THOMAS BELL-WRIGHT
A PHENNA GROUP COMPANY

IAS ACCREDITED Product Certification Agency

In accordance with IAS accreditation to ISO/IEC 17065
Certification is Hereby Granted

to

Alucopanel Middle East LLC

National Industries Park, P.O. Box 416557,
Dubai, United Arab Emirates

for

"Alucopanel® A2"

4 mm thick Aluminium Composite Panel Exterior Wall Cladding System with AFICO Glass Wool "Mechanical Board Insulation"

Test Method: NFPA 285-2019 Edition

(System Designation: A124B61-4)

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 13th day of November 2025

THOMAS BELL-WRIGHT INTERNATIONAL CONSULTANTS 103317 CERTIFIED

Sandy Dweik
Chief Executive Officer

Nicholas Purcell
Director of Certification

Certificate Number: TBW0300560

Initial registration: December 18, 2019 Issued: November 13, 2025 Expiration: November 12, 2028
File Name: ZI021_CRT_SD03FP_Issue3_560_(f) Issue 3

"Alucopanel® A2"
4 mm thick Aluminum Composite Panel Exterior Wall Cladding System with AFICO Glass Wool "Mechanical Board Insulation"
(System Designation: A124B61-4)

A. Certification is given for "Alucopanel® A2" 4mm thick Aluminium Composite Panel Exterior Wall Cladding system with AFICO Glass Wool "Mechanical Board Insulation", which has successfully met the requirements for fire propagation characteristics when evaluated against NFPA 285-2019 Edition subject to the limitations stated herein.

B. Readers of this document should be familiar with Fire Test Method for evaluation of Fire Propagation characteristics of Exterior wall Assemblies Containing Combustible Components 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 so listed.

C. The product is approved on the basis of TBWIC Product Certification Scheme SD03 Exterior Wall Assemblies, Curtain Walls, Building Materials, Products & Assemblies (Issue 12), which includes pre-test sampling, evidence of performance (under report reference(s) TH076 Rev.01), 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 fire propagation characteristics of exterior wall assembly when evaluated against the NFPA 285-2019 fire test method. The exterior wall assembly has been evaluated for fire propagation characteristics as specified in the following*:

a. The ability of the wall assembly to resist flame propagation over the exterior face of the wall assembly*;
b. The ability of the wall assembly to resist vertical flame propagation within the combustible components from one story to the next*;
c. The ability of the wall assembly to resist vertical flame propagation over the interior surface of the wall assembly from one story to the next*;
d. The ability of the wall assembly to resist lateral flame propagation from the compartment of fire origin to adjacent compartments or spaces*.

D.2. This Certification covers the performance of the exterior wall assembly when exposed to fire from an interior room that reaches flashover, breaks exterior windows, and exposes the building façade. It is not intended to address the effect of exterior radiation from nearby fires but is relevant to fires that start at the exterior wall assembly*.

D.3. This Certification covers the exterior wall assembly in its entirety. It does not extend to the individual components of the assembly.

D.4. The actual field installations of the non-loadbearing exterior wall system covered under this certification shall not limit the use of the methods and materials employed to seal the gap between the edge of the floor slab and the interior surface of the test specimen during the test, provided approved sealing methods and materials are used in the field*.

** NFPA 285:2019*

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Director of Certification
Nicholas Purcell

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Valid to: 12 Nov 2028

D.5. The design of the exterior wall assembly covered under this certification, including the exact specification of the components, method of fixing, and condition of such components which were subjected to the fire test, shall be duplicated when installed on the site. The design and components of the non-loadbearing exterior wall cladding assembly are not permitted to be substituted, eliminated or interchanged unless recognized and approved by this certification.

D.6. The method, technique and sealing materials at the panel joint gaps were evaluated and certified as part of the exterior wall cladding for fire propagation characteristics only. Physical performance, such as (but not limited to), resistance to weathering, resistance to impact/movement, adhesion, mechanical resistance and stability, or thermal properties, are not considered.

