



Enhancing
Timber

ImbueTM



We modify timber – and we enhance it

At Imbue, we modify timber, and we enhance it. Our precision-controlled heat tempering process transforms wood into a superior, high performance material. By refining its structure at a molecular level, we enhance durability, stability, and resistance to external factors. This means fewer defects, less maintenance, and a longer lifespan, ensuring our timber meets the demands of modern construction and design.



Tried and True. Imbue.

Maxwell Wood, established in 2001, introduced Asia's first large-scale thermal modification plant, pushing the boundaries of innovation. Over two decades, Maxwell refined its process, specialising in modifying fast-growing and dense tropical species.

Abodo Wood, founded in 2002, became the Southern Hemisphere's leader in thermal modification, focusing on sustainable plantation species like Radiata Pine.

Together they have 40 years of industry knowledge in thermal modification, and it's from this foundation that Imbue has emerged to continue the legacy of innovation and creating high performance, heat tempered timber.





Heat Tempered, Nature Perfected

The heat tempering process at Imbue enhances the wood's natural beauty while strengthening its core. By carefully controlling temperature and humidity, we unlock the full potential of timber, increasing its stability and resistance to environmental factors. Our advanced modification process is free from harsh chemicals, preserving the integrity of the wood while delivering superior performance.

Not All Heat Tempered Wood is Created Equal

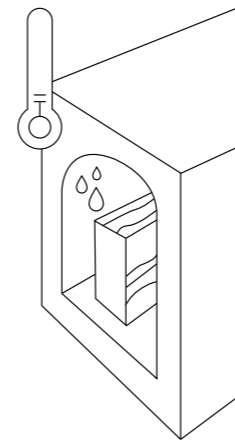
Heat tempering wood isn't just about turning it brown. To get long lasting performance, you need a process tailored for the species, not some one-size-fits-all schedule. Generic thermal modification can leave lower durability timbers weak and unpredictable.

The only way to know it holds up is to put it through the tests, real-world exposure, real decay trials. So that's what we did! We've spent 20 years refining a species-specific heat tempering schedule that modifies and unlocks the best in our timbers.

Imbue transforms rapidly renewable Forest Stewardship Council® (FSC®) certified plantation logs into durable, high performance timbers. The result? Timber with proven strength, stability, and staying power. That's where Imbue stands apart.



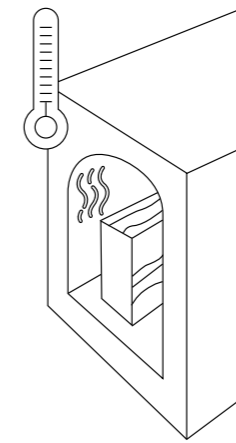
Thermal Modification Step by Step



PHASE 1

Initial heating process

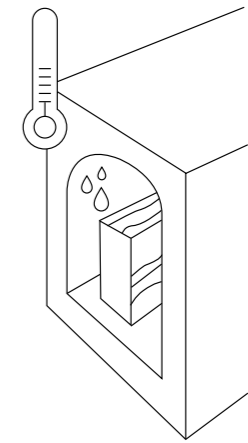
Kiln dried timber is placed in a thermal modification kiln and is gradually increased to a target temperature of 230 degrees. This process occurs over an extended period, with thicker boards requiring more time.



PHASE 2

Peak temperature

Once the timber has reached 230 degrees core temperature, it is held for a minimum of 2 hours. At this point the thermal modification is occurring than the temperature must be carefully controlled by probes. The moisture content of the wood at this stage is essentially zero.



PHASE 3

Reconditioning process

After the timber has reached its peak temperature, it is slowly cooled, and reconditioned with steam. This raises the moisture content to a target of 6-7% moisture content.



Expertise That Endures

With over two decades of experience and rigorous testing, Imbue stands the test of time. Leveraging advanced heat tempering techniques, our products undergo extensive durability testing, ensuring resistance to moisture, decay, and termites. Our long-standing performance data, collected over 15 years, validates the longevity and stability of our wood.



Imbue is built on a legacy of expertise, and grounded in years of research, and real-world application.



Rapidly Renewable. Responsibly Grown. Real Impact.

Sustainability is at the heart of Imbue. By focusing on fast growing, responsibly sourced species, and FSC® certified forestry we ensure a renewable supply chain without compromising quality. Our commitment to responsible forestry helps reduce pressure on old growth forests while delivering a high performance product. Through ethical sourcing and sustainable practices, we create timber solutions that benefit both people and the planet.



Timber Innovation That Runs Deep

Our commitment to innovation drives every aspect of our process. Imbue harnesses thermal modification techniques to enhance the natural properties of wood, delivering a product that is both beautiful and enduring. Whether it's pioneering the use of rapidly renewable species or refining modification methods for optimal performance, our timber solutions push the boundaries of what's possible.

KEY FEATURES:

- Heat tempered for strength, stability, and long-term performance.
- Durability Class 1 (EN350-1). Class 2 above ground (AS5604).
- High grade timber with mainly clear faces and minimal knots.
- 15 year warranty.*
- Stores more carbon than it uses in production, 7.56kg + of carbon.
- Profiles and finishes that adapt to your design vision.
- FSC® certified timber from responsibly managed plantations.
- Light weight for ease of install and delivery.

*Refer warranty conditions.



Imbue Screening

Imbue Screening is expertly heat tempered, crafted for high performance exterior applications.

