ESL

مختبر الإمارات للسلامة
EMIRATES SAFETY LABORATORY

ESLGlobal.com

CERTIFICATE OF CONFORMITY

Issue: **01**

Certificate number: **ESL-24-11728**

Pursuant to provisions of the Certification scheme on Global Conformity Certification of fire and life safety products (CS-GCC, scheme type 5), Emirates Safety Laboratory hereby grants this certificate of conformity to the product described below:

Aluminium Composite Material, ALPOLIC™ A2 in External Wall System / Assembly
(ESL system designation: FACN-0207-11728)

Placed on the market under the name or trade mark of:

AG Metal Industries LLC
P.O. Box No.: 54602, Al Hamra Industrial Zone
Ras Al Khaimah, United Arab Emirates (UAE)

Manufactured in the following location(s):

AG Metal Industries LLC
P.O. Box No.: 54602, Al Hamra Industrial Zone
Ras Al Khaimah, United Arab Emirates (UAE)

Complies with the requirements of the standard(s) as detailed below:

NFPA 285 – 2023 Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Wall Assemblies Containing Combustible Components

The certificate was first issued on **18 November 2024** and remains valid under the condition that the Certificate Holder fulfils the requirements of the agreement on certification supervision no. **0323/SA/24**.

Signed for ESL	Tomasz Kielbasa	18 November 2024	17 November 2027
	Certification Manager	Date of issue	Expiry date

This Certificate remains valid till date stated above, unless suspended, withdrawn or terminated. This certificate will not be valid if the manufacturer makes any changes affecting product conformity, which have not been notified to, and agreed in writing with ESL. This Certificate is an electronic document and shall not be reproduced (in any form) except in full. Certificate holder is under an obligation to make references to issued certificate only in conjunction with product(s) that conform to evaluated product construction. Prior to use of this certificate, please verify its validity at ESL.directory

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GCC ACCREDITATION CENTER GAC
Product Certification
ISO/IEC 17065:2012
APC 0097

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CERTIFIED PRODUCT:

Product / System Description:

Aluminium Composite Material, ALPOLIC™ A2 in External Wall System / Assembly is a non-loadbearing external wall system/assembly comprised of tray profile 4 mm or 6 mm thick aluminium composite material, ALPOLIC™ A2 installed on aluminium profiles on the base wall (substrate). Mineral wool insulation is installed on the exterior face of the base wall (substrate). Cavity barriers are installed vertically & horizontally between the base wall (substrate) and the inner face of aluminium composite panel. The ACM panel joints are filled aluminium c- channel and with fire rated sealant to close the gaps.

Aluminium Composite Material, ALPOLIC™ A2 in External Wall System / Assembly fire propagation performance evaluation summary:

System Description	Test Standards	Test Result
Aluminium Composite Material, ALPOLIC™ A2 in External Wall System / Assembly ALPOLIC™ A2 details • Panel thickness: 4 or 6 mm • Panel weight per unit area: 8.3 kg/m² ± 5% for 4 mm panel 12 kg/m² ± 5% for 6 mm panel • Top coil: Mill finish aluminium coil (AA 3003-H16) with PVDF/FEVE clearcoat, PVDF/FEVE topcoat & PE primer. Coil thickness: 0.50 ± 0.05 mm Coating thickness: 60 to 63 microns • Bottom Coil: Mill finish aluminium coil (AA 3003-H16) with PE Coating Coil thickness: 0.50 ± 0.05 mm Maximum coating thickness: 12 microns • Adhesive: 80 microns polymer based adhesive film • Core: Thickness: 3 or 5 mm Density:1,750 to 2,000 kg/m³	**NFPA 285 – 2023**	**Pass**

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Detailed specification of the components used in the external façade wall assembly/system:

Design no (reference drawings by manufacturer): AGMI-ED-003-Rev 0 Page 1 of 6, AGMI-ED-003-Rev 0 Page 2 of 6, AGMI-ED-003-Rev 0 Page 3 of 6, AGMI-ED-003-Rev 0 Page 4 of 6, AGMI-ED-003-Rev 0 Page 5 of 6 & AGMI-ED-003-Rev 0 Page 6 of 6.

