



## **Swish Installation Instructions**

***Please read the following instructions before starting the installation***

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### **Applications**

Swish Oak is an overlay flooring system and can be installed on concrete, tiles, existing timber floors, plywood or particle board as long as the floor is structurally sound, clean, level and dry. Swish Oak is recommended for internal use only, and should not be installed in wet areas like bathrooms or laundries or in external environments exposed to the elements.

Swish Oak wide board is engineered oak flooring, click locking **designed to be floated on underlay**.

### **Pre-Installation**

**Important: Please carefully inspect all material before installation.** It is industry standard to permit a defect tolerance up to 5% which may be natural or due to manufacture. The installer assumes all responsibility for final inspection of product quality and should not use or cut off pieces with deficiencies. Any flooring installed with obvious visual or structural defects will not be warranted.

It is the responsibility of the installer/owner to determine that the job site conditions are suitable and environmentally acceptable for storage of Swish Oak prior to installation as well as the commencement and completion of installation. Eco Flooring Systems declines any responsibility for failure resulting from or connected with sub floor, sub surface, or job site damage, or deficiencies after flooring has been installed.

Pre-finished Swish Oak should only be installed in the final stages of completion of a construction project with all trades people having left the site. All work involving water or moisture should be completed prior to installation (cement work, plastering, painting, plumbing, and tiling etc). Should this not be the case, installation should be delayed to avoid damage to the coating of the Swish Oak.

Due to the variable climate conditions within Australia, planks may display sight bow and twist once removed from carton this is not considered as structural defect unless the planks cannot be assembled. Slight convex bowing of the boards, up to 1% of the length is acceptable and should not affect the laying process.

Note: Eco Flooring Systems makes no warranty or guarantee of the quality of the chosen installer's work. Eco Flooring Systems disclaims all liability for any errors or improprieties in the installation of its product by an installer.

### **Acclimatisation**

Swish Oak is a natural timber and will expand and contract with changes in humidity. The building should be roofed and enclosed with the temperature and humidity as close as possible to in-service conditions including the use of air conditioning.

Flooring should be delivered at least 3 days prior to installation and stored internally. Do not open the packs until day of installation to avoid moisture pickup in the boards. Avoid installing Swish Oak in very damp or humid conditions. Temperature and humidity of the installation area should be consistent with normal year round living conditions for at least a week prior to installation. Air conditioning should be running at least 2 days before and during installation (especially in commercial fit outs).

### **Sub Floor Preparation**

Swish Oak is a natural product sensitive to changes in moisture content. It is vitally important to ensure that the substrate on which the flooring is placed, is dry and in no way subject to the ingress of moisture. Consider that the Oak needs to be protected for the lifetime of the floor. While Swish Oak is water resistant against light spillages or occasional over zealous mopping, it is not vapour proof. Water vapour from the soil will saturate the sub floor area and if there is inadequate cross ventilation or the flooring is exposed to moisture, the water vapour will rise upwards through the floor into the oak flooring. This will cause the flooring to expand and may cause buckling. All installations require a moisture barrier between the sub-floor and the Oak floor.

#### ***It is vitally important to check the following points before laying your floor:***

- Good ventilation with all sub floor areas having adequate air vents to all external walls (min size recommended is 230mm x 170mm x 2000mm apart)
- Minimum clearance of 400mm from the ground to the underside of the sub floor
- Adequate cross ventilation in internal dwarf walls (full brick construction) ensuring these walls are ventilated in the same manner as the external walls. If subfloor is open to the elements on the underside, additional protection may be required on the underside of the subfloor.
- Level and smooth sub floor. Level flat to 5mm per 3m radius.
- Surfaces must be clean and dry, free of dirt, wax, oil, paint, curing agents or other contaminants that would interfere with the adhesive bond

### **Timber Floor/ Particle Board/Tiles**

**Remove all existing floor coverings prior to installation.** Ensure the surface is dry and thoroughly clean. Grease, oil, old adhesive or excess paint must be removed as these may adversely affect adhesion. Lay a straight edge 1.5m long to the existing floor and check that no part of the surface is more than 2-3mm below the straight edge. Sand flat or fill as required. If the surface is particularly uneven, then we recommend a plywood underlay is used. Sand flat any raised edges. The boards should be laid crossways on an existing timber floor. If installing over tiles, ensure surfaces are crazed and prepared to ensure proper adhesion of the glue if sticking directly.

### **Concrete Floor**

All concrete slab installations (including suspended concrete slabs) require the use of a moisture barrier.

