

DELTA™

Aluminum Composite Panel

Technical Data Sheet

المواصفات التقنية

Why ACP Cladding?

Benefits of ACP

Aluminum Composite Panels (ACP) are revolutionizing the construction and design industries with their exceptional blend of durability, aesthetics, and versatility. These panels are crafted to offer limitless benefits that cater to a wide range of applications and uses.



Durability

Resistant to weather, corrosion, and impact ensuring a long-lasting performance without compromising beauty.



Variety of Color

Available in a vast range of colors, textures, finishes to suit any architectural need.



Formable & Bendable

Easily shaped and formed to many shapes, 3D designs, tiles, and structures



Lightweight yet Rigid

Easy to handle and install, reducing installation time, while still being strong enough to withstand impacts.



Perfect Flatness

Provides a smooth, even surface that enhances visual appeal.



Hygiene-Friendly

Provides a hygienic surface that is easy to clean and resists living organisms such as fungi, bacteria, insects.

Uses & Applications

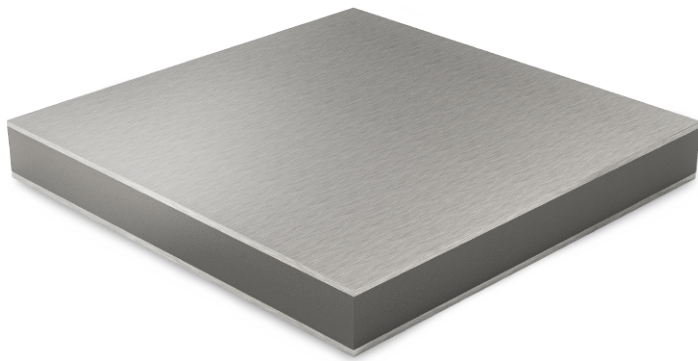
Exterior Cladding
 Interior Wall Finish
 Façades | Signage | Advertising
 Interior Design Elements
 Building Arches, Fascias & Soffits
 Stairways | Railing Units | Elevators
 Wall Canopies
 Kitchens
 Balconies
 Doors | Ceilings | Furniture
 Kiosks & Exhibition Stands

Sectors

Commercial & Retail Buildings
 Residential Buildings
 Industrial Buildings
 Transportation
 Healthcare Facilities
 Educational Institutions
 Governmental & Public Buildings
 Sports & Recreation
 Hospitality & Entertainment
 Signage & Advertising
 Infrastructure

Product Range

LDPE




 FR – B1



Fire-Retardant مقاوم للحريق

Product Description

Delta™ Aluminum Composite Panel materials consist of two layers of high-quality aluminum alloy filled with either a thermoplastic polyethylene core (LDPE) or mineral fire-retardant core (FR).

		Delta™
Core Type	LDPE	●
	 FR – B1	●

		Delta™
Colors & Textures	Solid	●
	Gloss	●
	Metallic	●
	Brushed	●
	Mirror	●
	Wood	●
	★Custom RAL /PANTONE	-

*MINIMUM ORDER QUANTITY REQUIRED 2000m²

Technical Specifications

		Unit	Standard	Delta™	
Dimensions & Types	Width	[mm]	-	1250 mm	
	Length	[mm]	-	5800 mm	
	Panel Thickness	[mm]	-	4 mm	
	Aluminum Skin Thickness	[mm]	-	0.30 mm	
	Panel Weight	[kg/m ²]	-	LDPE 5.2 B1 7.2	
	Alloy Type	-	-	A3003 (AlMg1)	
	Alloy Temper	-	-	H16	
	Coating Type	HDPE		-	●
		PVDF		-	●
		FEVE		-	●

		Unit	Standard	Delta™
Technical Properties	Tensile Strength	[N/mm ²]	EN ISO6892-1:2019	189
	Yield Strength	[N/mm ²]	EN ISO6892-1:2019	160
	Elongation %	[%]	EN ISO6892-1:2019	12.71
	Coating Thickness	[μm]	SASO ISO 2360:2012	≥30
	180° Peel Strength	[N/mm]	ASTM D903	9.87
	Drum Peel Strength	[N-mm/mm]	ASTM D1781-98 (2021)	110
	Shear Strength	[MPa]	ISO 6361-2:104	26
	Bending Strength	[MPa]	ISO 6361-2:104	115
	Bending Elastic Module	[MPa]	ISO 6361-2:104	22,188

Coating Properties & Chemical Resistance

		Unit	Standard	Delta™
Coating Properties	Pencil Hardness	-	SASO GSO ISO 15184:2015	3H
	Coating Thickness	[μm]	SASO EN 2360:2012	≥30
	Coating Flexibility	-	ISO 17132:2007	Pass
	Adhesion Grade	[Grade]	SASO ISO6272-2:2014	0*1
	Impact Resistance	-	SASO ISO6272-2:2014	No peels/No cracks
	Abrasion Resistance	[L/μm]	SASO ASTM D968:2017	>2
	Stain Resistance	[%]	SASO ISO 11998:2007	2%
Gloss Deviation	-	SASO ISO 2813:2015	4	

		Unit	Standard	Delta™
Chemical Resistance	Alkali Resistance	-	SASO ISO 2812-1:2014	Resistant
	Acid Resistance	-	SASO ISO 2812-1:2014	Resistant
	Oil Resistance	-	SASO ISO 2812-1:2014	Resistant
	Solvent Resistance	-	SASO ISO 2812-1:2014	Resistant
	Hot Water Resistance	-	SASO ISO 2812-1:2014	Resistant

Thermal Properties & Fire Safety Performance

		Unit	Standard	Delta™
Thermal Properties	Thermal Expansion	µm/m-°c	ASTM D696:16	136
	Thermal Conductivity	W/mk	ASTM C518-17/BS EN ISO 6946:2007	0.027
	Heat Deflection Temperature	[°c]	SASO ISO 75-2:2014	169
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			Standard	Delta™
Fire Safety Performance	Fire Reaction	-	EN 13501-1.2018	Class B-s1, d0
	Surface Burning	-	ASTM E84	Class A (FSI:0, SDI: 5)
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			Standard	Delta™
International Fire Class	EU	-	EN 13501-1	Class B-s1, d0
	UK	-	BR 135	passed
	GERMANY	-	EN 1187 / DIN 4102-7	Met performance criteria
	SWITZERLAND	-	VKF	RF2
	POLAND	-	PN-90/B-02867	NRO
	RUSSIA	-	GOST 30244-94	G1 (combustibility)
	RUSSIA	-	GOST 30402-95	W1 (flammability)
	RUSSIA	-	GOST 12.1.044-89	D1 (smoke development)
			GOST 12.1.044-89	T1 (toxocity)

*Fire tests have been conducted by THOMAS BELL in accordance to international standards including BS EN ISO 11925-2:2020 | BS EN 13823:2020 | ASTM E84 | BS EN13501-1.2018

Quality Standards & Certifications

Factory Certifications



Product Certifications



Physicochemical & Fire Testing

