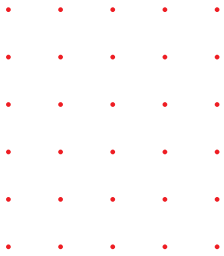




GUTMANN

EDITION #01/2024



# BUILDING MATERIALS OF THE FUTURE

GUTMANN BAUSYSTEME GMBH



# THE PERFECT SYMBIOSIS

*Wood and aluminium*

# WEATHER PROTECTION IN THE SPIRIT OF SUSTAINABILITY

CO2 neutral / climate positive

## ADVANTAGES OF WOOD

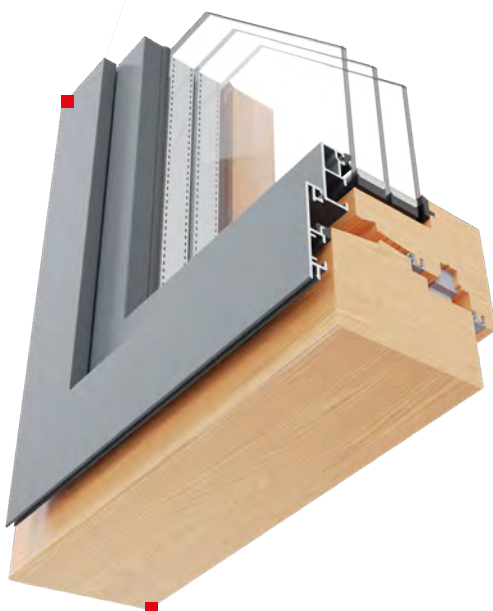
- Wood is sustainable
- Wood is natural and healthy to live in
- Wood is a renewable raw material
- Wood is an excellent insulating material
- Wood is a structural building material
- Wood is a modern building material
- Wood is economical

**1 CUBIC METER OF  
WOOD  
BINDS —  
1 TONNE OF  
CO<sub>2</sub>**



Wood is not only a renewable raw material, but also an effective partner in climate protection. Trees in the forest act as carbon stores, and the CO<sub>2</sub> bound in the wood remains there for the life of the resulting wood products even after processing.

**ALUMINIUM** OUTSIDE



**WOOD** INSIDE

## NEED FOR PROTECTION

- Wood is more durable with moisture protection
- Wood requires recurring chemical weather protection (painting)
- Certain types of wood are not suitable for use in weathered building areas

## SOLUTIONS

- Protection through weather-resistant materials such as aluminium
- Aluminium enables reduced surface coatings with almost unlimited durability
- Greater choice of suitable wood types thanks to weather protection on the outside

**'The aluminium shell protects the wood like the bark of a tree.'**

# THE NEXT GENERATION OF SUSTAINABILITY

Wood-aluminium windows

## ADVANTAGES OF WOOD-ALUMINIUM WINDOWS

‘For us, aluminium belongs to the wooden window like the protective bark belongs to the tree trunk,’ says Sales Manager Thomas Reinert, underlining the high future potential of wood-aluminium systems at GUTMANN. Because the combination of the valuable and optimally recyclable light metal aluminium and the sustainably renewable raw material wood is impressive in terms of function, design, durability and variety as well as ecological and sustainable aspects - and makes wood-aluminium the ideal window of tomorrow.

- Durable and weather-resistant
- Warm living space thanks to wood on the inside
- Wide variety of designs in terms of colours and profile look
- For classic and modern architecture
- High cost-benefit factor
- Combination of the strengths of wood and aluminium
- High degree of prefabrication
- Outstanding thermal insulation
- Outstanding structural values
- Corresponding certifications confirm: The performance of wood-aluminium systems are ‘fit for future’
- Non-toxic in the event of fire
- Easily separable at the end of the service life
- Double the service life compared to PVCu windows

## THE ALUMINIUM MATERIAL CYCLE

The publicly appointed and sworn as well as internationally certified and authorised expert **Alexander Dupp** says:

- Wood has low energy consumption from processing to disposal
- Wood will experience a significant increase in quantity and quality growth
- Durability supports a positive material cycle
- Aluminium is fully recyclable with 100% quality retention. Secondary aluminium requires only 5% of the energy needed to produce primary aluminium
- Wood-aluminium elements help to maintain the value of buildings
- Wood-aluminium elements are considered an economical long-term investment



