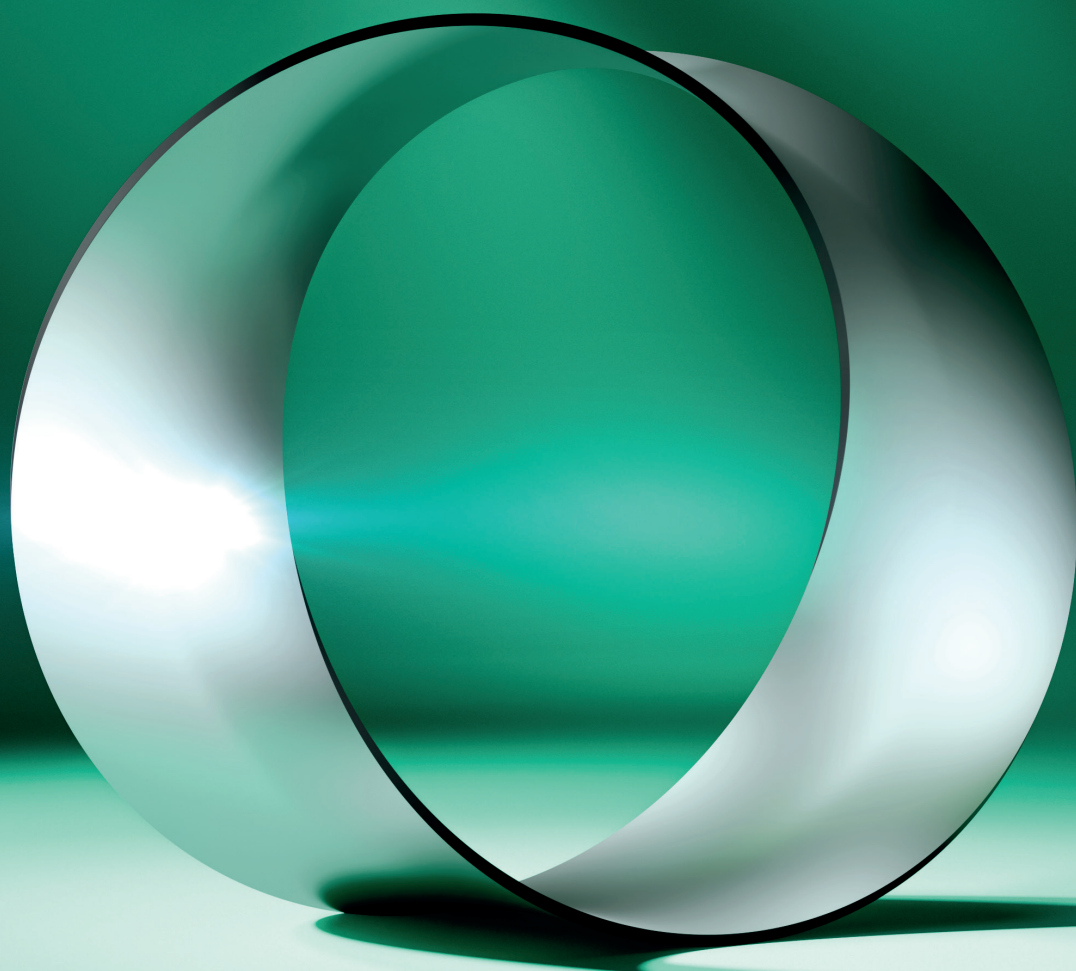


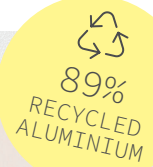
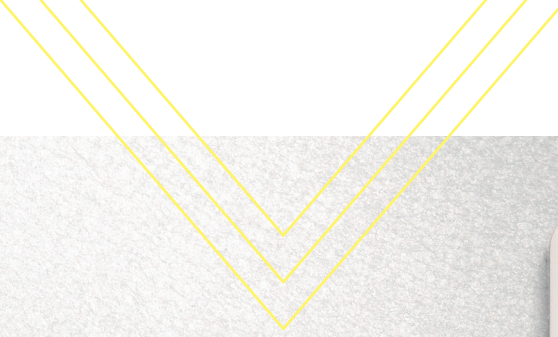
ALUCOBOND®

Closing
the loop.



