

Specified.

Architectural Timber Insights - by Pentarch Forestry

ISSUE 3. 2026

INSIDE THIS ISSUE

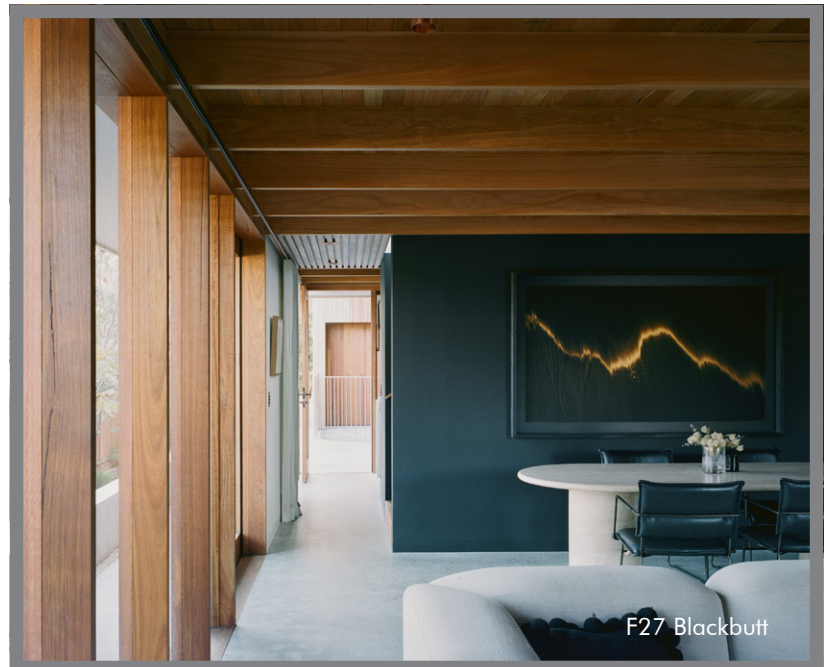
- 1. Project Highlight:**
Amaroo
- 2. New Pentarch Timber Website**
- 3. Coating Systems & Performance:**
Considerations for Australian Hardwood Decking
- 4. From Forest to Fitout:**
Australian Hardwood in Biophilic Design
- 5. Species Highlight:**
Brushbox

To be featured in **Specified.**

Send your project images to
marketing@pentarch.com.au

Welcome to **Specified.**

In this edition, we are pleased to announce the launch of our new Timber website and feature 'Amaroo', an impressive project located near Brisbane. Additionally, we offer insights on the role of timber in biophilic design and discuss various coating systems for hardwood decking.



Follow us on    



PENTARCH
FORESTRY®



Project Highlight

Architect: Shaun Lockyer
Builder: Envisage
Supplier: Ozbuild Materials
Product: 128 x19 Premier Grade Spotted Gum Shiplap, Pre-Oiled
Coating: Intergrain Universal Timber Oil

Amaroo – “beautiful place” in the local Aboriginal language – lives up to its name on a secluded rural property north of Brisbane. Framed by rolling valleys and hidden from view, this intimate home was crafted for racing icons Mark and Ann Webber as a serene counterpoint to their fast-paced lives. Every detail responds to a desire for calm, refuge, and connection to the Australian landscape.

The house unfolds in a cruciform layout that zones daily routines with precision. The southern wing handles arrival, car storage, and a mud room.

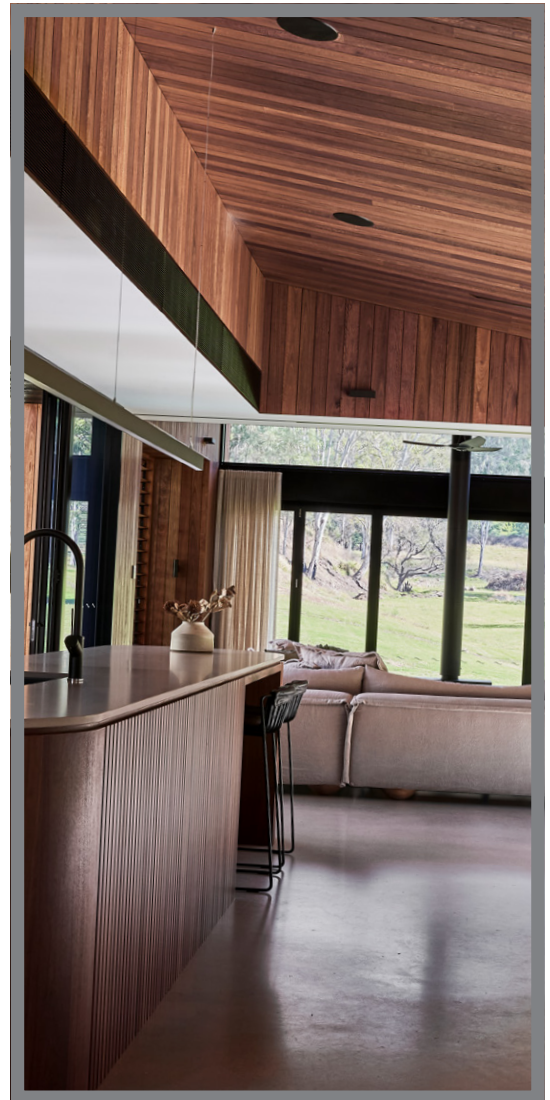
A central link creates a sheltered courtyard, buffering the southerly winds. The northern pavilion contains the primary living spaces and bedroom, scaled perfectly for a couple’s needs.

