

ACP Facade Systems

A2 · B1

Precision Facades. Global Standards.

A2-s1,d0
EN 13501-1

B-s1,d0
EN 13501-1

AAMA
2605

PVDF Coating

ACP FACADE SYSTEMS

Two Systems. Certified Fire Performance.

ALUCOSUN ACP Facade Systems deliver independently certified fire performance within the composite panel format, combining dimensional flexibility, surface depth, and certified A2 / FR core technologies.

Both systems share the same PVDF fluorocarbon coating platform, the same dimensional discipline, and the same certification rigour. The distinction is fire classification — and that distinction matters.



	ACP A2 Core	ACP FR Core B-s1,d0
Fire Classification	A2-s1,d0	B1
Standard	EN 13501-1	B-s1,d0 · EN 13501-1 Class A · ASTM E84 NFPA 285
Core Type	Non-combustible mineral	Mineral-filled FR compound
Panel Weight	8.2 kg/m ²	7.5 kg/m ²
Coating	PVDF	PVDF · Polyester
When Required	EN code mandates A2 or above	B1 sufficient under applicable code
Typical Application	High-rise · A2-code buildings	Commercial · Institutional

"Every fire class is a tested result. Every coating warranty is a legal commitment."

ACP A2 Core

A2-s1,d0 · EN 13501-1

A2 Classification. Composite Versatility.

The ALUCOSUN ACP A2 Core answers a specification challenge that has become increasingly prevalent as building fire codes tighten worldwide: how to achieve the architectural surface quality and fabrication characteristics of composite panel construction while meeting an A2 fire performance requirement.

Through a non-combustible inorganic mineral core, the ACP A2 achieves EN 13501-1 A2-s1,d0 / ETA-23/0929 classification — limiting heat release, smoke production, and droplet formation — while retaining the slim profile, wide format availability, and full coating depth of the composite panel format.



A2.s1,d0 Classification

Non-combustible inorganic mineral core. Strictly limited smoke production (s1) and no flaming droplets (d0). Suitable for high-rise and public-assembly buildings under European fire codes.

Composite Panel Format

Routeable, foldable, and machinable by standard aluminium fabrication methods. No special tooling or process modifications required.

Full PVDF Coating Range

AAMA 2605 standard coating line. Consistent gloss and colour across project quantities. Full architectural palette.

The Specification Gap

Between solid panel and FR-core ACP, the ACP A2 Core occupies a distinct position: composite handling, A2 fire class, full architectural finish range.

TECHNICAL DATA

Fire Classification	A2-s1,d0 · EN 13501-1/ ETA-23/0929
Core Type	Non-combustible inorganic mineral compound
Total Panel Thickness	4mm standard · 3 / 6 mm optional
Skin Thickness	0.5 mm standard · 0.4 / 0.3 mm optional
Aluminium Alloy	AA3003 / AA5005, H14 / H24
Panel Weight	8.2 kg/m ² (4mm standard)
Standard Sheet Width	Up to 2,000mm
Standard Sheet Length	Up to 6,000mm
Coating System	PVDF 3-coat AAMA 2605 / PVDF 2-coat / FEVE
Coating Standard	AAMA 2605 · QUALICOAT Class 2
Coating Warranty	PVDF 3-coat · 30 years · qualified projects
Surface Finish	Solid · Metallic · Anodised · Woodgrain
Fabrication	CNC routing and folding compatible



APPLICATIONS

- High-rise commercial towers in markets applying EN 13501-1 A2 code requirements
- Hospitality and mixed-use facades on buildings above regulatory height thresholds
- Public buildings and civic architecture requiring A2-classified cladding
- Markets with tightening fire regulations where future-proof specification is a client priority
- Premium facade applications where composite panel format is architecturally preferred over solid panel

REFERENCE PROJECT

FIFA World Cup 2022 — Stadium Facade · Qatar

160,000 m² · ACP A2 Core · A2-s1,d0 · EN 13501-1/ ETA-23/0929

The largest single-project deployment in ALUCOSUN history. 160,000 m² of ACP A2 Core supplied for stadium facade cladding across the tournament infrastructure — selected for mandatory A2 fire performance with composite panel dimensional flexibility.

