LB TIMBER

Installation guidelines

Engineered timber flooring

This guide covers all LB Timber engineered flooring, including our European Oak engineered boards. Parquetry (herringbone and chevron) comes with its own instructions.

Read it through before you start. Most flooring problems begin with the site or the subfloor, not the boards.

The numbers that matter

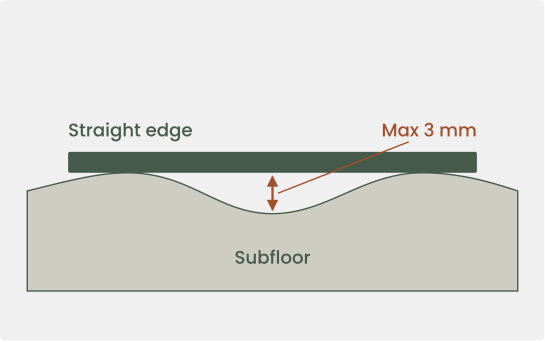
60 days	<85%	3 mm	300 mm
Minimum age of a new concrete slab	In-slab relative humidity	Maximum dip under a straight edge	Minimum gap between end joints

Get the site ready



- Install once the building is dry and clean, with most other trades finished or nearly finished.
- Store the boxes flat and stacked, out of direct sun. On concrete, put plastic underneath.
- Keep the boxes sealed until you're ready to lay. Don't open them overnight or leave loose boards lying around.
- Check for moisture: subfloors below ground level, gardens or patios close to floor height, and water stains on walls or ceilings.
- Protect the floor from sun through north and west windows until blinds, awnings or tinting are in.
- Our engineered flooring is not suitable over in-floor heating.

Dry, sound and flat



Concrete slabs must be at least 60 days old, with an impedance meter reading below 4.0% or in-slab relative humidity below 85%. Above that, get specialist advice. A slab that stays above 5.0% or 90% RH is not suitable.

Timber subfloors: plywood and particleboard below 13% moisture content, joists and bearers no more than 14%. The ground underneath must stay dry in wet weather, with ventilation and drainage to ATFA requirements.

Flatness: within 3 mm under a 3 m straight edge for glue-down, or under a 1.0 to 1.2 m straight edge for floating. Grind high spots and fill low spots with a levelling compound strong enough for timber floors.

Preparing your subfloor

Can I float a floor over any subfloor?

It needs a solid subfloor. Never lay a floating floor over carpet or another floating floor such as laminate or hybrid. Vacuum away every bit of debris before the underlay goes down.

How do I prepare a concrete slab for glue-down?

Test the slab moisture first. Use an applied moisture vapour barrier on every slab on the ground. An elevated slab reading below 3% (75% RH) may not need one.

Grind away any weak surface. The barrier usually goes on before levelling compound. Don't mix primer, levelling compound and adhesive from different systems, and grind off any primer outside the levelled areas before gluing.

How do I lay plywood over a slab?

Lay 200 µm builder's plastic, lapped 200 mm, with the joints taped and the plastic turned up the walls to floor height.

Fix 12 mm (minimum) non-structural plywood in a brick pattern with spike fixings: four rows of seven per sheet, about 75 mm in from the edges. Structural underlay panels go down to their maker's instructions.

What about plywood or particleboard on joists?

Fix any squeaks first by screwing sheets down or fixing the framing.

Rough sand to flatten swollen joints, clean off contaminants and remove the wax layer on particleboard.

Can I lay over an existing timber strip floor?

Yes, if it's dry (13% or less), not moving with the seasons and flat. Rough sand it clean.

If in doubt, add a 6.5 mm plywood layer: glue it with beads 100 mm apart or a full trowel bed, and staple 12 mm in from the edges, 75 mm apart around the edge and on a 100 mm grid across the sheet.

Can I lay over tiles?

Yes, once they're ground flat and clean and finished with a cement-based levelling compound.

