

THOMAS BELL-WRIGHT

A PHENNA GROUP COMPANY



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® FR”

**6 mm thick Aluminium Composite Material
Non-Loadbearing Exterior Wall Cladding System**

Test Method: NFPA 285-2012 Edition

(System Designation: A213041-6)

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 4th day of June 2025



Sandy Dweik

Sandy Dweik
Chief Executive Officer

Nicholas Purcell

Nicholas Purcell
Director of Certification

Certificate Number: TBW0300118

Initial registration: January 17, 2020

Issued: June 4, 2025

Expiration: June 3, 2028

File Name: ZB145_CRT_SD03FP_6mm_FR_Issue5_118_(f)

Issue 5

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 the Certification.

This certificate remains a property of Thomas Bell-Wright International Consultants.

P.O. Box 26385, Dubai, UAE. | Tel: +971 4 8215777 | Email: certification@bell-wright.com | Web: www.bell-wright.com

This document must not be reproduced except in its entirety and with the express permission of Thomas Bell-Wright International Consultants
F 19 Scheme Certificate Issue 8 Issued Mar 2024

“Alucopanel® FR”
6 mm thick Aluminium Composite Material
Non-Loadbearing Exterior Wall Cladding System
(System Designation: A213041-6)

- A. Certification is given for “Alucopanel® FR” 6 mm thick Aluminium Composite Material Non-Loadbearing Exterior Wall Cladding System, which has successfully met the requirements for fire propagation characteristics when evaluated against NFPA 285-2012 Edition, “Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Wall Assemblies Containing Combustible Components”, subject to the limitations stated herein.
- B. Readers of this document should be familiar with the fire test standard 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 based on 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 no. QA108-2 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 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*; and,
 - 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*.

* NFPA 285:2012

Certificate No.: TBW0300118

Page 2 of 8
Issue 5


Director of Certification
Nicholas Purcell

Seal No.: 103206

Issued: 04 Jun 2025
Valid to: 03 Jun 2028

- D.3. This Certification covers the exterior wall assembly in its entirety. It does not extend to individual components that comprise the exterior wall assembly (on their own).
- 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*
- 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 was 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