Built to weather gracefully in any environment, it is a renewable alternative to cedar and ideal for rainscreens, battens, pergolas, and facade details. Sourced from FSC® certified plantations, it combines durability, sustainability, and timeless timber appeal.



Imbue Screening, Edinburgh, Scotland. Installed 2025.



Imbue Cladding

Imbue Cladding is precision heat tempered, designed for strength, stability, and lasting appeal. FSC® certified and responsibly sourced, it delivers high performance timber without compromise.

Available in vertical shiplap, T&G secret fixed and other adaptable profiles, with a variety of finishes and coatings, it lets you shape the look and feel of any project. It's also a more sustainable choice with each board storing more carbon than it takes to make.



Imbue Cladding, Stubkaj, Copenhagen. Installed 2023.



Imbue Cladding, Sydjylland, Denmark. Installed 2024.



Imbue Decking

Create a naturally beautiful, durable exterior space with Imbue Decking, made from rapidly renewable FSC® certified timber. Available in a reeded face for improved grip underfoot or smooth dressed surface.

For termite prone regions, after the heat tempered Imbue process, we provide the option of a pressure treated low VOC organic preservative. This provides full protection against termites making it an all in one solution for decking. Unlike most hardwoods, Imbue Decking doesn't need predrilling, making it quick and easy to cut, fix, and finish, a favourite among both professional builders and DIY enthusiasts.



Imbue Decking, Rotorua, New Zealand. Installed 2020.



Imbue Decking, Whatawhata, New Zealand. Installed 2022.





Raw Timber, Real Potential

Imbue is supplied in rough sawn timber boards, offered in a range of sizes and is ready to be profiled to suit.

25x100

25x125

25x150

25x200

32x100

32x125

32x150

32x200

38x100

38x150

38x200

50x100

50x150

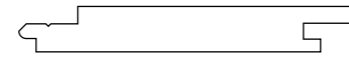
50x200

Other sizes available on request.

Profiled product is supplied as Select grade (refer to Abodo Appearance Grade Rules).

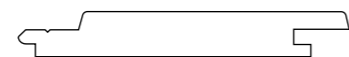
STANDARD PROFILES:

Cladding WB12



138x19 (118mm cover)
Vertical

Cladding WB18



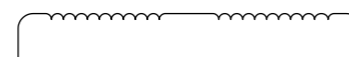
135x19 (115mm cover)
Vertical/Horizontal

Decking DK4



138x27

Decking DK16V



138x27

Screening RHB



68x19

Other profiles may be available on request subject to prior approval and minimum order quantity.



Technical Data Sheet

Product options

Imbue Radiata – Flatsawn

Typical nominal sawn sizes (mm)	100x25, 125x25, 150x25, 200x25, 100x32, 150x32, 200x32, 100x50, 150x50, 200x50mm
Lengths	2.4m, 2.7m, 3.0m, 3.6m, 4.2m, 4.8m (subject to availability). US Imperial lengths available
Grade	Clear 2 and Better (rough sawn)/Select (profiled)
Species	Radiata Pine
Treatment	Heat tempered TMT230. Additional preservative treatment is optionally available where termite resistance is required.
Origin	North Island, New Zealand
Sustainability	FSC® certified– mixed, CoC No.: SGS–COC–004944
Average dry density	~420 kg/m ³
Equilibrium Moisture Content % (EMC)	~7%
Durability	Class 1 (EN350–1). Class 2 above ground (AS5604)
Warranty	15 years against fungal attack (subject to terms and conditions)
Indicative expansion when wet (from 7% MC to fibre saturation point)	Tangential 3%, Radial 2%, Longitudinal 0.25%. May vary due to natural variation in the timber
Compatibility	Can be placed in contact with most materials including aluminium, galvanised and stainless steel however increased acidity of the timber may require separation from zinc. Use stainless steel fixings for exterior applications
Fixings	Nail hold strength same as for radiata pine (JD4). Screw hold strength reduced by around 20% (JD4–JD5)
Gluing	Cross linking PVA, PU, MUF glues and RF resins can be used. Unique properties of the timber including dryness may affect glue bond performance, always check with adhesive manufacturer and conduct testing prior to use
pH (indicative)	3.9
Hardness	Medium–Low (2.5kN Janka)
Thermal properties	~0.095 W/mK/~R1.35 per 25mm thickness (EN12667, ASTM C518, ISO 8301)
Characteristic structural properties (clear sap wood)	Stiffness (MoE) 8GPa, Bending strength (MoR) 50MPa
Weathering	Flatsawn boards will exhibit some surface cracking and will lighten in colour (eventually to silver–grey) with exposure to weather
Workability	Excellent machinability. Timber exhibits reduced splitting strength, therefore care should be taken to use sharp tools and pre–drill fixings. Fine dust is created from machining so good extraction is required. Increased brittleness so careful handling and robust protective packaging of profiled product required
Coating	Takes most oil and water borne coatings well, absorption rates tend to be higher. Smooth dressed timber must be sanded prior to coating. Always test coatings prior to use and follow coating manufacturer's instructions for application
Fire	D–s1–d0 (EN13501–1), Class B (ASTM E84), Group 3 (AS/NZS3837) (Fire classifications may be subject to specific installation requirements in accordance with test reports and local building regulations)

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Disclaimer

The information in this document is designed as a guide only and has not been independently verified. No warranty or representation is offered with regards to accuracy and completeness. Imbue disclaim any liability to the fullest extent by law for any loss or damage whatsoever resulting from the use of this information in full or part.

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