**“The appropriate communication about sustainable windows made of wood and wood-aluminium will be further intensified and highlighted!” - Alexander Dupp**



# **SUSTAINABLE WINDOWS**

*with aluminium material cycle*



# OUR PASSION

*Permanently efficient components*



# DURABLE AND PRACTICAL SOLUTIONS

Our concern

## PRODUCT EXAMPLES

- Gutmann MIRA 1
- Gutmann LARA GF 2
- Gutmann MIRA contour integral 3

The GUTMANN MIRA wood-aluminium system, for example, offers tailor-made solutions for every requirement with a diverse range of profiles, for both residential and commercial buildings. Behind the classic, offset appearance lies a solid technology with outstanding characteristics. All common window constructions, opening types and window shapes, including slanted windows, round, segmental or pointed arches, can be realised in various profile designs.



‘Modern façade systems have to fulfil an extremely wide range of requirements today and especially in the future,’ says Prof. Dr Thomas Fattler, Head of Technology and Product Management at GUTMANN building systems. The constantly growing requirements range from architectural and technical innovation to ensuring optimum quality of life in the building in terms of indoor climate, daylight, weather protection, sound insulation and safety, to the wide range of sustainability issues relating to materials and energy, as well as the equally important topics of cost-effectiveness and customer focus. Major challenges for GUTMANN building systems - but also exciting opportunities for a future of sustainable success.

# WOOD IS THE RAW MATERIAL OF THE FUTURE

Natural helper and gentle alternative

## SUSTAINABLE BUILDING MATERIAL

Wood makes it possible: conventional materials such as steel, concrete, brick and plastic can be replaced by wood. The production of these materials often goes hand in hand with the use of fossil energy sources, which in turn are mainly responsible for global CO<sub>2</sub> production.

Wood can be used repeatedly: Cascade utilisation is the principle according to which a raw material can be used over several stages. In this way, wood products can serve as the starting material for new products at the end of their life cycle. This aspect of the circular economy aims to extend carbon storage, i.e. to remove as much carbon dioxide as possible from the atmosphere for as long as possible.

During wood processing, several by-products are created in various phases, for example sawdust and wood chips in the sawmill, but also sawdust, wood shavings and wood residues in further processing. Waste wood and waste paper are recycled as secondary raw materials and used in the production of wood-based materials, paper, cardboard and pellets.

## EFFICIENT MATERIAL

Wood offers many advantages: Durability, reusability and recyclability.

It forms the centrepiece of an efficient circular economy - this versatile material passes through various phases within its value chain. The starting point is the tree, from which the wood is extracted as the basic material. This in turn produces various intermediate products, which ultimately reach the consumer as a finished end product.

**The responsible use of wood and the implementation of an efficient circular economy can make a significant contribution to the fight against climate change and support the transition to a sustainable economy.**





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# BUILDING MATERIAL OF THE FUTURE

*Wood - a sustainable raw material*



# MADE IN GERMANY

*Wood from Germany*

# LOCATION GERMANY

Wood is an essential resource in Germany

## SUSTAINABLE

There is still more wood growing in German forests than is taken from them: For more than 300 years, Germany's forestry industry has been a global role model in this respect. Sustainable forest management is more important today than ever before, as forest damage such as fires and pest infestations, climate change and the finite nature of our resources are already posing ever greater challenges. Resource-conserving and sustainable utilisation of our forests is therefore not only sensible, but essential.

Germany is one of the most densely forested countries in Europe.

Although the amount of wood in our forests is impressive, this does not automatically mean unlimited availability. In fact, sustainable management is crucial in order to secure wood resources for future generations.

Wood is a valuable raw and building material for many sectors, such as the construction and furniture industries. Conscious management of wood stocks ensures that the resource of wood remains usable in the future.



## LONG-TERM PERSPECTIVE



Wood is a crucial raw material for traditional craft businesses and innovative companies.

The material creates important jobs: Over one million people work in the forestry and timber industry in Germany.

In an era in which climate change, limited resources and increasing disasters such as forest fires and widespread damage caused by pests are causing ever greater difficulties, sustainable forestry is becoming increasingly important. It should be seen as an example of careful and sustainable utilisation of natural resources with a view to the future.

Visit our website and find out more: [WWW.GUTMANN.DE](http://WWW.GUTMANN.DE)

