

# "WE PRACTICE WHAT WE PREACH."

# House of Bamboo Warehouse Transformation

13 Erith Street, Botany, NSW

Jennifer Snyders, CEO. House of Bamboo | client Andrew Aitchison, Jennifer Snyders | architect Neil Thomas. Atelier One | structural consultant Bradley Mulcahy at BJM Projects | main contractor

851.1973

# The site & Project objectives

Case Study: A Showcase of Purpose — Building with Engineered Bamboo

With bamboo still unrecognised in Australia's building codes as a structural material, Jennifer Snyders adopted a clear approach: "Build it, and they will come."

Determined to demonstrate the untapped potential of engineered bamboo, this project set out to be more than just a renovation — it was conceived as a **proof of concept**. A place that would embody the future of construction and challenge outdated perceptions within the industry.





The project's objective was to repurpose an existing storage building and create seamless internal and external connections to the adjacent showroom and courtyard. The key transformation involved converting a dimly lit rear warehouse into an open, light-filled showroom and office space, designed not only for function but also to broadcast bamboo's structural and sustainable message to the construction sector.





# The site & Project objectives

The site itself posed several challenges — including a Sydney Water easement running along the rear boundary, strict setback and access conditions, and the risk of flooding. These constraints demanded intelligent, sensitive design responses that demonstrated the versatility of bamboo within real-world conditions.

This is more than a project — it's a statement. A commitment to innovation, sustainability, and changing the conversation around what's possible with bamboo in the built environment.



# **Project Overview**

The proposal was to salvage and repurpose as much of the existing structure as possible in the new building and raise the ground level above the flood risk level and create a new building that would minimises its environmental impact on the site.

Spaces and layout were explored to adapt the functionality of the space and how existing and proposed higher floor levels could be connected for a seamless circulation flow. Creation of new connections and movement between new and existing buildings and spaces on the site for visitors and staff.





# **Project Overview**

With reuse, repurpose and a positive low carbon message at the heart of this project, we focused on maximising the reuse of existing structure alongside the addition of new engineered bamboo beams and columns. Existing brick piers were reviewed for their structural suitability to add support in the new engineered bamboo building structure.





Existing storage space with roller shutters already removed.

New engineered bamboo posts and roof structure in place

# **Project Overview**

Not only a showroom displaying engineered bamboo but a building made of it. With a new exposed structure of engineered bamboo. A first in Australia. By making the structure from engineered bamboo we can even more clearly explain and present the materials properties: five times stronger than steel, sequesters three times more carbon than a tree, high harvest yields and harvesting benefits to the environment.



# Construction & Installation

Adding value during the construction phase was a major key design consideration, and this has been achieved through the design and construction approach. The building was constructed predominantly using prefabricated kits of parts, factory manufactured, which significantly reduced both onsite construction time and the need for skilled carpenters. This approach helped minimize costs while ensuring that the building remains of the highest quality.







# Construction & Installation

Engineered posts were fixed to the slab with galvanised footing chem. set into the existing concrete slab. A bespoke mechanical fixing joint was developed to fix perimeter posts into the repurposed brick piers.





Steel floor joists for the new raised floor spanned on supports independent of the new posts to raise the internal floor level above the flood risk level and ensure existing over ground storm water flows were not interrupted. The roof structure is engineered with bamboo beams, high performance foil back insulation and metal sheet roofing.

Existing rainwater downpipes required adjustment and re-routing to allow an unobstructed opening to be created between the new showroom and the existing rattan room.



Construction & Installation









# Bamboo Doors & Windows

Custom joinery elements were incorporated throughout, including a striking set of glass bifold doors framed in engineered bamboo, designed to create a strong architectural statement along the north-facing façade. Above, fixed bamboo-framed glass windows were integrated to draw in natural light and enhance the elevation.

All components were fabricated in-house and assembled on-site in under a day, demonstrating the efficiency and precision of the build. These beautifully crafted elements highlight the breadth of bamboo's application and elevate the showroom as a living example of design innovation using sustainable materials.





The interior transformation was guided by a clear intent: to demonstrate the diversity, performance, and beauty of bamboo materials in real-world applications. Every detail was designed to reflect HOB's core mission — to lead by example and show what is truly possible when bamboo is brought into the architectural conversation.

