ALUCOBOND®

Vision Materialized

Product Information

Whatever shape, height or design
your building, there is an ALUCOBOND®
panel to suit your needs

ALUCOBOND® 40 years of excellence

www.alucobond.com.au

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Product Information

ALUCOBOND® is a composite panel consisting of two aluminium cover sheets (0.5mm thick) and a polyethylene core.

Product Range

Thickness : Standard 4mm For special application 3mm, 6mm
Standard Width : 1000, 1250, 1500, 1575mm
Special Width : min 850mm max 1575mm
Standard Length : 2500, 3200, 4000mm
Special Length : to customer's specification max 8000mm

Available stock in Australia
For available colours and sheet sizes refer to our Standard Range.

Other surfaces on request:
Both sides mill-finish, both sides stove-lacquered & both sides clear anodised

Dimensional tolerances (rounded)
Thickness : mill finish resp. stove lacquered 0.2mm
Width : -0/+4mm
Length : 1000-4000mm -0/+6mm 4001-8000mm -0/+12mm

Due to the production process, a displacement of the cover sheets of maximum 2mm to one side may occur along the longer sides of the panels. Edges need to be trimmed unless returning.

Mechanical Properties

The composite material is rigid, resistant to blows, breakage and pressure and has high bending, buckling and breaking strengths.

The strength is determined by the 0.5mm thick aluminium cover sheets in Peraluman-100, EN AW-5005 (AlMgI), acc to EN 485-2.

Tensile strength : Rm 8 130N/mm²
0.2% proof stress : Rp 0.2 8 90N/mm²
Elongation : A5.0 8 5%
Modules of elasticity : E = 70000N/mm²

Since the cover sheets determine the bending strength, the core material can be disregarded when calculating the bending tension.

Alucobond Architectural can provide structural analysis using computer calculations based on the Finite Element Method.

Panel Thickness	**3mm**	**4mm**	**6mm**
Thickness Weight (kg/m²)	4.5	5.5	7.3
Acoustical Properties			
Sound insulation (acc. TO DIN 4109)			
Average airborne transmission loss R Frequency range 100-3200Hz)	24 dB	25 dB	26 dB

Sound absorption (acc. To EN20354)
Sound absorption factor as Average = 0.05 for all panel thicknesses.

Vibration dampening (acc. To EN ISO 6721)

Loss factor d (frequency 200Hz)	0.0072	0.0087	0.0138

The loss factor of ALUCOBOND® is about 6 times better than that of a solid aluminium sheet.

Thermal Insulating Properties

Due to its relatively thin and homogeneous core ALUCOBOND® is not an insulation panel.

Thermal expansion
This is effectively controlled by the aluminium cover sheets. Actual linear expansion 2.4mm/m/100 C.

Temperature resistance
From -50 C to + 80 C.

Fire Behaviour

The non-combustible aluminium cover sheets protect the plastic core.

Australia
AS 1530, Part 3 - Indicative results:
Ignitability : Index 0
Heat evolved : Index 0
Spread of flame : Index 0
Smoke developed : Index 0

United States of America:
ASTM E84:
Flame spread : 0
Fuel contribution : 0
Smoke density : 0
UBC 17-5 : meets test criteria

Germany
DIN 4102 Class B2

United Kingdom
BS 476, Part 6 index 0 } Class 0
BS 476, Part 7 Class 1 } (Bldg.Regul.)

Surfaces

Stove-lacquering
With ALUCOBOND® stove-lacquering, customers can choose from a wide range of standard and metallic colours or select any type of special individual colour. High quality lacquering systems with optimum resistance to weather and industrial pollution are used exclusively. These properties are achieved by using fluorinated bonding agents; for standard finishes PVF2-based top lacquers are used. Special surface effects are achieved on request by using duroplastic fluoropolymers which are virtually as weather resistant as PVF2 lacquering systems.

Anodising

DIN 17611 standards determine the criteria for anodised finishes (E6/EVI), minimum thickness of the anodic layer 20 microns, corresponding to BS 1615: 1972 AA20.

Protective peel-off foil

Unless otherwise specified ALUCOBOND® is supplied with a factory applied peel-off foil for protection of the coated surface. Removal of the protective foil is recommended as soon as possible after installation. In hot weather conditions, some residual glue may stick to the stove-lacquered panel surface. Application of PVC type tapes to protective foil is not recommended.

Storage

Protect pallets during storage against rain, penetration of moisture or condensation

Pile pallets in stacks one on top of the other (do not place the panels in an upright position); stacks must not comprise more than 6 pallets of identical size. Avoid storage for a period of more than 6 months.

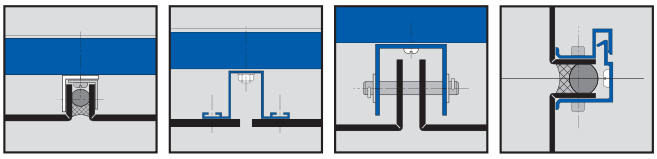
Cleaning & Maintenance

The frequency of cleaning depends largely on the design, the location of the building and the degree of soiling. For further information please contact your nearest ALUCOBOND® office.

Cleaning agents

Please do not use any powerful alkaline cleaning agents such as potassium hydroxide, sodium carbonate or caustic soda, or any powerful acidic products or heavily abrasive scouring agents such as Vim, Ajax or lacquer-dissolving cleaning agents.

EXAMPLES OF FIXING METHODS



FIXED CASSETTE SINGLE TOP HAT SUSPENDED CASSETTE ALUCOFIX

ALUCOBOND® ARCHITECTURAL

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HVG HALIFAX VOGEL GROUP

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