight. These characteristics together with its ideally smooth surface, make this material broadly applied in advertising, printing, construction, industrial disciplines as well as in many other similar fields. Due to the fact that our white panels have special polyester coating we hereby guarantee that our panels will not fade, peel off paint and delaminate within 5 years.

Characteristics	Standard index	Method	Value / Thickness		
			2mm	3mm	4mm
DESIGNATION	Tubond®				
PHYSICAL					
Aluminium thickness			0,30 mm		
Face finish			matt/matt gloss/matt one side coating*		
Weight			t2mm=3.15kg/m ²	t3mm=4,2-4,3kg/m ²	t4mm=5.35-5.45kg/m ²
Core composite			PE		
Length			± 3mm		
Width			± 2mm		
Thickness			±0,2mm		
Diagonal			≤ 5mm		
Edge non-straightness			≤ 1 mm/m		
Warpage			≤ 5mm/m		
Standard width			1250/1500/2000		



MECHANICAL					
Surface pencil hardness	≥H	ASTM D3363-00			
Coating thickness	2 coating ≥25 um 3 coating ≥ 35 um				
T-Bending	2T no rift	ASTM 4145			
Impact resistance	no cracing	ASTM D2794 (50kg.cm)			
Adhesive force	0.85kgf/mm				
Minimal bending radius	45mm 70mm				
THERMAL					
Temperature resistance	-50°C to 70°C				
Thermal expansion	2.4mm/m by 100°C temperature difference				
Thermal deformation temperature	115°C	ASTM D 648			
CHEMICAL RESISTANCE					
Boiling water resistance	after 2h in boiling water no change				
Chemical resistance: - muriatic acid 5% HCL 24 hrs - sodium hydroxide 5% NaOH 24 hrs	no change	ASTM D 308			
Solvent resistance	no change	ASTM D 2248 (100times)			



Humidity resistance	no change	ASTM D 2247-02 ASTM D 714 (4000hrs)			
FLAMMABILITY					
Fire propagation	qualified	ASTM E84			
OTHER					
Sound insulation	27 acc.	ASTM E413			
Water resistance	passed	ASTM E331			

*single-sided panel, one side foil - the bottom layer of the aluminium is covered with a protective layer