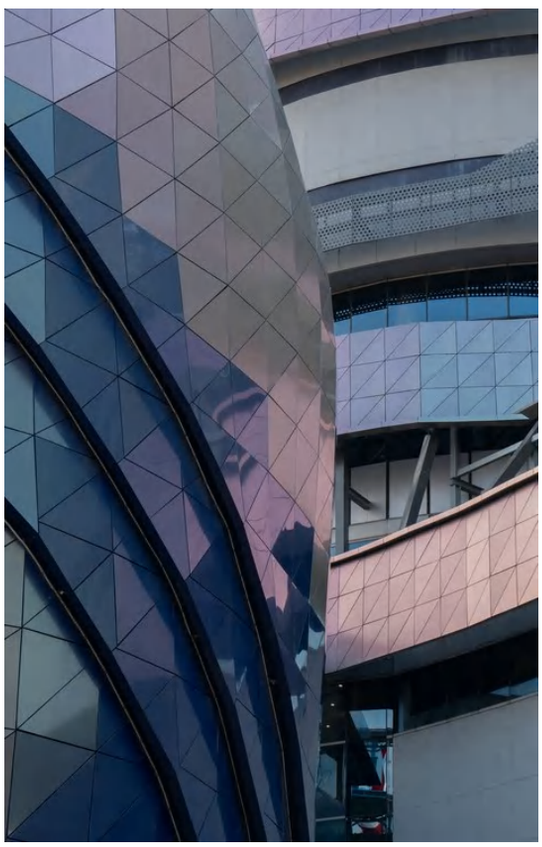
ALUCOSUN

Product Portfolio

Precision Facades. Global Standards.

WHO WE ARE

European Standard. Built for Every Market.



ALUCOSUN is a European-positioned aluminium facade brand delivering independently certified panel systems to architects, developers, and facade contractors across Southeast Asia, the Middle East, and beyond.

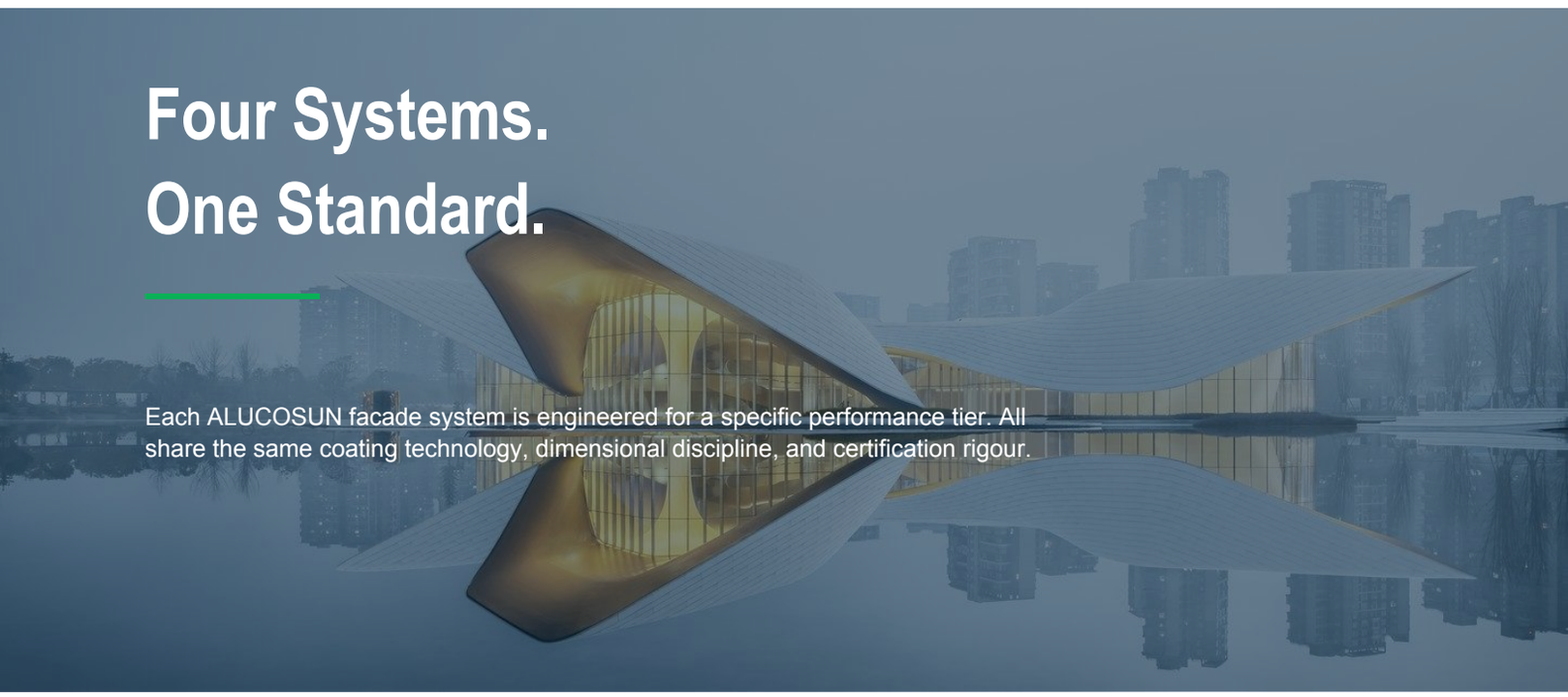
Every system we manufacture is held to the same fire performance, dimensional tolerance, and coating durability standards demanded by the world's most specification-critical projects — and we put the certification documentation in front of any specifier who asks for it.

