THOMAS BELL-WRIGHT
A PHENNA GROUP COMPANY

TEST REPORT FOR REACTION TO FIRE

Test Sponsor:

PRA Panels PVT LTD
PRA Campus near CRPF Camp Baradera,
Mandir Hasod Raipur - 492101
India
T: +91 8282828959
Website: www.alustic.com

Test Specimen:

4 mm thick “Alustic” FR B1 Aluminium Composite Panel

Test Standard:

BS EN ISO 11925-2:2020: Reaction to fire tests - Ignitability of products subjected to direct impingement of flame - Part 2: Single-flame source test.



Test Reference No.:	AQ103-1
Test Date:	06-Jul-26
Issue Date:	05-Aug-26

Thomas Bell-Wright International Consultants (Dubai Branch)
Plot 599 8987, Corner of 46th and 47th Streets, Jebel Ali Industrial Area 1, Dubai, U.A.E
T: +971 4 821 5777 | fire@bell-wright.com | www.bell-wright.com
UAE ● KSA ● Qatar ● UK

Copyright© This document shall not be reproduced except in full without written approval of Thomas Bell-Wright International Consultants

Accreditation

ISO/IEC 17025 General requirements for the competence of testing and calibrating laboratories with:

United Kingdom Accreditation Service (UKAS) - Testing Laboratory: **4439**
www.ukas.com

Memberships

Members of European Group of Organization for Fire Testing, Inspection and Certification
www.egolf.org.uk

Member of Association for Specialist Fire Protection
www.asfp.org.uk

Member of Centre for Window and Cladding Technology
www.cwct.co.uk

The work which is the subject of this report falls within the scope of the listed ISO/IEC 17025 accreditation above.

TABLE OF CONTENTS

1. INTRODUCTION 4
2. SPONSOR 4
3. TESTING LABORATORY 4
4. DATE OF TEST & WITNESSES 4
5. TEST SAMPLES 4
5.1. Product Details 4
5.2. Standard Specific Conditions 6
6. SPECIMEN DEFINITION & VERIFICATION 6
6.1. Specimen Definition & Verification of the Test Specimen 6
6.2. Specimen Conditioning 6
7. METHOD OF TEST 6
7.1. Test Procedure 6
8. SUMMARY OF RESULTS 7
8.1. Test Results 7
8.2. Observations 8
8.3. Limitation 9

1. INTRODUCTION

This report outlines a test for determination of the ignitability of products by direct small-flame impingement under zero impressed irradiance using vertically oriented test specimens.

BS EN ISO 11925-2:2020: *Reaction to fire tests - Ignitability of products subjected to direct impingement of flame - Part 2: Single-flame source test.*

2. SPONSOR

Name: PRA Panels PVT LTD
Address: PRA Campus near CRPF Camp Baradera,
Mandir Hasod Raipur - 492101
India
T: +91 8282828959
Website: www.alustic.com

3. TESTING LABORATORY

Name: Thomas Bell-Wright International Consultants (TBWIC)
Address: Corner of 46th and 47th streets, Jebel Ali Industrial Area 1
P.O. Box 26385, Dubai, U.A.E.
T: +971 (0) 4 821 5777, F: +971 (0) 4 333 26 93
www.bell-wright.com

4. DATE OF TEST & WITNESSES

The test was conducted on 06-Jul-26 and was not witnessed by the sponsor.

5. TEST SAMPLES

5.1. Product Details

Product Details				
Product Reference	4 mm thick “Alustic” FR B1 Aluminium Composite Panel			
Manufacturer	PRA Panels PVT LTD			
Overall Thickness	4.15 mm (measured by TBWIC)			
Overall Area Weight	Stated: 7.20 kg/m^2 | Measured: 7.74 kg/m^2			
Density	1850 kg/m^3 *			
Product Details	Topcoat (Fire Side)	1st Layer	Reference	Topcoat
			Manufacturer	JIANGSU*
			Type	H-16*
			Colour	Bright Silver
			Thickness, DFT	29 microns*
			Area Weight	1.26 kg/m^2 *
			Density	2620 kg/m^3 *
		2nd Layer	Reference	Primer
			Manufacturer	JIANGSU*
			Type	H-16*
			Thickness, DFT	8 – 9 microns*
			Area Weight	1.23 kg/m^2 *
			Density	2600 kg/m^3 *
		Reference		Aluminium skin

