

This specification is one of a series based on installation systems we have tailored to meet our needs and rigid performance requirements and have used over the past five years. This information is designed to assist Architects in specifications where timber flooring is required.

*As a solid timber, timber veneer and laminate flooring supply and installation company we can be contacted regarding the **supply of any specified product**. And, we would appreciate the opportunity of **quoting for your timber flooring work** New Zealand wide.*

SOLID T&G OVER PLY OVER CONCRETE SUBFLOOR

1. PRODUCTS

1.1 CONCRETE SEALER

Selleys "VBS" 2 pot epoxy vapor barrier system.

1.2 ADHESIVE FOR PLY AND T&G

Selleys Direct Stick Adhesive

1.3 PLY BOARD

12mm MBH (Marine Bonded Hardwood) ply.

1.4 MECHANICAL FIXING

Hilti or *Ramset* 28 – 32mm masonry anchors

1.5 SOLID T&G FLOORING TIMBER

Preferably "end matched" and kiln dried to a moisture content to match the proposed finished installation environment, plastic wrapped and stored flat and inside until installation start.

1.6 POLYURETHANE

Uroxsys MCVU non-yellowing moisture cured polyurethane.

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.

2.2 SUBFLOOR

Ensure the subfloor is clean and dry and level to the BRANZ Specification of maximum 5mm over a 3 meter straight edge in any direction.

2.3 SUBFLOOR PREPARATION

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 MOISTURE BARRIER

Vacuum the diamond ground slab and apply **Selleys** VBS vapor barrier to the manufacturers' specification, restrict traffic and allow 6 – 8 hrs to dry.

2.5 LEVELLING

Fill any low spots with a proprietary leveling compound and primer over the VBS following the manufacturers' specifications. We use and recommend the K15 system with Ardon 25 and Ardex 82 2-pot primer applied over the VBS. The primer is applied before leveling, to ensure a strong bond between the VBS and leveling compound. Note: Leveling compound, if applied underneath the VBS vapor barrier may be weakened by the presence of trapped moisture in the concrete slab. Follow manufacturers' instructions.

2.6 PLY BOARD

Lay sheets of ply in full sheets running in the opposite direction to the Timber overlay which will be laid above, fixed with **Selleys** Direct Stick Adhesive and mechanically fixed with 28-32mm masonry anchors i.e. Hilti or Ramset. Leave 3-5mm expansion spaces between each board.

2.7 SOLID T&G MOISTURE CONTENT

Check the moisture content of the timber flooring and ensure it is at the desired level for the installation environment.

2.8 T&G INSTALLATION

If necessary sand the ply flat. Install timber flooring over ply using the double fixing system of **Selleys** Direct Stick Adhesive and secret nailing with 28-32mm staples using a pneumatic flooring stapler/hit up gun. Apply the adhesive directly onto the ply and following manufacturers' specs.

2.9 EXPANSION SPACES

Leave expansion spaces to the timber suppliers' specifications at all fixed objects, walls and flooring transitions/junctions.

2.10 ACCLIMATISATION

After installation allow flooring to acclimatise to the environment for at least 2 weeks with any air conditioning or heating running.

3. FINISHING

3.1 SANDING & COATING

Sand the surface flat, trowel fill the entire floor to fill all gaps and fine sand. Apply 2 coats of **Uroxsys** MCUV Gloss non yellowing moisture cured polyurethane and 1 coat of **Uroxsys** MCUV Low Sheen (Matt or Satin finish) non yellowing moisture cured polyurethane to the manufacturers' specifications and spread rates.

3.2 PROTECTION

After final coat restrict all traffic for 48 hours then allow only light, clean traffic for 7 days to allow polyurethane to fully harden. Once the polyurethane has fully hardened it may be covered by corrugated cardboard to protect it from trade damage (vacuum carefully first). Avoid covering within first 7 days and avoid covering with plastic at any stage.