

**rightBOND™**

Aluminium Composite Panels



**NANO**  
**TEST REPORT**

## TEST REPORT: 57S064971-LPL\_CORR01



Date: 10 NOV 2006

Tel: +65 68851322 Fax: +65 67784301

Client's Ref: -

Email: tai-hoe.lin@psbcorp.com

**Note:** This report is issued subject to TÜV SÜD PSB Corporation's "Terms and Conditions Governing Technical Services". The terms and conditions governing the issue of this report are set out as attached within this report.

### **SUBJECT**

Testing of Nano PVDF coated aluminium composite panel

### **CLIENT**

Just Right Middle East.  
Plot No. MO 0427  
P.O. Box 17182  
Jebel Ali Free Zone  
Dubai UAE.

Attn : Mr Nilesh Jain

### **SAMPLE SUBMISSION DATE**

01 Sep 2006

### **DATE TEST CONDUCTED**

04 Sep to 08 Nov 2006

### **SAMPLE DESCRIPTION**

One sample of coated aluminium composite panels described as follows was submitted by the above company.

Brand Name	Dimension (mm)	Quantity
"Just Right"	150 x 100 x 4	35 pieces



Laboratory:  
TÜV SÜD PSB Corporation Pte. Ltd.  
Testing Group  
No.1 Science Park Drive  
Singapore 118221

Phone : +65-6885 1333  
Fax : +65-6776 8670  
E-mail: testing@psbcorp.com  
www.psbcorp.com  
Co. Reg : 199002667R

Regional Head Office:  
TÜV SÜD Asia Pacific Pte. Ltd.  
3 Science Park Drive  
#04-01/05 The Franklin  
Singapore 118223

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**METHOD OF TEST**

AAMA 2605-05

“Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminium Extrusions and Panels”

- Clause 4.2 - Visual examination
- Clause 4.3 - Total dry-film thickness
- Clause 7.1 - Colour uniformity
- Clause 7.2 - Specular gloss
- Clause 7.3 - Dry film hardness (Using Berol Eagle Turquoise pencil)
- Clause 7.4.1.1 - Dry adhesion
- Clause 7.4.1.2 - Wet adhesion
- Clause 7.4.1.3 - Boiling water adhesion
- Clause 7.5 - Impact resistance (Using a 16 mm diameter indenter)
- Clause 7.6 - Abrasion resistance
- Clause 7.7.1 - Muriatic acid resistance (10% v/v HCl, 15-minute spot test)
- Clause 7.7.2 - Mortar resistance (24-hour pat test)
- Clause 7.7.3 - Nitric acid resistance (70% w/w HNO<sub>3</sub>)
- Clause 7.7.4 - Detergent resistance
- Clause 7.7.5 - Window cleaner resistance

**RESULTS**

1) Total Dry Film Thickness

Location	Total Dry Film Thickness, $\mu\text{m}$		AAMA 2605-05 Requirement
	Panel A	Panel B	
1	32.8	31.2	Minimum 30 $\mu\text{m}$
2	33.1	30.4	
3	33.0	30.6	
4	32.3	30.4	
5	33.2	31.1	
Average	32.9	30.7	

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**RESULTS (CON'T)**

Test Item	“Just Right” Aluminium Composite	AAMA 2605-05 Requirement
2) Visual examination	Passed	Free from flow lines, streaks, blisters or other surface imperfections
3) Colour uniformity	*	Consistent with the established colour range
4) Specular gloss at 60°	39	Within ± 5 units of manufacturer’s specification
5) Dry film scratch hardness	F	Minimum F (No rupture of film)
6) Dry adhesion	No removal of film	No removal of film
7) Wet adhesion	- No blistering - No removal of film	- No blistering - No removal of film
8) Boiling water adhesion	- No blistering - No removal of film	- No blistering - No removal of film
9) Impact resistance	No removal of film from substrate	No removal of film from substrate
10) Abrasion coefficient, (litres/ mil)	41	40 minimum
11) Muriatic acid resistance, 10% (v/v) HCl	- No blistering - No visual change	- No blistering - No visual change
12) Mortar resistance	- Mortar dislodged easily - No residue - No loss of film adhesion - No visual change	- Mortar shall dislodge easily - Any residue shall be removable with a damp cloth - Any lime residue should be easily removed with 10% muriatic acid solution - No loss of film adhesion - No visual change
13) Nitric acid (70% w/w) resistance, colour change, ΔE (Hunter)	1.6	Not more than 5 ΔE units (Hunter)

Note : \* test not conducted as reference specimen is not available.

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**RESULTS (CON'T)**

Test Item	"Just Right" Aluminium Composite	AAMA 2605-05 Requirement
14) Detergent resistance	<ul style="list-style-type: none"><li>- No loss of film adhesion</li><li>- No blistering</li><li>- No significant visual change</li></ul>	<ul style="list-style-type: none"><li>- No loss of film adhesion</li><li>- No blistering</li><li>- No significant visual change</li></ul>
15) Window cleaner resistance	<ul style="list-style-type: none"><li>- No removal of film under tape</li><li>- No blistering</li><li>- No visual change</li></ul>	<ul style="list-style-type: none"><li>- No removal of film under tape</li><li>- No blistering</li><li>- No visual change</li></ul>

**MS LIU PEILIN**  
TECHNICAL EXECUTIVE

**MRS WONG-LIN TAI HOE**  
PRODUCT MANAGER  
COATINGS  
CHEMICAL & MATERIALS