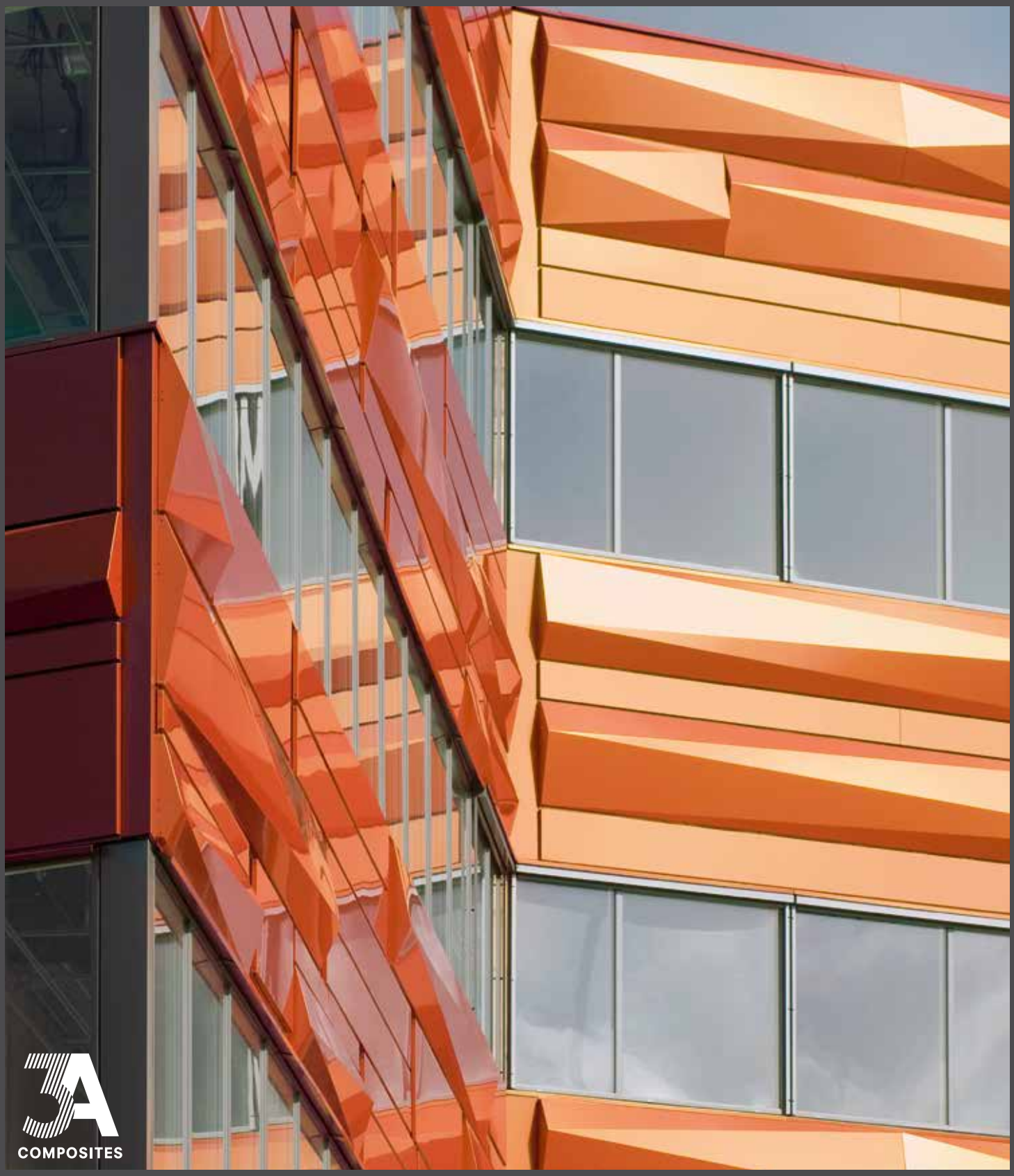
ALUCOBOND®

AT A GLANCE

All you need to know about the original aluminium composite material



PRODUCT RANGE

ALUCOBOND® / 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
Solid Colours	●	●	●	●	○
Metallic Colours	●	●	●	●	○
Spectra & Sparkling Colours	●	●	●	●	--
NaturAL	--	●	○	--	--
Ligno	○	●	●	--	--
Anodized Look	●	●	●	○	--
ALUCOBOND® design	○	●	●	--	--
Urban	○	●	●	--	--
Anodized*	--	●	○	--	--
Mill Finish	●	●	●	--	--

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
Solid Colours	--	●	●	--	○
Metallic Colours	--	●	●	--	○
Spectra & Sparkling Colours	--	●	●	--	--
NaturAL**	--	●	○	--	--
Ligno	--	●	●	--	--
Anodized Look	--	●	●	--	--
ALUCOBOND® design	--	●	●	--	--
Urban	--	●	●	--	--
Mill Finish	--	●	●	--	--

○ 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.

