

# ALUCOBOND®

## AT A GLANCE

All you need to know about the original aluminium composite material



# PRODUCT RANGE

## ALUCOBOND® PLUS

Thickness: 3/4 mm (6 mm on request)

Width [mm]	1000	1250	1500	1575	1750
Length [mm]	2000 – 6800	2000 – 6800	2000 – 6800	2000 – 6800	2000 – 6800
<b>Solid &amp; Metallic Colours</b>	●	●	●	●	○
<b>Spectra &amp; Sparkling Colours</b>	○	●	●	●	--
<b>Anodized Look</b>	○	●	●	○	--
<b>NaturAL</b>	--	●	●	--	--
<b>ALUCOBOND® legno – premium wood</b>	○	●	●	--	--
<b>Vintage</b>	○	●	●	--	--
<b>Façade design – individual décor</b>	○	●	●	--	--
<b>Urban</b>	○	●	●	--	--
<b>Terra &amp; Rocca</b>	--	●	●	--	--
<b>Anodized*</b>	--	●	○	--	--
<b>Mill Finish</b>	●	●	●	--	--

## ALUCOBOND® A2

Thickness: 3/4 mm

Width [mm]	1000	1250	1500	1575	1650
Length [mm]	2000 – 6800	2000 – 6800	2000 – 6800	2000 – 6800	2000 – 6800
<b>Solid &amp; Metallic Colours</b>	--	●	●	--	○
<b>Spectra &amp; Sparkling Colours</b>	--	●	●	--	--
<b>Anodized Look</b>	--	●	●	--	○
<b>NaturAL**</b>	--	●	●	--	--
<b>ALUCOBOND® legno – premium wood</b>	--	●	●	--	--
<b>Vintage</b>	--	●	●	--	--
<b>Façade design – individual décor</b>	--	●	●	--	--
<b>Urban</b>	--	●	●	--	--
<b>Terra &amp; Rocca</b>	--	●	●	--	--
<b>Mill Finish</b>	--	●	●	--	--

○ on request

\* Anodized according to DIN 17611. All anodized ALUCOBOND® composite panels have contact lines (about 25 mm width) on their short sides. For panel lengths of more than 3500 mm, the composite panels have contact lines (about 20 mm width) on their long sides. On the back, there are contact lines of about 35 mm on the short and the long sides of the panels. Maximum panel length 6500 mm. Please take this into consideration when dimensioning the panels.

\*\* Exception: ALUCOBOND® naturAL Reflect is only available in ALUCOBOND® PLUS in width 1250 mm.

### DIMENSIONAL TOLERANCES (STANDARD)

Due to manufacturing, a displacement of the cover sheets sidewise at the panel edges up to 2 mm is possible.

Thickness: ± 0,2 mm (mill-finish | stove lacquered | anodized)

Width: - 0 / + 4 mm

Lengths: 2000 – 4000 mm; - 0 / + 6 mm

Lengths: 4001 – 6800 mm; - 0 / + 10 mm

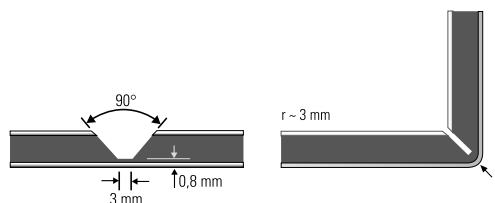
### COLOURS AND SURFACES

More colours and surfaces are available upon request. They are subject to our minimum quantities.

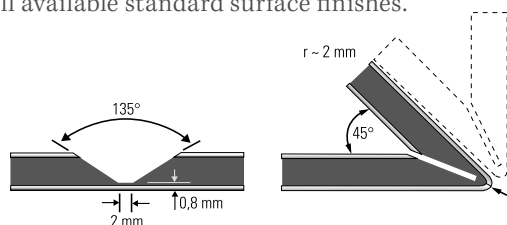
## ROUTING & FOLDING

Thanks to this very simple processing method ALUCOBOND® composite panels can be folded manually, following exactly the line of the routed groove. To do so, grooves are routed on the reverse side of the ALUCOBOND® panel. The shape of the groove determines the bending radius. The routing can be

done using a vertical panel saw equipped with ALUCOBOND® grooving accessories, a CNC machining centre, a portable sheet milling machine or a hand router. The routing and folding method can be used for ALUCOBOND® composite panels with all available standard surface finishes.