Simplicity and structural clarity define the design. A solid masonry base supports a lightweight charred timber roof, which doubles as a rainwater collector and solar platform. An elevated northern roof form frames distant ridges, while a twisted western skillion reorients views toward the valley’s shifting afternoon light.

Spotted gum cladding pays homage to the valley’s native species, its rich tones blending seamlessly with the terrain. Locally sourced stone references the surrounding landforms, grounding the structure in its setting. Together, these materials lend warmth and texture.

In partnership with generous and engaged clients, the architects delivered a home that feels inherently at ease with its environment. Amaroo stands as a testament to thoughtful design – a true sanctuary in a beautiful place.

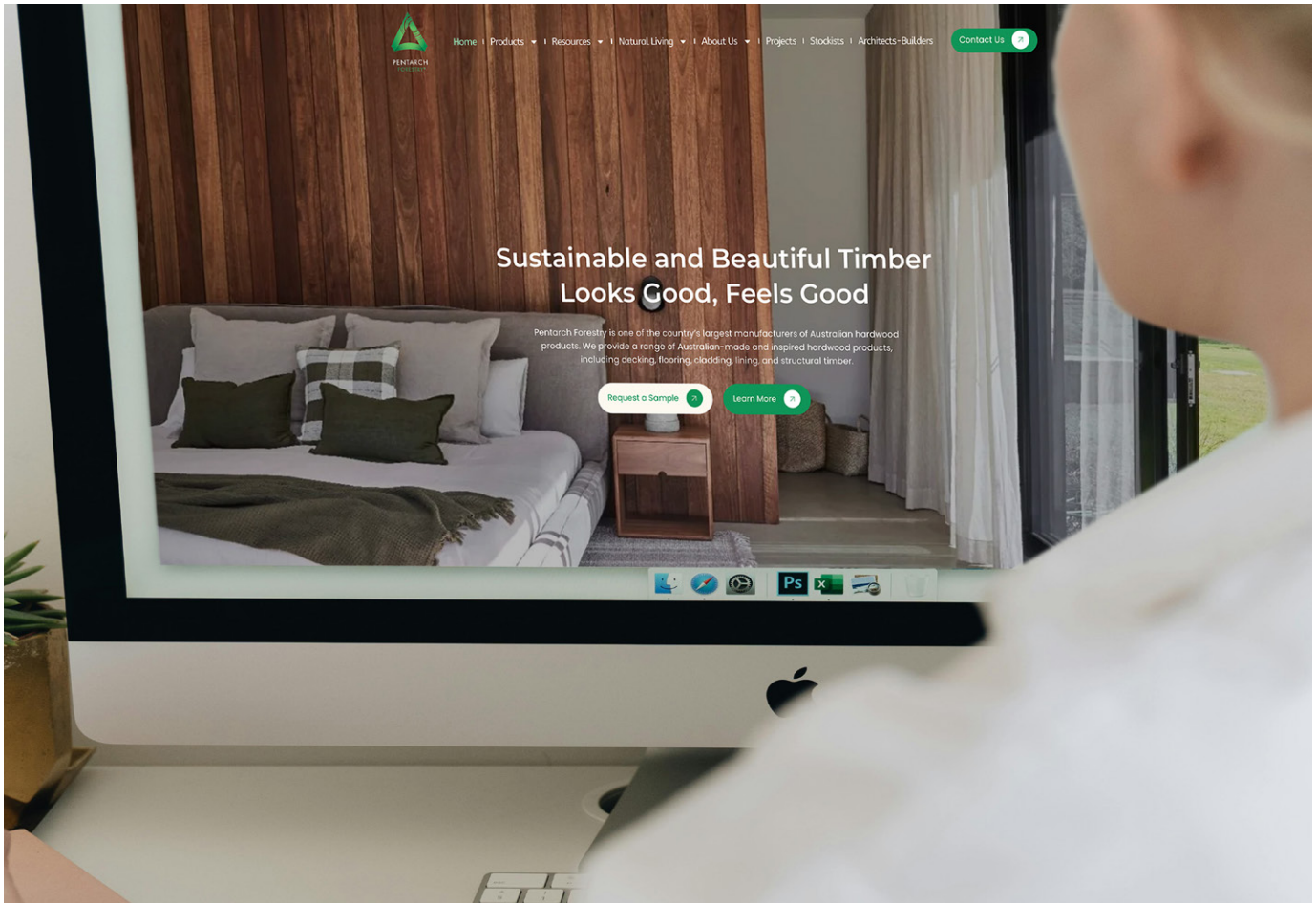
REAL TIMBER ENGINEERED TO PERFECTION





Specified.

New Pentarch Timber Website



From unique design ideas to practical applications, our new site is designed to spark your imagination and help you visualise how Australian timber can transform any space. Whether you're planning a new architecturally designed project or a small renovation, the website offers a wealth of inspiration and knowledge to spark your vision.

Learn how the warmth, character and natural properties of timber can enhance the thermal properties of a structure or how it can enhance the mental wellbeing of occupants. Bring your vision to life with the natural beauty of Australian timber!

[Discover Pentarch Timber...](#)

Discover the world of Australian hardwood timber with our new website – pentarchtimber.com.au.



Coating Systems & Performance Considerations for Australian Hardwood Decking

Choosing the right coating finish is critical to the long-term performance, appearance and safety of Australian hardwood decking. External timber is continuously exposed to moisture, UV radiation and temperature fluctuations, all of which influence how the timber moves, weathers and performs over time.

An appropriate coating system not only enhances the natural grain and character of hardwoods, but also provides essential protection against water ingress, surface wear and slip hazards. Selecting a finish that responds effectively to Australia's harsh outdoor conditions can significantly reduce maintenance demands, minimise coating failure and extend the service life of the deck.

Preparation

