

Maison Plank Installation Guide

Floating & Glue-Down Installation + Heating/Cooling Requirements

1. Before You Begin

Maison Plank is a real-wood veneer over a dense, stable core. It installs quickly, but only if the basics are right: flat, dry subfloors and stable indoor conditions. Most failures trace back to skipping this step.

Indoor conditions (jobsite ready):

- Temperature: 61–70°F (16–21°C)
- Relative humidity (RH): 40–60%
- Maintain these conditions 48 hours before, during, and after installation.

Acclimation:

- Store unopened boxes in the installation area for 24–72 hours.
- Keep boxes flat, off the ground, away from exterior walls and direct sun.
- Do not open cartons until you are ready to install.

Maison Plank is suitable for most interior spaces, not for wet areas such as showers, saunas, or constantly damp basements.

2. Subfloor Requirements

Maison Plank can be installed over:

- Concrete slabs
- Plywood or OSB subfloors
- Existing tile or natural stone (properly prepped)
- Existing hardwood (structurally sound and flat)

Regardless of subfloor type, it must be:

- **Flat:**
 - Max deviation 3 mm ($\frac{1}{8}$ ") over 6' 6" (2 m)
 - Or 1 mm ($\frac{1}{32}$ ") over 8" (20 cm)
- **Clean:**
 - No dust, paint, oil, adhesive residue, joint compound, or construction debris.
- **Sound:**
 - No loose sections, hollow spots, delamination, or active cracks.

Concrete

Concrete must be moisture tested and within the limits specified by both the flooring and adhesive manufacturers.

Recommended test methods:

- **ASTM F2170 (RH testing)** – in-slab relative humidity probes
- **ASTM F1869 (calcium chloride)** – moisture vapor emission rate

Follow the most conservative value between:

- The adhesive manufacturer's limits
- The flooring system recommendations

If readings exceed those limits, use an appropriate moisture mitigation system or postpone installation until conditions are within range.

Wood Subfloors (Plywood / OSB / Existing Hardwood)

- Moisture content of wood subfloors should generally be within 2–4% of the flooring moisture content and in line with regional norms.
- Subfloor must be structurally sound, firmly fastened, and free of squeaks or deflection.
- Fix loose panels and correct any structural issues before installing.

3. Underfloor Heating & Cooling

Maison Plank can be installed over properly designed and controlled hydronic or electric radiant systems used for heating and, in some cases, cooling.

General Rules

- The radiant system must be fully commissioned and tested before flooring installation.
- The system must deliver even temperature across the surface, with no hot spots.
- Maximum floor surface temperature: 80°F (27°C).

Heating

Before installation:

- Turn off heating at least 48 hours before installation.
- Ensure slab temperature has returned to room temperature (not warm to the touch).

After installation:

- Wait at least **24 hours** before turning heat back on.
- Increase temperature gradually; no more than 9°F (5°C) per day.
- Never exceed a floor surface temperature of 80°F.
- Typical maximum water temperature at the boiler/output: 122°F (50°C).

Expect minor seasonal gaps during heating season as the indoor air dries; this is normal.

Cooling (Radiant Cooling Systems)

Radiant cooling is more sensitive than heating. It is only acceptable when the system includes proper controls to prevent condensation:

- The system must incorporate dew-point control or equivalent safety technology.
- Cooling water supply temperature must remain between 64–72°F (18–22°C), depending on climate and humidity.
- Room thermostats should never be set more than 5°F lower than the room temperature.
- As a general rule, radiant cooling systems should not pull the room below roughly 75°F (24°C) in humid conditions.

If condensation occurs within or under the floor, damage is likely and warranty coverage is void. Always follow the radiant system manufacturer's installation, operation, and control guidelines.

4. Floating Installation (Click-Lock System)

Floating installation uses the built-in click system. No fasteners, no glue between boards.

Materials

- Common installation tools (tapping block, spacers, pull bar)
- Underlay with integrated moisture barrier
- Moisture-resistant tape for seams
- Hammer, saw, utility knife, measuring tape, pencil

Underlay / Moisture Barrier

Concrete subfloors:

- Use a 6-mil polyethylene moisture barrier or an underlayment with an integrated moisture barrier.
- Lap seams at least 8–12", tape all seams, and extend 2–3" up the wall.

Wood subfloors:

- Use a suitable acoustic underlay. A separate moisture barrier may or may not be required depending on conditions (e.g., over crawl spaces).

Expansion Gaps

Maison Plank is a real wood veneer product and must be allowed to move:

- Minimum $\frac{3}{8}$ " (10 mm) gap at all walls, columns, pipes, and fixed objects.
- For rooms wider or longer than 33' (10 m), add a transition / T-profile to create an additional expansion break.
- Treat fixed islands, built-ins, and heavy objects like walls — do not trap the floor under them without expansion space.

Layout

- Install in the direction of the main light source or the longest wall, unless the design calls for another layout.

- Mix planks from multiple boxes to blend variation.
- Avoid repeating patterns and keep end joints staggered at least 12" (30 cm).