90° V-groove for folds up to 90°

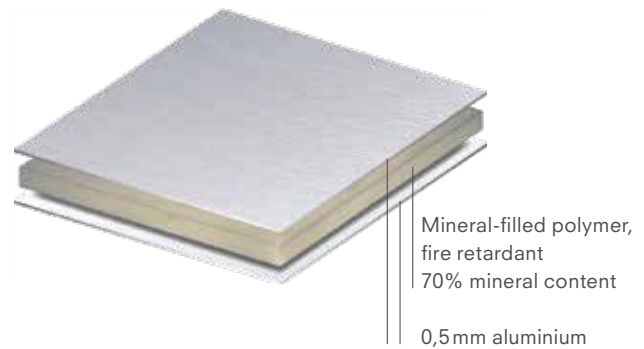


135° V-groove for folds up to 135°

# THE PRODUCT

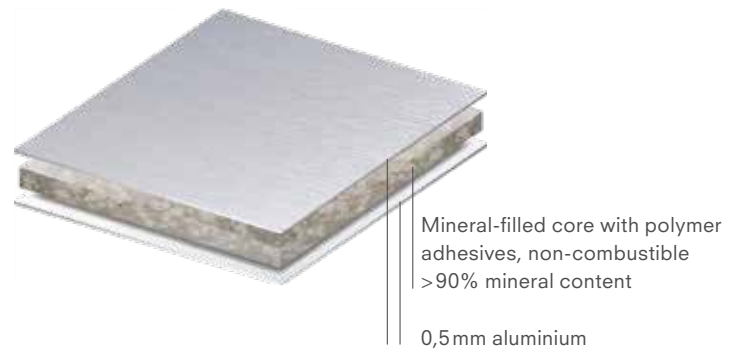
## ALUCOBOND® PLUS

ALUCOBOND® PLUS has been developed exclusively for the more stringent requirements of the fire prevention regulations in architectural products. Thanks to its mineral-filled, core ALUCOBOND® PLUS meets the stricter requirements of the fire classifications. It is hardly flammable and offers all the proven product properties of the ALUCOBOND® family, such as flatness, formability, resistance to weather and easy processing.



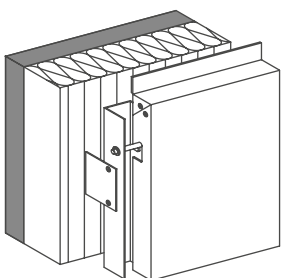
## ALUCOBOND® A2

ALUCOBOND® A2 is our non-combustible aluminium composite panel used in architecture that fulfills the respective standards worldwide. Thanks to its mineral-filled core, ALUCOBOND® A2 meets the strict requirements of the fire regulations and enhances the possibilities for the concept and design of buildings. ALUCOBOND® A2, just like all the products of the ALUCOBOND® family, allows simple processing, is impact-resistant, break-proof and weatherproof and, above all, non-combustible.

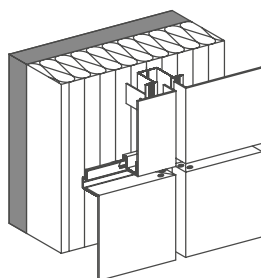


# EXAMPLES OF FIXING METHODS

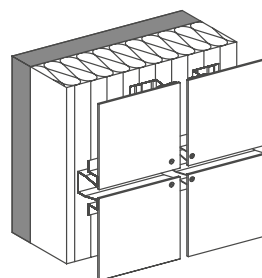
TRAY PANELS  
suspended on stainless steel bolts  
for vertical panel layout



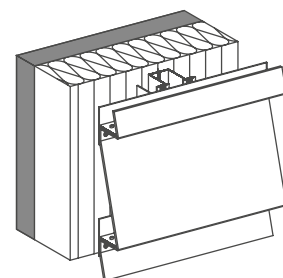
TRAY PANELS SZ 20  
tongue and groove design /  
horizontal panel layout



RIVETED / SCREWED  
on omega carrier section for vertical  
panel layout



RIVETED WEATHER BOARDING  
on aluminium substructure



ALUCOBOND® composite panels can also be used with wooden substructure. Canopies and soffits can be realized with ALUCOBOND® as well. For more technical information, please contact our technical service.

# LIGHTNESS AND TRANSPARENCY

BUS STATION, GERMANY – BLUNCK+MORGEN ARCHITECTS



Poppenbüttel Bus Station's floating wing-shaped roof, made of ALUCOBOND® PLUS pure white. | Picture: archimages

The design concept for the new public transport interchange involved creating a light, floating sculpture. The 1,800-square-metre ALUCOBOND® roof constitutes the most eye-catching design feature at the modernised bus station.

A central pedestrian bridge connects the new bus station in Hamburg Poppenbüttel with the rapid transit rail link and the park+ride car park.

The striking three-dimensional ALUCOBOND® cladding is instantly recognisable and has transformed the waiting area into an architectural landmark in the town centre. The Hamburg Architecture and Engineering Association (AIV) awarded the project the title "Building of the Year 2009". The jury was particularly impressed by the lightness and transparency of the new construction.



The foyer becomes a lively and dynamic space.