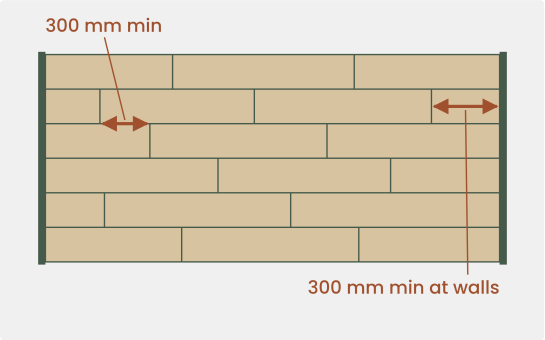
Remove hollow-sounding tiles. Floating floors such as laminate or hybrid must come out.

Can I use an acoustic underlay?

Yes. Use a firm, flat acoustic underlay made for engineered flooring, glued to the subfloor. Glue the floor to it, or float over it with floating underlay on top.

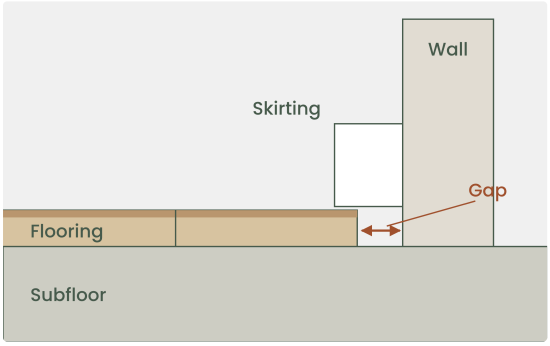
Make sure the underlay and adhesive makers approve each other's products for this method.

Plan the layout



- Run the boards parallel to the longer walls and down the main hallways. Low light across the boards can show small surface irregularities.
- Balance the layout so cut boards along walls, and either side of a hallway, are as wide as possible.
- Stagger end joints at least 300 mm apart. Boards at the walls must be at least 300 mm long.
- Blend boards for colour and grain as you go. If a board looks out of place, use it somewhere less visible or leave it out.
- Check boards before you lay them. If you find damage or a coating fault, call us and don't install it.
- Remove skirtings and undercut door frames. Have trims, and underlay for floating floors, on site before you start.

Leave room to move



- **Floating:** 10 mm in Vic, SA, WA and NZ. 15 mm in NSW and Qld.
- **Glue-down:** 5 mm.
- Set the gap with spacers along board edges and ends, around every fixed vertical surface: walls, door frames, pipes and cabinets fixed to the subfloor.
- Skirtings or trims cover the gap.

Floating or glue-down

Floating

Boards click together on an underlay and aren't fixed to the subfloor. Softer underfoot. 10 to 15 mm expansion gap, with large floors split into rafts.

Glue-down

Boards are glued to the subfloor with a full trowel bed. Firmer underfoot with less seasonal movement. 5 mm expansion gap, and a flatter subfloor.

Floating floor: step by step

Coastal NSW and Qld: rafts up to 6 m wide and 10 m long. Vic, NZ and moderate climates such as Perth: up to 10 m by 12 m.

01

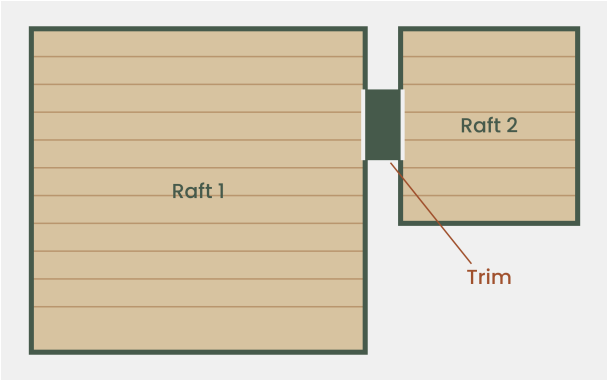
Check the site

Make sure the site and subfloor meet the requirements above.