A Living Showcase of Engineered Bamboo







Flooring throughout the space features 20mm thick scrimber (strandwoven) bamboo boards, chosen for their high density and durability — a material well suited for high-traffic commercial use. Installed and ready to walk on in a single day, the flooring showcases bamboo's strength, warmth, and efficiency.





The walls were clad in a curated mix of products from HOB's Cello Series, including acoustic bamboo panels. These feature delicate perforations, design motifs, and a backlit configuration that highlights both form and function — adding visual texture while demonstrating acoustic performance potential.





Overhead, the ceiling installation celebrates bamboo's natural softness and adaptability. A selection of HOB's woven blind materials was applied in elegant, scalloped drapery across the high ceilings, providing a warm, tactile contrast to the harder surfaces below and subtly improving acoustics.



# Interiors



In line with the commitment to sustainability, furniture was repurposed and reimagined. Discarded desk bases were given a second life — clad with Tassel Series end-grain flooring boards, then trimmed and shaped using engineered bamboo battens.

The inherent flexibility of bamboo allowed it to curve seamlessly around desk edges, merging form and material innovation. Chairs were either recycled or made from bamboo components.





To complete the experience, the space narrate the manufacturing journey of bamboo, showcase case studies, and regenerative lifecycle and modern applications.



# includes educational storyboards. These provide architects, designers, and visitors with a deeper understanding of bamboo's





commercial spaces.



This interior is not only a working office but a living, breathing showroom — designed to inspire, educate, and transform thinking about what bamboo can achieve in both residential and

This project began with a clear purpose: to prove the structural and aesthetic potential of engineered bamboo in Australian construction. With no formal standards in place for its use as a structural material, the only way forward was to build it — and let it speak for itself.







The result is a multi-functional, low-carbon building that not only showcases the strength and versatility of engineered bamboo, but also acts as a live example — a proof of concept — for the industry. Through careful design and thoughtful execution, the project invites architects, builders, and designers to experience firsthand how bamboo can contribute to the future of sustainable construction.





The space now functions as more than just an office or display room — it has evolved into a dynamic Education Hub. Students, architects, and industry professionals are invited in to learn about bamboo's materiality, performance characteristics, and environmental benefits. Storyboards positioned throughout the showroom narrate the process of manufacturing and application, offering valuable insight into bamboo's full lifecycle — from raw material to refined finish.



# **Proof of Concept**

The interiors prioritise comfort, sensory experience, and wellbeing. Natural materials, fresh air, and generous light give the building a sense of calm and regeneration — evoking the feeling of being in an urban forest. Bamboo flooring, acoustic walls, soft draped ceilings, and handcrafted joinery all serve as both functional elements and demonstrative applications.





23 | 29

Externally, the building integrates with a lush courtyard and a dedicated outdoor bamboo deck — providing staff with spaces for rest and reflection, while inviting visitors into a warm and welcoming atmosphere. The building's openplan layout and north-facing glazed façade with pivoting bamboo doors maximise natural light and thermal performance, while also supporting flexible use — from product showroom to workspace to events.





A defining feature is the exposed engineered bamboo structural frame, which draws attention to the core message: bamboo is not only viable — it's beautiful, resilient, and necessary. With no existing Australian or ISO standards, structural engineering for the project was undertaken in collaboration with Neil Thomas of Atelier One (UK) — reinforcing the pioneering nature of the build.



25 | 29



In every way, this space is a working example of what bamboo can achieve. It challenges outdated thinking, invites innovation, and positions HOB and its community at the heart of a broader movement — redefining what building materials can be in a more sustainable future.





"This building stands as a real-world example of what's possible with bamboo — not just as a decorative material, but as a high-performance structural solution. It's the first of its kind in Australia, and I hope it inspires others to explore new, sustainable pathways in construction."

— Jennifer Snyders (CEO House of Bamboo), 2025













www.houseofbamboo.com.au

28 | 29

## **OFFICE & SHOWROOM NSW**

0 13 Erith Street, Botany NSW 2019

### SHOWROOM QLD

66 Merivale Street, South Brisbane QLD 4101

### CONTACT

For General Enquiries info@houseofbamboo.com.au



 $\bowtie$ 

nouse of of the second s

EST. 1972

 $\bigcirc$ 

Local or Interstate: 1800 240 996 International: (+61)2 9666 5703

### **ONLINE**

- www.houseofbamboo.com.au Q
- @house.of.bamboo.australia 0)