

Flooring Technical Guide

1.0 About

1.1 Introduction

Halswell Flooring is recommended for residential & light commercial use only.

Proper care and maintenance will ensure you get the best performance from your floor.

This document is a guide only and qualified tradesmen should be consulted where expert services may be required.

1.2 Profiles

All Halswell flooring profiles are covered by this guide.

2.0 About

2.1 Building Code Compliance

Halswell Flooring meets the requirements and limitations of the following:

- NZS 3604:2011, Sec 7.1 Floor Joists - Timber framing requirements
- NZS 3604:2011, Sec 7.2 Flooring – Flooring requirements
- BRANZ BU 374 – Laying Timber Strip Flooring over concrete slab
- BRANZ BU 380 – Timber Internal Linings
- BRANZ BU 390 – Laying Timber Strip Flooring over Timber Joists

2.2 Timber Grading

Halswell Flooring boards are supplied Sound Tight Knot (STK), which is generally a mix of clears to STK. Any loose or bark encased knots or natural timber defects should be removed during installation. All grades may require some docking.

Halswell Flooring is available in 12mm & 19mm thicknesses and in a variety of cover widths. A random length supply of floorboards ranges from .900 – 5.7m, longer lengths may be available on request.

Halswell Flooring is Kiln Dried.

2.3 Durability

Halswell Flooring exceeds the 15-year minimum durability requirement when fixed above ground.

3.0 Coating

As there are a number of finishers for timber floors, an expert should be consulted to determine the best option for your intended use. Finishes include, but are not limited to; oils, mineral & water-based polyurethanes and waxes.

For all finishes, we recommend that the floor boards be coated on all four sides and each end after cutting and before laying the boards. This will help to reduce material movement in the floor boards over time.

3.1 Coating preparation

- Only sand and finish the floor when all work in the space has been completed
- Fill and sand smooth any nail holes after the first sealer coat has been applied
- Always apply finishes to the manufacturer's instructions

4.0 Handling & Storage

All Flooring should be kept indoors, and strip stacked in the environment that it is going to be laid.

Care should be taken when handling the boards to minimize damage.

5.0 Installation

All flooring shall have a maximum variation of 3mm in a 3m radius.

5.1 Health & Safety

Halswell Flooring cutting must be carried out in a well-ventilated area. Protective equipment including dust masks and hearing and eye protection must be worn.

Ensure space is well ventilated when sanding and finishing the floor.

5.2 Timber framing

Generally, the timber substrate and framing must comply with NZS 3604:2011 (Timber framed buildings). The sub floor should have at least 450mm clearance from the ground to allow for adequate ventilation. A sealed moisture proof barrier should be laid on the ground in excessively damp areas.

Joists must be spaced according to NZS 3604:2011, Table 7.3

The moisture content of the framing should be between 8% – 12% at the time of fixing the boards to reduce problems later due to excessive timber movement.

Allow a 2mm per meter length of flooring gap at each end of the space to allow for the natural movement of the wood. And a 10mm gap on each side of the space.

“Secret” nailing of the floor boards may be used for boards up to 85mm. For wider boards two nails through the face of the board must be used. The nails shall be annular grooved and two and a half times the board thickness. Use clamps, with a protective block, as each board is laid and nailed, be sure not to nail adjacent to the clamps till clamps have been removed.

5.3 Concrete floors

If the flooring is to be fixed to a concrete floor, then the concrete shall be allowed to cure at the rate of one month for each 25mm of floor thickness. The moisture content of the concrete floor shall be less than 70%RH. Remove all surface impurities with an acid wash. Only approved leveling compounds may be used to achieve the required maximum variation, seek professional advice.

Use 19mm flooring when under-floor heating is installed.

The use of a specialist adhesive is recommended when gluing the boards to concrete, seek professional advice. Weigh the flooring until glue has fully cured.

6.0 Maintenance

To prolong the life of your flooring:

- Place mats either side of entrance ways
- Put felt pads under legs/feet of furniture. For furniture with wheels replace them with rubber wheels
- Regularly sweep and mop the floor. Using soft brooms and mild detergents
- Wear soft soled shoes or bear feet only.
- **NO** stiletto heeled shoes

7.0 Disclaimer

Project specifiers must ensure the Halswell Flooring detailed in this Guide is suitable for its intended use. Any specific design or areas that fall outside the specifications of this Guide will require additional detailing. These must meet all requirements of the New Zealand Building Code. Halswell will not be liable for any claims, damages or defects arising from, or in any way attributed to:

- Poor design or detailing
- Incorrect design of the structure
- Poor workmanship
- Settlement or structural movement and/or movement of materials to which the Halswell Flooring is attached
- Acts of God including, but not limited to; earthquakes, cyclones, floods or other severe weather conditions or unusual climatic conditions.
- Efflorescence performance of coatings applied to the Halswell Flooring.
- Normal wear and tear or: growth of mould, mildew, fungi, bacteria, or any organism on the surface of any Halswell Flooring (whether on the exposed or unexposed surfaces).

Halswell Flooring is machined with care and inspected to ensure quality. However, it is a natural wood product and subject to variations in weight, density, colour, grain and performance. Care must be taken in installation and maintenance to allow for movement. Swelling, shrinkage, movement and surface cracking are all normal occurrences in timber flooring.

8.0 Current warnings or bans

This product is not subject to a warning or ban under Section 26 of the Building Act 2004.