The ALUCOBOND® PLUS composite panel façade in naturAL Brushed gives the building its distinctive character. | Pictures: Duccio Malagamba

# INDIVIDUAL DESIGN FREEDOM

LIMMAT TOWER, SWITZERLAND – HUGGENBERGERFRIES ARCHITEKTEN AG



Depending on the light, the lustrous ALUCOBOND® PLUS anodized look C31 façade in warm, neutral tones changes colour subtly. | Picture: Florian Licht

**Dietikon's new district, Limmatfeld, is located at the heart of dynamic Limmattal. The 80-metre high Limmat Tower is the most distinctive feature.**

This monolithic structure is conspicuously different from the normal glass-fronted high-rise buildings. It is more than just an office block; it is also a residential building. The architect, Lukas Huggenberger, explains how "the tower creates a central point for Limmatfeld in the way a church used to do in a medieval town." The striking façade tapers upwards, meaning that although the base is massive, the upper part of the building becomes increasingly slender before it finally appears to melt away into the sky at the very top. Recesses modulate the volume of the high-rise building and the ALUCOBOND® façade is defined and elegantly enhanced by its structure.

# ARCHITECTURE AS A CREATIVE RESONANCE CHAMBER

HOUSE OF MUSIC, DENMARK – COOP HIMMELB(L)AU



**Inside the building, the auditorium's sinuous shapes and curves are in strong contrast to the austere, cubic external appearance. Concrete and ALUCOBOND® naturAL Brushed establish material continuity between the exterior and interior.**

Viennese architecture office, Coop Himmelb(l)au designed the House of Music as a fusion between school and a concert hall, using an open-plan design to promote interaction between audiences, artists, students and educators. According to Wolf. D. Prix, Design Principal and CEO of Coop Himmelb(l)au, "The concept behind the building is evident from its outer shape: the school embraces the concert hall. Our architecture acts just like an instrument's resonance chamber by magnifying the creativity within the House of Music."

A concert hall seating 1,300 forms the core of the complex and is surrounded by a U-shaped block containing rehearsal and teaching rooms. A spacious foyer with a multi-storey glazed frontage links these rooms and overlooks the adjoining Cultural Plaza and nearby fjord. Another three rooms of varying sizes are located under the foyer and offer additional space: the Intimate, the Rhythmic and the Classical hall. Students and visitors can look into the concert hall through several windows and watch music in the making, both during rehearsals and concerts. In the stalls and on the curved upper circles, the seats are placed to ensure the best possible acoustics and view of the stage.

# FIRE CLASSIFICATION

ALUCOBOND® PLUS			ALUCOBOND® A2	
Country	Test accord. to...	Classification	Test accord. to...	Classification
EU	EN 13501-1	Class B-s1, d0	EN 13501-1	Class A2-s1, d0
Germany	EN 1187 (method 1)/ DIN 4102-7	passed	EN 1187 (method 1)/ DIN 4102-7	passed
Great Britain England/Wales / Scotland	BR 135	met the performance criteria	BR 135	meets requirements of LUL
Switzerland	VKF	RF2	VKF	RF1
Poland	PN-90/B-02867	NRO	EN 13501-1	Class A2-s1, d0
Russia	GOST 30244-94 GOST 30402-95 GOST 12.1.044-89 GOST 12.1.044-89	G1 (combustibility) W1 (flammability) D1 (smoke development) T1 (toxicity)	GOST 30244-94 GOST 30402-95 GOST 12.1.044-89 GOST 12.1.044-89	G1 (combustibility) W1 (flammability) D1 (smoke development) T1 (toxicity)
Australia	AS ISO 9705  AS 1530.3 Indices  EN 13501-1	Group 1 material SMOGRA 1.385 m2/s2 0 (ignitibility) 0 (flame spread) 0 (heat evolved) 0-1 (smoke development) B-s1, d0	AS ISO 9705  AS 1530.3 Indices  EN 13501-1	Group 1 material SMOGRA 0.630 m2/s2 0 (ignitibility) 0 (flame spread) 0 (heat evolved) 0-1 (smoke development) A2-s1, d0

	Large fire testing	Classification	Large fire testing	Classification
Austria	ÖNORM B 3800-5	passed	ÖNORM B 3800-5	passed
France	Lepir 2	passed	Lepir 2	passed
Hungary	MSZ 14800-6	passed	MSZ 14800-6	passed
Great Britain	BS 8414 part 1 & 2	passed	BS 8414 part 1 & 2	passed
Poland	According to ITB guidelines	passed	According to ITB guidelines	passed
Russia	GOST 31251	passed	GOST 31251	passed

