BIG RIVER

HELPFUL TIP GUIDE

Engineered vs Solid Timber Flooring

A plain-English guide for Australians building or renovating — how the two compare, the pros and cons of each, what to look for, and why the right local installer makes all the difference.

First, the good news

Both engineered and solid boards are **real timber** with a genuine hardwood surface — this isn't timber versus a laminate or vinyl look-alike. The difference is in how the board is built, and that affects where each one works best, how it's installed, and how it lives in your home over the years. Here's how to choose with confidence.

At a glance

	Engineered timber	Solid timber
What it is	A real hardwood top layer bonded to a stable cross-laminated (plywood) core	A single solid piece of hardwood, usually ~19mm thick
Stability	Very stable — resists gapping & cupping with humidity swings	Moves more with moisture & temperature
Over a concrete slab	Yes — can be direct-stuck to the slab	Generally needs a battened/timber subfloor
Underfloor heating	Suitable (choose a board rated for it)	Usually not recommended
Finish	Often pre-finished (less dust, quicker) or raw	Usually sanded & finished on site
Re-sanding	Limited — depends on wear-layer thickness	Many times over decades
Best for	Slabs, apartments, wide boards, heated floors, faster installs	Period homes & anyone wanting to re-sand for generations

Engineered timber flooring

STABLE & VERSATILE

A hardwood wear layer over a multi-layer core that's engineered to stay put. It's why engineered boards handle Australian slabs, apartments and climate swings so well.

Pros

- ✓ Excellent dimensional stability — far less gapping, cupping or shrinkage
- ✓ Can be installed directly over concrete slabs (direct-stick)
- ✓ Suits apartments, upper floors and slab-on-ground homes
- ✓ Compatible with in-slab/hydronic underfloor heating (when rated)
- ✓ Great for wide boards, which move too much in solid form
- ✓ Often pre-finished — faster, less dust, walk on it sooner
- ✓ Available Australian-made in native species (e.g. Big River ArmourFloor®)

Cons

- – Fewer re-sands over its life — set by the wear-layer thickness
- – Quality varies: thin wear layers & cheap cores exist — check the specs
- – A badly damaged pre-finished board is usually replaced, not spot-sanded
- – Not all products are rated for heating or wet areas — confirm first

Solid timber flooring

TRADITIONAL & RENEWABLE

A single piece of solid hardwood, tongue-and-groove, typically sanded and finished in your home. The classic choice — and one you can refresh for generations.

Pros

- ✓ Can be re-sanded & re-finished many times — a very long life
- ✓ Solid board underfoot with a traditional, premium feel
- ✓ Easy to refresh the whole floor's look down the track
- ✓ Ideal for period and heritage homes
- ✓ Australian hardwood species with genuine character

Cons

- – Moves more with moisture & temperature — needs expansion gaps & care
- – Generally not suited to direct-stick on slabs or over underfloor heating
- – Usually site-sanded & finished — more dust, time & installer-dependent
- – Wide boards are more prone to gapping & cupping
- – Often a higher installed cost and a longer project

What to look for

Whichever way you lean, these are the things that separate a floor you'll love for decades from one you'll regret. Ask your supplier and installer about each.

Wear-layer thickness (engineered)
Thicker top layer = more re-sands and a longer life. Ask for the actual mm.

Species & hardness
Match durability (Janka rating) to your household — pets, kids, high traffic.

Grade & character
How much natural feature, knots and colour variation you want to see.

Finish
Pre-finished vs site-finished; matte/satin/gloss; oil vs polyurethane.

Board size
Width & length change the look — wide boards suit engineered for stability.

Health & sourcing
Low-VOC/E0 emissions and responsible sourcing (AFS/PEFC, FSC where applicable).

Warranty
Structural + finish cover, backed by a reputable local manufacturer.

Australian-made
Local provenance, species suited to our climate, and local support if anything's needed.

Quick selection tips

Concrete slab?
Lean engineered — it can be direct-stuck to the slab.

Apartment or upper floor?
Engineered, for stability and acoustic underlay options.

Underfloor heating?
Engineered, and confirm the board is rated for it.

Big open-plan or wide boards?
Engineered keeps wide boards flat and gap-free.

Heritage restoration?
Solid suits period homes and future re-sanding.

Choosing a colour?
Get samples and view them in your own light, next to your furnishings.

The step that matters most: use a local timber flooring professional

A great floor is 50% product and 50% installation. The most beautiful boards can fail if the subfloor isn't right — and in Australia's climate, substrate and site preparation are everything. A qualified local timber flooring installer is the difference between a floor that lasts and an expensive problem.

1
Substrate & moisture testing
Testing the slab and subfloor for moisture, and confirming the slab is cured & dry, before a single board goes down.

2
Site preparation
Grinding/levelling the floor, the right underlay or acoustic layer, and acclimatising the timber where required.

3
Correct fixing & gaps
The right method for your subfloor and product (direct-stick, float or secret-nail) with proper expansion allowances.

4
Quality install & finish
Skilled laying and — for raw or solid boards — expert sanding & coating for a flawless, durable finish.

Why it's worth it
Professional installation protects your warranty (many warranties require it), gets the substrate and site prep right for Australian conditions, and delivers the highest-quality finish — the part you actually see and feel every day. A local pro also knows your climate and the right products for it. If in doubt, ask your supplier to recommend a qualified timber flooring installer.

Your pre-installation checklist

- ✓ **Subfloor type confirmed** — concrete slab or timber subfloor (it drives the product choice)
- ✓ **Moisture test done** — slab cured and dry, subfloor within range
- ✓ **Subfloor level & clean** — ground/levelled and ready
- ✓ **Timber acclimatised** — where the product requires it
- ✓ **Expansion gaps planned** — perimeter and transitions allowed for
- ✓ **Heating compatibility checked** — if you have underfloor heating
- ✓ **Finish & sheen chosen** — pre-finished or site-finished; matte, satin or gloss
- ✓ **Warranty & installer confirmed** — qualified installer booked, warranty terms understood

BIG RIVER

Australian-made timber flooring

Big River manufactures ArmourFloor® — Australia's only locally-made engineered hardwood floor — in Grafton, NSW, alongside a full range of engineered, solid and prefinished timber flooring. Talk to our team or visit a branch for product advice and to be pointed to a qualified local installer.

This guide is general information to help you choose, not installation instructions or product-specific advice. Always follow the manufacturer's specifications and use a qualified timber flooring professional. © Big River Group.