	Aluminium Skin (Top)	Manufacturer	JIANGSHU*
		Alloy	AA-3003, H-16*
		Thickness	0.45 mm*
		Area Weight	1.26 kg/m^2 *
		Density	2620 kg/m^3 *
	Adhesive (Top)	Reference	LDPE
		Manufacturer	PRA Panel Pvt Ltd*
		Thickness	0.05 mm*
		Area Weight	0.046 kg/m^2 *
		Density	920 kg/m^3 *
	Core	Reference	$Mg(OH)_2$ core
		Manufacturer	PRA Panel Pvt Ltd*
		Thickness	3 mm*
		Area Weight	4.58 kg/m^2 *
		Density	1480 kg/m^3 *
	Adhesive (Bottom)	Reference	LDPE
		Manufacturer	PRA Panel Pvt Ltd*
		Thickness	0.05 mm*
		Area Weight	0.046 kg/m^2 *
		Density	920 kg/m^3 *
	Aluminium Skin (Bottom)	Reference	Aluminium skin
		Manufacturer	JIANGSHU*
		Alloy	AA-3003, H-16*
		Thickness	0.45 mm*
		Area Weight	1.23 kg/m^2 *
		Density	2600 kg/m^3 *
	Back coat	Reference	Aluminium*
		Manufacturer	JIANGSHU*
		Type	H-16*
		Colour	Grey*
		Thickness, DFT	0.45 mm*
		Area Weight	1.23 kg/m^2 *
		Density	2600 kg/m^3 *
Number of Samples Tested		Eighteen (18)	
Dimension Per Sample, (l x w x t)		250 x 90 x 4.15 mm (measured by TBWIC)	

Notes: The testing laboratory does not hold responsibility for information that has been provided by the sponsor and which could not be verified by the testing laboratory. As this could affect the validity of the tests results, any and all such information which could not be verified has been marked with an asterisk (*).

5.2. Standard Specific Conditions

In accordance with §5.1 of BS EN ISO 11925-2:2020, the specimens were cut from a sample which was representative of the product to be tested, as informed by the test sponsor.

In accordance with §5.2 of BS EN ISO 11925-2:2020, the overall dimensions of the specimen were 250 ± 2 x 90 ± 2 mm (length x width). As informed by the sponsor of the test, the thickness of the specimen intended for end use was less than 60 mm and, as such, was tested with a nominal thickness of 4.15 mm.

In accordance with §5.4.1 of BS EN ISO 11925-2:2020, a minimum of six test specimen were tested whereby three samples were cut lengthwise and three cut crosswise across the sample material.

6. SPECIMEN DEFINITION & VERIFICATION

6.1. Specimen Definition & Verification of the Test Specimen

The choice and design and the definition of the specimen have been made by PRA Panels PVT LTD, and TBWIC testing laboratory has not been involved in the selection or design of the specimen. Similarly, the results of the test apply only to the samples as received.

There are contexts where information has been provided by the sponsor and verification of information has been done through either technical datasheet or other document submission, or as indicated directly by the sponsor. For this reason, materials have been tested in an as-received condition and TBWIC bears no liability for the legitimacy of the submitted information.

6.2. Specimen Conditioning

The specimens were delivered on 29-Jun-26 and, in accordance with §6 of BS EN ISO 11925-2:2020, were conditioned to constant mass at 23 ± 2°C and 45% to 55% Relative Humidity (RH) as per §4.2 of BS EN 13238:2010; *Reaction to fire tests for building products – Conditioning procedures and general rules for selection of substrates.*

7. METHOD OF TEST

7.1. Test Procedure

The tests were performed in accordance with the procedures outlined in §7 of BS EN ISO 11925-2:2020.

In accordance with §7.3.2 of BS EN ISO 11925-2:2020, the flame was applied for 30 seconds, as specified by the sponsor with respect to the intended end use classification, B-s1-d0, under EN 13501-1.

In accordance with §7.3.3 of BS EN ISO 11925-2:2020, the specimens were subjected to both surface and edge exposure, as specified by the sponsor with respect to their intended end-use classification described in the previous paragraph.