> ***"Specified where performance cannot be compromised."***

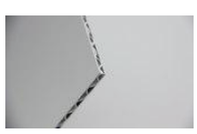
EN 13501-1	**AAMA 2605**	**SGS / Intertek**	**50+ Markets**
Fire Performance Certified	PVDF Coating Standard	Independently Certified	Global Export Experience

OUR SYSTEMS

Four Systems. One Standard.



Each ALUCOSUN facade system is engineered for a specific performance tier. All share the same coating technology, dimensional discipline, and certification rigour.



FIRE CLASS A2-S1,D0 · EN 13501-1

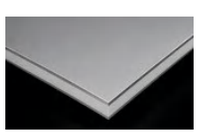
X PANEL (3D LATTICE CORE)

A structurally innovative aluminium sandwich panel built around a proprietary three-dimensional corrugated lattice core. Superior rigidity-to-weight performance for large-span, high-specification facades.

FIRE CLASS A1 · EN 13501-1

SOLID PANEL A1

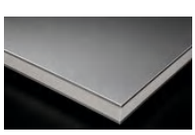
Single-skin solid aluminium panel. The highest fire classification available — non-combustible, no organic content. The definitive specification for fire-critical zones and buildings above statutory height thresholds.



FIRE CLASS A2-S1,D0 · EN 13501-1

ACP A2 CORE

Non-combustible inorganic mineral core composite panel. A2 fire performance in composite panel format — the specification solution where code compliance and design flexibility must both be satisfied.



FIRE CLASS B1 · E N 1 3 5 0 1 - 1 / ASTM E84

ACP FR CORE B1

Mineral-filled flame-retardant core composite panel. B1 fire classification, full PVDF coating range, wide format availability. The versatile specification choice for commercial and institutional facade applications.

X Panel · 3D Lattice Core

A2-s1,d0 · EN 13501-1

The Facade Panel Engineered from the Inside Out.

Conventional composite panels rely on a flat mineral or polymer core. The ALUCOSUN X Panel takes a fundamentally different approach: a proprietary three-dimensional corrugated aluminium lattice is bonded between two precision-rolled aluminium skins, creating a multi-directional structural lattice that distributes load across the panel's full depth.

The result is exceptional flatness under thermal load, high resistance to wind-driven deflection, and a weight profile that simplifies substructure design — without compromising A2 fire classification.