As in the case above, ensure the concrete floor is dry and clean. When it is tested with a commercial moisture meter, the moisture content must not exceed 5.5% Refer AS 1884-2012.

Generally, concrete slabs younger than 60 days are too wet. On ground concrete slabs are rarely dry enough to apply any pre-coated flooring system and special care must be taken to ensure the oak flooring is protected from moisture ingress. Where any concrete slab has a moisture content greater than 5.5%, it is too wet and installation is not recommended until this has been rectified. In addition to testing the moisture content with a commercial moisture meter, carry out the following tests:

- Check that the membrane under the slab is continuous and covers the edges
- Remove any dirt that is piled against the slab
- Ensure that the drainage around the slab is adequate

### **Moisture treatment of all subfloors**

Oak is natural and will absorb moisture vapour from the surrounding environment. As oak must be protected from moisture vapour ingress for the lifetime of the floor we require **all installations use a suitable moisture barrier** – either a high quality epoxy moisture barrier (eg Bostik Moisture Barrier or Sika MB), a 2 in one moisture barrier underlay, or Builder's polythene sheeting. Follow the instructions of the manufacturer.

If using Builder's polythene sheeting, lay it under the underlay on the subfloor, and tape all joints with waterproof tape to ensure a continuous seal. Fold the sheeting up the walls of the laying area by 50mm. If subfloor is open to the elements on the underside, additional protection may be required on the underside of the subfloor.

### **Levelling of all subfloors**

Uneven or damaged surfaces must be repaired with a cement leveling compound, following the manufacturer's instructions (EG Bostik Ultralevel SL) or use a plywood underlay (10mm min). Leave a 10mm gap between each sheet of ply and the walls. Secure plywood with corrosion proof concrete nails or screw fix with masonry spaghetti. Seal all drill holes. The ply must be fixed securely with nails at least 300mm apart. Inadequate fixing will result in your floor having a "drummy" sound when you walk on it

### **Underfloor heating**

Swish Oak can be installed over heated subfloors. Consult with the manufacturer of the heating system to ensure that Oak is suitable. Subfloor preparation and installation will be carried out similar to a 'normal' installation, except for the following provisions:

- The heating system does not come into direct contact with the Swish Oak ie. is underfloor inslab heating
- The heating system must be turned off at least 30 hrs before and during installation
- The heating system can be turned on low 24 hrs after completion of installation, the temperature being increased gradually over a 7 day period until normal operating temperature is reached
- Maximum floor heat allowed is 24°C

## **Laying and installation of the Swish Oak**

**Important: Work out of multiple boxes.** Oak is a natural product with natural colour variations. While our quality standards ensure the flooring is separated by shade at the factory, shade differences between cartons may be noticeable. Mixing cartons creates a random, natural shade effect.

### **Expansion Gaps**

Oak will expand and contract with changes in humidity. Because the humidity of a room can vary due to differences between seasons, the floor must be able to expand and contract in all directions. It is critical that an expansion gap of 10-15mm is allowed around the full internal and external perimeters of the floor ie: at all walls and fixed vertical obstructions eg kitchen islands, pipes and columns. This gap should be covered by a trim after the floor has been installed.

For floors widths over 6m or where extra allowance for expansion is required (moist locations) expansion joints need to be used. We recommend an expansion strip every 6m across the width of the boards allowing for additional expansion and contraction when there are extremes in temperature and humidity. Expansion joints must also be provided at every doorway and where the flooring meets tiles, carpet or any other floor covering.

An expansion joint in the sub floor has to be provided with a matching expansion joint at the same location on the floor installed above it. The expansion gap is usually covered with an H or T profile or a proper expansion profile that allows free movement of the flooring.

## Glue Down Method

We recommend using a premium eco friendly wood flooring adhesive. For glue down applications that are on or below grade, (directly on concrete slab), a moisture barrier **MUST** be used in accordance with the manufacturers instructions. Adhesive must be compatible with the moisture barrier system

### Materials needed

- Adhesive such as Sika T55J, Bostik Solvent free Ultraset or Regupol one part Polyurethane Acoustic) Carefully follow the manufacturer's instructions provided with the adhesive
- Notched trowel – recommend v-notches @ 5mm centres
- Saw, tape measure, tapping block, 10-15mm spacer, hammer, weights

Flooring is usually laid square with the space and parallel to its longest dimension. Place a spacer against the starting wall or skirting board. Using a 5mm notched trowel spread the adhesive evenly over the prepared surface. Only spread enough glue for 3 or 4 board widths at a time. From the starting wall, place the groove first and lay each board carefully and firmly. Place each tongue firmly into the corresponding groove of the next board. Swish Oak is laid in a brick pattern. Check every 4-5 boards to ensure that you are square to the starting wall. It is a good idea to mark a line on your underlay or sub-floor to line up the joints. Where you are direct sticking to sub floor make sure the floor is adequately weighted. Continue this process until the floor is complete. Remember to leave a 10-15mm gap at each wall surface or edge. Allow the adhesive to set according to the manufacturers' instructions.