Proper preparation is crucial for a long-lasting finish. Start by thoroughly cleaning the deck to remove dirt, metal shavings, mould, and tannins and use a deck cleaner for stubborn stains if required. Sand any rough or weathered areas and allow the timber to dry out completely before applying a finish.

Maintenance

Regular maintenance will keep your deck looking its best. Reapply selected coatings every 6 to 12 months, or as recommended by the product manufacturer. Sweep away leaves and debris and wash the surface occasionally to prevent mould growth. Inspect for signs of wear or damage, addressing any issues promptly to prevent further deterioration.

Slip Resistance

Slip resistance is an important safety consideration, especially in wet conditions. Many decking finishes are tested to meet Australian Standards for slip resistance. If additional grip is required, anti-slip treatments or tapes can be applied to high-traffic areas.

SELECTING A FINISH THAT RESPONDS EFFECTIVELY TO AUSTRALIA'S HARSH CONDITIONS IS A MUST

When it comes to protecting and enhancing Australian hardwood decking, there are several finishes available, some of which are categorised as:

- **Penetrating Oils:** These are popular for hardwood decks as they soak into the timber, highlighting the natural grain and providing water resistance. Common options include decking oils and natural tung oils.
- **Water-Based Sealers:** These finishes form a surface film, offering UV protection and a range of sheen levels. They tend to dry faster and are low odour, making them a practical choice for residential settings.
- **Polyurethane and Varnish:** While less common for outdoor decks due to their tendency to crack and peel under harsh weather, they provide a hard, glossy finish when used in covered areas.





Coating Systems & Performance Considerations for Australian Hardwood Decking

Film-Forming Coating Systems

Film forming coating systems, such as varnishes, polyurethanes and some surface sealers, create a continuous layer over the timber rather than penetrating it. While these systems can offer a uniform appearance and higher initial gloss, they present several challenges when used on external timber decking:

1. Peeling and Delamination

External timber is subject to moisture movement due to rain, humidity and temperature changes. Film forming coatings can trap moisture beneath the surface, leading to loss of adhesion, blistering and peeling. Once the coating is breached, failure can spread rapidly across the deck surface.

