

ALUCOBOND ALUCORE



News & Press Office

Products

References

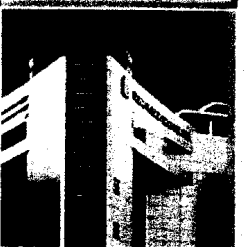
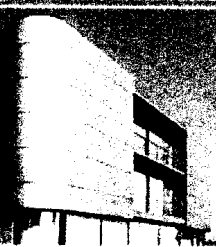
Service Center

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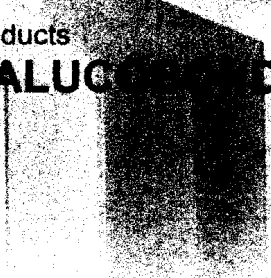


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Products

ALUCOBOND®



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Handling

ALUCOBOND® is a composite panel consisting of two aluminium cover sheets and a plastic core. The superb properties of this material boost one's inspiration and offer architecture a whole new range of solutions - whether your project is a private home, a public building, a corporate headquarter or offices, or a trading or industrial complex - or if your organisation wants to create a new image-building Corporate Design - whether for petrol stations, car showrooms, banks or supermarkets.



Advantages

Characteristics

- Low weight, high rigidity, perfect flatness
- Large variety of colours
- Weatherproof
- Vibration-damping
- Can easily be folded and bent
- Large panel sizes, fast installation, pre-fabricated panels

Advantages

- Low cost for substructures and fasteners, Smooth handling on the site
- Unlimited planning and design
- Supplied ready to install
- No additional sound-damping needed
- Simple processing using conventional tools
- Short construction times, adherence to schedules, low cost

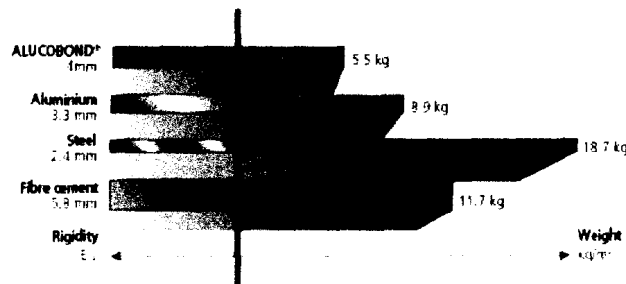
ALUCOBOND® perfectly adapts to a building's contours, flowing elements. It is the combination of formability, flatness, stability and weather resistance that characterizes this material. Due to its composite structure, **ALUCOBOND®** can take on many different shapes. Though both stable and flat **ALUCOBOND®** can be perfectly formed without any loss to its rigidity.



Lightness / Rigidity

The composite structure of **ALUCOBOND®** results in an impressive strength-to-weight ratio, even when comparing large panel sizes. Despite its low weight, which makes **ALUCOBOND®** easy to transport and handle in the factory and on site, its rigidity and high strength make the panels keep their shape and remain flat, even when exposed to extreme temperature changes.

Comparison of thickness and weight of panels with equal rigidity



ALUCOBOND® compared with solid aluminium
 Required thickness and actual weights of panels with same rigidity

Rigidity (E J)	ALUCOBOND®			Aluminium	
	Section modulus	Thickness	Weight	Thickness	Weight
1250 kN cm ² /m	1.25 cm ³ /m	3 mm	4.5 kg/m ²	2.7 mm	7.3 kg/m ²
2400 kN cm ² /m	1.75 cm ³ /m	4 mm	5.5 kg/m ²	3.3 mm	8.9 kg/m ²

Sustainability

Environment, Safety and Quality

Today 3A Composites is recognized worldwide as one of the leading companies in the field of sustainability - in fact not only within its own branch but also among other diversified producers and raw material processing companies throughout the world. 3A Composites's commitment to sustainability enables the company to make decisions that create the highest economic, social and ecological value, by taking the requirements of all the relevant groups into consideration.

The company commits to continuous self improvement programs for environmental protection, many of which exceed government regulations. 3A Composites continues to serve as a global leader in this field.

During the life cycle of ALUCOBOND® composite panels, no substances containing CFC are set free at any time. The core material does not contain any nitrogen, chlorine or sulphur. Therefore, selecting

ALUCOBOND® for projects which require environmental-friendly materials is literally a natural choice.

Life Cycle



During decades of use in a rear-ventilated cladding system, ALUCOBOND® protects the building from weathering and the harmful effects caused by industrial and environmental pollution.

An external cladding system using ALUCOBOND® acts as a barrier against solar radiation. The ventilated space between the ALUCOBOND® panels and the wall or the thermal insulation reduces the heat transmission.

The rear-ventilated cladding system using ALUCOBOND®, protects the wall of the building from high and rapid temperature changes. Moisture can pass through the wall. The building structure keeps dry.

Advantages

- Lower maintenance costs
- Long-term preservation of the building structure
- In winter: savings in heating cost
- In summer: savings in air-conditioning cost
- Reduction of thermal expansion
- Reduction in crack formation

Recycling

ALUCOBOND® is fully recyclable, i.e. both the core material and the aluminium cover sheets are recycled and can be used in the production of new material.