02

Plan the rafts

A floating floor moves as a whole, so split large or complex floors into rafts joined by control joints, usually H-trims. Put one at every doorway between main rooms.



03

Check the alignment

If a hallway leads into an open area, snap a chalk line down the middle of the hallway and through the open area. Use it to check the walls and balance the boards either side.

04

Lay the underlay

Use a suitable damp-proof underlay. Start along a long outside wall, with the moisture barrier film turned up that wall.

05

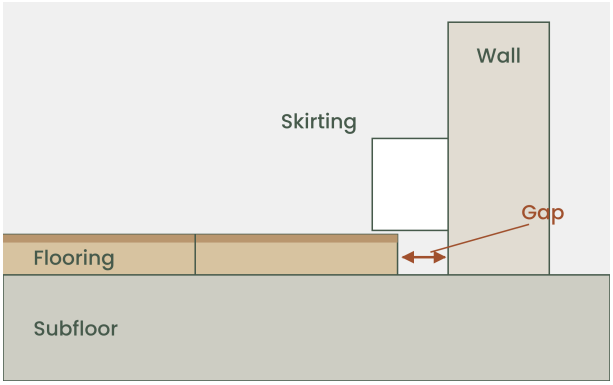
Prepare the first row

Cut it narrower from the tongue side if needed, and scribe it to the wall. Remove tongues or ends that would sit against a wall. If trimming removes an end joint's plastic tongue, glue that joint with cross-linked PVA.

06

Set the gap

Put spacers along the board edges and ends: 10 mm in Vic, SA, WA and NZ, 15 mm in NSW and Qld.



07

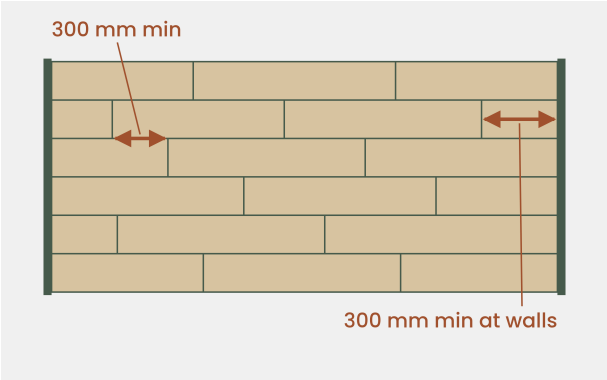
Lay the first row

Usually left to right, with the groove facing away from the wall. Clean the end grooves before clicking the ends together. Keep the last board at least 300 mm long.

08

Lock in the second row

Stagger the joints at least 300 mm. Angle the tongue into the groove and fold down so the edge and end lock together. Tap gently if needed; it shouldn't need force.



09

Keep going

Start rows with offcuts. Tape each run of underlay to the next. Scribe and cut the last row to the wall, allowing for the gap.

10

Fit the trims

At doorways, external doors, other floor surfaces and between rafts. Fix trims to the subfloor, never to the flooring, and leave room for movement.

11

Leave the edges free

Don't caulk around the edges; it stops the floor moving and can make it buckle. Lay around heavy fixtures such as kitchen benches, never under them.

Glue-down floor: step by step

Use a non-etching (isocyanate-free) polyurethane or polymer flooring adhesive. The moisture barrier, levelling compound and adhesive must come from the same maker, or a system the makers have agreed.

01

Check the site

Make sure the site and subfloor meet the requirements above, especially if someone else did the preparation.

02

Plan expansion breaks

Coastal NSW and Qld: add one when the floor is more than 10 m wide or 12 m long. Vic, NZ and Perth: more than 12 m wide or 14 m long. Leave a 5 mm break and fill it with cork or caulk.

03

Check the alignment

Use a chalk line down the hallway, as for floating floors. Starting from a centre line can work better than starting at a wall.

