

*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 and timber veneer flooring supply and installation company we can be contacted re the **supply of any specified product**. And, we would appreciate the opportunity of **quoting for your timber flooring work** NZ wide.*

## **SOLID T&G OVER IN / ON SLAB HEATING (CONCRETE SUBFLOOR)**

Suitable for in slab heating systems (eg piped hot water) and on slab heating (eg wires).

### **1. PRODUCTS**

#### **1.1 CONCRETE SEALER**

**Selleys** "VBS" 2 pot epoxy vapor barrier system.

#### **1.2 ADHESIVE FOR PLY**

**Selleys** Direct Stick adhesive

#### **1.3 PLY BOARD**

12mm MBH (Marine Bonded Hardwood) ply.

#### **1.4 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 & inside until installation start.

#### **1.5 POLYURETHANE**

**Tover** "Home" Waterborne polyurethane.

### **2. INSTALLATION**

#### **2.1 PRIOR TO STARTING ANY WORK**

Start installation only when the building is enclosed, all "wet" trades have finished, any heating or air-conditioning systems are operating.

#### **2.2 SUBFLOOR**

Ensure the subfloor is clean & 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 clean the diamond ground slab and apply **Selleys** VBS vapor barrier to the manufacturers specification, restrict traffic & allow 6 – 8 hours to dry.

## 2.5 LEVELLING OF SLAB

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.

### 2.5a APPLICATION OF LEVELLING MATRIX OVER HEATING WIRES (if appropriate)

Securely fix wires in place (hot glue) over VBS moisture barriered slab, priming the patches where glue needs to adhere. Apply primer to entire VBS'ed area. Apply leveling screed and allow to dry following the manufacturers specifications. We use and recommend the **Vibro** K15 system with Ardex 82 2-pot primer applied over the VBS and wires. The primer is applied before applying the leveling matrix, 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 cut into 400x400mm squares in “brick” pattern and fixed to slab with **Selleys** Direct Stick Adhesive. Leave 2-3 mm expansion spaces between each 400 x 400 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 40-45 mm staples using a pneumatic flooring stapler/hit up gun. Apply the adhesive directly onto the ply and following manufacturers specs.

Do not allow staples or nails to go through ply and pierce slab as it may damage heating system.

## 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 3 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 3 coats of waterborne 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 Ram Board to protect it from trade damage (vacuum carefully first). Avoid covering within first 7 days and avoid covering with plastic at any stage. DO NOT tape to the finished floor.