

larson® COMPOSITE PANEL

CHARACTERISTICS

Aluminum Composite Panel (ACM) larson® is a fully tested and certified, top quality architectural wall cladding panel providing the strength and flexibility required for the most demanding design criteria.

larson® FR is an innovative composite panel developed by Alucoil using two metal sheets (Aluminum, Stainless Steel, Copper or Brass), and a mineral core. By developing our R+D programs, we have obtained a core which delays combustion to achieve a B-S1, d0 classification according to the regulations UNE-EN 13501. This core can be used with the whole Larson range and the different finishes.

ADVANTAGES

larson® composite panel provides all the benefits of ACM – excellent formability, exceptional strength to weight ratio, extreme architectural flatness, and a cost-effective means of achieving design criteria not physically or economically possible with other building façade materials.

The advanced production process of larson® grants an extraordinary adherence, obtaining double of the recommended parameters. The corrosion resistant aluminum composite panels provide the fundamental design flexibility and long term performance demanded by almost any commercial application. Superior quality coil coated architectural finishes provide outstanding color and gloss retention, while serving as seamless transitions between complimentary building facade materials such as glass and concrete.

APPLICATIONS

The aluminium composite panel larson® is especially recommended for new-construction ventilated façade sectors as well as renovation. It allows for ventilated, semi-ventilated or air-tight façades.

MEASURES AND FINISHES

THICKNESS	LENGTH	WIDTH	OBSERVATIONS
4,0 mm	3.200	1.500	Silver Metallic
4,0 mm	4.000	1.500	Silver Metallic / Grey Metallic
4,0 mm	5.000	1.500	Silver Metallic / Grey Metallic / Manganese / Bronze Metallic / Smoke Metallic / 9010 - Pure White / 9005 - Jet Black / 3004 - Purple Red / 3020 - Traffic Red / 5002 - Ultramarine Blue / 7016 - Anthracite Grey / 7022 - Umbra Grey
3,0 mm	5.000	1.500	White / Silver (SIGNI)

For other finishes and measures, please consult minimum order and availability.



TECHNICAL DATA

DIMENSIONAL SPECIFICATIONS	LARSON FR		
Total thickness (mm)	3	4	6
Aluminium Thickness (mm)	0,5	0,5	0,5
Panel weight (kg/m ²)	6,00	7,65	10,9
Standard Width (mm)	1.000 / 1.250 / 1.500		
Maximum / Minimum Width (mm)	1.650 / 900		
Maximum / Minimum Length (mm)	8.000 / 2.000		
Core	Mineral FR		
Tolerance Thickness (mm)	-0 / +0,2		
Tolerance Width (mm)	-0 / +2,5		
Tolerance Length (mm)	±10		

MECHANICAL SPECIFICATIONS	LARSON FR		
Moment of inertia (cm ⁴ /m)	0,115	0,307	0,758
Rigidity E ⁻¹ (KNcm ² /m)	810	2150	5310
Modulus of elasticity (N/mm ²)	15.707		
Ultimate tensile strength (N/mm ²)	43,26		
Elasticity limit (N/mm ²)	30,69		
Elongation (%)	5,62		
Audible reduction (dB)	(*)	31	(*)
Acoustic insulation (dB)	(*)	29,5	(*)
Thermal resistance (m ² K/w)	(*)	0,0126	(*)
Thermal conductivity K (w/mk)	(*)	0,317	(*)
Aluminium thermal expansion (mm/m)	2,3 mm/m Δ100°C		
Excellent performance in temp. (°C)	-50 < +80		

(*) Not calculated

ALUMINIUM SPECIFICATIONS	LARSON
Aluminium alloy	5005 UNE EN 573-3
Ultimate tensile strength R _m (N/mm ²)	130 < R _m < 165
Elasticity limit R _p (N/mm ²)	90 < R _{p0,2} < 155
Yield Strength A (%)	>7
Modulus of elasticity (N/mm ²)	70.000

PAINT SPECIFICATIONS	LARSON
	PVdF 70% kynar 500 2 layers with COASTAL PRIMER 31μ. PVdF 70% kynar 500 3 layers 37μ

REACTION TO FIRE TEST	LARSON FR
Spain	UNE EN 13501 Bs1d0
European Union	UNE EN 13501 Bs1d0
Austria	ONORM B 3800 Class B1, Tr1, Q1
Poland	NP-0905/06/ZM NRO
Czech Republic	CSN 730802 CSN 730804 CSN 730810 ISO 5658-4
Germany	DIN 4102-1 Class B1
Italy	ISO 5658-4 Class O
United Kingdom	UNE EN 13501 Bs1d0