



**THOMAS BELL-WRIGHT
INTERNATIONAL CONSULTANTS**

In accordance with UKAS accreditation to ISO 17065
Certification is Hereby Granted

to

Alstrong Enterprises India Pvt. Ltd.

*25, DSII DC Shed Scheme 2nd, Okhla Industrial Area,
Phase – II, 110020 – New Delhi, India*

for

“ALSTRONG FR A2-ACP”

**4 mm thick Aluminium Composite Material
(ASTM D1929-16 and BS EN 13501-1:2007+A1:2009)**

which, subject to limitations described on the following pages and continued
listing on www.tbwcert.com, complies with Product Certification Scheme
*SD03 Exterior Wall Assemblies, Curtain Walls, Building Materials,
Products & Assemblies*

In witness whereof, this Certificate is issued this 2nd day of January 2023



Sandy Dweik

Sandy Dweik
Chief Executive Officer

Nicholas Purcell

Nicholas Purcell
Director of Certification

Certificate Number: TBW0300835

Initial registration: June 8, 2022

Issued: January 2, 2023

Expiration: June 7, 2025

File Name: TE117_CRT_SD03RX_FR-A2_Issue2_835_(f)

Issue 2

This certificate and schedules are held in force by regular Factory Inspections by Thomas Bell-Wright International Consultants (TBWIC). Refer to www.tbwcert.com or contact TBWIC Certification Division to validate the current status of Certification. This certificate remains the property of Thomas Bell-Wright International Consultants, PO Box 26385, Dubai, UAE. Tel: +971 4 8215777, Email: certification@bell-wright.com
Web: www.bell-wright.com

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F 19 Scheme Certificate Issue 7 Issued Feb 2020

“ALSTRONG FR A2-ACP”

4 mm thick Aluminium Composite Material

- A. Certification is given for is given “ALSTRONG FR A2-ACP” 4 mm thick Aluminium Composite Material for Reaction to Fire performance for Spontaneous Ignition Temperature (SIT) & Flash Ignition Temperature (FIT) performance to test standard ASTM D1929-16, “Standard Test Method for Determining Ignition temperature of Plastics”, and Reaction to Fire Classification according to BS EN 13501-1:2018 – “Fire classification of construction products and building elements – Part 1: Classification using data from reaction to fire tests” subject to the limitations stated herein. The summary of the scope of this certification is listed in Table 1 below.


Table 1. Summary of the scope of certification

Description	Reaction to Fire performance		Report reference
	Result	Standard	
“ALSTRONG FR A2-ACP” 4 mm thick Aluminium Composite Material	A2 - s1, d0	BS EN 13501-1:2018	TE141-3 Rev.0 WG135-3 Rev.0
	SIT: 499 °C FIT: 499 °C	ASTM D1929-16	TI004 Rev.0

- B. Readers of this document should be familiar with Reaction to Fire testing and the requirements of ISO/IEC 17065:2012. The Certification will be listed on www.tbwcert.com, while it remains current. This Certification is not valid if it is not listed.
- C. The product(s) is approved on the basis of TBWIC Product Certification Scheme SD03 for Exterior Wall Assemblies, Curtain Walls, Building Materials, Products & Assemblies, which includes pre-test sampling, evidence of performance (under report reference(s) mentioned in Table 1), Technical Verification and Proof of Performance, compliance to Factory Production Control requirements and surveillance & Re-certification Inspection/ Audits.
- D. Limitations:
- D.1. This Certification covers the material, including its components, as tested and described in the reference report(s).
 - D.2. The response of the material to heat and flame was measured under controlled conditions in accordance with the requirements of the test standard(s) covered under this certification. The result(s) described in the respective report shall not be used as the sole criteria for fire-hazard or fire-risk assessment of the product, material or system assembly under actual fire conditions.
 - D.3. This Certification pertains to the material as a standalone product; it does not extend to the overall system, construction build-up or assembly in which the product is installed.
 - D.4. Changes to the system components or deviation from tested specifications are not permitted unless recognised and approved by this Certification.
 - D.5. This Certification does not address the following:
 - a. Measurement of heat transmission

