

Technical data sheet

Tubond® Digital aluminium composite panels with polyethylene core and 0,21mm aluminium layer, recommended for digital printing, single-sided panels, one side protective foil - the bottom layer of the aluminium is covered with a protective layer. Due to their structure the aluminium composite panels are characterized by exeptional material rigidity while maintaining low weight. These characteristics together with its ideally smooth surface, make this material broadly applied in advertising and printing. 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		
DESIGNATION	Tubond® Digital					
PHYSICAL						
Aluminium thickness			0,21 mm			
Face finish			one side coating matt			
Weight			t2mm=3.15kg/m2	t3mm=4,2-4,3kg/m2		
Core composite			PE			
Length			± 3mm			
Width			± 2mm			
Thickness			±0,2mm			
Diagonal			≤ 5mm			
Edge non-straightness			≤ 1 mm/m			
Warpage			≤ 5mm/m			
Standard width			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				
		ASTM D2794				
Impact resistance	no cracing	(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						
	after 2h in boiling water					
Boiling water resistance	no change					
Chemical resistance:						
- muriatic acid 5% HCL 24 hrs						
- sodium hydroxide 5% NaOH 24h	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				