In accordance with §7.3.3.1 of BS EN ISO 11925-2:2020, six (6) specimens were tested, each of which was subjected to surface exposure to flame with the coated aluminium top skin exposed. The 4 mm thick “Alustic” FR B1 Aluminium Composite Panel was restrained to the specimen holder using screws. The flame was applied on the centerline of the specimen, 40 mm above the bottom edge.

In accordance with §7.3.3.2.2 of BS EN ISO 11925-2:2020, six (6) specimens were tested, each of which was subjected to edge exposure to flame with the coated aluminium top skin exposed. The 4 mm thick “Alustic” FR B1 Aluminium Composite Panel was restrained to the specimen holder using screws. The flame was applied to the centre of the width of the bottom edge of the test specimen 1.5 mm behind the surface.

In accordance with §A.2 of EAD 210046-01-1201, six (6) specimens were tested. The 4 mm thick "Alustic" FR B1 Aluminium Composite Panel was turned at 90° from its vertical axis and the flame was impinged at the bottom edge of the centreline of the underside of each different layer.

8. SUMMARY OF RESULTS

The test specimen has been evaluated in accordance with:

BS EN ISO 11925-2:2020: *Reaction to fire tests - Ignitability of products subjected to direct impingement of flame - Part 2: Single-flame source test.*

8.1. Test Results

The results expressed in the tables below are valid only for the tested configuration.

Table 1: Surface Exposure for 30 seconds

Specimen No.	Ignition Yes/No	Time from start of test for flame tip to reach 150 mm (seconds)	Extent of Flame Spread (mm)	Flaming Droplets/particles (Yes/No)	Ignition of the Filter Paper (Yes/No)	Glowing (Yes/No)
CW - 1	No	Not Reached	<150	No	No	No
CW - 2	No	Not Reached	<150	No	No	No
CW - 3	No	Not Reached	<150	No	No	No
LW - 1	No	Not Reached	<150	No	No	No
LW - 2	No	Not Reached	<150	No	No	No
LW - 3	No	Not Reached	<150	No	No	No

Notes:
i. CW - crosswise
ii. LW - lengthwise

Table 2: Edge Exposure for 30 seconds

Specimen No.	Ignition Yes/No	Time from start of test for flame tip to reach 150 mm (seconds)	Extent of Flame Spread (mm)	Flaming Droplets/particles (Yes/No)	Ignition of the Filter Paper (Yes/No)	Glowing (Yes/No)
CW - 1	No	Not Reached	<150	No	No	No
CW - 2	No	Not Reached	<150	No	No	No
CW - 3	No	Not Reached	<150	No	No	No
LW - 1	No	Not Reached	<150	No	No	No
LW - 2	No	Not Reached	<150	No	No	No
LW - 3	No	Not Reached	<150	No	No	No

Notes:
i. CW - crosswise
ii. LW - lengthwise

Table 3: 90° Exposure for 30 seconds

Specimen No.	Ignition Yes/No	Time from start of test for flame tip to reach 150 mm (seconds)	Extent of Flame Spread (mm)	Flaming Droplets/particles (Yes/No)	Ignition of the Filter Paper (Yes/No)	Glowing (Yes/No)
CW - 1	No	Not Reached	<150	No	No	No
CW - 2	No	Not Reached	<150	No	No	No
CW - 3	No	Not Reached	<150	No	No	No
LW - 1	No	Not Reached	<150	No	No	No
LW - 2	No	Not Reached	<150	No	No	No
LW - 3	No	Not Reached	<150	No	No	No

Notes:

i. CW - crosswise

ii. LW - lengthwise

8.2. Observations

No sustained flaming after the test.

8.3. Limitation

The test results relate to the behaviour of the test specimens of a product under the particular conditions of the test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.

This report and all records of the test to which it relates may not be retained by TBWIC beyond 5 years from the date of testing.

This test report is respectfully submitted by: Thomas Bell-Wright International Consultants.

Prepared By:

Esther Gitau
Fire Testing Engineer

P.O.Box: 26385
DUBAI - U.A.E.
Thomas Bell-Wright Int'l Consultants (Dubai Br.)

Authorized By:

Daisan Dippi, AIFireE
Director Fire Compliance

Report Revision Tracking		
Revision No.	**Issue Date**	**Notes & Amendments**
Rev. 00	05-Aug-26	This is the first issue of the report. No revisions are included.

----- End of Test Report -----