04

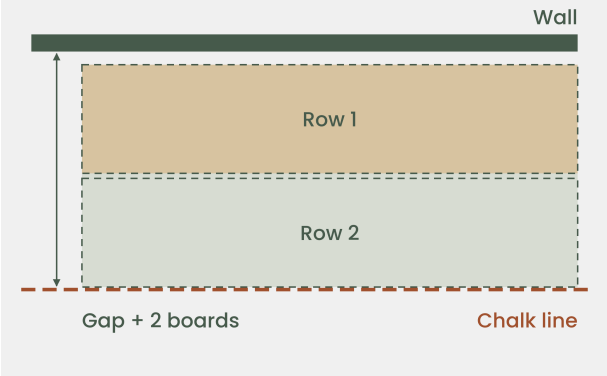
Dry-lay the first row

Along a long outside wall. Cut the last board to length (at least 300 mm), leaving the 5 mm gap at both ends. Cut narrower from the tongue side if needed and scribe to the wall.

05

Mark the chalk line

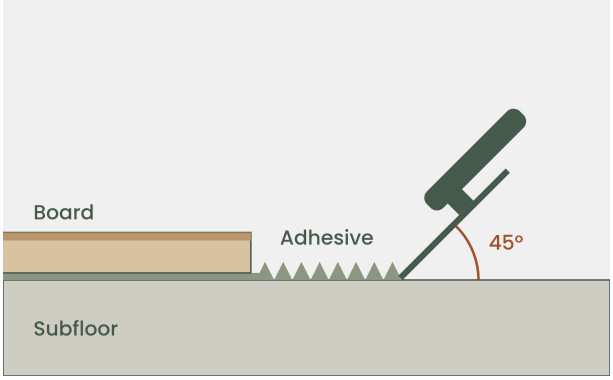
Measure out from the wall the gap plus the first board plus a second board. Mark both ends, snap a chalk line and move the boards aside.



06

Spread the adhesive

Spread a full trowel bed from the chalk line to the wall, with the trowel the adhesive maker specifies held at 45°. Beads of adhesive often leave hollow spots.



07

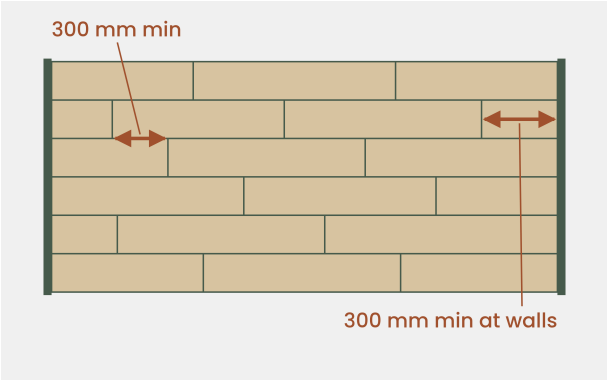
Lay and lock

Lay the first row with the groove facing away from the wall, pressed into the adhesive. For the next row, angle each board at 45°, line up the end joint and fold down in one movement so it locks.

08

Keep going

Spread adhesive 3 or 4 boards wide along the full row. Don't leave it open more than 35 to 45 minutes (check the maker's instructions). Keep joints at least 300 mm apart and avoid repeating patterns.



09

Check for hollow spots

Don't walk on fresh boards. If you find hollow spots, lift a board to check coverage, then weight or fix boards while the adhesive cures. Clean any adhesive off the surface straight away.

After installation



- Remove the spacers and fit skirtings and trims.
- Caulking between skirtings or cabinets and the floor works when the floor moves very little. Never use silicone: it causes problems if the floor is recoated later.
- If other trades are still working, cover the floor with a breathable protection product made for floors.
- Don't stick tape directly on the floor. Some tapes harden and lift the coating.
- Give the owner our care and maintenance guide.

Questions? Contact LB Timber: lbtimber.com.au/pages/contact