D.7. This Certification does not address the following:

a. Air and Water Permeability
b. Measurement of heat transmission
c. Classification or definition of material as non-combustible
d. Any Resistance to Fire rating
e. The toxicity level of smoke developed during combustion
f. Effect of aggravated flame spread behaviour of an assembly resulting from the proximity of combustible materials
g. Effects of combustible accessories installed or fixed on the surface of exterior cladding material such as laminates, banners, signage, and alike.
h. Effects of radiation from nearby fires
i. Other characteristics such as durability, weather-resistance, water permeability, physical and mechanical properties etc.

E. System Configuration

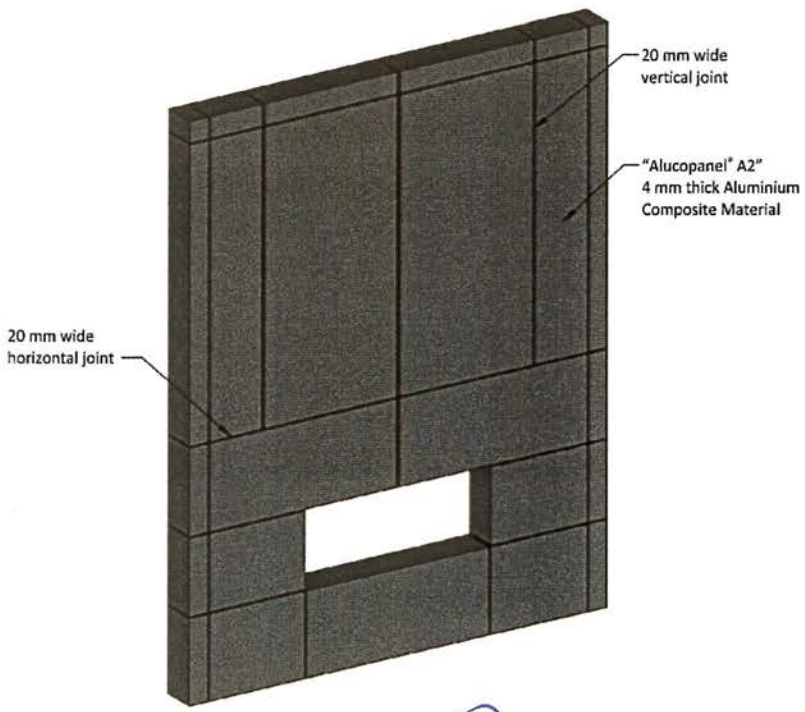

Figure 1. *Aluminium Composite Material Exterior Wall Cladding System*

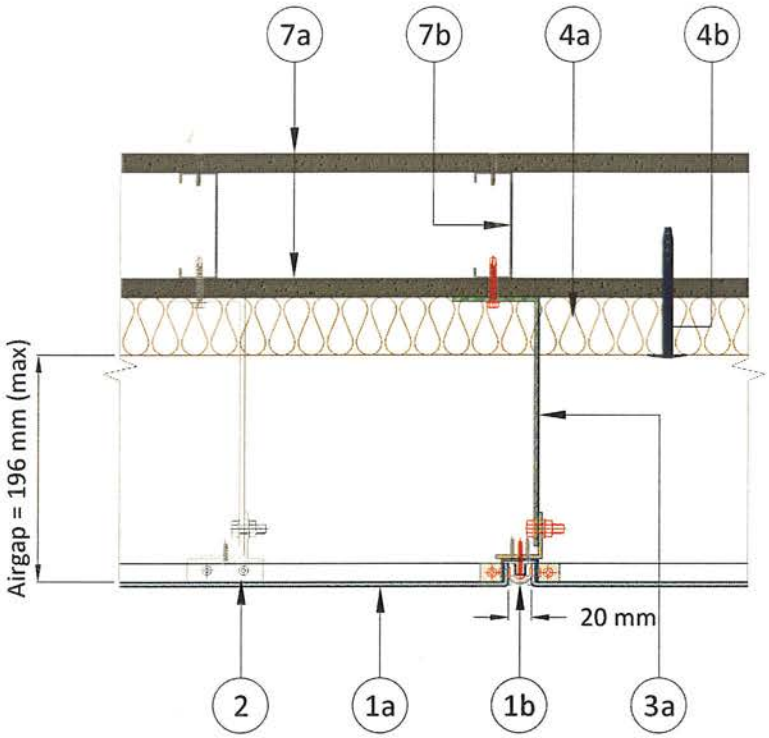

Figure 2. *Horizontal section – joint details*

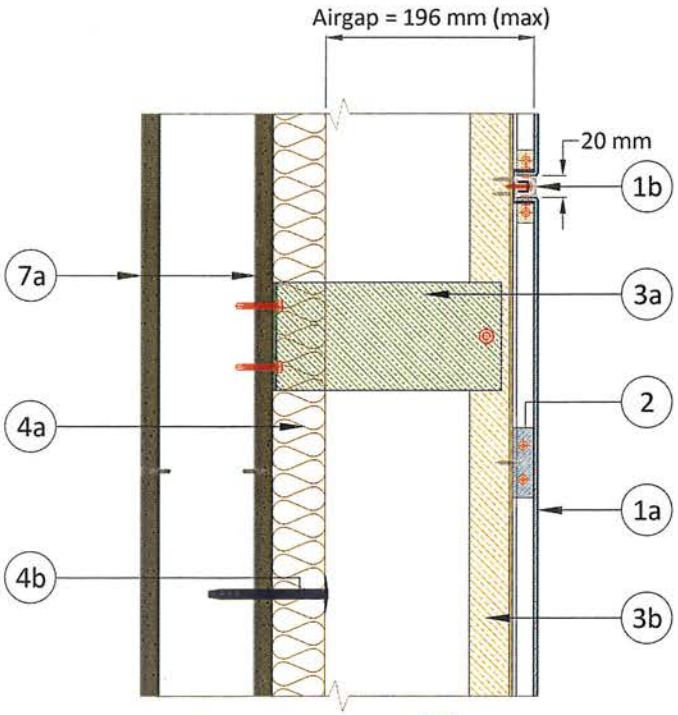

Figure 3. *Vertical section – joint details*

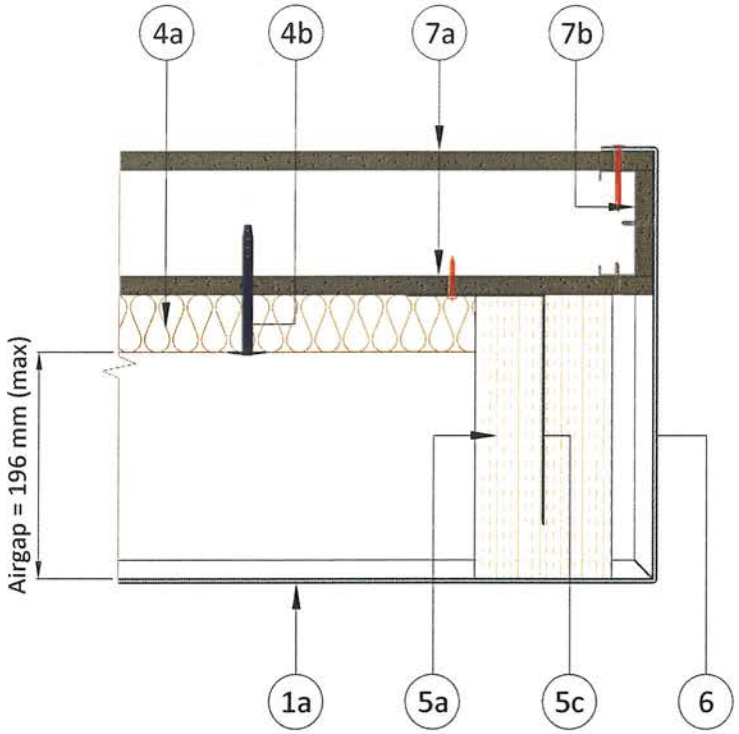

Figure 4. *Horizontal section – window details*

