

# ALUCOBOND® ALUCOBOND® plus



1969



1978



1984



years  
of excellence



1996



1990

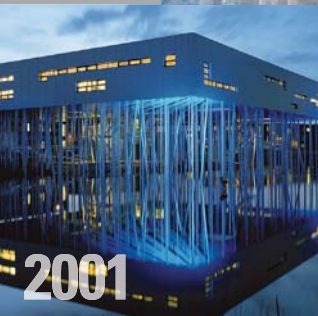


## Pioneer & World Leader in Aluminium Composite Materials

Alcan Composites' ALUCOBOND® celebrates its 40th anniversary in 2009. In the years since its inception, the company has gained a solid reputation as the world leading manufacturer of aluminium composite materials by initiating creativity along with cost efficiency and design solutions. The company has been able to provide its customers with high quality products and superior service.



1998



2001



2008



THE WORLD LEADER IN ALUMINIUM COMPOSITE MATERIALS



# ALUCOBOND® ALUCOBOND® plus



## Product Information

ALUCOBOND® aluminium composite panels consist of a polyethylene core sandwiched between two sheets of aluminium.

ALUCOBOND®plus aluminium composite panels consist of a mineral filled core sandwiched between two sheets of aluminium.

### Available Sizes

ALUCOBOND®		ALUCOBOND®plus	
Thickness	Standard: 4 mm For special application 3 mm, 6 mm	Thickness	Standard: 4 mm For special application 3 mm
Width	Standard: 1000, 1250, 1500 mm Special: min. 850 mm max. 1575 mm	Width	Standard: 1250, 1500 mm Special: min. 1000 mm max. 1575 mm
Length	To customer's specification max. 8000 mm	Length	To customer's specification max. 8000 mm

### Technical Data

Panel-Thickness:		3mm	4mm	6mm
Thickness of Aluminium Cover Sheets	[mm]	0.50	0.50	0.50
Weight ALUCOBOND®	[kg/m <sup>2</sup> ]	4.5	5.5	7.3
ALUCOBOND®plus	[kg/m <sup>2</sup> ]	6.0	7.6	N.A.

### Technical Properties:

Section Modulus	Z	[cm <sup>3</sup> /m]	1.25	1.75	2.75
Rigidity	EI	[kNcm <sup>2</sup> /m]	1250	2400	5900
Alloy	3xxx or 5xxx series				
Temperature Resistance	-50.C to +80.C				
Linear Thermal Expansion	2.4 mm/m at 100.C C temperature difference				

### Acoustical Properties:

Sound Absorption Factor	$\alpha_s$		0.05	0.05	0.05
Airborne Sound Insulation Index	$R_w$	[dB]	25	26	27
Loss Factor	d		0.0072	0.0087	0.0138

### Fire Behaviour

#### ALUCOBOND®

Country	Test according to ...	Results / Classification
Australia	AS1530, part 3 Ignitability Heat evolved Spread of flame Smoke developed	Indicative results: Index 0 Index 0 Index 0 Index 0
Malaysia	Approved for usage for Buildings less than 18 metres high. Approved for all external cladding applications as per BS 476, Part 6 & Part 7	

#### ALUCOBOND®plus

ALUCOBOND®plus has been developed exclusively to meet Asian and international standards for fire regulations in architectural applications.

Country	Test according to ...	Results / Classification
EU	EN 13501-1	Class B, s1, d0
British Standard	BS 476, Part 6 BS 476, Part 7	Index I≤12 I≤6 Class 1
United Kingdom	meets therefore Class 0 (National Building Regulations)	
China	GB8624-2006	Class B s1, d0, t0
Malaysia	Approved for external wall cladding for any type of building without restriction in height	
Singapore	Approved for external wall cladding for any type of building without restriction in height (test according to NFPA 285) PSB tested, approved and listed	
USA	UBC 8-1 (ASTM E84) NFPA 285 & UBC 26-9 (Intermediate Scale Multi-story Test)	Class I passed

For more details in the correct application and possible limitations of these systems request for a full set of ALUCOBOND® data sheets or consult our nearest technical advisor for advice.

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### Surface Finishes

#### Fluorocarbon (PVDF) coating

The coating is applied to the aluminium coil prior to lamination into a composite panel, using a continuous coil coating process which is based on the latest technology. The multiple layers of coating are individually baked at temperatures between 200-260°C. The quality of the coating is tested according to latest standards.

Fluorocarbon (PVDF) coating system combines good formability with excellent surface durability. They are extremely resistant against weathering, strong solar radiation and pollution attack.

For exterior application, ALUCOBOND® is available in many specially selected standard colours (solid and metallic), naturAL, timberAL, anodised and spectra. For details, refer to the ALUCOBOND® colour charts. Custom colours are available on request.

#### Protective Peel-off foil

The finished surface is factory protected with a self-adhesive peel-off foil, tested to withstand at least 6 months exposure to local weather condition without losing the original peel-off characteristic or causing stains or other damages.

#### Flatness

With a standard gloss of approx. 30-40% acc. to Gardner Scale, the panel surface taken individually shall not have any irregularities such as oil canning, waves, buckles and other imperfections when viewed from any position but not less than at an angle of 15 degrees to the true plane of the panel, with natural lighting of incident of not less than the same angle.

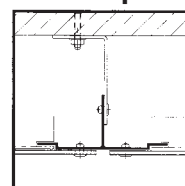
#### Storage

ALUCOBOND® should be stored on pallets or shelves. The stacking height should not exceed 2m. Ensure dry storage.

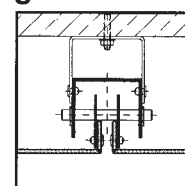
#### Cleaning and maintenance

The frequency of cleaning and the choice of a suitable cleaning agent depends largely on the location of the building and the condition of the panel surface. The cleaning can be carried out with water and sponge or a soft brush. In case of more severe soiling add a neutral detergent.

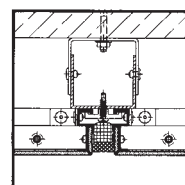
### Examples of Fixing Methods



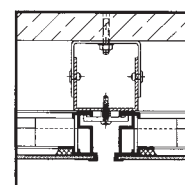
riveted system



tray panel suspended on pins



tray panel screw fixed



edge grip system