

SOLID T&G FLOORING OVER BATTENS OVER CONCRETE SUBFLOOR

Information Sheet

This information sheet is designed to assist Architects and Designers in specifications where timber flooring is required.

The purpose of this system is usually to raise the subfloor height. It is not recommended to install T&G over battens directly over underfloor heating; some form of insulation should be used to protect the T&G. In general, it is recommended that **40mm polystyrene** is placed between battens to minimise noise and prevent moisture problems from developing due to the air space being present between battens.

1. PRODUCTS

- 1.1 CONCRETE SEALER
Selleys "VBS" two pot epoxy vapor barrier system.
- 1.2 ADHESIVE FOR BATTENS
Selleys Direct Stick Adhesive
- 1.3 BATTENS
Kiln Dried Dressed H1 battens
- 1.4 MECHANICAL FIXING FOR BATTENS (only suitable if underfloor heating not present)
Counter sunk Dyna bolts or other suitable masonry anchor
- 1.5 **JSC TIMBER** SOLID T&G FLOORING TIMBER
Preferably "end matched", kiln dried to a moisture content to match the proposed installation environment, plastic wrapped and stored flat and inside until installation start.
- 1.6 POLYURETHANE
Moisture cured/waterborne polyurethane.

NB: When installing solid Kwila flooring, a solvent based polyurethane must be used.

2. INSTALLATION

- 2.1 PRIOR TO STARTING ANY WORK
Start installation only when the building is fully enclosed, when all "wet" trades have finished and when any heating or air-conditioning systems are operating.

Moisture testing of the concrete slab is essential. To determine how to proceed refer to *Selleys VBS Specification and Technical Data Sheet* - http://www.selleys.co.nz/assets/510/VBS_Prod_INFO.pdf
- 2.2 ACCLIMATISATION
Before installation, allow flooring to acclimatise (in fillet) to the environment for at least two weeks with any air conditioning or heating running. *Consult with your installer for more information.*
- 2.3 SOLID TIMBER T&G MOISTURE CONTENT
Check the moisture content of the timber flooring and ensure it is at the desired level for the installation environment.

2.4 SUBFLOOR

- 2.4.1 Diamond grind the entire floor area to remove surface layer, high spots and construction debris to ensure the best possible key to the slab.
- 2.4.2 Ensure the subfloor is clean and dry and level to the BRANZ330 Specification of maximum 3mm over a 3 metre straight edge in any direction.
- 2.4.3 Fill any low spots with a recommended self leveling compound.

2.5 MOISTURE BARRIER

Vacuum the diamond ground slab and apply VBS vapor barrier to the manufacturer's specification, restrict traffic and allow 6-8 hours to dry. Two coats required.

2.6 BATTENS

Fit kiln dried (MC 10-12%) battens to entire perimeter and floor area at 300-450mm MAX centers, double fixed with Direct Stick Adhesive and counter sunk Dyna bolts or other suitable masonry. Anchor at two fixings per lineal metre of batten (NB: DO NOT USE DYNA BOLTS OVER UNDERFLOOR HEATING).

2.7 T&G INSTALLATION

Install **JSC Timber** flooring over battens using the double fixing system of Direct Stick Adhesive and secret nailing with 40-45mm staples using a pneumatic flooring stapler/hit up gun. Apply the adhesive directly onto the battens or joists and follow manufacturer's specifications.

2.8 EXPANSION SPACES

Leave expansion spaces of 10mm at walls and flooring transitions/junctions to be covered by trim and skirting boards. On floors over 4 metres, an allowance for lineal wide expansion should be considered, bearing in mind the specie and the micro-climate of the room.

3. FINISHING

3.1 SANDING AND COATING

The flooring should be sanded, any gaps trowel filled (if required), and then coated with 3-4 coats of either moisture cured or waterborne polyurethane. Finishing in oils is also an alternative option. Refer to manufacturer's specifications and spread rates.

3.2 PROTECTION

After the final coat, restrict all traffic for 48 hours, then allow only light, clean traffic for seven days to allow polyurethane to fully harden. Once the polyurethane has fully hardened it may be covered with corrugated cardboard to protect it from trade damage (vacuum carefully first). Avoid covering within first seven days and avoid covering with plastic at any stage.

IMPORTANT NOTES:

Solar heat or internal heat build-up can create heat in excess of 30-40°C which will buckle any floor. Areas near glass doors or walls of glass will be even hotter and must be protected by shade glass or some form of screening either external or internal. In some cases sensory controlled ventilation is required, particularly if a residence is left unattended for a period. This is a prime reason for cupped and shrunken floors.

Unless JSC Timber "Wooden Flooring Handing Over Certificate" details are confirmed and the wooden flooring is fully conditioned/acclimatised to the actual ambient moisture conditions of the dwelling as specified above, JSC Timber cannot be held liable for subsequent shrinkage or expansion.

November 2013
JSC Timber
www.jsctimber.co.nz