



Physical properties for Lightbond Plus

Panel Dimension	2mm	3mm	4mm
Panel Thickness(mm)	2	3	4
Aluminum Thickness (mm)	0.3 0.21		
Standard Width	1220 1250 1500		

Dimensional Tolerances

Thickness (mm)	-0 +0.1
Width (mm)	j 1
Length (mm)	j 1
Diagonal (mm)	j 3
Thermal Expansion	2.4mm/m @100°C Temp Difference
Aluminum Thickness (mm)	j 0.02

Surface Properties

Paint Thickness (micron)	20
Pencil Hardness	> HB
Toughness of Coating	3T
Temperature Resistance	-50°C to 90°C
Impact Strength (kg cm ²)	50
Boiling Water Resistance	Boiling for 2h without change
Acid Resistance	Inner surface with 2%HCl (v/v) for 24h without change
Alkali Resistance	Inner surface with 2%NaOH (mpm) for 24h without change



Oil Resistance	Innerse sureface with 20# engine oil for 24h without change
Solvent Resistance	Clean 100 times with Dimethylbenzene without change
Cleaning Resistance	≥ 1000 times without change
Peel Strength 180j	> 5 Newton / mm

Product Properties

Weight (Kg m ²)	2.9	3.8	4.75
Sound Absorbtion NRC	0.05		
Sound Attenuation R _w db	23	24	25
Water Absorbtion % By Volume	0.01		
Thermal Performance R Values	0.0047	0.0057	0.0012
Core Composition	LDPE Polyethylene		
Fire Composition	Class 1 BS476 PT7		
	Class O BS476 PT6		
	Class A ASTM E-84		
Color Difference	$\Delta E_{ab}^* = 1.6$ ASTM G155-05A, 4000H Test		
Gloss Retention	85.7% ASTMG155-05A 4000H Test		