Certificate No.: TBW0300118

Page 3 of 8
Issue 5



Director of Certification
Nicholas Purcell

Seal No.: 103206

Issued: 04 Jun 2025
Valid to: 03 Jun 2028

E. System Configuration

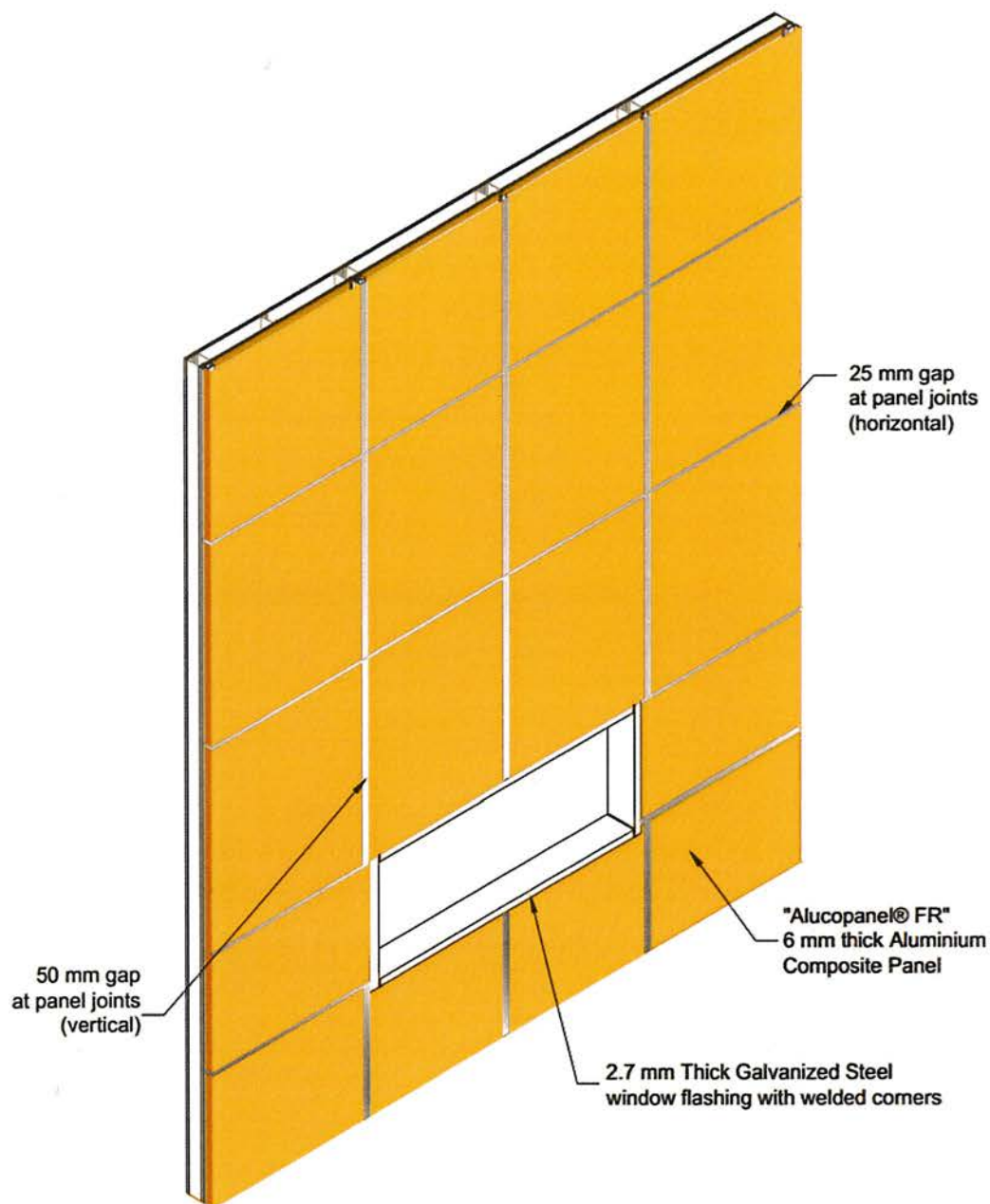


Figure 1. Aluminium Composite Panel Exterior Wall Cladding System - Typical Details

