

ALUCOBOND®

REAR-VENTILATED
FAÇADE
SYSTEM

THE DURABLE CLADDING MATERIAL FOR YOUR FAÇADE

ALUCOBOND® – the cost-effective solution for refurbishments, renovations or new constructions



3A
COMPOSITES

ARE YOU LOOKING FOR ...

...a cost-effective and durable façade solution?
Then ALUCOBOND® as a constituent of a RVF is
just the job for your construction project.

THE SYSTEM

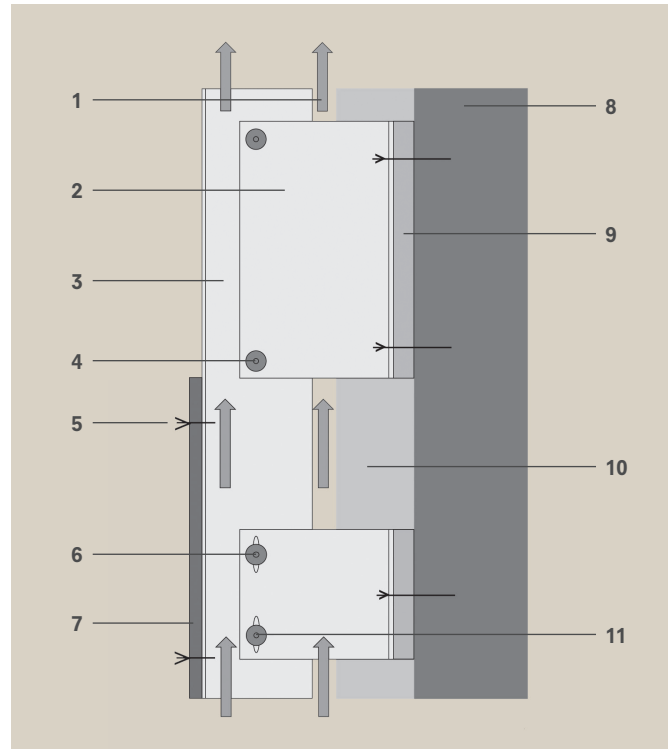
REAR-VENTILATED FAÇADE SYSTEM (RVF)

Cost-effectiveness, sophisticated technology and the maximum number of design variations are the quality characteristics of the RVF.

Today, rear-ventilated façades are amongst the most popular façade systems. In addition to their functional safety, builders and architects chiefly value the design possibilities provided by the use of rear-ventilated façades. The rear-ventilated construction system is suitable for both existing and new buildings.

The key characteristic is the separating air layer (rear ventilation space) between an insulated or uninsulated external wall and the cladding (weather protection). In addition to this construction advantage, the rear-ventilated rainscreen façade makes it possible to create architecturally sophisticated façades with a range of active and passive cladding elements.

1 Rear ventilation | 2 Substructure | 3 Vertical profile | 4 Fixed point | 5 Fastening element | 6 Sliding point | 7 Façade element | 8 Fixture base | 9 Thermal separating element | 10 Mineral insulation | 11 Connecting element



ADVANTAGES OF RVF

Sustainability/efficiency

- Low service life costs as very little maintenance and repair work is needed
- Long-term value retention and increase in value of the building
- Easy to disassemble
- Can be reused and recycled
- Exact calculation of the façade
- Short, cost-effective holding times of scaffolding
- Possible transfer of substructure to existing buildings

Energy efficiency

- Weather-independent implementation procedures:
Protection from warming up of the building interior in summer; Protection from cooling down and heat loss in winter
- A pleasant room climate ensures comfort
- Very good vapour diffusion properties
(no formation of condensation)

FIXING SYSTEMS

In the curtain-type rear-ventilated façade system, a basic distinction is made between visible and concealed fixing of the façade panel.

1. Riveted/Screwed

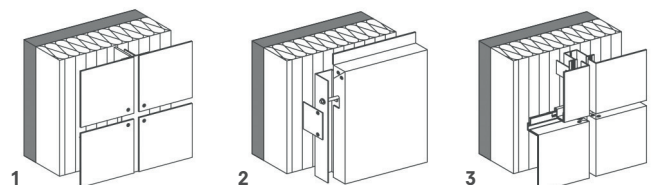
The most used economical method for fixing façade cladding is a design using aluminium blind rivets.

2. Suspended tray panels

Joint widths can be easily adapted to the element joints of the desired grid.

3. Tray panels SZ 20

Based on construction principle with S- and Z-sections SZ 20 tray panels can be installed fast and simple (tongue and groove principle).



THE APPLICATION

CONCEALED FASTENING SYSTEM

The new **easy fiX** solution for fixing ALUCOBOND® cassettes provides all of the advantages of a rear-ventilated façade at an attractive price. This gives you a flat attractive façade at the same price as a faced fixed solution with the possibility of easy cleaning.

NEW: A new, patented system solution that combines both the technology of a modern and proven material with easy assembly and the claim of architectural timelessness, be it on a new construction or a building under renovation.