ACP FR Core · B1

B-s1,d0 EN · B1 GB · ASTM E84 Class A

Fire.Retardant Performance. Full Design Freedom.

Aluminium composite panels are the specification workhorse of the global facade industry. The ALUCOSUN ACP FR Core brings a mineral-filled FR polymer core to composite panel construction — delivering B-s1,d0 EN / B1 GB / ASTM E84 Class A performance while maintaining the full dimensional and surface capabilities of the composite panel format.

The FR core significantly reduces ignitability, flame propagation, and heat release compared to standard PE-core panels, enabling compliance with fire regulations across a wide range of building typologies where elevated fire performance is required but A1 or A2 classification is not mandated.



B-s1,d0 / B1 Fire Classification

Classified to GB 8624 B1 and ASTM E84 Class A. Mineral filler compound suppresses flame spread and reduces smoke generation. Independently tested and certified.

Mineral-filled FR Core

Non-halogenated formulation. Inorganic mineral fill increases panel density and provides acoustic damping as a secondary performance benefit.

Full Coating Range

PVDF fluorocarbon (AAMA 2605, superior external durability) and polyester coating available. Full architectural palette in both systems.

Wide Application Range

B1 classification and composite panel processing flexibility make ACP FR Core one of the most broadly applicable facade systems in the ALUCOSUN range.

TECHNICAL DATA

Fire Classification	EN 13501-1 · B1 / GB 8624 · B1 / ASTM E84 · Class A
Core Type	Mineral-filled FR polymer core
Total Panel Thickness	3mm / 4mm standard · custom available
Skin Thickness	0.3mm / 0.4mm / 0.5mm
Aluminium Alloy	AA3003 / AA5005
Panel Weight	7.5 kg/m ² (4mm standard)
Standard Sheet Width	Up to 2,000mm
Standard Sheet Length	Up to 7,200mm
Coating System	PVDF Fluorocarbon · Polyester
Coating Standard	PVDF: AAMA 2605 · Polyester: AAMA 2603
Surface Finish	Solid colour · Metallic · Woodgrain · Stone · Brushed
Fabrication	CNC routing, folding, punching compatible
Warranty	PVDF 3-coat · 30 years · qualified projects

APPLICATIONS

- Commercial building exterior cladding — low to mid-rise
- Retail and mixed-use development facades
- Interior architectural cladding: lobbies, atriums, reception areas
- Educational and healthcare facilities under B1 code requirements
- Renovation and refurbishment projects requiring FR-compliant cladding



REFERENCE PROJECT

Teda Football Stadium · Tianjin, China · 2008

50,000 m² · ACP FR Core B1 · B1 · GB 8624

Supplied for the full exterior facade of a major sports venue 50,000 PVDF: AAMA 2605 · Polyester: AAMA 2603 classification and surface finish quality.

FIRE PERFORMANCE

The Right Classification for Every Project.

Fire classification is not a marketing claim — it is a tested result assigned by accredited third-party laboratories. Selecting the correct fire class for your project is a code compliance decision. ALUCOSUN provides full certification documentation for both ACP systems upon specification request.

	ACP A2 Core	ACP FR Core B1
EN 13501-1	A2-s1,d0	B s1,d0
GB 8624	—	B1
ASTM E84	—	Class A
Typical building type	High-rise · Public assembly	Low to mid-rise · Commercial
Certification documentation	Available on request	Available on request

CONTACT & SPECIFICATION

Ready to Specify?

Our technical team supports architects, facade engineers, and project developers at every stage — from product selection to project-level specification assistance.

TECHNICAL & SPECIFICATION

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