Certificate No.: TBW0300118

Page 4 of 8
Issue 5


Director of Certification
Nicholas Purcell

Seal No.: 103206

Issued: 04 Jun 2025
Valid to: 03 Jun 2028

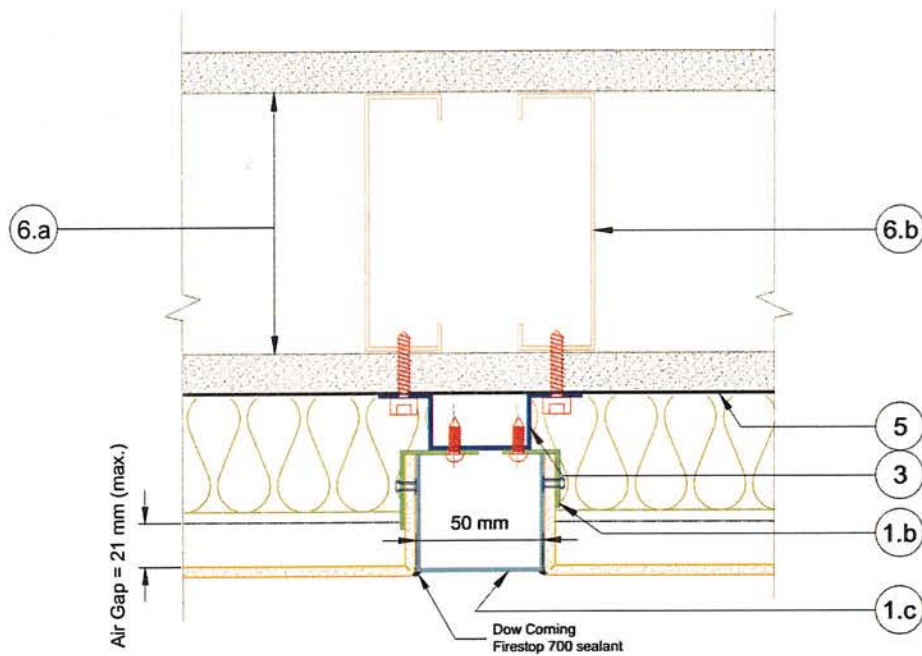


Figure 2. Horizontal section - joint detail

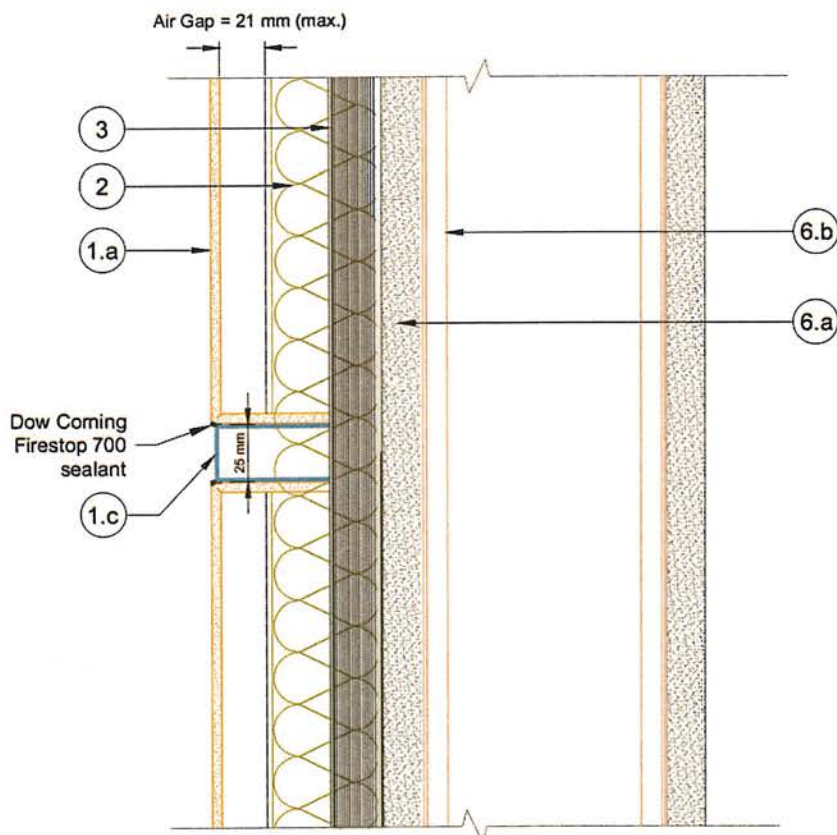


Figure 3. Vertical section - joint detail

Certificate No.: TBW0300118

Seal No.: 103206

Page 5 of 8
Issue 5

Director of Certification
Nicholas Purcell

Issued: 04 Jun 2025
Valid to: 03 Jun 2028

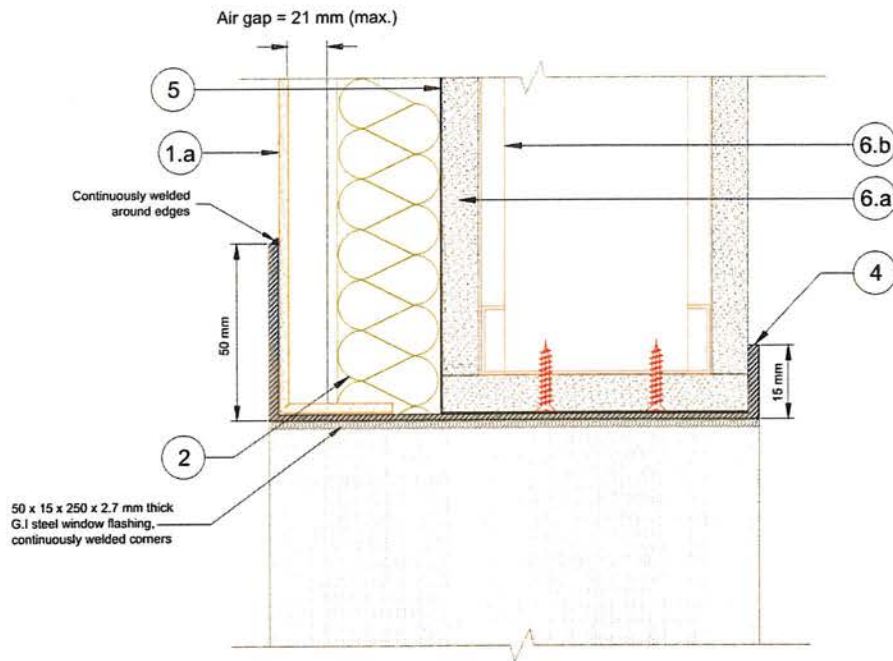


Figure 4. Horizontal section - window detail

1. Cladding Element

1a. Aluminium Composite Panel

"Tray profile" Aluminium Composite Panel (ACP) with nominal 39 mm deep flanges. The panels shall be fixed to the vertical runners through 2.7 mm thick galvanised steel cleats. The corner flanges of the panel "tray" shall be reinforced with aluminium "L" angles (20 x 20 x 30 x 2.7 mm, leg x leg x depth x thickness) using 1 no. of Ø4 x 19 mm aluminium blind rivet per leg. The details of the ACP are as follows:

Table 1. Aluminium Composite Panel Details

Reference	"Alucopanel® FR"
Minimum Weight Per Unit Area	12 kg/m ²
Panel Thickness	6 ± 0.2 mm
Exterior Facing (Top Skin)	0.5 ± 0.02 mm thick, Aluminium Alloy 3105-H16, Polyvinylidene Fluoride (PVDF) finish, 37 microns max. coating thickness
Interior Facing (Bottom Skin)	0.5 ± 0.02 mm thick, Aluminium Alloy 3105-H16, Polyester (PE) coating, 7 microns max. coating thickness
Adhesive	"High molecular content polymer adhesive" Nominal Thickness: 70 microns, Nominal Density: 920 kg/m ³

Certificate No.: TBW0300118

Seal No.: 103206

Page 6 of 8
Issue 5

Director of Certification
Nicholas Purcell

Issued: 04 Jun 2025
