



MOST ENGINEERED FLOORING IS SUITABLE FOR USE OVER (CERTAIN TYPES OF) UNDERFLOOR HEATING. PLEASE CONTACT YOUR SUPPLIER FOR TECHNICAL INFORMATION PRIOR TO LAYING. WE DO NOT RECOMMEND THE INSTALLATION OF SOLID HARDWOOD FLOORING OVER ANY TYPE OF UNDERFLOOR HEATING

### **PRE-INSTALLATION**

To keep the wood in excellent condition it is imperative that the humidity level be controlled at all times, from delivery to laying the floor, and during the years that follow installation. The optimal humidity range for hardwood flooring is 45–60%; temperature should be maintained at about 18°C.

Flooring should never be stored outdoors, on a cement floor, in a garage or in any damp conditions. Care should be taken to store the wood flat; packs should never be lent against a wall. Pre-finished boards should be left in the packaging in the room where it is to be laid until you are ready to lay the floor (at least overnight). Unfinished flooring packs should be open and the boards spread around the room in which they are to be laid for at least 5 days. In a newly constructed building, the heating must have been in operation for at least 10 days, prior to the minimum 5 day acclimatisation period required for unfinished flooring. For pre-finished flooring, this can be laid after the 10 day period mentioned. Upon delivery, check wood flooring moisture content with a moisture meter to establish a baseline for required acclimatisation. All flooring contractors should possess a moisture meter.

In a new construction all windows and doors etc should be installed and all wet trades should be completed. Surface drainage should direct water away from the building. Basements and crawl spaces must be dry. For further information regarding crawl spaces, please contact Atkinson & Kirby. It is not recommended that any solid hardwood floor be laid below ground level. Test concrete for moisture. A Damp Proof Membrane must also be present underneath the concrete subfloor as well as over it. Where a new concrete slab has been laid, the moisture content must not exceed 5% and the humidity level of the building must not exceed 60%. Prior to installation, ensure that wood flooring is within acceptable range of moisture content with the wood subfloor. If not within the acceptable range, then a suitable Damp Proof Membrane should be installed, over the wood subfloor, prior to installation. In on ground applications, always add a suitable Damp Proof Membrane. All subfloors must be flat, clean, dry and structurally sound, free of squeaks, and free of protruding fasteners. All subfloors should be flat to within 3mm over a 3 metre length, or 2mm over a 2 metre length.

When sticking onto panels, these should have a 3mm expansion space around the perimeter of each panel, with panels fastened every 300mm along intermediate supports. Hardwood Flooring should not be secret nailed or glued to a Chipboard subfloor.

Solid board subflooring should consist of boards no wider than 180mm. Thin classification solid strip flooring (overlay/parquet panels) must have a 12mm or better plywood underlayment installed over solid board subflooring.



Due to the variety of installations we can only generalise. We would always recommend that the floor layer satisfy themselves of the suitability of the conditions before laying the floor.

# Do not lay the flooring in areas that are wet or humid, e.g. bathrooms, shower rooms etc.

It should also be remembered that the floor layer is the last person to inspect the flooring. Care should be taken to ensure that a balanced look is maintained when laying out the floor; any pieces that are suspect should not be laid. The manufacturer cannot be held responsible for defects due to incorrect installation or boards with defects that have been installed.

Using the following method a larger waste factor should be allowed. Warped boards or boards that are not straight cannot be pulled in (as they would in a nailed installation); these boards should be cut back and used at the end of rows.

As a general rule we recommend at least 12-18mm expansion around the perimeter if the room and at doorways. At least 12-18mm expansion must also be left where the floor comes in to contact with any other vertical surfaces. These expansion gaps can be covered by mouldings after installation. Allow 15mm minimum expansion space at all vertical obstructions. If the floor area is greater than 5m wide, it is advisable to leave a washer gap of 2mm every 6-7 rows to allow for extra expansion across the floor.

In areas where the flooring comes into contact with a fireplace, stove, heating system or un-insulated hot air vents a layer of asphalt or wax paper should be laid first. This will prevent excess drying out of the wood flooring. Adequate ventilation must exist beneath the wood flooring e.g air bricks around the perimeter of the building.

### **POST INSTALLATION**

The appearance of spaces between boards indicates a drying out of the wood and an insufficient degree of humidity. The appearance of waves or noticeable swelling in the finish of the wood floor indicates the presence of excessive humidity. Heating systems may have to be utilised throughout the year to maintain the correct humidity level. The installation of a humidifier or an air exchange system can prove indispensable in controlling humidity.

Above all don't forget that wood is a natural, living material and that we must look after it for life. A proper maintenance program should always be carried out.

Barrier matting should be placed at all exterior doorways.

Remember that pets running round, stiletto heels, and dirt and grit left on the floor can scratch wood; regular maintenance should be carried out to prevent this.

For full maintenance guidelines please refer to the individual maintenance guidelines that apply to the finish of your floor.

