ALUCOSIGN®

ALUCOPANEL®

Fire Safety First Priority

Thomas Bell - Wright
TBW0300185.2

FR

6762

THOMAS BELL-WRIGHT
INTERNATIONAL CONSULTANTS

In accordance with UKAS accreditation to ISO 17065

Certification is Hereby Granted

to

Alucopanel Middle East L.L.C

National Industries Park,
P.O. Box 18022, Dubai, United Arab Emirates

for

"Alucosign® FR"
4 mm thick Aluminium Composite Material
(Test method: ASTM E84-16)

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, Cladding, Curtain Walls, Building Materials, Products and Assemblies*

In witness whereof, this Certificate is issued this 15th day of June 2020

THOMAS BELL-WRIGHT INTERNATIONAL CONSULTANTS
CERTIFIED

Sandy Dweik
Chief Executive Officer

Nicholas Purcell
Director of Certification

Certificate Number: TBW0300185.2

Initial registration: June 15, 2017 Issued: June 15, 2020 Expiration: June 14, 2023

File Name: UE009_CRT_SD03RX_R2_ASTME84_(f)

"Alucosign® FR"
4 mm thick Aluminium Composite Material

1. Certification is given for "Alucosign® FR" Aluminium Composite Material for Reaction to Fire performance when subjected to test standard ASTM E84-16 for Flame Spread Index (FSI) and Smoke Developed Index (SDI), subject to the limitations stated herein. Refer to table 1 for the scope of certification.

Table 1: Scope of Certification

Reference	Classification(Note 1)
"Alucosign® FR" – Aluminium Composite Panel	Class A (FSI: 20, SDI: 75)

Note: (1) Certification is based on ASTM 84-16 test result; and classification is based on the International Building Code 2015, Section 803.1.1 according to Flame Spread Index (FSI) and Smoke Developed Index (SDI) values.

2. 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.

3. The product is approved on the basis of TBWIC Product Certification Scheme SD03 for Exterior Wall Assemblies, Cladding, Curtain Walls, Building Materials, Products and Assemblies which includes pre-test sampling, evidence of performance (under reference TBWIC test report no. RC055), Technical Verification and Proof of Performance, compliance to Factory Production Control requirements and surveillance & Re-certification Inspection/ Audits.

4. This certification pertains to "Alucosign® FR" – Aluminium Composite Panel composed of a mineral core adhered to Aluminium facings. Refer to section 6 for further details.

5. Limitations:
   - 5.1. This certification covers the specifications of the aluminium composite material as tested and described in the respective test reports.
   - 5.2. The tests standards covered under this certification were used to measure the response of materials, products, or system assemblies to heat and flame under controlled conditions. The results described in each particular test reports on its own shall not be used as sole criteria for fire-hazard or fire-risk assessment of the materials, products, or system assemblies under actual fire conditions.
   - 5.3. This certification pertains to the material tested as a standalone product only. It does not extend to the wall system, construction build-up or assembly comprising the material
   - 5.4. The test (and Certification) do not address the following:
     - 5.4.1. Measurement of heat transmission
     - 5.4.2. Effect of aggravated flame spread behaviour of an assembly resulting from the proximity of combustible walls and ceilings.
     - 5.4.3. Classification or definition of material as noncombustible
     - 5.4.4. Any Resistance to Fire rating
     - 5.4.5. The toxicity level of smoke developed during combustion
     - 5.4.6. Fire propagation characteristics when tested as large-scale façade cladding assembly
     - 5.4.7. Fire performance of panels having perforations or discontinuous surface

Certificate number: TBW0300185.2

Director of Certification
Nicholas Purcell

Seal number: 101118

Issued: 15 June 2020
Valid to: 14 June 2023

6. Product details

6.1. Product description

a. Reference: "Alucosign® FR" Aluminium Composite Panel
b. Description: 4 mm thick Aluminium composite material panel with a mineral-filled polymer core
c. Weight per unit area: 7.0 ± 0.5 kg/m²
d. Panel thickness: 4 ± 0.2 mm

6.2. Product component details

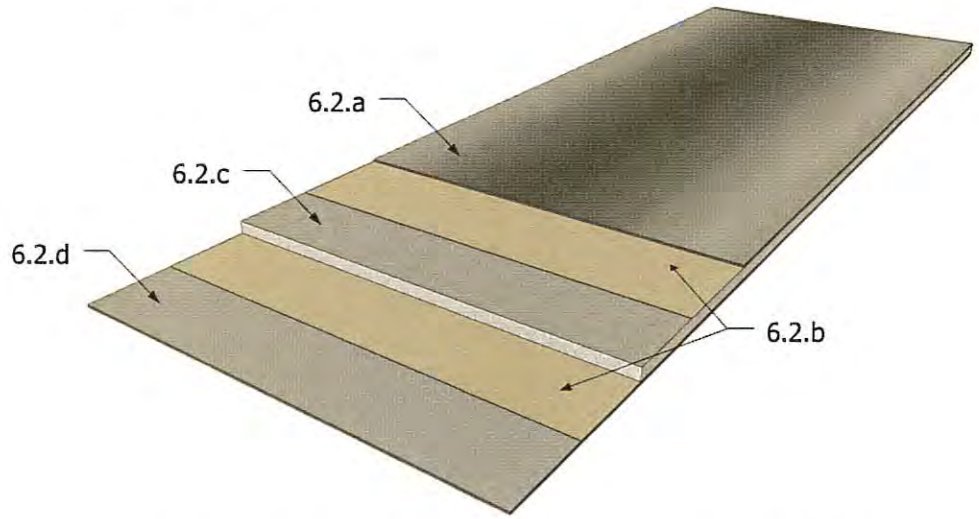

Figure 1: "Alucosign® FR" Aluminium Composite Panel - Typical details

a. Exterior Skin
Material: Aluminium, Alloy 1100-H16
Minimum thickness: 0.3 mm
Coating type: High Durable Polyester (HDPE)
Coating thickness: 28 ± 4 microns

b. Adhesive
Material: High molecular content polymer
Thickness: 70 ± 2 microns
Density: 920 ± 10 kg/m³

c. Core
Material: Mineral-filled / Inorganic B core
Thickness: 3.4 ± 0.1 mm
Minimum density: 1800 kg/m³

d. Interior Skin
Material: Aluminium, Alloy 1100-H16
Minimum thickness: 0.3 mm
Coating type: Polyester (PE)
Coating thickness: 5 ± 2 microns

7. Approved Manufacturing Location

Sublease Plot # TP010105B,
National Industries Park,
P.O. Box 18022, Dubai,
United Arab Emirates

Certificate number: TBW0300185.2

Director of Certification
Nicholas Purcell

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