ALUCOSUN TECHNICAL DATA SHEET

SOLID PANEL A1

Solid Aluminium Panel — A1 · EN 13501-1 · Non-Combustible

The Solid Panel A1 is a single-skin aluminium cladding panel precision-formed from high-grade aluminium alloy, with no core and no composite laminate structure. Because it contains no combustible element whatsoever, A1 — the highest classification under EN 13501-1 — is an inherent material property, not a treatment or additive. The panel can be perforated, curved and folded to virtually any geometry, with a PVDF fluorocarbon coating available in 600+ colours. This classification is increasingly mandated for high-rise façade systems across Europe, the UK and GCC markets.

Ref / **ALCS-SP-A1-TDS-001** Code / **ALCS-SPA1** Version / **v2.0 · 2026**

A1 EN 13501-1 · FIRE CLASS	**8.5 kg/m²** WEIGHT (3MM STD)
185 MPa TENSILE STRENGTH	**Up to 30yr** COATING WARRANTY*

TECHNICAL SPECIFICATIONS

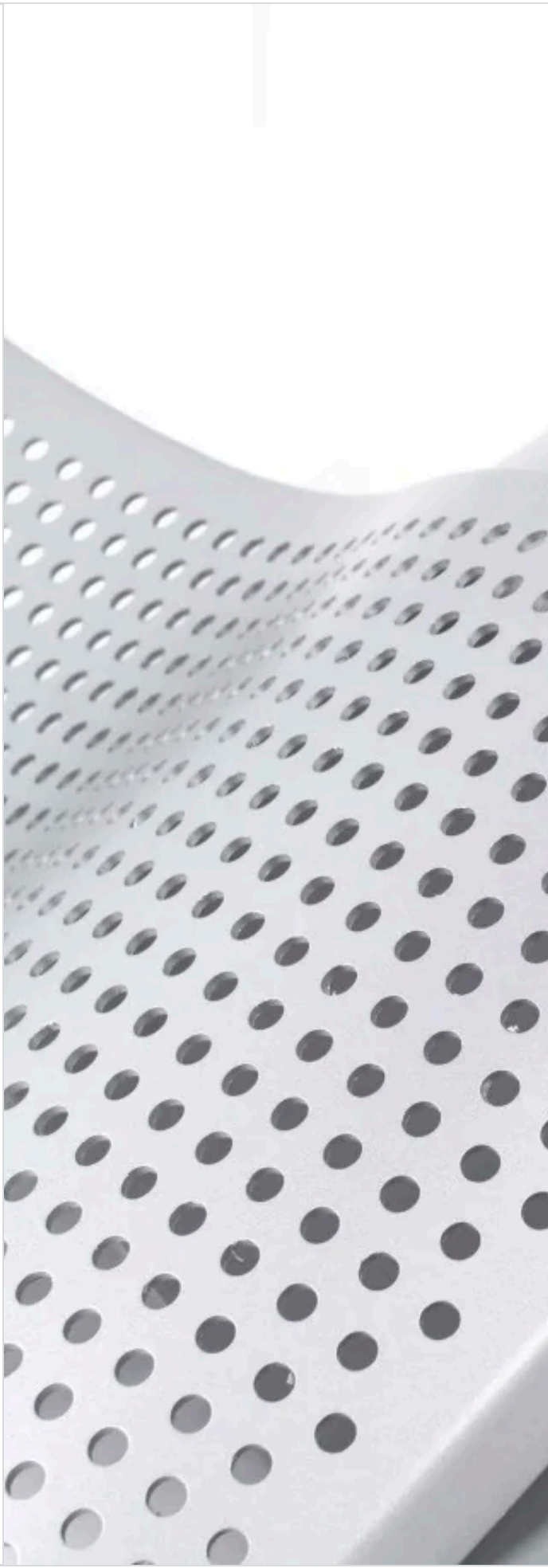
EN 13501-1 Classification	A1 (Non-Combustible — highest class)
Panel Construction	Single-skin solid aluminium — no core, no composite structure
Thickness	3mm standard · 1.5 / 2.0 / 2.5mm available
Aluminium Alloy	AA3003 / AA5052 · H14 / H24
Panel Weight	8.5 kg/m² (3mm standard)
Max Width	2,000mm
Max Length	6,000mm
Tensile Strength (Ultimate)	185 MPa
Tensile Strength (Yield)	145 MPa
Elastic Modulus	68.9 GPa
Elongation at Break	≥4%
Coating (Roll coat)	≥25 µm
Coating (Spray coat)	≥30 µm (AAMA 2605 compliant)

WHY SOLID PANEL A1

Pure aluminium. No core, no compromise — A1 as a material truth.

FORM FREEDOM
Curves, folds, perforations and 3D shapes — solid aluminium bends to any architectural geometry

INHERENT A1 RATING
100% aluminium — A1 non-combustible classification is a property of the material, not an additive



SECTION 02

PERFORMANCE, COATING & APPLICATIONS

Specifications Continued

Width Tolerance	±2mm
Length Tolerance	Subject to project confirmation
Thickness Tolerance	±0.2mm
Diagonal Tolerance	≤3.0mm
Surface Finish	Solid Colour · Metallic · Anodised · Woodgrain · Stone · Corten
Colour Range	600+ standard colours · Custom RAL / NCS on request
Perforation	Available — custom patterns on request
Fabrication	CNC bending · Folding · Punching · 3D forming
Fixing System	Concealed clip / bracket system
Coating Warranty	Up to 30 years (PVDF three-coat, AAMA 2605, qualifying projects)*

Standards & Certifications

A1
EN 13501-1
NON-COMBUSTIBLE

AAMA
AAMA 2605
PVDF COATING

ISO
ISO 9001
QUALITY MGMT

30yr
COATING
WARRANTY*

Coating Systems

Coating System	Standard	Min. DFT	Warranty	Notes
PVDF Fluorocarbon — Three-coat	AAMA 2605	≥30 µm spray · ≥25 µm roll	Up to 30yr*	Standard exterior · full architectural palette
PVDF Fluorocarbon — Two-coat	AAMA 2604	≥25 µm	Project-specific	Available on request
FEVE Fluorocarbon	—	≥25 µm	Project-specific	Cold-cure option; metallic and special finishes
Anodizing	AA-M12C22A31/41	≥10 µm (Class I: ≥15 µm)	Project-specific	Integral colour; maintains metallic character

Typical Applications

- High-rise building facades in markets where A1 non-combustible cladding is mandated (EU, UK, GCC)
- Complex sculptural and curved architectural façade elements
- Perforated cladding screens, brise-soleil and sunshading systems
- Canopies, soffits and feature ceiling panels
- Landmark cultural, civic and governmental buildings
- Retrofit recladding of existing structures requiring non-combustible compliance

TECHNICAL CONTACT

Technical Enquiries: **spec@alucosun.com** · Commercial: **sales@alucosun.com** · **www.alucosun.com**

* 30-year coating warranty applies to PVDF three-coat (AAMA 2605) on qualifying projects. Warranty registration required. Contact sales for details.