Valid to: 03 Jun 2028

This Certificate is the property of Thomas Bell-Wright International Consultants UAE.
Registered office: P.O. Box 26385, Dubai, UAE. F 19 Scheme Certificate Issue 8 Issued Mar 2024

This document must not be reproduced, except in its entirety and with the express permission of Thomas Bell-Wright International Consultants.

Core	"Mineral-filled core" Nominal Thickness: 5 mm Minimum Density: 1800 kg/m ³
Maximum Panel Width	1170 mm
Minimum Panel Width	1052 mm
Maximum Panel Height	1126 mm
Minimum Panel Height	1126 mm

1b. Cladding Fixing

Using panel cleats, with one leg fixed to the flanges of the cladding panels within 150 mm to 200 mm from the corners using 2 numbers of AS 5-9 Ø4.0 mm x 19 mm blind rivets and the other leg fastened to the vertical subframe runner using no. #8 x 3/4 inch steel pan head self-tapping screws.

Material: Galvanised Steel

Grade: ASTM A653M, CS Type B

Sizes: 20 x 20 x 2.7 x 30 mm (leg x leg x thickness x width);

25 x 30 x 30 x 2.7 mm (leg x leg x thickness x width)

1c. Panel Joint Sealing

Galvanised steel (ASTM A653M, CS Type B) U-channels 50 x 30 x 30 x 2.7 mm (web x flange 1 x flange 2 x thickness) and 25 x 25 x 25 x 2.7 mm (web x flange 1 x flange 2 x thickness) shall be fitted into the vertical joints and horizontal joints respectively. The U-channels on the horizontal joints shall be fixed continuously across the width of the wall assembly, while the U-channel on the vertical joints shall terminate at every intersection with the U-channel located at the horizontal joints. The U-channels shall be pressure fitted into the joints, and a bead of "Dow Corning Firestop 700" sealant shall be applied continuously along the edge seams.