2. Cracking Due to Timber Movement

Timber expands and contracts with changes in moisture content. Rigid film forming coatings are often unable to accommodate this natural movement, resulting in cracking and splitting of the coating, particularly at board joints, fixings and end grain.

3. High Maintenance and Difficult Repairs

When film forming systems fail, localised touch ups are rarely effective. Remedial work typically requires complete sanding or stripping back to bare timber before recoating, which is labour intensive, disruptive and costly compared to re oiling penetrating systems.

4. Slip Resistance Issues

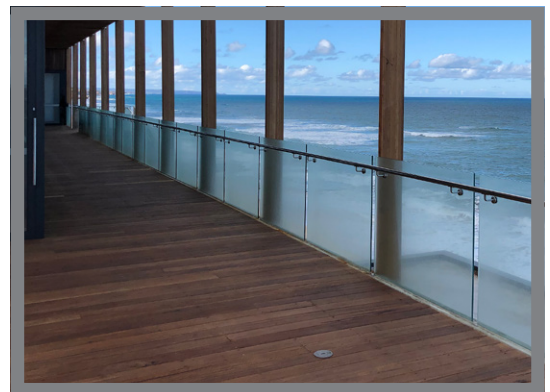
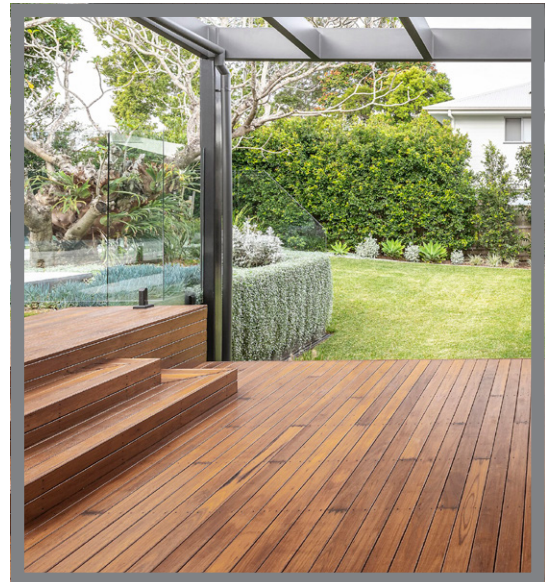
Smooth film forming finishes can become slippery when wet. This can present safety risks on decks, stairs and walkways unless additional slip resistant additives or treatments are applied, which may alter appearance and performance.

5. Accelerated Degradation in Harsh Exposure

UV radiation, heat and weathering can cause surface coatings to become brittle and degrade over time. In exposed external environments, this can lead to chalking, loss of clarity and uneven appearance, reducing both durability and aesthetic performance.

6. Moisture Entrapment and Timber Degradation

By sealing the surface, film forming coatings may restrict the timber's ability to dry evenly. Prolonged moisture retention can increase the risk of mould growth, surface staining and long term timber deterioration.



For these reasons, film forming coating systems are generally less suitable for exposed external decking applications. Penetrating oil based finishes are typically preferred for external hardwood decking due to their ability to move with the timber, ease of maintenance and lower risk of coating failure.

By selecting the right finish and following proper preparation and maintenance routines, you can ensure your Australian hardwood decking remains attractive, durable and safe for years to come.



Specified.

From Forest to Fitout Australian Hardwood in Biophilic Design

At Pentarch Forestry we align our timber products with biophilic design principles, emphasising the innate human connection to natural materials such as wood. Through our Natural Living platform, we describe how natural timber enhances wellbeing by reducing stress, improving comfort, and creating environments that feel warm, tactile, and visually complex rather than sterile.

Biophilic design as an approach, uses natural materials to improve physical and psychological outcomes in buildings, positioning Australian hardwood as a “cornerstone” material due to its visual grain, texture, and sensory richness.

Pentarch Forestry is one of Australia’s largest manufacturers of locally produced hardwood products, including flooring, cladding, lining, decking, and structural timber, all of which are commonly specified in biophilic architecture.