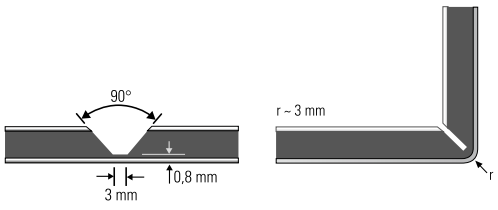
DIMENSIONAL TOLERANCES
Due to manufacturing, a displacement of the cover sheets sidewise at the panel edges up to 2 mm is possible.
Thickness: ± 0,2 mm (mill-finish | stove lacquered | anodized)
Width: - 0 / + 4 mm
Lengths: 1000 – 4000 mm; - 0 / + 6 mm
Lengths: 4001 – 8000 mm; - 0 / + 10 mm

DIMENSIONS
Standard dimensions are 4 x 1250 x 3200 mm. Other dimensions are available on request. We are pleased to provide advice for the choice of available surfaces and panel dimensions.

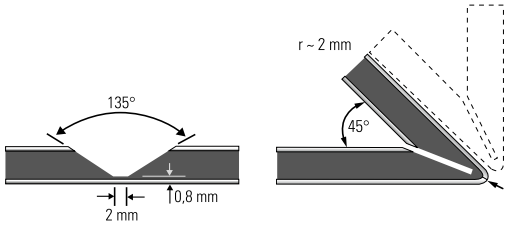
COLOURS AND SURFACES
More colours and surfaces are available upon request.

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°

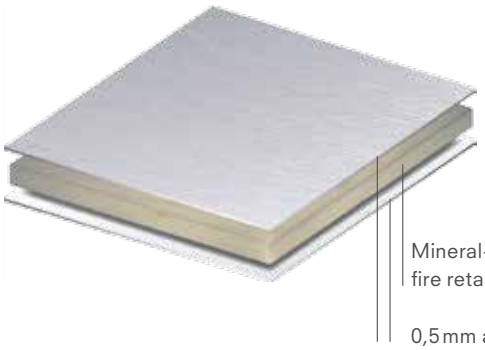


135° V-groove for folds up to 135°

THE PRODUCT

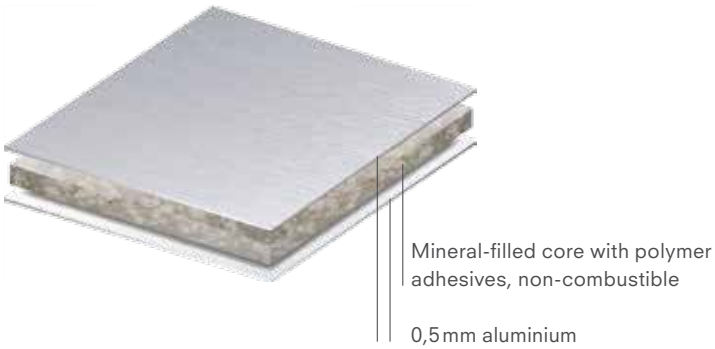
ALUCOBOND® plus

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 inflammable and offers all the proven product properties of the ALUCOBOND® family, such as flatness, formability, resistance to weather and easy processing.



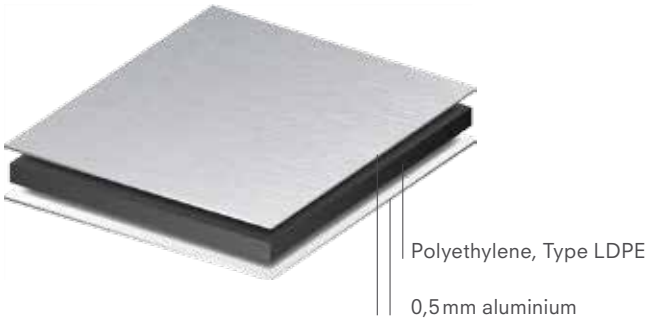
ALUCOBOND® A2

ALUCOBOND® A2 is the only 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.



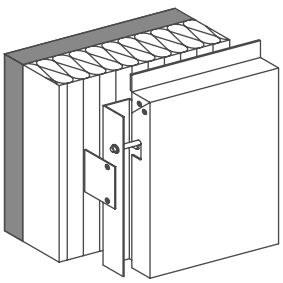
ALUCOBOND®

ALUCOBOND® is a rigid, yet flexible façade material for architectural uses. ALUCOBOND® is extremely weatherproof, impact-resistant and break-proof, vibration-damping, and ensures easy and fast installation. ALUCOBOND® is produced with various core thicknesses in a continuous lamination process and then customized regarding dimensions.

