FloorStore Direct
Online Flooring

# MERBAU SOLID HERRINGBONE

Professional Installation & Finishing Guide

**CRITICAL WARNING: NOT SUITABLE FOR UNDERFLOOR HEATING**

**Merbau Solid Wood is strictly NOT suitable for use with any form of underfloor heating (UFH).** The inherent properties of solid timber make it highly sensitive to direct heat sources, which will result in severe shrinkage, structural cracking, and bond failure.

## 1. SUBFLOOR PREPARATION & LAITANCE REMOVAL

The foundation of a Herringbone installation is the most critical stage. All subfloors must be **clean, dry, and smooth.**

### Mandatory Laitance Removal

Laitance is the weak, friable layer of cement or calcium sulphate that forms on the surface of a new screed as it dries. **It is vital that all laitance is mechanically removed by sanding or grinding.** Adhesives will only bond to this weak surface layer rather than the structural slab if it is not removed, leading to delamination and movement of the herringbone blocks.

We exclusively advise the use of **Uzin** professional systems for preparation:

## A. Damp Proof Membranes (DPM)

Subfloor moisture is the leading cause of floor failure. A professional DPM creates an impenetrable barrier between the substrate and your timber.

• **Uzin PE 404:** A high-performance, 1-component polyurethane moisture barrier designed for cementitious screeds. It penetrates deep into the pores to consolidate the surface.

• **Uzin PE 480:** A 2-component epoxy resin moisture barrier for extremely high moisture levels (up to 100% RH). This is the gold standard for damp-proofing, providing a structural seal that protects the Merbau blocks from rising vapour for the life of the floor.

## B. Priming Systems

Priming is essential to bind residual dust and regulate the absorption of the subfloor. Without it, the subfloor can "suck" the moisture out of adhesives or smoothing compounds too quickly, leading to a brittle bond.

• **Uzin PE 360 Plus:** A rapid-drying, high-penetration primer for absorbent screeds that improves the spread and bond of smoothing compounds.

• **Uzin PE 280:** A carbon-filled, film-forming primer designed for non-absorbent surfaces. Its "gritty" texture provides a massive increase in surface area for a superior mechanical bond.

## C. Smoothing Compounds

To ensure the herringbone pattern remains geometrically true and the blocks sit perfectly flat, the surface must be level and smooth.

• **Uzin NC 151:** A heavy-duty, cement-based smoothing compound for standard residential and commercial requirements.

• **Uzin NC 170:** A premium, fibre-reinforced, low-tension compound specifically engineered to withstand the extreme lateral forces and "tugging" exerted by solid wood as it expands and contracts. It provides a level-10 surface for the adhesive to grab onto.

## 2. MOISTURE TESTING & ACCLIMATISATION

Moisture testing must be performed and recorded prior to installation. Failure to do so will void any product warranty.

| SUBFLOOR TYPE | MAX RELATIVE HUMIDITY (RH) | MAX MOISTURE CONTENT (CM) |
|---|---|---|
| Concrete / Cementitious Screed | 75% RH | 2.0% CM |
| Anhydrite (Calcium Sulphate) | 75% RH | 0.5% CM |
| Timber Subfloors | Must be within 2% of the flooring moisture content | |

### Acclimatisation Period

Solid Merbau requires a **minimum of 14 days** of acclimatisation. Store the unopened packs in the room of installation, cross-stacked, to allow the timber to reach equilibrium with the room's temperature and humidity levels.

## 3. EXPANSION GAPS & FIXED WEIGHTS

### Expansion Gaps

A strict **expansion gap of 10mm - 12mm** must be maintained on all four sides of the room and around all fixed vertical obstructions, **such as radiator pipes and door frames.** This allows the natural timber to breathe without buckling.

### Heavy Fixed Weights

**Do not place heavy fixed weights (e.g., fitted kitchens, islands) directly on top of the floor.** These units must be fixed to the subfloor before the floor is installed around them to allow for natural wood movement.

## 4. INSTALLATION & FINISHING

### A. Glue Down Installation

For Merbau Herringbone, a **full spread glue down installation** is the only approved method. We exclusively advise the use of **Pallmann P4 Adhesive**. Apply using the correct notched trowel to ensure 100% adhesive transfer to the back of the blocks.

### B. On-Site Sanding and Finishing

As this is an **unfinished solid floor**, it must be sanded and finished on-site following installation. This process ensures the pattern is perfectly flush and the timber is fully protected.

We advise the following professional finishing systems:

- **Pallmann Floor Lacquers:** High-performance, hard-wearing lacquers that provide a protective seal against spills and high traffic.
- **Pallmann Oils:** For a natural look and feel that penetrates the wood fibres.
- **Rubio Monocoat Oils:** A premium single-layer oil finish that bonds with the wood at a molecular level for superior matte protection.