EASY FIX



90° / 135°



135° / 135°



For individual application-related questions about this system solution, please contact us directly at any time. Our team of technical experts will be pleased to assist you with your construction project. The QR code will take you to the relevant contact person.

Excellent edge processing

The milled edge method is made possible by milling a V-shaped groove. The easy fiX profile helps you to fold the edging by hand.



ADVANTAGES

- Panel sizes from 1,180 mm to 6,800 mm
- Extremely light overall façade weight (< 10 kg/m²)
- Flexible format (horizontal and vertical laying)
- Maximum panel utilisation, no waste
- The easy fiX cassette can be manufactured in the workshop in advance or on-site
- Low installation depth, minimal panel thickness 31 mm
- Can be combined with any approved substructure or insulation material
- Easy assembly, therefore quicker assembly time, less scaffolding usage time, less non-use time (shorter rental period)
- Easy subsequent installation and removal of the elements

THE PRODUCT

Width [mm] Length [mm]	Thickness: 4 mm			
	1000 2000 – 6800	1250 2000 – 6800	1500 2000 – 6800	1575 2000 – 6800
ALUCOBOND® A2	--	●	●	--
ALUCOBOND® PLUS	●	●	●	●

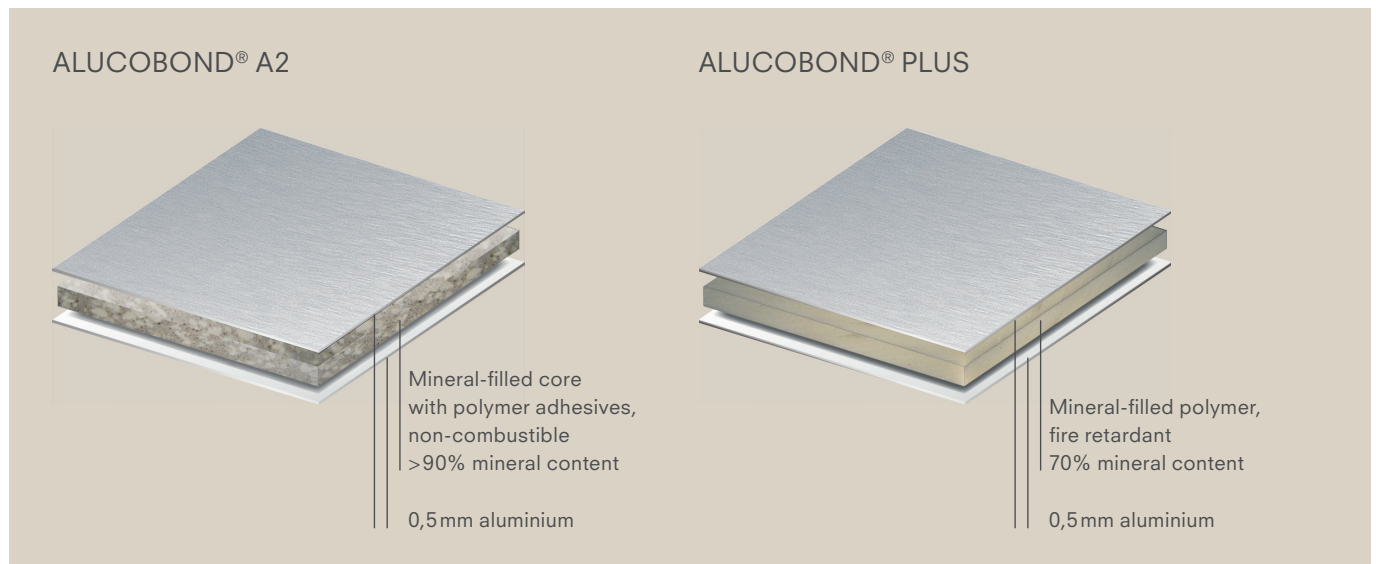
ABOUT ALUCOBOND®

ALUCOBOND® is a composite panel consisting of two aluminium cover sheets and a non-combustible or fire-retardant mineral-filled core that stands for sustainable construction quality and the highest creative standards. The façade material is distinguished by its outstanding product attributes such as precise flatness, variety of surfaces and colours as well as excellent formability.

With its extensive processing possibilities and cost-effectiveness, ALUCOBOND® is ideal for the implementation of a wide variety of building types. It can also be processed directly on the construction site with commercially available tools, and

also adapts to the conditions of the building in a variety of ways. The functionality and aesthetics of the façade remain intact over the long term, with a minimum amount of cleaning and maintenance.

Backed by over 50 years of experience, we can offer you a mature product of consistent quality. ALUCOBOND® preserves the aesthetic value of the property even after decades of outdoor use, without the higher maintenance costs usually associated with many alternative solutions.



