

# Innovating Nature, Building the Future



**TIMBRA** by GWP  
Innovating Nature Building Futures



# **Elevating Wood** to a New Standard

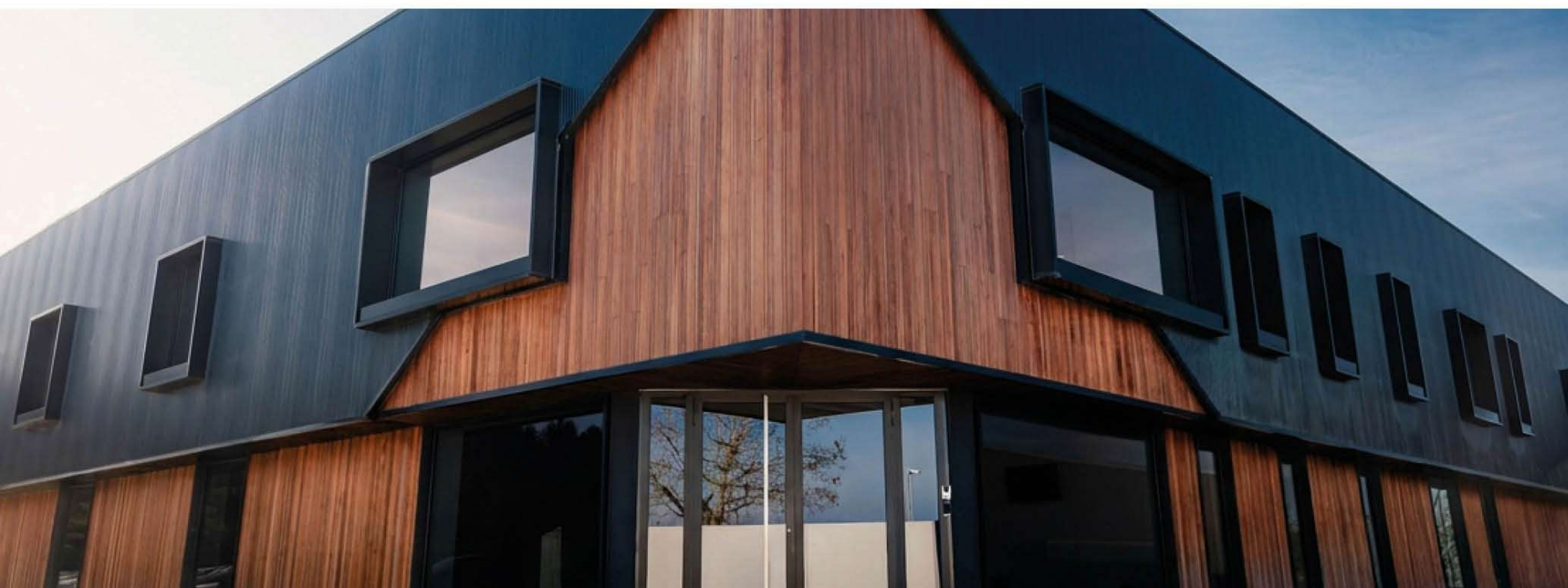
# TIMBRA by GWP

is redefining  
wood sustainability,  
bridging nature  
with technology.

TIMBRA by GWP was born from GWP Wood by Nature®'s expertise combining technology and sustainability in the transformation of tropical wood. A new generation of wood, more durable, **more stable** from a natural process (only heat and steam), with no chemicals involved.

TIMBRA by GWP introduces new wood species that meet the demands of contemporary architecture, blending performance, aesthetics and environmental responsibility.

TIMBRA by GWP redefines standards and delivers high-quality solutions for architects, designers and builders.





# Thermal Modification

## Where Wood meets **Technology**

The union between technology and nature creates a balance that enhances the performance, the beauty and the durability of wood.

TIMBRA by GWP is taking Wood  
to the next level in modern society ■

## 1. Thermal Modification

Thermal modification alters wood at a cellular level. It's an innovative process that enhances the properties of wood, improving its durability, dimensional stability and mechanical performance, without the use of chemical products.

Exposed to controlled high temperatures 428°F in a low-oxygen environment, the wood undergoes structural transformation, becoming more resistant to moisture, fungi and insects. Additionally, its natural color becomes darker and more homogeneous, enhancing its natural beauty.

## 2. A Sustainable Innovation

Thermal modification revolutionizes wood treatment by enhancing its performance and expanding its usage in modern architecture and design. Combining durability, aesthetics and environmental responsibility, it marks a key advancement in sustainable materials, elevating wood to new levels of innovation and elegance.