**Important: Do not allow glue to penetrate through the tongue in/on to the surface. If this occurs, then wipe off immediately with a turps or methylated spirits covered rag or product specified by the adhesive manufacturer.**

Wide longer planks may have a tendency to bow in the middle. This is NOT a manufacturing defect, but rather the nature of oak planks. For glue down or floating installation, strapping or tape may be necessary during the installation process while the glue sets.

## Floating Installation

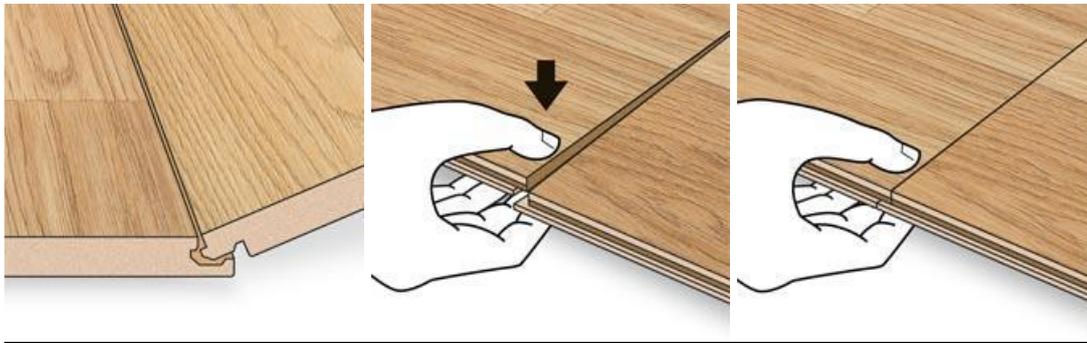
**Important: Moisture protection is required over any subfloor when floating the floor.**

### Materials needed

- Moisture barrier
- Recognised brand of underlay recommended for floating floors (eg Eco Flooring Systems, Dunlop, Regupol)
- Waterproof tape to join and seal underlay
- Recognised brand of industrial strength PVA cross linked wood adhesive (eg Robert's 6355)
- Saw, tape measure, tapping block, cork spacers, hammer, small crow bar, straps

If required, remove any skirting, quarter round or doorway thresholds that may be in place. Doorway architraves should be undercut to allow the flooring to fit neatly when installed. This is best done using a hand saw. A piece of underlay and flooring placed against the architrave will act as a guide for height. On top of the moisture barrier (ie Epoxy or Builders plastic) unroll the underlay so that all ends and sides fit neatly against the wall. Seams between lengths should also butt together so that no overlap occurs. Tape all ends, sides and seams with waterproof tape to ensure the water vapour barrier properties of the underlay are maintained. The underlay should be laid at 90 degrees to the intended direction of the flooring.

Start planks square with the room and parallel to the longest dimension but leaving 10-15mm expansion space from the wall. Cork spacers approximately 600mm apart or near the plank ends should be left between the floor boards and the wall structure. Place the groove to the wall. Apply a thin line of adhesive to the top inside edge of the next groove in a continuous line and insert into the plank's tongue using a tapping block and tap until the boards are firmly together. When starting the second row, we suggest the first board be a minimum of 600mm shorter than the original board to achieve a brick or random pattern. The last row will probably need to be cut to the required width. A small crow bar can be used to gain leverage against the wall when trying to ease the last of the boards together. Straps may be required while the glue is drying to hold boards together. Remove any excess adhesive immediately with a damp cloth and wipe dry to avoid "smearing".



### **Completing the installation**

To complete your floor, remove all spacers, attach the finish moldings or door treads and coat as necessary or install skirting boards and architraves. Gaps between floor and beading should be filled with water based gapping compound (eg Fuller's) and wipe clean with a rag. Allow the adhesive to cure as per the manufacturer's instructions and clean the floor before use with methylated spirits and warm water to remove any oily film or grease from nail guns. Stubborn glue residue can be removed using Citrus Resources Orange Solvent or Eucalyptus Oil.