a. Exterior cladding:
Tray profile 4 mm / 6 mm thick aluminium composite material, ALPOLIC™ A2 , shall be fixed onto the vertical profile using aluminium cleats and ⌀4.2 × 19 mm aluminium self-drilling screws. The maximum gaps allowed for the panel to panel joints are 20 mm, the joint shall be fitted with a 10 mm × 10 mm × 1.5 mm (web x flange x thickness) aluminium C channel (Alloy 6063 - T6) using ⌀4.2 × 38 mm self-drilling screws, and a full depth of Dowsil firestop 700 sealant shall be applied. The maximum permitted air cavity between the cavity insulation's exterior face and the panel's interior face is 244 mm.
Products manufacturer: AG Metal Industries LLC

b. Fixing components:
1. Wall brackets
Galvanised steel brackets shall be anchored onto the base wall (substrate) using a Ø6 × 38 mm carbon steel self-drilling screws with aluminium EPDM bonded washer.
   - 265 mm × 75 mm × 100 mm × 4 mm (leg x leg x length x thickness).
2. Vertical runner
Aluminium (Alloy 6063 - T6) profiles shall be fixed into wall bracket using M8 × 25 mm stainless steel self-drilling screw with aluminium EPDM bonded washer.
   - 40 mm × 40 mm × 3 mm (leg x leg x thickness).
3. Panel holding bracket
Aluminium (Alloy 6063-T6) cleats shall be fixed on flanges of tray profile aluminium composite panel using ⌀4 × 12 mm aluminium blind rivets.
   - 20 mm × 20 mm × 2 mm (leg x leg x thickness).

c. Exterior insulation:
A single layer of 50 mm thick stone wool insulation with a density of 40 kg/m³ (ref. SRW P 50 D 50 ALU) shall be installed on the exterior of the base wall (substrate) except for the locations of the cavity fire barriers using M8 × 110 mm carbon steel insulation pins.
Products manufacturer: Saudi Rockwool Factory

d. Cavity barrier (Vertical & Horizontal):
Cavity fire barriers (ref. CH-CB120/120 barrier manufactured from CW-FS120) with 120 mm x 75 kg/m³ (thickness x density) shall be installed at the top and bottom side of the window opening, every floor termination, and along the full height of the specimen at each vertical edge of the window opening using BG335G fixing brackets. The fixing brackets shall be fixed to the base wall (substrate) using size Ø4.2 x 38 mm stainless steel screws.
Products manufacturer: Siderise Insulation Ltd

e. Window flashing & perimeter flashing:
4 mm or 6 mm thick ALPOLIC™ A2 aluminium composite panel shall be fixed along the window opening and perimeter opening using ⌀3.5 × 45 mm stainless steel self-drilling screws.

f. Base wall:
15.9 mm thick Type X (GW-TX) gypsum board material (interior & exterior) installed on a galvanised steel framing consisting of 92 x 32 x 1.2 mm (web x flange x thickness) studs and 95 x 25 x 1.2 mm (web x flange x thickness) tracks.

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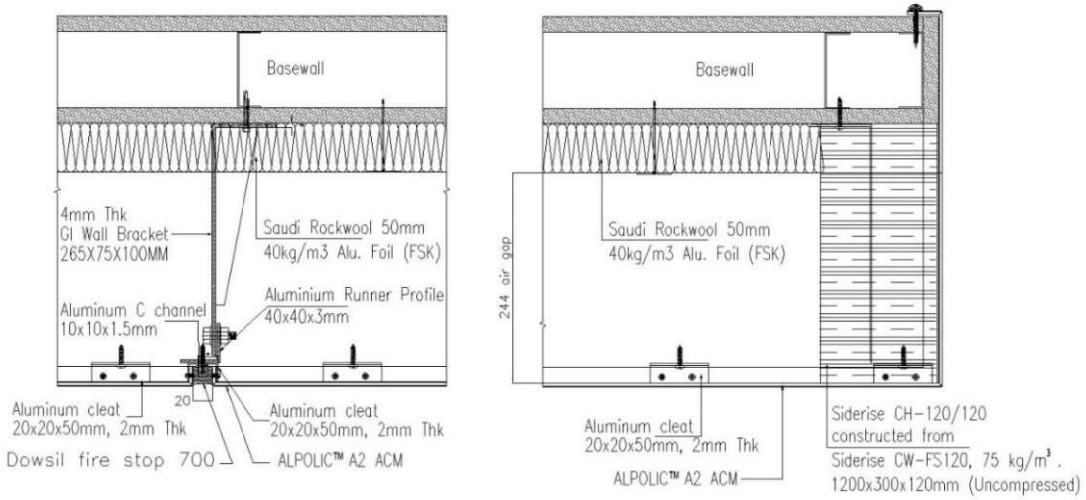