Our process allows us to turn more abundant wood species into viable, sustainable alternatives. By doing so, we aim to contribute to reducing overharvesting of more popular timber while promoting biodiversity and responsible forestry.

### ↳ Essence of Nature, Protecting the Future

The fusion of technological innovation and natural elements enhances the beauty and performance of wood while promoting environmental responsibility.

## TIMBRA by GWP - Benefits of Thermally Modified Wood



### Durability

Higher resistance to moisture absorbency, fungi and insects.



### Natural Aesthetics

Richer color and elegant finish.



### Stability

Less expansion and contraction, ideal for any climate.



### Sustainability

No chemicals, just heat and steam.

A technology that enhances wood's durability and stability without the use of harmful chemicals, ideal for both indoor and outdoor applications.



# Process **TIMBRA by GWP**

## 1. Initial Heating

**Removes moisture and prepares the raw material.**

- The wood is placed in a specially built system and gradually heated.
- Initial temperature ranges between 212°F and 320°F.
- Moisture content is reduced down to approximately 2%.

## 2. Modification Process

**Stabilizes and modifies the content and structure of the wood cells.**

- A high temperature is applied around 428 °F.
- Low-oxygen environment.

## 3. Cooling and Rehydration

**Prevents warpage and enhances durability.**

- Temperature is gradually reduced.
- Controlled rehydration is performed with steam.
- Final moisture content is adjusted to between 5% and 9%: (65/20), balancing the wood's stability.

## 4. Process Results

- Significantly higher resistance to decaying biological agents, such as fungi and insects.
- Increased durability and dimensional stability with highly reduced moisture absorption capacity.
- A browner tone, enhancing the final appearance of the wood.

# Enhancing Fire Retardancy



**TIMBRA by GWP**, in partnership with BURNBLOCK®, offers a non-toxic fire retardant solution that ensures high safety standards without compromising aesthetics or product performance.

Applied through a high-pressure autoclave impregnation, the treatment penetrates completely inside the timber, delivering long-lasting fire retardant across a wide range of wood species.

## Key Benefits

### ↘ Eco-Friendly

Prevents ignition and flame spread.

### ↘ Fire Retardant

Biodegradable and non-toxic.

### ↘ Smart Reaction

Chars and releases water under heat.

### ↘ Aesthetic Integrity

Preserves wood's natural look and finish.

## Tested, Certified and Trusted

Tested and trusted worldwide, BURNBLOCK® complies with international fire safety US standards and enables **TIMBRA by GWP** wood to achieve class A (ASTM 2768) classification. No special preparation of the wood is required for the application.

This precise process ensures maximum fire retardant maintaining product integrity, making **TIMBRA by GWP** the reliable choice for high-performance, fire retardant solution in wood materials.

Protect your projects with  
**innovative and safe solutions.**



# Collection

↘ Advance  
↘ Excellence



Discover our distinct product Selections tailored to suit every architectural and technical requirement, each level offering enhanced quality and innovation.

