

larcove[®]

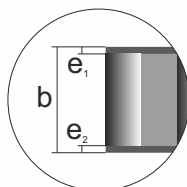
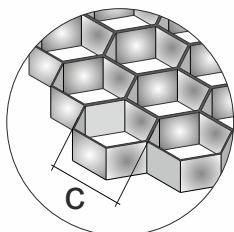
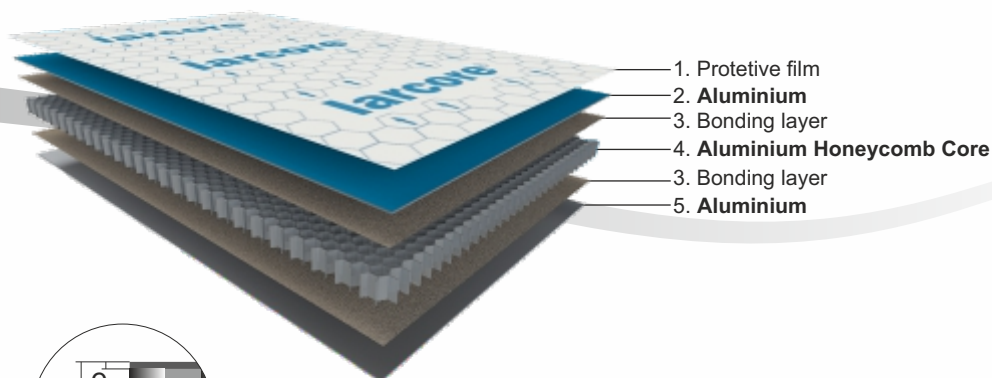
by Alucoil[®]

Aluminium Honeycomb Panels for Transport & Industry
Lightweight solutions for ships, trains, elevators, buses and aircrafts



Alucoil[®]

Grupo Alibérico



For industrial use of **larcore®** Aluminium Honeycomb panel in external or internal areas with high humidity concentration, the installation will ensure the water tightness of the **larcore®** in its whole

Composition

Through a proprietary continuous manufacturing process, **Alucoil®** manufactures its structural aluminum honeycomb panel **larcore®** to fit perfectly in numerous sectors such as marine, railway and industrial applications. It is an extremely lightweight and rigid panel which is fire proof, non-toxic, recyclable, insulating, and energy efficient.

After an intensive R&D effort, **Alucoil®** has managed to combine the natural qualities of the honeycomb structure with its industrial experience in the manufacturing of structural metal panels, obtaining a final product capable of integrated solutions across various end requirements.

Panel features

Total thickness "b" [mm]	5,5	6,0	10,0	15,0	20,0	25,0	30,0	40,0
Metal thickness "e ₁ " [mm]	0,5	1,0	1,0	1,0	1,0	1,0	1,0	1,0
Metal thickness "e ₂ " [mm]	0,5	0,5	0,5	1,0	1,0	1,0	1,0	1,0
Alloy	5754	5754	5754	5754	5754	5754	5754	5754
Panel weight [kg/m ²]	3,62	4,97	5,19	6,78	7,05	7,32	7,59	8,13
Moment of inertia (*) "I" [cm ⁴ /m]	0,63	0,79	3,16	9,99	18,06	28,81	30,16	83,51
Rigidity (*) "EI" [kNcm ² /m]	4390	5519	22169	69964	126466	201716	211227	584560
Section modulus (*) [cm ³ /m]	2,28	2,63	4,92	13,32	18,06	23,05	20,12	41,75
Sound reduction "R _w " [dB]	18,75	19,0	20,0	21,25	22,5	23,75	25	27,5
Acoustic isolation "R _A " [dBA]	19,5	19,6	20,3	21,18	22,16	23,21	24,3	26,15
Thermal resistance "R" [m ² K/W]	0,006	0,0063	0,0074	0,0084	0,0089	0,0093	0,0099	0,011
Standard width	1000 / 1250 / 1500 / 2000 [mm]							
Min / max length	2000 - 14000 [mm]							
Cell size "C"	3/8" / 9,52mm							
Thickness foil	70 [μ]							

(*) Value measured in the transversal axis

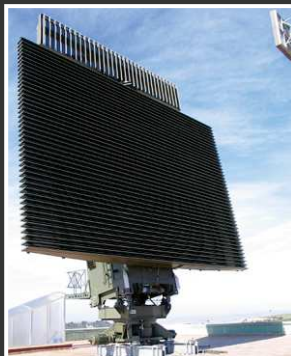
Core characteristics

Aluminium alloy	3005 [UNE EN 573-3]
Compression resistance	2,00 [MPa]
Core density	54 [kg/m ³]
Protective primer	OK

Finishes

Coated surface	Polyester [25(-4μ/10μ)] Primer [5±2μ] Film PVC 100-200 [μ]
----------------	--

- Extended technical data sheet under request -



CERTIFICATES MARINE

- 1.- MED approval – IMO Modules B+D
for surface materials and floor coverings with low flame-spread characteristics (veneers and floorings)
- 2.- IMO FTPC Part 1 – Class C non-combustible
- 3.- RS type approval – Russian Maritime Register of Shipping
- 4.- Transport Canada approval
- 5.- Us Coast Guard approval

FIRE TEST MARINE

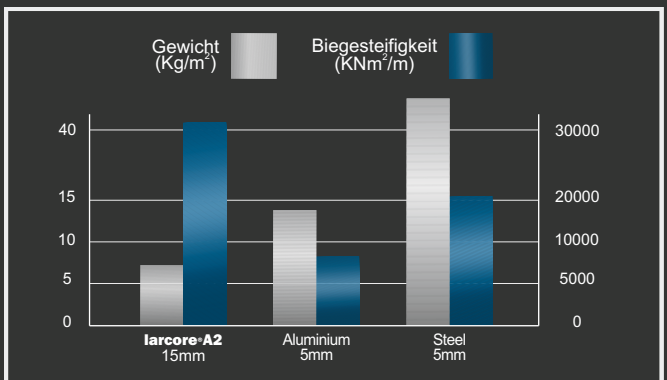
- 1.- IMO FTPC Part 1-2-5 (Non-combustibility aluminium honeycomb core, smoke density and toxicity and surface flammability)

FIRE TEST RAILWAYS

- 1.- EUROPE [EN 45545-2:2013]
R1-2-3-6-7-8-9-10-11-12-17-19-21 for HL1, HL2 and HL3
- 2.- SPAIN [UNE EN 23721-27] M1
- 3.- FRANCE [NF P 92501] M0 - [NF F 16-101] F1

Transport und Industrie

Die neuen Projekte in Schiffsinnenausbau, Schienenfahrzeug-, Aufzug- und Fahrzeugbau fordern die Verwendung von leichteren, stärkeren, steiferen und energieeffizienteren Materialien an. **Iarcore®** erreicht eine perfekte Balance zwischen Gewicht, Steifigkeit und Brandverhalten und ist das ideale Material für die Herstellung von Bauteilen für die Industrie.



Lightweight solutions for ships, trains, elevators, buses and aircrafts
Applications: wall claddings, false ceilings, floating floors and assemblies
lighter, stronger and more energy efficient thanks to **larcore**® aluminium honeycomb panels



www.alucoil.com

Polígono Industrial de Bayas
C/ Ircio. Parcelas R72-77
09200 Miranda de Ebro, Burgos
SPAIN
Tel.: +34 947 333 320 Fax: +34 947 324 913
info@alucoil.com


Alucoil®
Grupo Alibérico