

M/s. CRISTONE PANELS PRIVATE LIMITED
Plot No. 5A, Bhamburda Ind. Area,
Kapur Chhatrasgarh-492001

July 12, 2016

Ref. No., your letter dated April 1, 2016

Our Job No. IN/ASK-07/16-17

Dear Sir,

Subject - Testing of the ACP 4 mm thickness Grey color

Prime Name - CUTY BOND

Please find hereby the test results of ACP samples submitted to us.

Sr. No.	PARAMETERS	UNIT	ASTM METHOD	Results
Physical Properties				
1	Panel Thickness	mm	Visual	4.0
2	Panel Weight	kg/m ²	Visual	3.7
3	Panel Density	g/cm ³	Visual	1.4
4	Polyethylene Core Density	g/cm ³	D 1505	0.90
5	Bond Strength (Weld strength)	N/mm	D 903	10.77
6	Tensile Strength	MPa	D 882	47.25
7	Yield strength	MPa	D 882	45.20
8	Elongation	%	D 882	3.073
9	Flexural strength	MPa	D 790	124.6
10	Water Absorption	%	D 570	1.1
11	Thermal Expansion	mm/M ² C	D 696	0.084
Properties of Aluminum skin				
1	Skin thickness	mm		0.50
2	Tensile Strength	MPa	D 882	150.0
3	Yield strength	MPa	D 882	140
4	Elongation	%	D 882	12.97

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C	Paint Finish and Test Properties:			
1	Lacquering (PVDF)	Visual	Electrical	Passes
2	Coating thickness	µm	D 7091	24
3	Gloss at 60° angle	---	D 523	35
4	Formability (T - Bend)	Visual	D 4145	Passes
5	Reverse Lap weld, 27 joules	Joules	D 2794	Passes
6A	Cross Hatch	Visual	D 3356	5B
6B	Cross Hatch after 120 °C.	Visual	D 3359	5B
7	Hardness - Pencil	Visual	D 3363	3H
8	Impact test	Joules	ASTM D 3794	Passes
9	Chemical resistance: 10% HCl, 15min	Visual	AAMA 2605	Passes
10	Chemical resistance: 10% H ₂ SO ₄ , 18hrs	Visual	AAMA 2605	Passes
11	Chemical resistance: 10% NaOH, 1hr	Visual	AAMA 2605	Passes
12	Chemical resistance: 10% HNO ₃ , 30min	Visual	AAMA 2605	Passes
13	Chemical resistance: Detergent, 24hrs	Visual	AAMA 2605	Passes
14	Color Change (1000 h)	ΔE	D 2244	No color change
15	% Loss in gloss (1000 h)	%	D 523	4.5 % gloss loss
16	Chalking (1000 h)	Visual	D 3214	Passes No chalking
17	Salt spray (1000 h)	Visual	B 117	Passes no blistering or corrosion observed
18	Humidity (1000 h)	Visual	D 2247	Passes no blistering or corrosion observed

Test results pertain to sample submitted to us

AS Khanna
A.S.Khanna

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