2. Exterior Insulation

A single layer of 50 mm thick mineral wool slabs, 600 x 1200 mm (width x length), with Aluminium foil facing on one side and a nominal density of 130 kg/m³ shall be fixed to the substrate and secured in place using self-adhered galvanised steel insulation fasteners having 50 x 50 mm square base (1.5 mm thick) and Ø2.7 x 60 mm long galvanised steel nail. Minimum 5 fasteners shall be used per slab. A maximum air gap of 21 mm shall be maintained between the exterior face of the insulation and the back of the ACP panel.

Description: Mineral wool slabs with an aluminium foil facing on one side

Reference: "S2XX"

Manufacturer: Fujairah Rockwool

Minimum Density: 130 kg/m³

Certificate No.: TBW0300118


Director of Certification
Nicholas Purcell

Seal No.: 103206

Page 7 of 8
Issue 5

Issued: 04 Jun 2025
Valid to: 03 Jun 2028

This Certificate is the property of Thomas Bell-Wright International Consultants UAE.
Registered office: P.O. Box 26385, Dubai, UAE. F 19 Scheme Certificate Issue 8 Issued Mar 2024

This document must not be reproduced, except in its entirety and with the express permission of Thomas Bell-Wright International Consultants.

3. Mounting System

Vertical runners comprising of galvanised steel (ASTM A653M, CS Type B) "Top Hat" profiles, 75 x 30 x 2.7 mm thick, shall be fastened directly onto the substrate using hexagonal washer head zinc plated self-drilling screw #14 x 1 inch with a fitted rubber washer at a nominal spacing of 1000 mm and 25 mm from the edges. Runners shall be spaced at horizontal intervals between 1052 to 1118 mm.

4. Window Flashing

Galvanised steel (ASTM A653, CS Type B) flashing, 205 x 50 x 15 x 2.7 mm (depth x outside lip x inside lip x thickness) shall be cut to the required section lengths and installed around the jambs, header and sill of the window opening. Meeting edges formed at the butt-jointed corners shall be secured together by continuous welding.

5. Wall finish

Material: Acrylic-based emulsion paint

Reference: "Fenomastic Hygiene Pure Colors Emulsion Matt"

Application thickness: 105 microns DFT (total, in two coats)

Manufacturer: Jotun Paints

6. Base Wall

6a. Interior & Exterior Gypsum Board

1200 x 2400 x 15.9 mm (width x length x thickness) Type X gypsum boards fixed onto galvanised steel (ASTM A653, CS Type B) framing, consisting of 1.2 mm thick studs and tracks, using Ø3.5 mm x 35 mm self-tapping screws, fixed at 300 mm centres and with the long edge along the vertical joints. The board joints shall be covered with fibre-glass multi-purpose self-adhesive plasterboard jointing tape and a jointing compound composed of calcium sulphate-based mineral fillers.

6b. Steel Studs and Tracks

Galvanised steel (ASTM A653, CS Type B) studs 93 x 32 x 34 x 9 x 1.2 mm (web x flange 1 x flange 2 x lip x thickness) and tracks 95 x 32 x 9 x 1.2 mm (web x flange x lip x thickness) welded directly to the test frame.

F. Approved Manufacturing Location

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

Certificate No.: TBW0300118

Page 8 of 8
Issue 5


Director of Certification
Nicholas Purcell

Seal No.: 103206

Issued: 04 Jun 2025
Valid to: 03 Jun 2028

This Certificate is the property of Thomas Bell-Wright International Consultants UAE.
Registered office: P.O. Box 26385, Dubai, UAE. F 19 Scheme Certificate Issue 8 Issued Mar 2024

This document must not be reproduced, except in its entirety and with the express permission of Thomas Bell-Wright International Consultants.