

ALUCOSUN TECHNICAL DATA SHEET

ACP FR CORE B1

Flame-Retardant Aluminium Composite Panel – B-s1,d0 · EN 13501-1 / B1 · GB 8624 / Class A · ASTM E84

An aluminium composite panel constructed from two aluminium skins laminated to a mineral-filled flame-retardant core, developed specifically for more stringent fire-safety requirements. Its surface carries a PVDF fluorocarbon coating, available in a broad range of colours and finishes. Thanks to its flame-retardant mineral core, the ACP FR Core B1 achieves significantly better fire performance than composite panels with a standard PE core, while retaining the flatness, formability, weather resistance and ease of processing valued in composite panel construction.



Document Reference / **ALCS-ACP-B1-TDS-001** Product Code / **ALCS-ACP-B1** Version / **v2.0 · 2026**

B-s1,d0 <small>EN 13501-1 · FIRE CLASS</small>	B1 <small>GB 8624 · CHINESE STANDARD</small>	Class A <small>ASTM E84 · SURFACE BURNING</small>	7.5 kg/m² <small>PANEL WEIGHT (4MM STD)</small>
--	--	---	--

TECHNICAL SPECIFICATIONS

EN 13501-1 Classification	B-s1,d0
GB 8624 Classification	B1 (Flame Retardant)
ASTM E84 Rating	ASTM E84 Rating Class A · FSI 5 · SDI 10
NFPA 285	NFPA 285 Exterior wall assembly test · Report 104097530SAT-001
Core Type	Mineral-filled flame-retardant (FR) compound
Total Thickness	4mm standard · 3 / 6mm available
Front Skin Thickness	0.5mm standard · 0.4 / 0.3mm available
Rear Panel Thickness	0.5mm standard · 0.4 / 0.3mm available
Aluminium Alloy	AA3003 / AA5005 · H14 / H24
Panel Weight	7.5 kg/m ² (4mm standard)
Max Width	2,000mm
Max Length	7,200mm

SECTION 02

PERFORMANCE, COATING & APPLICATIONS

Specifications Continued

Width Tolerance	±2mm
Length Tolerance	±4mm
Thickness Tolerance	±0.2mm
Diagonal Tolerance	≤5.0mm
Surface Finish	Solid Colour · Metallic · Woodgrain · Stone · Brushed · Mirror
Colour Range	600+ standard colours · Custom RAL / NCS on request
Fabrication	CNC V-groove routing + hand folding · CNC cutting · Punching
Fixing System	Concealed clip / bracket system
Coating Warranty	Up to 30 years (PVDF three-coat, AAMA 2605, qualifying projects)

Standards & Certifications

B-s1,d0 EN 13501-1 FIRE CLASS	B1 GB 8624 CHINESE STANDARD
Class A ASTM E84 SURFACE BURNING	NFPA NFPA 285 WALL ASSEMBLY TEST

Coating Systems

Coating System	Standard	Min. DFT	Warranty	Notes
PVDF Fluorocarbon – Three-coat	AAMA 2605	≥30 µm	Up to 30yr*	Standard exterior · full architectural palette
PVDF Fluorocarbon – Two-coat	AAMA 2604	≥25 µm	Project-specific	Available on request
PE (Polyester)	AAMA 2603	≥18 µm	Project-specific	Interior or sheltered external · cost-optimised

Typical Applications

- Mid-rise commercial building exterior cladding in markets where B1 is the applicable code requirement
- Retail and mixed-use development facades
- Interior architectural cladding: lobbies, atriums, reception areas
- Signage backer panels and architectural feature elements
- Renovation and refurbishment projects requiring FR-compliant cladding
- Educational and healthcare facilities under B1 code requirements

TECHNICAL CONTACT

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