GOOD TO KNOW

- Up to 10 year warranty
- Wide variety of colours and surfaces
- Large panel format possible
- Versatile machining by means of milled edge technology
- Flanging technology for visual enhancement of the cut edge
- Possibility of one-piece corner solution
- Impact and breakage resistant
- Light and UV resistance without colour loss
- High resistance to mould, moss, rotting and weathering
- Extreme durability
- RVF protects the building fabric (rain is kept out)
- Use as parapet and/or balcony cladding
- Available as standard from dealers
- Large network of competent partners / fabricators
- Can be used for all building types

THE PERFORMANCE

The German Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR) confirms that ALUCOBOND® has a service life of more than 50 years. This means that the building components achieve the highest level of service life. Unlike other façade systems such as thermal insulation composite systems, ALUCOBOND® does not have to be replaced several times over the life cycle of a building. This characteristic has a very positive effect on the life cycle assessment (LCA) of buildings.

Material	Service life in years according to BNB*	Replacement in 50 years
ALUCOBOND® Aluminium composite material	≥ 50	0
Solid aluminium material	≥ 50	0
Fibre cement	≥ 50	0
Thermal insulation composite system with render	30	1
Galvanized steel	30	1
Glass facing shell	≥ 50	0
Polycarbonate plastic panels	30	1
Resin composite panels (HPL)	30	1
Rock wool panels	N/A	--
Render on porous base layer	40	1
Ceramic plates	≥ 50	0
Glass fibre concrete	N/A	--
Untreated coniferous wood	30	1
Natural stone	≥ 50	0

ALUCOBOND® has an Environmental Product Declaration (EPD) in accordance with international ISO standards, which certifies a service life of **70 years**.

* Sustainable Building Rating System of the BBSR
As of: 2017

FIRE PROTECTION

With our aluminium composite panels, we provide various solutions for making existing or new buildings fire-safe according to the latest guidelines.

- Tested according to EN 13501-1 "Reaction to fire"

We therefore recommend combining ALUCOBOND® with non-combustible mineral insulation for a fireproof curtain-type rear-ventilated façade. This combination shows no flame propagation or critical temperature increases, and even exceeds the requirements of BR135.

	Tested as per ...	Classification
ALUCOBOND® A2	EN 13501-1	Class A2-s1, d0
ALUCOBOND® PLUS		Class B-s1, d0

SUSTAINABILITY

Our goal is to meet the most stringent economic, social and ecological demands. ALUCOBOND® composite panels do not release environmentally hazardous substances at any point in their life cycle. After many years of use, the components can be easily dismantled and recycled. Therefore, an ALUCOBOND® façade can be regarded as passive storage of recyclable materials, which generates additional revenue at the end of its use and conserves resources. The requirements of current energy guidelines can easily be met with ALUCOBOND® and a rear-ventilated façade.

- 100% recyclable

PRACTICAL EXPERIENCE

What users say about ALUCOBOND®



“We decided to use ALUCOBOND® in this residential complex for the first time. In addition to the very appealing façade design, the weather-independent processing of the material proved to be a major advantage for us on this large-scale project. After building many other properties, this façade is still fulfilling its purpose to this day. The colour-fastness still makes a contribution to the very attractive appearance of the quarter. From a cost-effectiveness point of view, the façade is characterised by its durability and therefore the very low cost of maintenance.”

Christoph Rehrmann
Managing Director
GWG Hagen e.G., Germany



Project Hagener Impulse, Germany
Architect Stadtbildplanung Dortmund GmbH
Fabricator Henke AG
Year of construction 1973
Modernisation 2008
Material ALUCOBOND® PLUS
Surface Special colours
Photography Cornelia Suhan



Project Sue & Til, Winterthur, Switzerland
Architect ARGE suetil –
weberbrunner architekten ag +
Soppelsa Architekten
Fabricator Implenia Schweiz AG
Distributor for Switzerland Allega GmbH
Year of construction 2018
Material ALUCOBOND® A2
Surface Anodized Look C0/EV1
Photography Peter Schäublin + Beat Bühler



“Aluminium surfaces represent very sustainable façade systems in terms of lightness, material efficiency and robustness. Due to the high degree of prefabrication, ALUCOBOND® panels can be precisely scheduled in the implementation process and assembled in accordance with the requirements of the property as the construction process progresses.”

Roger Weber
dipl. Arch. FH / BSA / SIA / AKB, Owner and General Manager
weberbrunner architekten ag, Zurich, Switzerland

INTERNATIONAL REFERENCES



Photography 1 XTU Architects/Elisabeth Leblanc 2 Angus Martin 3 Richard Gooding 4 Thea van den Heuvel 5 WeberHaus 6 Losys GmbH 7 Evaldas Lasys 8 Silver Linings Media 9 Neba-Therm AG 10 Jens Willebrand 11 Ricardo Vieira de Melo

Next & Beyond.
ALUCOBOND®



3A Composites GmbH
Alusingenplatz 1
78224 Singen, Germany
Phone +49 7731 - 941 2060
info@alucobond.com
www.alucobond.com