Structural Innovation

3D corrugated aluminium lattice core; superior panel stiffness at equivalent thickness and weight compared to flat-core alternatives.

A2 Fire Classification

Independently classified to EN 13501-1 A2-s1,d0. Suitable for high-rise and public-assembly buildings under European fire codes.

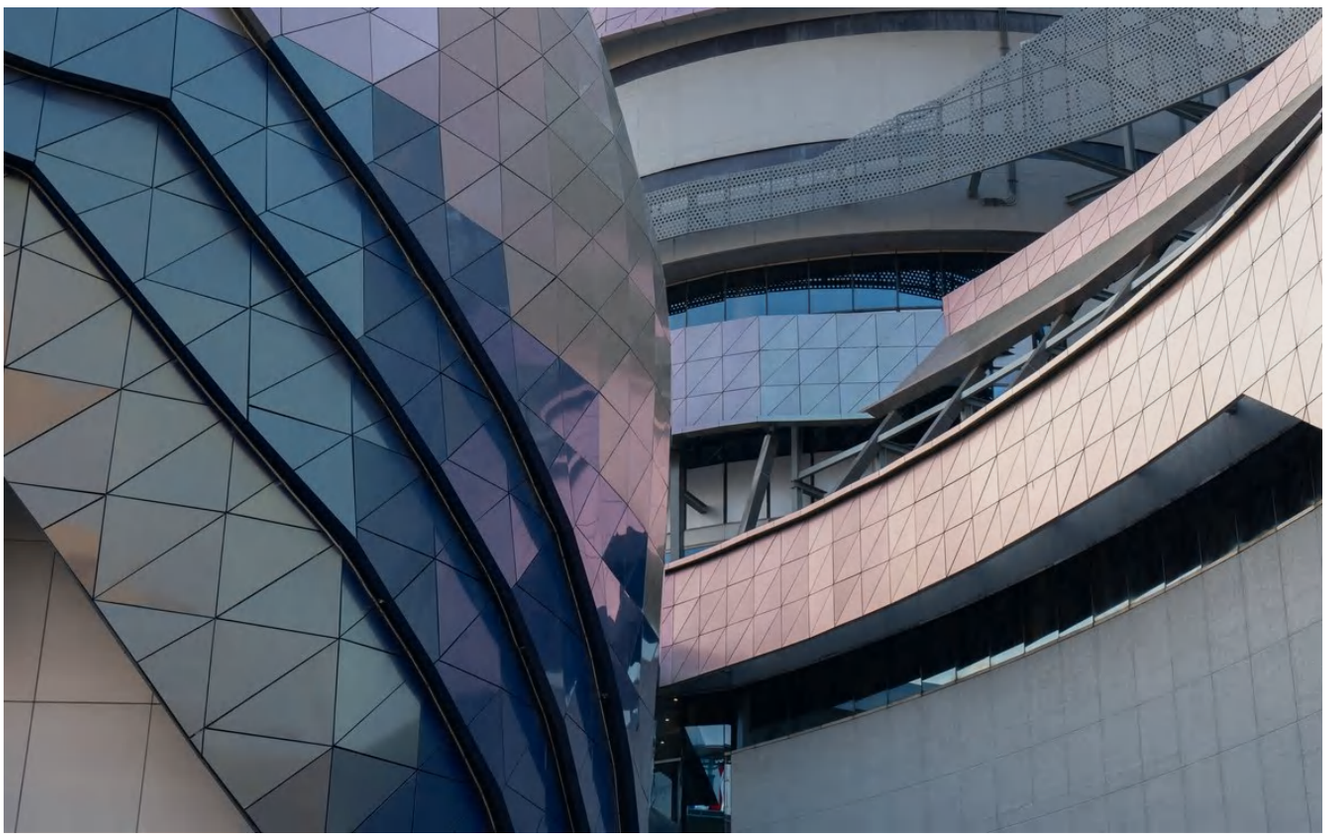
Large-Format Capability

Panel widths to 1,570mm, lengths to 8,000mm. Consistent colour and gloss matching across full project quantity.