Two Lines.  
One Technology.  
**Infinite Possibilities**

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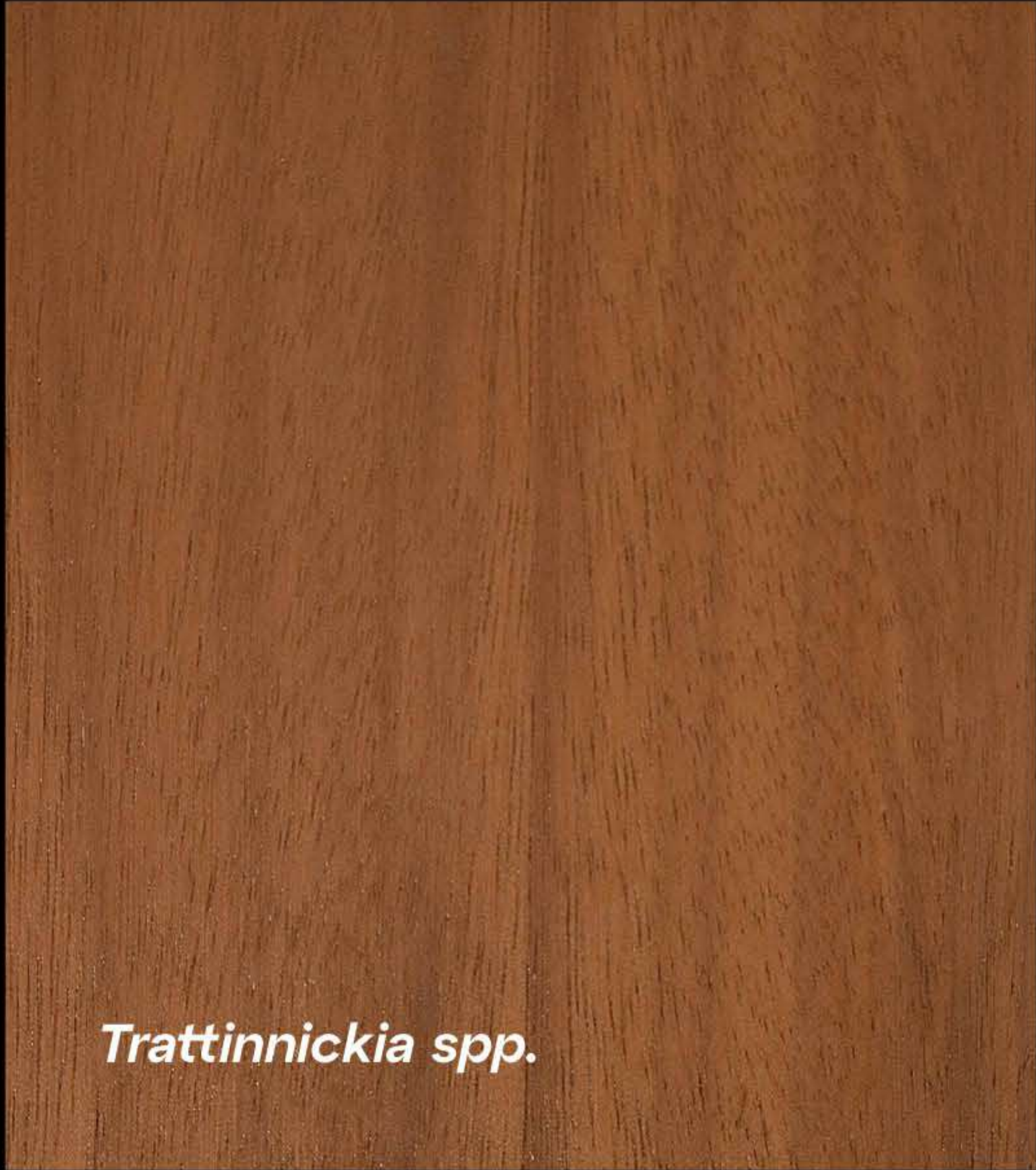
## Elevated Durability, Iconic Charm

- CLADDING
- WINDOWS
- STREET FURNITURE

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## Perfection, Elevated to Excellence