These products are promoted not only for durability and performance, but for their ability to:

- Introduce natural texture and warmth into interiors
- Soften acoustics through timber’s sound-absorbing properties
- Create visually calming environments aligned with biophilic outcomes

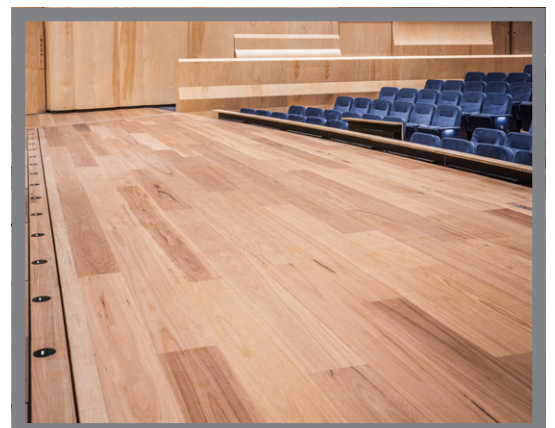
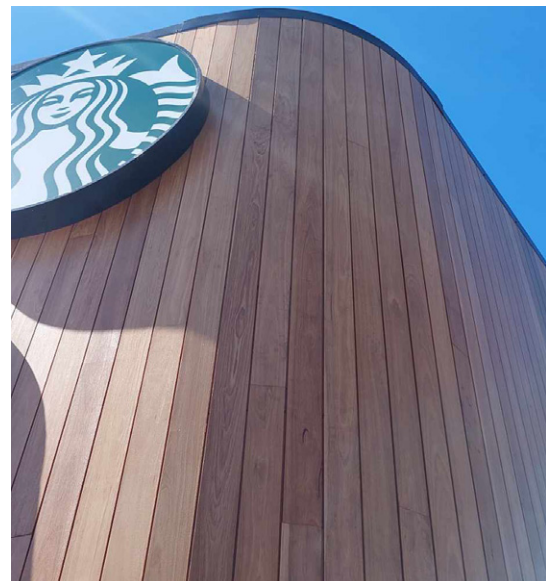
There is an abundance of research that associates exposure to wood and how it may reduce stress and improve focus. With its thermal and hygroscopic properties timber feels warmer to touch than steel or concrete and helps regulate indoor humidity thus contributing to the occupant’s comfort and wellbeing. This framing supports the biophilic movement’s goal of creating buildings that are not just environmentally responsible, but also psychologically restorative.

A core principle of biophilic design is maintaining a genuine, ethical connection to nature rather than a superficial aesthetic. Pentarch Forestry contributes here through its sustainable forest management and chain of custody systems, which aim to ensure timber is sourced from managed, renewable forests.

Certified forests and plantations support carbon sequestration, soil conservation, and biodiversity when managed responsibly, reinforcing the idea that biophilic materials should come from regenerative systems rather than extractive ones.

We also hold certifications such as PEFC and Responsible Wood Chain of Custody for our timber products, which provides specifiers, builders and architects with traceability when aligning projects to sustainability and wellbeing frameworks.

For an architectural specification context, Pentarch Forestry positions itself as a supplier that helps translate biophilic intent into buildable, certifiable, Australian-sourced timber solutions rather than as a purely conceptual advocate.





Species Highlight Brush Box

(*Lophostemon confertus* syn.
Tristania conferta)

Is a native Australian hardwood commonly found along the east coast, particularly in Queensland and New South Wales. Renowned for its dense structure and fine, even texture, Brush Box is highly valued in Australian flooring due to its stability and attractive appearance.

Brush Box features a unique palette ranging from pale pinkish brown to rich reddish-brown tones. The natural variation in colour and subtle grain pattern makes it a popular choice for adding warmth and sophistication to interior spaces. Over time, the timber develops a beautiful patina, enhancing its aesthetics.

Brush Box is valued for its fine, even texture and close grain, which produces a smooth, refined surface when finished. The timber commonly exhibits an interlocked grain, and in selected boards this can create attractive effects such as subtle fiddleback, wavy grain or a natural shimmering appearance under light. When sanded and coated, Brush Box polishes exceptionally well, making it well suited to high end residential and commercial interiors where visual depth is desired.

Brush Box is rated as moderately durable, suitable for both domestic and commercial applications. Its resistance to wear and indentation makes it ideal for high-traffic areas. This species contains naturally occurring silica within its wood structure and together with the species' high density, contributes to Brush Box being regarded as naturally resistant to termite attack, particularly in above-ground applications. While no timber is entirely immune, Brush Box is commonly specified where enhanced natural termite resistance is desired.

Brush Box has a long history of use as a flooring timber in Australia, particularly in Queensland and northern New South Wales, where it was commonly installed in residential homes, schools, halls, warehouses and community buildings. Its high density, durability and resistance to wear made it well suited to high traffic interiors, and many original Brush Box floors remain in service today. As a result, the species is frequently encountered in renovation and restoration projects, where existing floors are sanded and refinished to reveal their original colour and grain.

