

**TECHNICAL DATA - BCP STEEL COMPOSITE**

TEST DESCRIPTION	TEST RESULT - PRODUCT QUALITY		
<b>DIMENSION DEVIATION</b>	Length Difference: $\leq \pm 3\text{mm}$		
	Width Difference: $\leq \pm 2\text{mm}$		
	Thickness Difference: $\leq \pm 0.2\text{mm}$ (For 2mm Panel $\leq + 0.2\text{mm}$ only)		
	Diagonal Deviation: $\leq 3\text{mm}$		
	Out of straight at sides: $\leq 1\text{mm/m}$		
	Warp : $\leq 3\text{mm/m}$		
<b>APPEARANCE</b>	Clean surface without swelling flaws, scratches and aberrations		
<b>LUSTER DEVIATION</b>	Face : 0.5/50.0		
	Back : 0.5/50.0		
<b>SURFACE DENSITY (Kgs/m<sup>2</sup>)</b>	Steel	3mm - 0.30mm	7.71
<b>PENCIL HARDNESS</b>	$\geq \text{HB}$		
<b>COATING TOUGHNESS</b>	Inner Panel $\leq 3\text{T}$		
<b>ADHESIVE</b>	No less than grade I		
<b>IMPACT STRENGTH</b>	50Kg/cm Without peeling & cracking of paint		
<b>RESISTANCE TO SOLVENT</b>	Unchanged after cleaning 100 times with dimethylbenzene		
<b>180° PEEL STRENGTH (N/mm)</b>	$\geq 9.0$		
<b>MODULUS OF ELASTICITY (N/mm<sup>2</sup>)</b>	$\geq 78,000$		
<b>SHEAR STRENGTH (Mpa)</b>	$\geq 68$		
<b>RIGIDITY E x J (kNcm<sup>2</sup>/m)</b>	$\geq 2300$		
<b>TEMPERATURE RESISTANCE</b>	unchanged after -40°C to +80°C 20 cycles		
<b>COEFFICIENT OF HEAT EXPANSION</b>	$\leq 2.00 \times 10^{-5} \text{ } ^\circ\text{C}^{-1}$		
<b>DEFORMATION TEMPERATURE</b>	$\geq 105^\circ\text{C}$		
<b>LINEAR THERMAL EXPANSION</b>	$\leq 2.7 \text{ mm/m}$ at 100° expansion temperature difference		
<b>HEAT TRANSITION COEFFICIENT</b>	5.6 - 5.8 Wm <sup>2</sup> k		
<b>0.2% PROOF STRESS</b>	Rp0.2: 110–175 N/mm <sup>2</sup>		
<b>SOUND ABSORPTION FACTOR</b>	0.04 - 0.05 Alphas		
<b>AIRBORNE SOUND INSULATION INDEX Rw</b>	23 - 25 dB		
<b>WATER ABSORPTION</b>	$\leq 0.01 \%$		

SURFACE COATING SPECIFICATIONS		
<b>BCP STEEL COMPOSITE</b>	Surface Coating	Polyester Paint
	Colour Base	Pigment made in Taiwan
	Coating Thickness	$\geq 22.0\mu\text{m}$
	Standard Colour	Pure White
	Tolerance of Colour	$\leq \pm 2.0 \Delta\text{E}$
	Lacquering	2 layers of structural resistant baked lacquer providing optimum rigidity and durability
	Surface Finishing & Glossiness Level	Both sided Matt : 65%
	Tolerance of Glossiness	$\leq \pm 5.0\%$
	Surface Outdoor Durability	5 years (the change of colour $\leq 4 \text{ NBS}$ )
<b>SHELF LIFE</b>	The product should be used within 12 months from date of production.	

Before starting printing production we recommend a printing test and generation of a specific ICC profile on the individual printing machine.