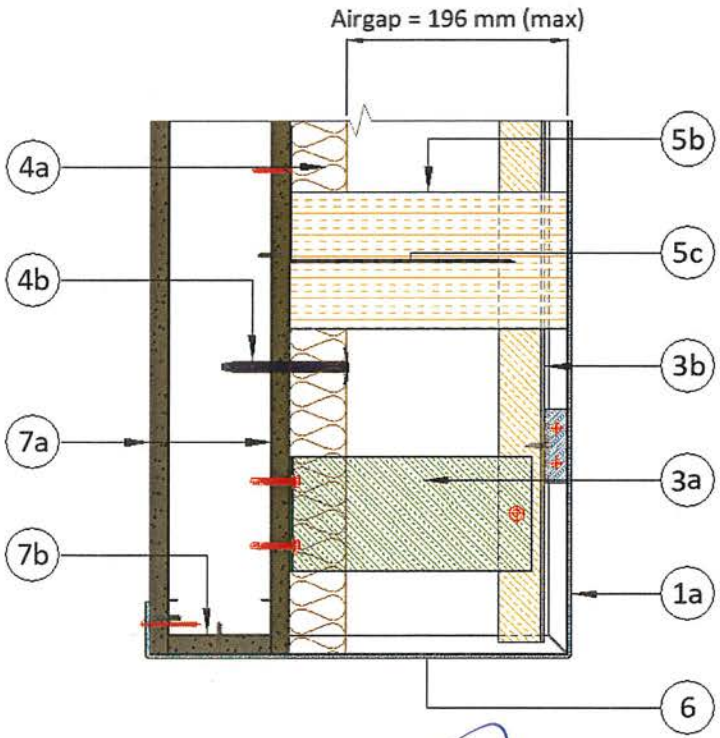

Figure 5. *Vertical section – window details*

1. Cladding Element

1a. Aluminium Composite Panel (ACP)

"Tray profile" Aluminium Composite Panel with 20 mm deep flanges. The panel corners shall be reinforced with aluminium angles (20 × 20 × 15 × 1.5 mm, leg × leg × width × thickness) using 2 nos. of Ø4 × 15 mm aluminium blind rivets. The details of the ACP are as follows:

Table 1. *Aluminium Composite Panel Details*

Reference	"Alucopanel® A2"
Weight Per Unit Area	8 ± 0.5 kg/m²
Panel Thickness	4 ± 0.2 mm
Top Skin (Exterior Facing)	Minimum 0.5 mm thick Aluminium Alloy 3105-H16, Polyvinylidene Fluoride (PVDF) coating, 27 microns maximum coating thickness
Bottom Skin (Interior Facing)	Minimum 0.5 mm thick Aluminium Alloy 3105-H16, Polyester (PE) coating, 7 microns maximum coating thickness
Adhesive	Material: "High molecular content polymer adhesive" Thickness: 70 ± 2 microns Density: 920 ± 10 kg/m³
Core	Description: Mineral-filled inorganic core Thickness: 3 ± 0.1 mm Density: 1800 ± 10 kg/m³
Maximum Panel Width	2037 mm
Minimum Panel Width	200 mm
Maximum Panel Height	2824 mm
Minimum Panel Height	200 mm

1b. Joint Seal

A maximum gap of 20 mm shall be maintained between the panel joints. Aluminium (Alloy 6063-T6) U-channel, 10 × 10 × 1.3 mm (web × flange × thickness), shall be recessed into the joint gap and capped with "Everbuild Tecnic® Fire Sealant 400" silicone-based sealant, applied at a nominal depth of 15 mm, and finished flush with the exterior surface of the ACP cladding.

2. Cladding Fixing

Aluminium angles (Alloy 6063-T6), 20 × 20 × 65 × 2 mm (leg × leg × width × thickness) shall be fixed on the flanges of the tray using 2 nos. of Ø4 × 15 mm blind rivets, located 100 mm from the panel corners and spaced 400 mm. The angles shall be fixed to the runners using Ø5 × 20 mm stainless steel self-tapping pan head screws.

3. Sub-Frame

3a. Wall Brackets

Mild Steel (Grade S275, EN 10025) angle brackets, 75 × 215 × 100 × 4 mm (leg × leg × width × thickness), shall be fixed against the base wall using Ø6.11 × 38 mm stainless steel self-drilling hex head screw. The brackets shall be fixed at a nominal spacing of 486 to 1200 mm vertically and 587 to 735 mm horizontally.