Fig 1: Horizontal section – fixing details & window details

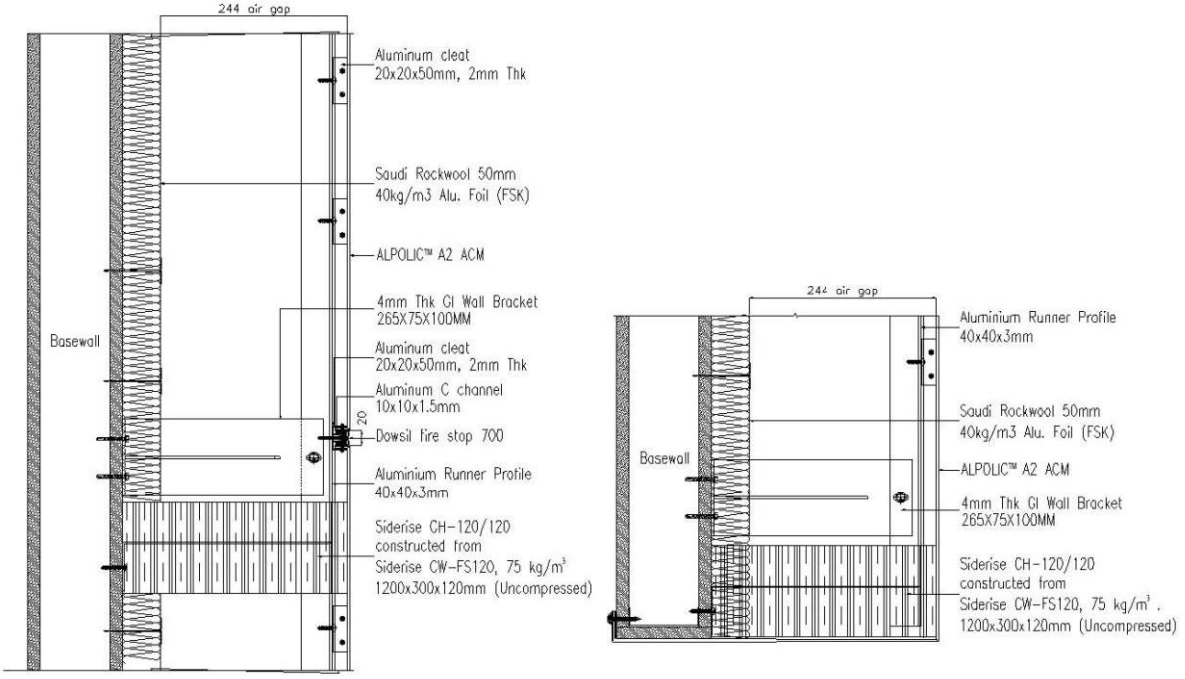

Fig 2: Vertical section – fixing details & window details

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Notes:

1. The system/assembly tested on a non-loadbearing steel base wall is permitted for installation on concrete walls or concrete masonry unit (CMU) walls.
2. For further details, refer to the test report 0601-24 -TR-01A.

Limitation of use:

1. This certification covers the fire propagation performance of external wall assembly/systems with the above-mentioned component specifications.
2. This certification does not cover the fire resistance performance of the exterior wall assembly.
3. Actual system/assembly construction shall conform to the certified design of the system/assembly.
4. System/assembly testing and certification in compliance with NFPA 285 - 2023 does not evaluate the performance of individual components (e.g., thermal insulation, cavity fire barriers, etc.) incorporated within the system/assembly.

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