# Basic Fitting Instructions

## BASIC Fitting Guide For Pre-Finished Solid Wood Floors

Solid hardwood floors should not normally be installed below ground level or in bathrooms. Cut out pieces with glaring defects and it is normal practice to use stain putty or filler stick for defect correction or minor dimension differences. Pre oiled flooring should be hand sanded using 120 grit or higher and a light finishing coat of oil applied with a cloth after installation. Flooring should be stored within the installation area at normal expected conditions for at least one week to acclimatise depending on your particular product and species. A dimension tolerance of plus or minus 2% is allowed by manufacturers.

We only recommend, as best practice, secret nailing preferably to plywood subfloor.

**Once installed products are considered accepted by owner / installer.**

### Step 1

Before you start make sure the subfloor is in good shape .bouncy, squeaky uneven areas should be repaired. Note 18mm plywood, solid wood or battens hold nails better than MDF or chipboard. Generally you will want the flooring to run the length of the room for aesthetic reasons. Install at right angle to floorboards, if laying over an existing floor, otherwise fit plywood so that the direction can be changed. The floor will be stiffer and less prone to joints separating.

### Step 2

It is recommended to fit a vapour and acoustic barrier between the subfloor and the finish floor. This helps to control dust and moisture from below as well as dampen squeaks and reduce noise transference. Alternatively builders paper or roofing felt works reasonably well. This can be stapled to the floor. Polythene sheeting should also be laid over soil areas underneath the subfloor to lessen vapour transmission.

### Step 3

First find the centre between the two walls at each end of the room and snap a chalk line between the two points. This is your baseline. You do not have to start laying the floor from the baseline but wherever you start, you should be parallel to this.

### Step 4 : Fitting From the Wall (easiest method)

It is best to remove skirting boards and cut door linings and architrave with a scrap piece of flooring as a guide. If skirting boards are not removed scotia or quadrant will be required to cover up the expansion gap required around all edges. If you are starting from a wall and not the centre of a room set down your parallel chalk line leaving at least 13- 20 mm expansion gap (spacers can be used). E g . you can start from parallel to the longest outside wall or from the centre of the room , especially useful in large rooms as the flooring expands and contracts from the centre out instead of from one side of the room. Use nice long lengths when starting from the wall. The first two rows will have to be surface nailed. Place the first row along the chalk line and predrill holes before screwing or use a power nailer . Fix with a power

nailer  through the tongue, coloured putty or filler will disguise nail holes if necessary. Always work from a minimum of 3 cartons or bundles and preferably rack out the floor ahead of you in a suitable pattern. It is quite normal for minor width variation until the acclimatisation period is complete. For example in the UK the flooring can take on one or two percentage points of moisture. this can result in an increase of one or two millimetres depending on the initial dimension.

**Occasionally small tolerances in width dimensions due to milling or acclimatisation will require sorting out flooring into pieces of equal width.**

**Step 5 :**

The subsequent rows can now be fixed using a power nailer. The last two or three rows will have to be surface nailed. Skirting boards and or scotia can now be fixed to cover the expansion gap, always fix to the wall not the floor.

Notes

Recommended Nailing for Strip and Plank Flooring

As a general rule secret nailing should be spaced at 6 to 8 inch 240-320mm intervals narrower spacing is recommended for wider boards or planks. Hardwood flooring over approx. 150mm width should be additionally face nailed or plugged and screwed as well. We recommend using a power nailer.

Expansion

Wood flooring mainly expands across its width across the grain direction and very little in length with the grain. THE WIDER THE BOARD THE MORE IT WILL EXPAND AND CONTRACT.

Staggering joints (headers)

Always stagger end joints by alternating with strips of different length's to avoid aligning joints.
T&G flooring can be laid straight over joists although we recommend 12mm or 18mm ply as a much better platform to install hardwood flooring. Pieces which are ends matched (e.g. T&G all round) do not have to finish on a joist as the floor will be stable when the surrounding lengths are nailed down . Wider boards may require additional support. Recommended space between joists or battens is 250-350mm centres.

Random Lengths

The majority of hardwood flooring is supplied in random lengths with pieces from approx. 300mm in length. Grading
The higher the grading of the timber will usually indicate smaller knots and less colour variation. Traditional grading will usually indicate more and larger knots and often surface defects even in pre finished flooring. Always allow en extra 5-10% for grading and wastage in your measurement calculations.

## Moisture Meter

Always use a moisture meter to measure subfloor moisture levels . Moisture levels of the new flooring should be within 2 to 3% of the subfloor. On concrete you can tape a 400mm square of polythene to the subfloor after 24 hours bubbles or wetness under the polythene will indicate high levels. Further advice available. An acceptable moisture level is under 5% on a concrete floor.

## Concrete Floors

Moisture in concrete slabs and screeds cannot be measured in direct relation to timber . BS 8021 : 1987 suggests that the slab should be a maximum of 75% relative humidity or 5% moisture content this is calculated using a humidity box . However we recommend that a reading of 35-40% relative humidity or 2-3% moisture content is ideal . This may be difficult to obtain in practice and it is often more practical to apply a surface dampproof membrane (DPM), either polythene (where 18mm ply is used) or paint on type (where the hardwood flooring is directly bonded to the subfloor , make sure the two are compatible). Concrete slabs can take notoriously long periods to dry and we suggest you allow approximately 1 day per millimetre of slab depth. ( 1 month per inch)

Solid hardwood flooring can also be stuck down to existing concrete sub floors using a specialised adhesive such as Taylors 2071 (applied by trowel) or an elastic polyurethane flooring adhesive. Alternatively battens (250-350mm centres ) or 18mm plywood sheets provide an excellent platform for secret nailing. It is important to measure the moisture content of the concrete and ensure that it is completely dry all slabs must incorporate a DPM. Another method is to use 12mm plywood cut into strips of 50 - 75mm and placed at 250-350 centres and this is used as a base for secret nailing using a powernailer and special shoe adapter with 1 ½ inch nails.

**Note : Keep a record of all your readings for later reference and warranty enquires.** We strongly recommend you keep a record of your moisture and humidity readings prior to installation to accurately determine acclimatisation. These measurements will be definitely required by the manufacturer or supplier if there are any future problems.

## Wedges

Occasionally you may find warped pieces force these into position using a wedge to bring the flooring into line.

## Further Technical Information

These instructions are for guidance only, further technical advice is available, always consult manufacturers fitting details. Always consult the latest information or take professional advice regarding your particular situation. Environmental humidity should be maintained in the range 35% - 55% the optimum range or use humidifiers or dehumidifiers to limit the expansion or contraction of your flooring. Always refer to BS 8201 the British Standard for fitting hardwood floors.

Further technical guides are available and should be read in conjunction with this guide.