ATKINSON & KIRBY RECOMMEND FITTING BY A PROFESSIONAL FLOORING CONTRACTOR.

**NEVER LAY SOLID HARDWOOD FLOORING OVER ANY TYPE OF UNDERFLOOR HEATING.** If there is underfloor heating present please refer to Underfloor Heating Guidelines prior to laying.

ATKINSON & KIRBY LTD RECOMMEND THE USE OF LAYBOND ADHESIVES FOR ADHERING SOLID HARDWOOD FLOORING.

STEP 1. ASSESS THE SUBFLOOR

The choice of installation method depends on the specific circumstances and the requirements of the final floor. Before selecting an installation method the floor must be assessed for the following criteria:

#### Is the subfloor wet?

Moisture tests should be carried out on all ground floor installations and all new build upper floors levels where a screed has been used. The British standard method is to use a surface hygrometer; Moisture readings above 60% relative humidity (RH) indicate a damp floor. If this is the case a damp proof membrane (DPM) should be used.

If in doubt about the presence of moisture use a DPM.

#### Is the subfloor smooth?

If the subfloor is not smooth enough to accommodate the wood flooring, apply a smoothing compound to level out the floor.

# Is the substrate a sound strong material?

If there is any doubt about the answer to this question always use a flexible adhesive.

## Is there a requirement for improved acoustics?

If so, use an adhesive that offers improved acoustic properties.

### NOT SUITABLE FOR:

Bitumen subfloors.

Underfloor heating (Solid Flooring).

Boards over 130mm wide.

### STEP 2. ESTABLISH A STARTING POINT

- 1. Before beginning the actual installation, spread out short and long lengths equally over the area where the floor is to be installed.
- 2. Work out of several packs at a time to ensure an even colour and shade distribution over the whole floor.
- 3. Align the first row of planks to be sure that you have a good straight line from one side of the room to the other. Put a chalk line at the desired distance from the wall to help align the planks. The end joints of the flooring can be glued with Gripfill PVA glue and should be staggered (minimum of 150mm) to achieve the best appearance in the finished floor.

Important: Leave at least 12-18mm for expansion at all vertical surfaces or at least what will be covered by the skirting board or trim.

4. Align the first piece on the chalk line. The groove side and end will be facing the starting wall.

### STEP 3A. ENGINEERED & BLOCK FLOORING

FULL STICK DOWN – USING A RIGID ADHESIVE (L16)

For use on sound strong subfloors which are permeable.

Apply the adhesive using a V notched trowel with a minimum notch depth of 4.75mm and width 3mm.

Flooring must be adjusted with a block and mallet immediately after laying.

## FOR BLOCK FLOORING PLEASE ALSO REFER TO SEPARATE GUIDELINES.

### STEP 3B. SOLID & ENGINEERED FLOORING

FULL STICK DOWN – USING A FLEXIBLE ADHESIVE (L19)

For use on virtually all subfloors.

Apply the adhesive using a V notched trowel with a minimum notch depth of 6mm and width 3mm. Wood should be laid within 40 minutes of the adhesive being applied.

Flooring must be adjusted with a block and mallet immediately after laying.

Use L19 for installations of Engineered flooring over underfloor heating (see separate guidelines).

### STEP 3C. SOLID STRIP & ENGINEERED FLOORING

BATTEN BONDING STICK DOWN - USING FLEXIBLE ADHESIVE L18

The adhesive should be applied by cartridge or sausage using a nozzle cut to ensure a 10mm high by 8mm wide cordon. Beads should be laid at 100-250mm intervals (depending on the width of the board).

Wood should be laid within 30 minutes of applying the adhesive.

### SPECIAL CIRCUMSTANCES

It is important to leave expansion gaps around the perimeter of the room, in doorways between rooms and at all vertical surfaces.

### PERIMETER OF THE ROOM

If the skirting board has not been removed, the expansion gap can be covered using a Scotia or Quadrant moulding.

#### **DOORWAYS**

At doorways the floor should be broken with an expansion gap. The expansion gap should be covered with a Twin or Ramp moulding this will allow individual rooms to expand and contract within their own areas. Which moulding to use is determined by the floor covering on the other side of the doorway. Floors equal in height a Twin should be used, if floors have differing heights a ramp should be used.

# PIPES, VENTS AND OTHER FIXED OBJECTS

Each can be unique, but the general rule is to measure very carefully before you cut and remember to leave a 12-18mm expansion gap between the object and the flooring. Cover the expansion gap with mouldings, vent covers or pipe rings when the floor is complete.

## **INSTALLATIONS ON STAIRS**

Flooring on stairs must be fully nailed to the stairs. Stair Nosing mouldings should be installed using either screw type fasteners or nails.

A FULL RANGE OF HARDWOOD TRIMS ARE AVAILABLE FROM ATKINSON & KIRBY TO FINISH YOUR FLOOR.