

## Solid Timber Flooring Installation Guide



Timber is a natural product. Timber will absorb and release moisture continually throughout its lifespan; therefore, it is important to note that some slight visible expansion and contraction may occur.

Extreme care should be taken during handling, installation and finishing which will minimise most of this movement. To achieve the best possible result with hardwood timber products, it is essential that the following procedures are followed.

## Delivery and Storage



Check that the delivery of the Timberline timber product has not been damaged in transit and ensure there is no water damage or other defects. Store the product in a dry and secure area. Care should also be taken to protect timber flooring from the elements; the plastic wrapping should remain intact until the final delivery has been made. Packets of timber always need to be stored 200mm clear from the ground. Storage should be in a dry enclosed location, where temperature and humidity are kept relatively stable. It is best to avoid storing timber anywhere on site where extreme temperatures are expected i.e. anywhere in direct sunlight or a cold garage.

Unless otherwise specified, timber flooring from Timberline will be supplied with a standard level of kiln dried moisture content of between 10% and 14%. This moisture content is suitable for normal ambient indoor conditions within New Zealand.

As ambient temperatures can vary significantly between summer and winter in New Zealand, it is recommended that the product upon delivery to site, is strip sacked for approximately one – two weeks to allow the timber to acclimatise to its surrounding conditions prior to installation. Strip stacking allows adequate airflow and enables the timber product to equalise at the ambient moisture content of the room. Strip stacking in a dry and naturally heated area will help minimise variation. If the product is to be installed in an air-conditioned building, after the product has been strip sacked, run the air conditioning at a constant temperature that will be used in the future.

## Sealing



After conditioning the Timberline flooring products as recommended, it is best practise that all solid timber T&G floorings should have a diluted sanding sealer applied PRIOR TO INSTALLATION. This should be applied over the tongue, groove, edges, ends, face and back of each board. Applying the sealer prior to installation ensures the conditioned T&G product moisture content is locked in and consistent at the time of installation. Applying a sealer also ensures that when the T&G product is polyurethaned or oiled, that the coating does not act as a glue between the tongue and groove, which can result in splitting along this joint, as the T&G naturally settles and conditions to its new environment. Always ensure that the sealer being used is compatible with the coating being used.

## Protection and Maintenance



Timber is a natural material which will move in response to changes in humidity, excessive levels of ultraviolet light or abnormal heat and temperature. Tongue and groove products are designed to allow individual boards to expand and contract in such situations but not at extreme or prolonged levels.

Minimise direct and prolonged levels of UV light – draw blinds and curtains or design shade canopies around French doors and large glass areas for long term protection.

Ensure there is a consistent level of ventilation or airflow throughout the building, particularly when buildings are not occupied for prolonged periods.

Care and preparation at the pre-installation stage will ensure a high-quality finish and appearance and common-sense protection and maintenance will ensure your investment is protected well into the future.

## General Installation



Timberline always recommends using a specialised timber flooring installer for all installations of solid timber flooring. Specialised timber flooring installers are experts and have superior knowledge of substrates, fixing methods and materials necessary to minimise the effects of timber movement and therefore ensure that a quality finished product is received.

Traditional tongue and groove hardwood timber flooring is most commonly available in a 19mm finished thickness profile. This is typically installed using a secret nail or glue system to provide secure fixing without top nailing the timber and can also be end matched to facilitate end jointing between joists.

## General Installation Continued...



Timberline solid timber flooring can be fixed direct to subfloors of plywood or particleboard, fixed direct over joists or battens over concrete slabs. The most common sub floor installation is to direct fix the solid timber floor to the concrete slab, however, if using this installation method it is recommended that the timber is only installed after an epoxy moisture barrier has been applied to the concrete. Timberline solid timber floor is renowned for its strength, durability and character. Timberline solid timber flooring can be rejuvenated over the products lifespan, by sanding and refinishing.

- Make sure that the building is completely enclosed before installation. It is advised not to pre-lay timber strip flooring.
- Seal the edges, ends and faces of the timber boards before installation. Take extra care when handling boards.
- The sub floor must be dry, flat and level before installation. To check if floor is level, use a straight edge at least 2m in length over the entire area. Any deviation in height should not exceed 2-3mm. If the subfloor exceeds this given tolerance Timberline recommend the following: If installing over a wooden substrate: fasten any loose floorboards, then sand or use a levelling compound. If installing timber over a concrete substrate: grind or use a levelling compound. If wanting to install over existing cork or vinyl: remove existing floor, sand/grind subfloor and use a levelling compound to level.
- If you are installing directly over concrete, first, check the moisture content of the sub floor with a moisture metre before installing. Timber should be installed on a dry concrete subfloor, plywood or particle board. New Zealand flooring industry regulations stipulate that the RH of a concrete slab must be less than 70% to allow installing a timber floor without first applying a moisture barrier onto the concrete.
- Industry standards recommend that a 10mm expansion gap is left around the perimeter of the room when installing a timber floor to allow for any movement that may occur.
- Laying direction is usually parallel to the longest wall or in the direction of the incoming sun but is dependent on overall design. Ensure all skirting boards/ toe kicks are removed before stating installation.

## General Installation Continued...



- Timberline recommends the use of industry standard adhesives i.e. Sika and Bostik. Adhesive should be applied to the back of the board, using a gun, in a zig zag format approx. 100mm apart. Install each board individually and try to avoid getting any adhesive on the surface of the timber. If adhesive does get on the surface of the board, wipe it off immediately with a damp cloth. Press the timber firmly into the adhesive. It

is recommended to weight the floor until the adhesive is fully cured. The interlocking (tongue and groove) system does not require any adhesive. If fixing direct to the concrete, ensure that a system is used i.e. the moisture barrier and adhesive are the same brand. Refer to adhesive manufacturer for recommendations.

- If installing timber flooring over joists or battens over the concrete substrate, make sure the framing is level before installation. Make sure that the battens/joists are securely fixed to the concrete. It is important to check that the battens and/or joists do not have a moisture content of more than 10-14%
- If nail fixing, secret nail can be used although timber profiles wider than 85mm must be top nailed.