Installation Steps

1. **Inspect planks:**

Do not install boards with visible defects. Set defective pieces aside.

2. **First row:**

- Cut off the tongues on the long and short side of all first-row boards.
- Place with groove side toward the wall and use spacers to maintain expansion gap.

3. **Click mechanism:**

- Insert the tongue of one plank into the groove of the previous plank at an angle, then rotate down to lock.
- Use the tapping block and hammer to seat joints if needed — never strike the plank directly.

4. **Stagger joints:**

- Use cutoff pieces from one row to start the next row, provided they are at least 8" (20 cm) long.
- Maintain minimum offset of 12" (30 cm) between end joints in adjacent rows.

5. **Continue rows:**

- Assemble the first 2–3 rows away from the wall so you can sit on the work area.
- Slide the assembled section into position, maintaining the expansion gap.

6. **Last row:**

- Measure and rip boards lengthwise to fit, preserving expansion gap along the wall.
- Use the pull bar to pull the last row tightly into place.

Door Frames & Pipes

- Undercut door jambs where possible and slide flooring underneath, keeping the expansion gap hidden.
- Around pipes, drill holes slightly larger than the pipe diameter, cut a wedge piece out behind the pipe, install, and glue the wedge back in. Cover with trim or a pipe cover as desired.
- Seal around pipes with an appropriate flexible sealant to reduce moisture intrusion while preserving movement.

After Floating Installation

- Remove all spacers.
- Install baseboards and/or quarter-round, attaching to the wall only, never to the floor.

- Seal gaps where trim is not practical with flexible sealant to reduce moisture intrusion.

5. Glue-Down Installation

Glue-down installation adds maximum stability and is often preferred for commercial spaces, long corridors, or areas with high sunlight exposure.

Materials

- Approved wood flooring adhesive, such as:
 - Ultrabond ECO S948 1K
 - Ultrabond ECO S955 1K
 - Ultrabond ECO P909 2K
- Trowel
- Moisture barrier / primer if required by concrete conditions
- Standard tools: saw, utility knife, tape measure, chalk line, etc.

Ambient Conditions

- Room temperature: 61–70°F (16–21°C)
- RH: 40–60%
- Wood flooring and subfloor moisture levels must be in equilibrium with these conditions.

Subfloor Prep – Concrete

- Must meet flatness, soundness, and cleanliness standards listed in Section 2.
- Test moisture using ASTM F2170 (RH testing) and/or ASTM F1869 (calcium chloride).
- If readings exceed the adhesive manufacturer's limits, install a compatible moisture mitigation product or delay installation.
- Remove all curing compounds and surface contaminants that can interfere with adhesion.

Subfloor Prep – Wood

- Plywood/OSB must be properly fastened and structurally sound.
- Sand high spots, fill low spots with appropriate patching compound, and vacuum thoroughly.

Existing Tile / Stone

- Ensure existing tile is firmly bonded. Replace loose tiles and patch.
- Degrease thoroughly and, if required by the adhesive system, mechanically abrade to promote adhesion.
- Use the primer specified by the adhesive manufacturer when needed.

Perimeter Expansion & Spacers (Glue-Down)

- Maison Plank still expands and contracts with changes in humidity, even when glued down.
- Leave a $\frac{3}{8}$ " (10 mm) expansion gap at all walls, columns, cabinets, and other fixed vertical elements.
- Use spacers along the perimeter while setting the first rows, then remove them once the adhesive has cured and baseboards are installed.
- Never fasten trim to the flooring itself.

Glue-Down Installation Steps

1. **Layout:**

Strike control lines to maintain straight, square installation.

2. **Apply adhesive:**

- Use the specified trowel.
- Work within the open time and working time of the product.
- Do not spread more adhesive than you can cover within that window.

3. **Set planks:**

- Press planks into wet adhesive following directional layout.
- Use tapping block and pull bar as needed to close joints without overdriving them.
- Respect expansion gaps at all fixed vertical surfaces.

4. **Rolling (if required):**

- Some adhesive systems require rolling with a suitable roller to ensure full contact. Follow adhesive guidelines.

5. **Cure time:**

- Restrict foot traffic and load until adhesive is fully cured.
- Avoid rolling heavy loads (refrigerators, islands, etc.) across the new floor until cure time is complete.

6. After Installation & Protection

- Maintain indoor conditions in the 61–70°F and 40–60% RH range whenever possible.
- Use walk-off mats at exterior entries to reduce grit.
- Use felt protectors under furniture legs.
- Use soft, non-marking casters for rolling chairs and consider a protective mat in high-use office areas.
- Avoid dragging heavy objects across the floor.

7. Cleaning & Maintenance

- Use a cleaner approved for Maison Plank's finish system like Bona Hardwood Floor Cleaner
- **Do not** use steam mops, abrasive cleaners, or overly wet mopping methods.
- Wipe spills promptly. While Maison Plank is highly resistant to daily wear and moisture on the surface, prolonged standing water is never recommended for wood-based flooring.

For stubborn marks or damage, consult Haute Plank or your installer for appropriate repair methods.