30-Year Coating Warranty

PVDF fluorocarbon coating to AAMA 2605 standard. Fade, chalking, and adhesion performance warranted for qualifying projects.

TECHNICAL DATA



Panel Thickness	4mm / 6mm
Skin Thickness	0.7mm (front) / 0.5mm (back)
Aluminium Alloy	AA3003 / AA5005
Panel Weight	4.2 kg/m²
Fire Classification	A2-s1,d0 · EN 13501-1
Panel Width	1,000mm – 1,570mm
Panel Length	1,000mm – 8,000mm
Coating System	PVDF Fluorocarbon · FEVE available
Coating Standard	AAMA 2605 · QUALICOAT Class II
Coating Warranty	30 years · qualifying projects
Core Material	Proprietary 3D corrugated aluminium lattice
Surface Finish	Solid · Metallic · Anodised-look · Woodgrain

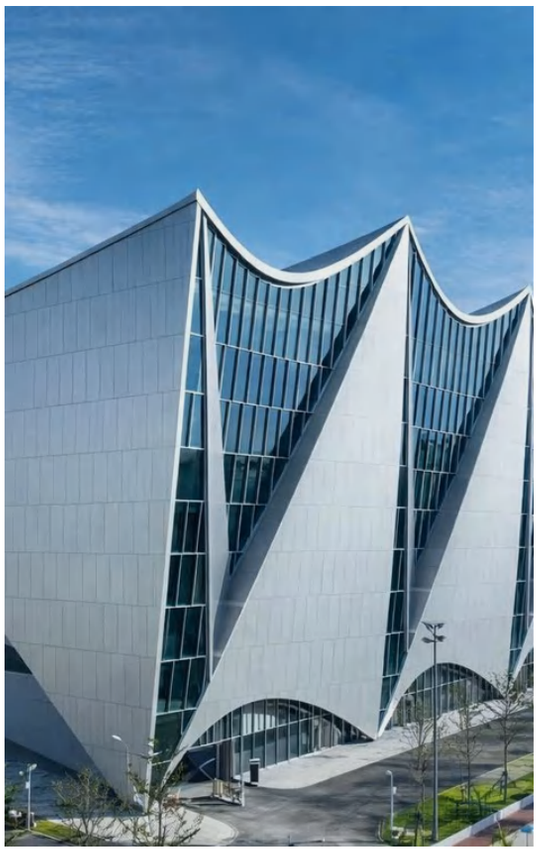
APPLICATIONS

REFERENCE PROJECT

Australia 108 · Melbourne, Australia · 2020

6,000 m^2 · Gold Anodised · A2-s1,d0

One of the Southern Hemisphere's tallest residential towers. ALUCOSUN supplied X Panel in gold anodised finish for the tower's signature crown cladding.



Solid Panel · A1

A1 · EN 13501-1

The Highest Fire Class. No Compromise.

A1 is the highest fire performance classification under EN 13501-1 — non-combustible, with no contribution whatsoever to fire or smoke development. The ALUCOSUN Solid Panel achieves A1 classification through its material composition: solid aluminium alloy with no organic components in the panel body.

Where building codes mandate A1-classified facade materials — around refuge floors, within fire escape routes, or on buildings above regulated height thresholds — the Solid Panel is the specification solution that closes the performance gap without sacrificing architectural finish quality.

A1 Non-Combustible

Full non-combustible classification to EN 13501-1. No combustible content. The definitive response to stringent fire code requirements.

High-Performance Alloy

Available in AA3003 and AA5052. Tensile ultimate strength 185 MPa. Elastic modulus 68.9 GPa.

PVDF Coating System

Full architectural colour palette. 15–20 year coating performance warranty against fade, chalking, and adhesion failure.

