

TECHNICAL DATA SHEET 3MM RUBY FR - B1 (CLASS B)

SR NO	PARAMETERS	ASTM STD.	UNIT	3R FR-B1 SPECIFICATION
A	Properties of ACP Panel			
1	Thickness of ACP Panel	-	mm	3 ± 0.20
2	Weight of ACP Panel	-	kg/m ²	5.50 ± 5%
3	Density of ACP Panel	ASTM D1505	gm/cc	1.83
4	Bond Integrity (Peel Strength 180°)	ASTM D903	N/mm	5 ± 2
5	Tensile Strength of ACP Panel	ASTM E8	MPa	≥ 25
6	Yield Strength of ACP Panel	ASTM E8	MPa	≥ 18
7	% Elongation of ACP	ASTM E8	%	> 5
8	Flexural Strength	ASTM D790	MPa	≥ 60
B	Properties of Aluminium Skin			
1	Skin Thickness	-	mm	0.25 ± 0.03
2	Alloy	ASTM B209M	-	AA 1xxx / 3xxx
3	Temper	ASTM B209M	-	H18/H16
4	Tensile Strength	ASTM E8	N/mm ²	140 - 165
5	0.2% Proof Stress (Yield Strength)	ASTM E8	N/mm ²	115 - 135
6	Elongation	ASTM E8	%	5 - 8
7	Modulus of elasticity	ASTM E8	N/mm ²	≥ 70000
C	Coat/Paint Properties			
1	Type of Coating	-	-	PVDF Coated
2	Coating Thickness	ASTM D7091	µm	26 +5/-3
3	Gloss at 60° Angle	ASTM D523	%	20 - 40
4	Reverse Impact	ASTM D 2794	225 mm	Paint No peel off
5	T-Bend Flexibility	ASTM D 4145	T	>2T
6	Pencil Hardness Test	ASTM D 3363	Visual	HB-H
7	Adhesion (Cross Hatch)			
	Dry	ASTM D3359	Visual	Paint No peel off
	Wet (Under Water - 72 Hours)	ASTM D3359	Visual	Paint No peel off
	Boiling Water (8 Hours)	ASTM D3359	Visual	Paint No peel off
8	Chemical Resistance			
	Acid Resistance	AAMA 2605	Visual	Passed
	Alkali Resistance	AAMA 2605	Visual	Passed
	Mortar Resistance	AAMA 2605	Visual	Passed
9	Humidity Test	ASTM D 2247	Visual	No Blister
10	Colour Retention	ASTM 2244	ΔE	Max. 5 units
11	Gloss Retention	ASTM D523	%	60 Min.
12	Chalk Resistance	ASTM D4214	Visual	Max. 8 units
13	Solvent Rub Test (MEK test)	ASTM D 5402	Visual	No Exposed Aluminium
D	Acoustical Properties of panel			
1	Sound Transmission Loss R _w	ASTM E90	[db]	26
F	Fire Classification			
1	Reaction to Fire Class	EN 13501-1		Class B - s1, d0
2	Resistance to Fire	ASTM E-119		2 Hours

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