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Director of Certification
Nicholas Purcell

Seal number: 101812

Issued: 02 Jan 2023
Valid to: 07 Jun 2025

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- b. Effect of aggravated flame spread behaviour of an assembly resulting from the proximity of combustible walls and ceilings
 - c. Any Resistance to Fire rating
 - d. Classification or definition of material as non-combustible
 - e. The toxicity level of smoke developed during combustion
 - f. Fire propagation characteristics when tested as large-scale façade cladding assembly
 - g. Other characteristics such as durability, weather resistance, physical and mechanical properties etc.
- E. Product details
- E.1. Product description
- a. Reference: "Alstrong FR A2-ACP"
 - b. Description: 4 mm thick Aluminium composite material panel with 3 mm "mineral-filled core"
 - c. Weight Per Unit Area: $8.1 \pm 0.4 \text{ kg/m}^2$
 - d. Panel Thickness: $4 \pm 0.2 \text{ mm}$
- E.2. Product component details

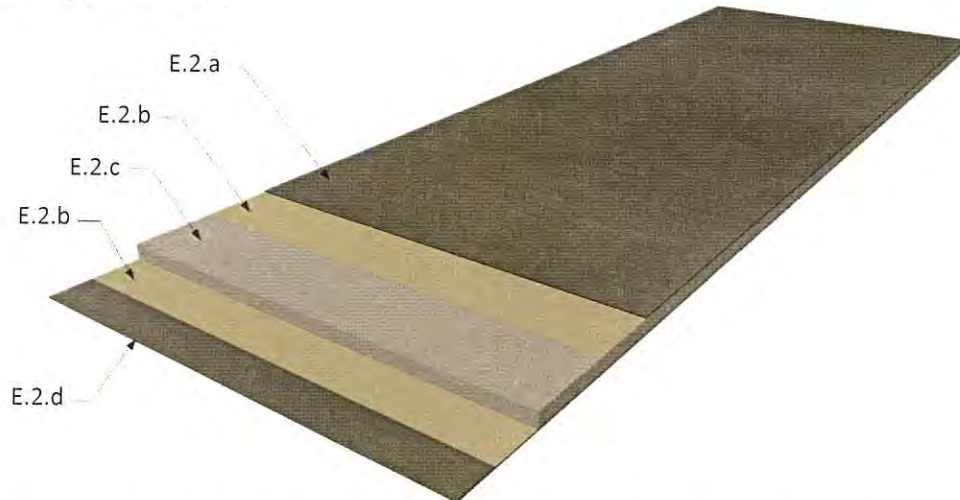



Figure 1. "ALSTRONG FR A2-ACP" Aluminium Composite Panel - Typical details

- a. Exterior Skin (top skin)
 - Material: Aluminium, Alloy 3003/ 3105/ 5005
 - Thickness: $0.5 \pm 0.03 \text{ mm}$
 - Coating Type: Polyvinylidene Fluoride (PVDF)
 - Maximum Coating Thickness: 27 microns
- b. Adhesive Film
 - Material: Resin-based
 - Nominal Thickness: 100 microns
 - Density: $937 \text{ kg/m}^3 \pm 5\%$
- c. Core
 - Reference: "mineral-filled core"
 - Thickness: $3.0 \pm 0.2 \text{ mm}$
 - Density: $1867 \text{ kg/m}^3 \pm 5\%$

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- d. Interior Skin (bottom skin)
Material: Aluminium, Alloy 3003 / 3105 / 5005
Thickness: 0.5 ± 0.03 mm
Coating Type: Polyester (PE)
Coating Thickness: 10 ± 2 microns

F. Approved Manufacturing Location

Unit No. 2, SIDCO, Industrial Growth Centre,
Phase 2, Samba, Jammu,
Jammu & Kashmir - 184121, India

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