Dimensional Precision

Thickness tolerance ±0.2mm. Width tolerance ±2mm. Consistent panel geometry across full project supply.

TECHNICAL DATA

Fire Classification	A1 · EN 13501-1
Aluminium Alloy	AA3003 · AA5052
Standard Thickness	1.5 / 2.0 / 2.5 / 3.0mm
Maximum Width	2,000mm
Tensile Ultimate Strength	185 MPa
Tensile Yield Strength	165 MPa
Elastic Modulus	68.9 GPa
Thickness Tolerance	±0.2mm
Width Tolerance	±2mm
Length Tolerance	±4mm
Coating System	PVDF Fluorocarbon · FEVE available
Coating Standard	AAMA 2605 · QUALICOAT Class II
Coating Warranty	15–20 years · qualifying projects
Surface Finish	Solid · Metallic · Anodised-look · Woodgrain · Brushed

APPLICATIONS

REFERENCE PROJECT

Royal Randwick Racecourse · Sydney, Australia

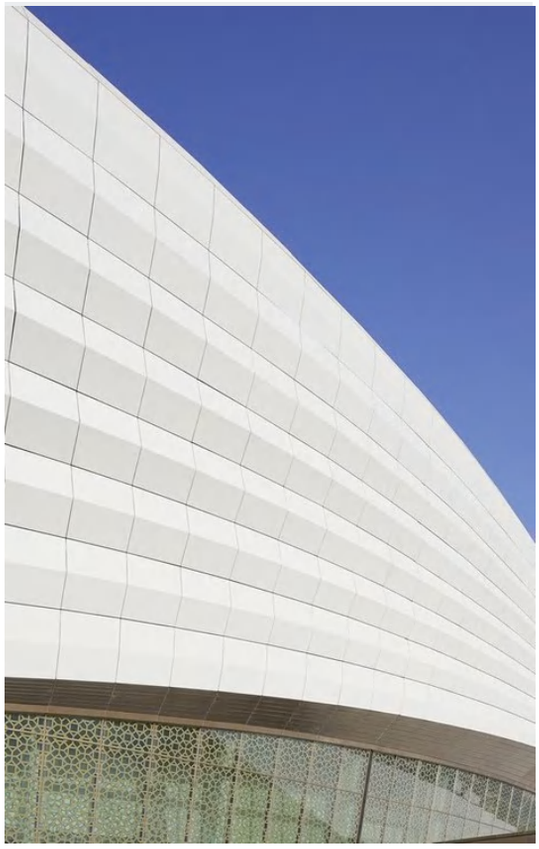
8,000 m^2 · Solid Panel A1 · EN 13501-1

Supplied for facade cladding across one of Australia's most prominent heritage racing venues, where A1 classification and finish consistency were mandatory.

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 compound, the ACP A2 achieves EN 13501-1 A2-s1,d0 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 and no flaming droplets under European fire codes.

Composite Panel Format

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

Full PVDF Coating Range

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

The Specification Gap

Composite handling, A2 fire class, and full architectural finish range between heavier solid panel and FR-core ACP.

TECHNICAL DATA

Fire Classification	A2-s1,d0 · EN 13501-1
Core Type	Non-combustible inorganic mineral compound
Total Panel Thickness	4mm standard · custom available
Skin Thickness	0.3 / 0.4 / 0.5mm
Aluminium Alloy	AA3003 / AA1100
Panel Weight	8.2 kg/m² (4mm standard)
Standard Sheet Width	Up to 1,575mm
Standard Sheet Length	Up to 6,000mm
Coating System	PVDF Fluorocarbon
Coating Standard	AAMA 2605 · QUALICOAT Class II
Coating Warranty	15 years+ · qualifying projects
Surface Finish	Solid · Metallic · Anodised-look · Woodgrain
Fabrication	CNC routing and folding compatible