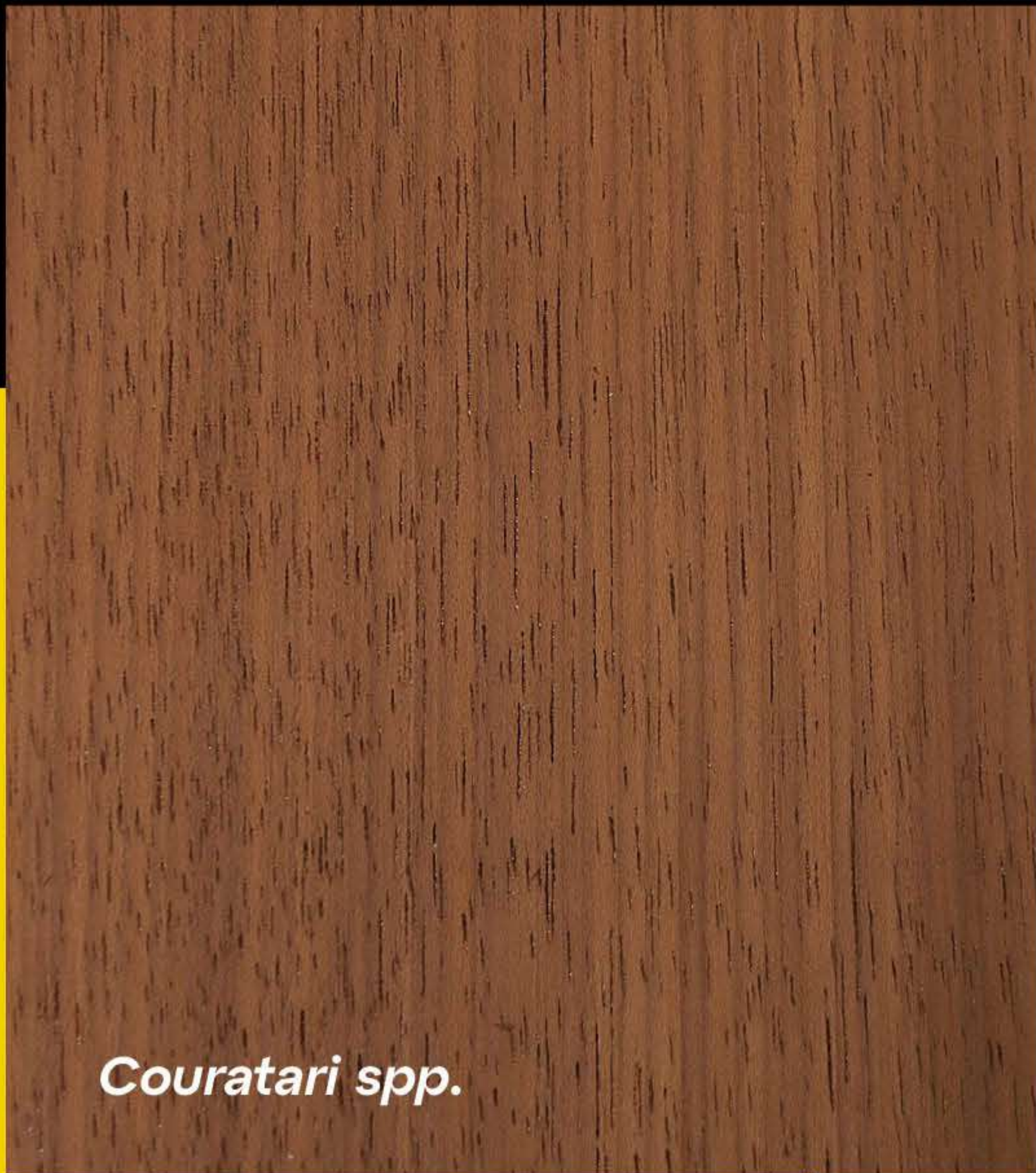
- DECKING
- CLADDING
- FLOORING
- WINDOWS
- STREET FURNITURE



*Trattinnickia spp.*

## Advance

- Visual appearance with irregular grain
- Pleasant tactile texture
- Reliable mechanical performance
- Substantial dimensional stability



*Couratari spp.*

## Excellence

- Robust structure with high wear resistance
- Suitable for highly demanding environments
- Combines robustness with design flexibility
- Ensures long-term reliability

When  
it comes  
to wood,  
**Sustainability**  
is Key

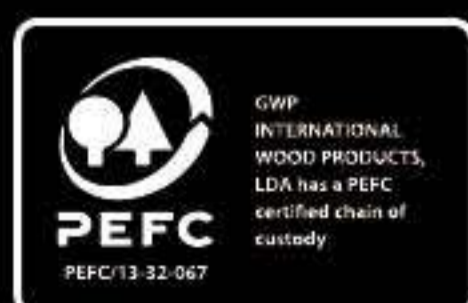


Forest Today  
**Life Tomorrow**

With a certified harvesting method, TIMBRA by GWP stands at the forefront of sustainable building practices.



The mark of  
responsible forestry  
FSC® C121009



Ask for our certified products

TIMBRA by GWP is a brand owned by the GWP Group and holds the code FSC® C12009.  
We are qualified to provide certified products.

All **TIMBRA by GWP** products are carefully and 100% legally sourced, certified and sustainable. Can be provided, on request, with the **FSC**<sup>®</sup> - Forest Stewardship Council<sup>®</sup>, or the **PEFC** - Program for the Endorsement of Forest Certification and our internal due care the **Legal Wood Program** - our internal Due Care Chain of Custody environmental compliance program. Our Program **The Legal Wood** ensures timber legality through a rigorous auditing process from the forest floor to your door.

Thermal modification is a sustainable technology that significantly enhances wood's properties without compromising the environmental sustainability of the product. This advanced process improves resistance and dimensional stability, making wood an ideal choice for applications requiring high durability.



- **Today**  
 Sustainable Forest Management with Expertise and Precision.
- **Tomorrow**  
 Technology for a Sustainable Future.
- **2028**  
 Achieve Carbon Neutrality.



[info@timbrawood.com](mailto:info@timbrawood.com)

**Our Global Manufacturing Hub**  
Centro de Negócios VNB, Lote 35 Atalaia  
2260-067 Vila Nova da Barquinha