Technical data sheet

Xbond® 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.

Characteristics	Standard index	Method	3mm
DESIGNATION	Xbond®		
PHYSICAL			
Aluminium thickness			0,30 mm
Face finish			matt/matt gloss/matt
Weight			t3mm=4,75kg/m2
Core composite			LDPE
Length			± 3mm
Width			± 2mm
Thickness			±0,2mm
Diagonal			≤ 3mm
Edge non-straightness			90
Warpage			≤ 4mm/m
Standard width			1500
MECHANICAL			
Surface pencil hardness	≥HB	ASTM D3363-00	
Coating thickness	›18mm		
T-Bending	2T no rift	ASTM 4145	
Impact resistance	no cracing	ASTM D2794 (50kg.cm)	

Adhesive force	7N/MM		
Minimal bending radius	170mm	ASTM D790	
THERMAL			
Temperature resistance	-50°C to 80°C		
Thermal expansion	4-28	ASTM D696	
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	29	ASTM E413	
Water resistance	passed	ASTM E331	