

## TECHNICAL DATA SHEET 6MM RUBY HPL

SR NO	PARAMETERS	ASTM STD.	UNIT	6RHP SPECIFICATION
<b>A</b>	<b>Properties of ACP Panel</b>			
1	Thickness of ACP Panel	-	mm	<b>6 ± 0.20</b>
2	Weight of ACP Panel	-	kg/m <sup>2</sup>	<b>7.00 ± 5%</b>
3	Density of ACP Panel	ASTM D1505	gm/cc	<b>1.16</b>
4	Bond Integrity (Peel Strenght 180°)	ASTM D903	N/mm	<b>5 ± 2</b>
5	Tensile Strength of ACP Panel	ASTM E8	MPa	<b>≥ 21</b>
6	Yield Strength of ACP Panel	ASTM E8	MPa	<b>≥ 20</b>
7	% Elongation of ACP	ASTM E8	%	<b>&gt; 9</b>
8	Flexural Strength	ASTM D790	MPa	<b>≥ 50</b>
<b>B</b>	<b>Properties of Aluminium Skin</b>			
1	Skin Thickness	-	mm	<b>0.25 ± 0.03</b>
2	Alloy	ASTM B209M	-	<b>AA 1xxx / 3xxx</b>
3	Temper	ASTM B209M	-	<b>H18/H16</b>
4	Tensile Strength	ASTM E8	N/mm <sup>2</sup>	<b>140 - 165</b>
5	0.2% Proof Stress (Yield Strength)	ASTM E8	N/mm <sup>2</sup>	<b>115 - 135</b>
6	Elongation	ASTM E8	%	<b>5 - 8</b>
7	Modulus of elasticity	ASTM E8	N/mm <sup>2</sup>	<b>≥ 70000</b>
<b>C</b>	<b>Coat/Paint Properties</b>			
1	Type of Coating	-	-	<b>PVDF Coated</b>
2	Coating Thickness	ASTM D7091	µm	<b>26 +5/-3</b>
3	Gloss at 60° Angle	ASTM D523	%	<b>20 - 40</b>
4	Reverse Impact	ASTM D 2794	225 mm	<b>Paint No peel off</b>
5	T-Bend Flexibility	ASTM D 4145	T	<b>&gt;2T</b>
6	Pencil Hardness Test	ASTM D 3363	Visual	<b>HB-H</b>
7	Adhension (Cross Hatch)			
	Dry	ASTM D3359	Visual	<b>Paint No peel off</b>
	Wet (Under Water - 72 Hours)	ASTM D3359	Visual	<b>Paint No peel off</b>
	Boiling Water (8 Hours)	ASTM D3359	Visual	<b>Paint No peel off</b>
8	Chemical Resistance			
	Acid Resistance	AAMA 2605	Visual	<b>Passed</b>
	Alkali Resistance	AAMA 2605	Visual	<b>Passed</b>
	Mortar Resistance	AAMA 2605	Visual	<b>Passed</b>
9	Humidity Test	ASTM D 2247	Visual	<b>No Blister</b>
10	Colour Retention	ASTM 2244	ΔE	<b>Max. 5 units</b>
11	Gloss Retention	ASTM D523	%	<b>60 Min.</b>
12	Chalk Resistance	ASTM D4214	Visual	<b>Max. 8 units</b>
13	Solvent Rub Test (MEK test)	ASTM D 5402	Visual	<b>No Exposed Aluminium</b>
<b>D</b>	<b>Acoustical Properties of panel</b>			
1	Sound Transmission Loss R <sub>w</sub>	ASTM E90	[db]	<b>25</b>

**PRODUCT TOLERANCE:** Panel Width ± 2mm, Length ± 4, Thickness ± 0.2mm, Aluminium coil ± 0.03mm  
Maximum Bow : 0.8% of width and / or length, Squareness : Maximum 5.0mm