APPLICATIONS

REFERENCE PROJECT

FIFA World Cup 2022 — Stadium Facade · Qatar

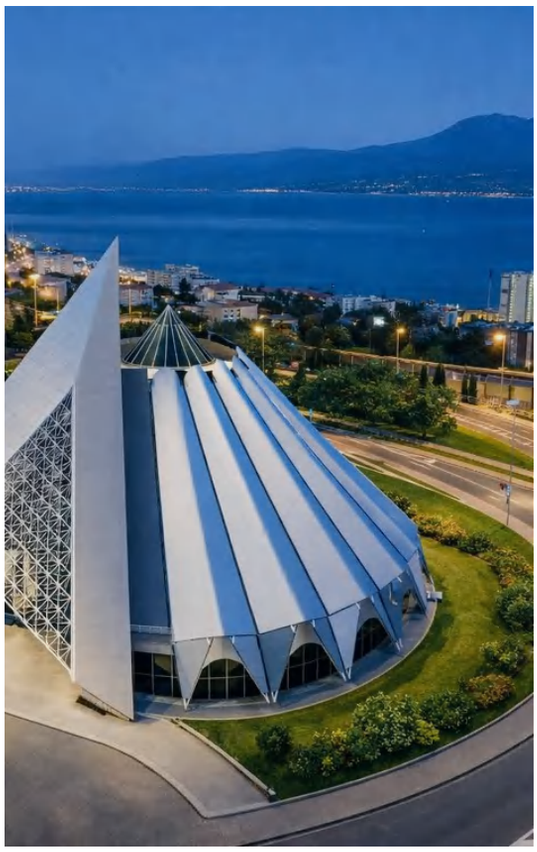
160,000 m^2 · ACP A2 Core · A2-s1,d0 · EN 13501-1

The largest single-project deployment in ALUCOSUN history, selected for mandatory A2 fire performance with composite panel dimensional flexibility.

ACP FR Core · B1

B1 · GB 8624 · 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, flame-retardant core to composite panel construction — delivering B1 fire classification 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.

B1 Fire Classification

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

Mineral-Filled FR Core

Non-halogenated formulation. Inorganic mineral fill increases panel density and provides acoustic damping.

Full Coating Range

PVDF fluorocarbon and polyester coating available. Full architectural palette in both systems.

Wide Application Range

B1 classification and composite processing flexibility make ACP FR Core one of the most broadly applicable systems.

TECHNICAL DATA

Fire Classification	B1 · GB 8624 / Class A · ASTM E84
Core Type	Mineral-filled flame-retardant compound
Total Panel Thickness	3mm / 4mm standard · custom available
Skin Thickness	0.3 / 0.4 / 0.5mm
Aluminium Alloy	AA3003 / AA1100
Panel Weight	7.5 kg/m² (4mm standard)
Standard Sheet Width	Up to 1,575mm
Standard Sheet Length	Up to 7,200mm
Coating System	PVDF Fluorocarbon · Polyester
Coating Standard	PVDF: AAMA 2605 · Polyester: AAMA 2603
Surface Finish	Solid · Metallic · Woodgrain · Stone · Brushed
Fabrication	CNC routing, folding, punching compatible

APPLICATIONS

REFERENCE PROJECT

Teda Football Stadium · Tianjin, China · 2008

50,000 m^2 · ACP FR Core B1 · GB 8624

Supplied for the full exterior facade of a major sports venue in the 2008 Beijing Olympic cycle, with consistent B1 classification and finish quality.

ALUCOSUN

Specified Across Four Continents.

Australia 108

Melbourne, Australia · 2020

X Panel · Gold Anodised · A2-s1,d0 · 6,000 m²

EnCo Terminal Building

Bangkok, Thailand · 2021

X Panel · Colour-Shift PVDF · A2-s1,d0 · 10,000 m²

FIFA World Cup 2022 Stadium

Qatar

ACP A2 Core · A2-s1,d0 · EN 13501-1 · 160,000 m²

Shanghai Oriental Sports Center

Shanghai, China

Solid Panel · A1 · 50,000 m²

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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