ALUCOBOND® circular
89% recycled aluminium





89%
RECYCLED
ALUMINIUM

Our latest
product family
is available in
numerous surfaces
and colours.

TODAY'S PRODUCT: UPCYCLING THE PAST FOR THE FUTURE

» **ALUCOBOND®** circular
89% recycled aluminium content



“Reduce, Reuse, Recycle” is the guiding principle for production processes committed to responsible resource and energy consumption.

This is where the new ALUCOBOND® circular composite panels come in: adopting the requirements for a sustainable circular economy. The previous average of 43% recycled aluminium content has been increased to 89% in the course of a material balance approach (page 7).

ALUCOBOND® circular represents the significant improvements in recycling performance achieved by 3A Composites thanks to this innovation: an aluminium composite panel with the spirit of tomorrow, created today from yesterday's recycled material.



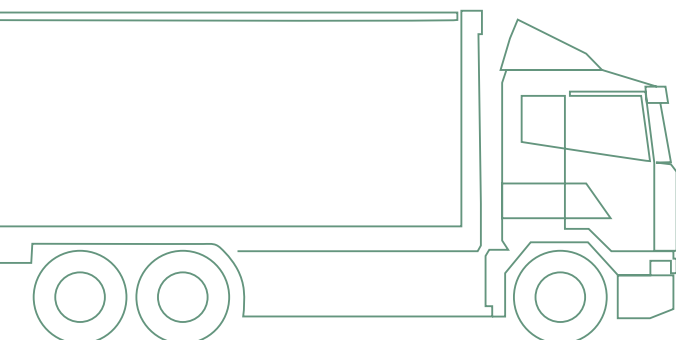
ALUCOBOND® circular CO₂-emissions halved!

It is not just the look of ALUCOBOND® façades which make an impact; a look behind the scenes reveals our ongoing corporate efforts to conserve valuable resources and continuously reduce our CO₂ footprint.

ALUCOBOND® circular is the most recent proof that recycling and reusing our products plays a pivotal role in the manufacturing process. Waste from our production is recycled, the aluminium remelted, to create new aluminium sheets for ALUCOBOND® circular composite panels – with consistently high quality and the usual ease of processing. This currently results in a reduction in CO₂-emissions of 52% for the cover sheets.



THE SMALLER THE FOOTPRINT, THE BRIGHTER THE FUTURE



Short transport distances

By keeping transport distances short, we further minimise ALUCOBOND® circular's carbon footprint. A trip between the recycler, the aluminium sheet manufacturer and back to us is less than 15 km.

Many happy returns

1 **Shredding panel offcuts**

The scrap from material waste is processed into regular sized chips.



2 **Composite separation using a turbo rotor mill**

The composite chips are propelled at high speed towards the cutting blades and broken down into their component parts.



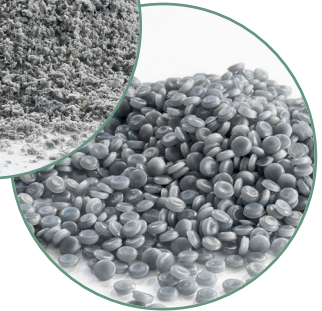
3 **Separation of core and aluminium by weight differences**

Components are separated from each other according to different densities using an eddy current separator.



5 **Recycling**

The aluminium recovered by the recycling process is used for the particularly corrosion-resistant aluminium alloy 5005/A, which is also used for standard ALUCOBOND® panels. The mineral components are reused in secondary applications.



4 **Component processing**

After separation, the aluminium is directly fed back for smelting. Before being returned to the cycle, the core material undergoes further processing.

Selective aluminium scrap collection and separation is of great importance in the recycling process as correctly sorted materials ensure the specific properties of the alloy are pre-

served for reuse. The efficient use of unmixed components not only maximises resource efficiency, but also reduces the ecological footprint of aluminium scrap recycling.