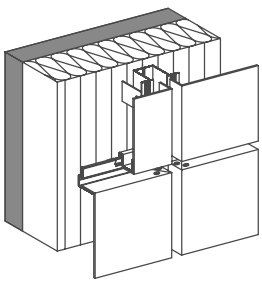


EXAMPLES OF FIXING METHODS

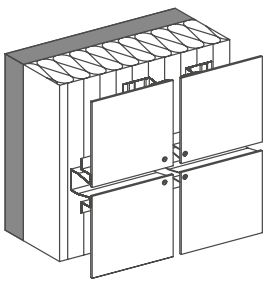
TRAY PANELS
suspended on stainless steel bolts
for vertical panel layout



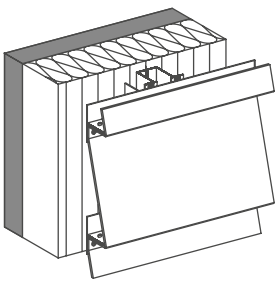
TRAY PANELS SZ 20
tongue and groove design /
horizontal panel layout



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

INDIVIDUAL DESIGN FREEDOM

LYSHOLT PARKEN, DENMARK – C. F. MØLLER

Advice House in ALUCOBOND® spectra Cupral as a landmark in the Vejle business park, Denmark. Text and picture: C. F. Møller Architects, Photograph: Julian Weyer

C. F. Møller Architects have developped two office buildings, Advice House and Lysholt Tower. Both projects employ a simple, yet visually strong cladding with an unusual, colour-changing appearance.

The cladding-strips of 'Advice House' are composed of a 'random' sequence of a total of 13 differently proportioned cladding panels, some of which are folded diagonally to create a triangulated pattern. The cladding panels are made of ALUCOBOND® spectra Cupral that offers changing colour effects with highlights and interesting colour gradients, depending on the viewing angle and the angle of the sun.

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 stark 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		ALUCOBOND®	
Country	**Test accord. to ...**	**Classification**	**Test accord.to**	**Classification**	**Test accord. to ...**	**Classification**
EU	EN 13501-1	Class B, s1, d0	EN 13501-1	Class A2, s1, d0	EN 13501-1	Class D
Germany	EN 1187 (method 1) / DIN 4102-7	passed	EN 1187 (method 1) / DIN 4102-7		DIN 4102-1 DIN 4102-7	Class B2 passed
France	NF P 92-501	Class M1	NF P 92-501	Class M0, non combustible	NF P 92-501 NF F 16-101	Class M1 Class F0
Italy					UNI 9177	Class 1
Great Britain England / Wales / Scotland	 BS 476-6/7 BS 476-6/7	 Class 0 Class 0	BS 6853	meets requirements of LUL limited combustible non combustible	 BS 476-6/7 BS 476-6/7	 Class 0 Class 0
Scandinavia			DS 1085-1	Class A		
Switzerland	VKF	Class 5.3	VKF	Class 6q.3	VKF	Class 4.2
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) D2 (smoke emission) T1 (toxicity)	GOST 30244-94 GOST 30402-95 GOST 12.1.044-89 GOST 12.1.044-89 GOST 31251-03	G1 (combustibility) W1 (flammability) D1 (smoke emission) T1 (toxicity) k0	GOST 30244-94 GOST 30402-95 GOST 12.1.044-89 GOST 12.1.044-89	G4 (combustibility) W1 (flammability) D2 (smoke emission) T2 (smoke flammability)
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 developed) 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 developed) A2, s1, d0	AS ISO 9705 AS 1530.3 Indices EN 13501.1	Group 3 material SMOGRA 3.194 m2/s2 0 (ignitibility) 0 (flame spread) 0 (heat evolved) 0–1 (smoke developed) D

APPROVALS

Country	Approval	Name	Approval authority
Belgium	ATG 12/2368	ALUCOBOND® Cassettes; Bardage rapporté	BUtgb, Bruxelles
Czech Republic	c.216/C5a/2013/0022	ALUCOBOND®	PAVUS a.s., Praha
France	n° 2/09-1372	ALUCOBOND® Riveté	CSTB, Paris
France	n° 2/09-1371	ALUCOBOND® Cassettes	CSTB, Paris
Germany	Z-33.2-6	ALUCOBOND® Fassadensystem	DIBt, Berlin
Great Britain	No 05/4214	ALUCOBOND® Cladding Systems	British Board of Agrément (BBA), Garston
Poland	AT-15-4058	ALUCOBOND®	Instytut Techniki Budowlanej, Warszawa
Russia	TC 3750-13	ALUCOBOND® Panels and cassettes elements	ФЦС, Moskau
Singapore	011937	Product listing scheme: class 2	PSB Singapore
Slovakia	TO-06/0275	ALUCOBOND®	TSUS, Bratislava
Spain	No 345	Sistema de revistimiento de fachadas ventiladas mediante bandejas procedentes de paneles ALUCOBOND®	Instituto Eduardo Toroja, Madrid
Spain	No 346	Sistema de revistimiento de fachadas ventiladas mediante placas remachadas procedentes de paneles ALUCOBOND®	Instituto Eduardo Toroja, Madrid

USEFUL INFORMATION

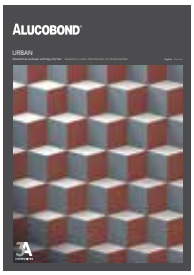
Solid & Metallic Colours

Spectra & Sparkling Colours

naturAL

Ligno

Anodized Look



urban

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 (for metallic, naturAL, urban and spectra & sparkling 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.

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.

THIRD-PARTY VERIFIED
EPD
ISO 14025 and EN 15804
Institut Bauen und Umwelt e.V.

Create the difference.

ALUCOBOND®

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01/06/2015 Printed in Germany **AT A GLANCE** English