

ALUCOSUN TECHNICAL DATA SHEET

X Panel (3D) A2

Proprietary Three-Dimensional Corrugated Aluminium Lattice Core Panel

A2-s1,d0 · EN 13501-1



A structurally innovative aluminium sandwich panel built around a proprietary three-dimensional corrugated aluminium lattice core. The lattice geometry distributes structural load in multiple directions simultaneously, delivering superior rigidity-to-weight performance, exceptional panel flatness under thermal load, and outstanding wind-driven deflection resistance — particularly suited to large-span, high-performance facade applications.

Document Reference / ALCS-3D-TDS-001 Product Code / ALCS-3D Version / v1.0 · 2026

A2-s1,d0

FIRE CLASSIFICATION

3D CORE

CORE TYPE

4.2 kg/m² (4mm)

PANEL WEIGHT

1,570 mm

MAX WIDTH

Technical Specifications

Fire Classification	A2-s1,d0 · EN 13501-1
Core Type	Proprietary 3D corrugated aluminium lattice
Panel Thickness	3mm / 4mm (standard) /6mm
Skin Thickness	0.7mm(front) / 0.5mm(back)
Aluminium Alloy	AA3003 / AA5005
Panel Weight	4.2 kg/m ² (4mm)
Max Width	1,570 mm
Max Length	8,000 mm
Coating System	PVDF / FEVE liquid coating: certified to AAMA 2605

SECTION 02

Performance, Coating & Applications

Specifications Continued

Coating Warranty	Up to 30 years based on AAMA 2605-certified PVDF fluorocarbon coating systems. Warranty period subject to coating specification, project location, maintenance programme, and warranty registration. Contact ALUCOSUN for project-specific warranty terms.
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Width Tolerance	+/- 2.0 mm
Length Tolerance	+/- 4.0 mm
Thickness Tolerance	+/- 0.2 mm
Diagonal Tolerance	≤ 5.0 mm
Surface Finish	Solid Colour · Metallic · Anodised-look · Woodgrain
Fabrication	CNC routing · V-groove folding · CNC cutting

Standards & Certifications

A2 EN 13501-1 · FIRE CLASS	s1,d0 SMOKE & DROPLET · LIMITED · NONE
PVDF AAMA 2605 · COATING CERT	Warranty PROJECT-SPECIFIC TERMS

Coating Systems

Coating System	Standard	Warranty	Notes
PVDF Fluorocarbon	AAMA 2605	Up to 30 years, subject to project warranty terms	Standard — full architectural palette
FEVE Fluorocarbon	AAMA 2605	Up to 25 years, subject to project warranty terms	Available for special colour requirements
Anodised-look PVDF	AAMA 2605	Up to 30 years, subject to project warranty terms	Gold, silver, bronze, champagne effects
Powder coating, where applicable	AAMA 2604	Project-specific	Do not list as PVDF certification

Typical Applications

- High-rise commercial and residential curtain wall systems
- Public and civic architecture subject to A2 fire code requirements
- Large-format feature facade panels and architectural skins
- Transportation infrastructure: airports, transit terminals
- Healthcare and education buildings requiring non-combustible cladding

TECHNICAL CONTACT

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