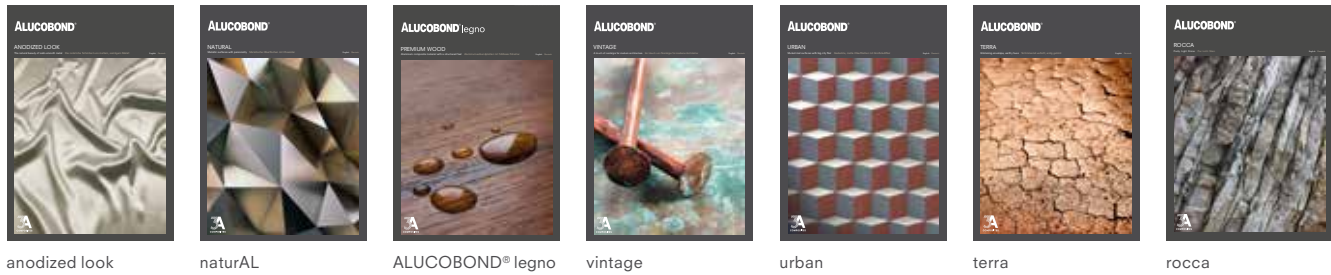
## APPROVALS

Country	Approval	Name	Approval authority
Czech Republic	c. S-216/C5a/2019/0061	ALUCOBOND®	PAVUS a.s., Prague
France	n° 2/16-1730 n° 2/16-1731	ALUCOBOND® Riveté ALUCOBOND® Cassettes	CSTB, Paris CSTB, Paris
Germany	Z-10.3-774	ALUCOBOND® Façade system	DIBt, Berlin
Great Britain	No 05/4214	ALUCOBOND® Cladding System	British Board of Agrément (BBA), Garston
Poland	ITB-KOT-2017/0044 wydanie 1	ALUCOBOND®	Instytut Techniki Budowlanej, Warsaw
Russia	TC No 4922-16	ALUCOBOND® Panels and cassettes elements	ФЦС, Moscow
Slovakia	SK-TP-16/0143	ALUCOBOND®	TSUS, Bratislava
Spain	No 639/19	Sistema de revestimiento de exterior fachadas ventiladas	Instituto Eduardo Torroja, Madrid
Hungary	A-171/2015	ALUCOBOND® composite panel	EMI
Romania	001SC-04/729-2019	Aluminium Composites Panel ALUCOBOND®	
Australia	CM 30070 Rev 2 CM 30108 Rev 1	Certificate of Conformity – ALUCOBOND® PLUS Certificate of Conformity – ALUCOBOND® A2	Global-Mark Pty Ltd



# USEFUL INFORMATION

In addition to our Solid & Metallic and Spectra & Sparkling colours we offer the following special surfaces:



## SURFACES

ALUCOBOND® surfaces are coated using exclusively high-quality and eco-friendly lacquer systems. They are highly weather resistant and resistant to industrial emissions. These properties are achieved using UV-resistant bonding agents. For top-level architecture in exterior applications, we use high-grade polymer coating systems, e.g. PVDF and FEVE lacquers, which have proved ideal for architectural applications. These surface coatings are applied by coil-coating technology using a continuous coating and curing process. The quality of the coating is tested according to standards established by E.C.C.A. (European Coil Coating Association).

## INSTALLATION

To avoid possible reflection differences (except for solid colours), it is essential to install the panels in the same direction as marked on the protective peel-off-foil. Colour variations may occur between panels originating from different production batches. To ensure colour consistency, the total requirement for a project should be placed in one order.

Make sure to remove the protective foil as soon as possible after installation as prolonged exposure to the elements could make the foil difficult to remove. When stacking the panels, nothing should be placed in between them, as this could produce marks on the panels. It is recommended to only stack pallets of identical size should, with a maximum of 6 pallets stacked on top of each other.

## WARRANTY

ALUCOBOND® stands for high quality and longevity. Warranties according to the product specification and approved field of application can be obtained upon request.

## ENVIRONMENT, HEALTH AND SAFETY

For 3A Composites, effective, continuous environmental protection is a top priority. It is of utmost importance to preserve our natural resources for future generations. 3A Composites is committed to implementing its own continual improvements in environmental protection, measures which go above and beyond government regulations. 3A Composites was one of the first companies to develop its own environmental management system, which is regularly audited by independent experts. Successful certification according to EN ISO 14001 and EN ISO 50001 is clear evidence of our commitment to the environment.

Our ALUCOBOND® panels, 100% manufactured in Singen, Germany, only contain high quality, unmixed raw materials, such as 5005 A alloy aluminium coils.

## RECYCLING

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

## SUSTAINABILITY

Environmental Product Declarations (EPDs) are considered to provide the most comprehensive and transparent environmental data about construction products. In addition, the task of EPD evaluation is entrusted to independent experts. The EPD for ALUCOBOND® composite panels contains all relevant data and is available at [www.alucobond.com](http://www.alucobond.com).



Next & Beyond.  
**ALUCOBOND®**



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