Green action instead of greenwashing

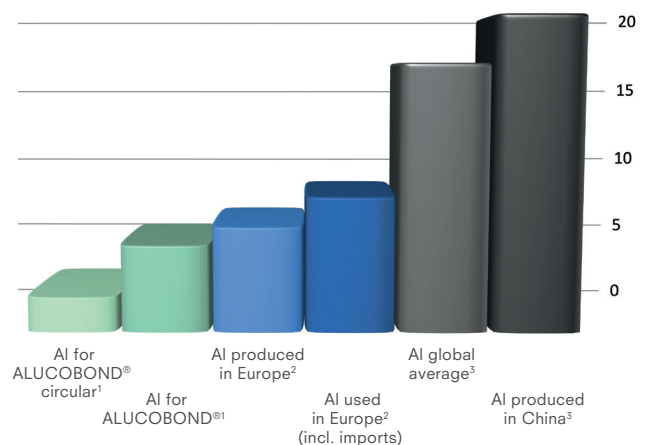
Actively promoting the circular economy is a part of our sustainability strategy. In addition to conserving valuable raw materials and avoiding waste, ALUCOBOND® circular brings that aim one step closer.

ALUCOBOND® circular means we are purchasing more CO₂-reduced secondary aluminium, which has a recycled content of at least 89%. Every square metre of ALUCOBOND® circular sold automatically results in a higher proportion of secondary aluminium and lower emissions. Using the material balance approach, recycled aluminium (= secondary aluminium) is fed into production of composite panels at the start and results are assigned to the end products.

The CO₂ footprint is also calculated using the material balance approach. In accordance with „European Aluminium“ recommendations, we use the cut-off approach for the cradle-to-gate CO₂ footprint data. This means that we assess both pre- and post-consumer waste as CO₂ neutral.

The use of secondary aluminium provides numerous benefits: greenhouse gas emissions are reduced and fossil resources are conserved, while the quality of the product and its properties remain the same. Our ALUCOBOND® composite panels can be processed as usual with no need to adapt equipment or procedures.

Carbon footprint of (primary) aluminium [kg CO₂/kg Al] comparison worldwide



Sustainable recycling for aluminium composite panels

3A Composites is committed to a sustainable and wide-ranging collection and recycling of aluminium composite panels. As early as in the 90s, the company developed innovative recycling technologies which successfully feed production waste back into the manufacturing cycle.

In 2020, the company joined the AIUIF, an association dedicated to collecting and recycling aluminium sustainably. 3A Composites also works closely with specialised partners in order to create nationwide recycling solutions and to advance aluminium recycling in Germany. Cooperation with AIUIF and its partners has facilitated a sustainable

backflow of aluminium from building components such as window and façades.

Customers are invited to join this closed loop and return their composite materials to the recycling process. Experienced logistics and recycling partners such as Krall Kunststoff-Recycling, Pekutherm Kunststoffe, D.A.R. Metall AG and W.E.R.T. GmbH, make up part of a comprehensive network which ensures that material sorting and specialised recycling of aluminium composite materials is carried out.



Tour Elithis, France
XTU Architects
ALUCOBOND® A2 solid Black + naturAL Brushed & Line
© Elisabeth Leblanc

ALUCOBOND® circular Product specifications

	ALUCOBOND® PLUS	ALUCOBOND® A2
Panel width:	Panel thickness: 4 mm Panel length: 2,000 mm – 6,800 mm	
1000 mm	●	
1250 mm	●	●
1500 mm	●	●
1575 mm	●	
1650 mm		●
1750 mm	●	

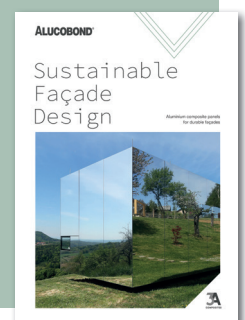
Available in all ALUCOBOND® PLUS and A2 surfaces.
ALUCOBOND® circular quantities are subject to the availability of recycled aluminium.
Offer subject to current availability.

More about sustainability:

Discover our
sustainability brochure



If you would like to learn more about ALUCOBOND® façade design, aluminium composite panels and our general corporate mission: Together Responsible, you can experience more exciting insights at www.alucobond.com/files/downloads





Design freedom



Light weight



Durability



Cost effectiveness



Fire safety



Energy efficiency*



Circularity*



Unparalleled experience



High quality service



Spirit of innovation