3b. Vertical Runners

Aluminium (Alloy 6063-T6) angles, 40 × 40 × 3 mm (leg × leg × thickness), shall be fixed to the wall brackets using Ø8 × 25 mm stainless steel hex head bolts with nuts and washers.

4. Exterior Insulation

4a. Mineral Wool

A single layer of mineral wool with foil scrim facing on one side, shall be fixed to the base wall using metal insulation fasteners. A maximum air gap of 196 mm shall be maintained between the exterior insulation and the rear face of the ACP panel. The joints between the slabs shall be sealed using a 120 mm wide self-adhesive aluminium foil tape (Reference: "Tickitape").

Reference: "Mechanical Board Insulation (MBD)"
Manufacturer: Arabian Fiberglass Insulation Co. Ltd., KSA
Nominal Density: 36 kg/m³ ± 10%
Nominal Thickness: 50 mm (+5/-3 mm)
Dimension: 600 × 1200 mm (width × length)

4b. Insulation Fastener

Reference: "MBA-08090"
Material: Galvanised Steel
Dimensions: Ø8 × 90 mm
Manufacturer: Rawlplug Ltd.
Application: 5 nos. per slab

5. Cavity Fire Barrier

5a. Cavity Barrier - vertical

A full-seal vertical cavity barrier shall be mechanically secured to the base wall using Siderise "B195" fixing brackets. It shall be installed 50 mm from the vertical edges of the window opening and shall extend continuously along the full height of the wall assembly.

Description: Pre-compressed Stonewool Lamella with an integral foil facing
Dimension: 120 × 260 mm (width × depth)
Nominal Density: 75 kg/m³
Reference: "Siderise CH-CB constructed from CW-FS120"
Manufacturer: Siderise Insulation Ltd., UK

5b. Cavity Barrier - Horizontal

A full-seal horizontal cavity barrier shall be mechanically secured to the base wall using Siderise "B195" fixing brackets. It shall be installed at every floor slab termination and shall extend continuously along the full width of the wall assembly.

Description: Pre-compressed Stonewool Lamella with an integral foil facing

Dimension: 120 × 260 mm (width × depth)
Nominal Density: 75 kg/m³
Reference: "Siderise CH-CB constructed from CW-FS120"
Manufacturer: Siderise Insulation Ltd., UK

5c. Cavity Barrier bracket
The brackets shall be bent into an "L" shape with the short leg fixed to the base wall using Ø4 × 32 mm pan head screws and the long leg impaling the cavity barrier. The fixings shall be located at a nominal spacing of 500 to 800 mm centres.

Material: Galvanised steel

Dimension: 320 × 25 × 1 mm (total length × height × thickness)
Reference: "B195"
Manufacturer: Siderise Insulation Ltd., UK

6. Window Flashing
The window perimeter shall be covered by extending the flange of the cladding panels to overlap the interior side of the base wall by 45 mm. The window flashing shall be fixed to the base wall using Ø4.5 × 75 mm self-tapping countersunk head screws at a nominal spacing of 170 mm around the perimeter.

7. Substrate

7a. Interior & Exterior Gypsum Board
1200 × 2400 × 15.9 mm (width × length × thickness) Type X gypsum boards shall be fixed vertically onto 1.2 mm thick galvanised steel studs and tracks using Ø3.5 mm × 35 mm self-tapping screws at 300 mm centres vertically. The board joints shall be covered with glass fibre multi-purpose self-adhesive plasterboard jointing tape and jointing compound. The screw heads shall also be covered with the jointing compound.

7b. Steel Studs and Tracks
Galvanised steel (ASTM A653M, CS Type B) studs, 92 × 32 × 32 × 9 × 1.2 mm (web × flange 1 × flange 2× lip × thickness) and tracks, 95 × 25 × 25 × 1.2 mm (web × flange 1 × flange 2 × thickness) welded directly to the test frame.

F. Approved Manufacturing Location

Sublease Plot # TP010105B,
National Industries Park,
P.O. Box 416557, Dubai,
United Arab Emirates

Certificate No.: TBW0300560

Director of Certification
Nicholas Purcell

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