



# real wood engineered flooring

## installation guidelines

Congratulations with your new Engineered Flooring. Before starting with the installation, it is critical that you read the following instructions carefully. Failure to do so will inevitably result in problems occurring and invalidate your warranty.

### Installer/Owner Responsibility:

Engineered floors are a natural product and as such are subject to many variances in both colour and character, this is to be expected at all times. In order to establish a consistency of product a grading and manufacturing tolerance of 5% has been set to allow for de-selection of material if deemed unsuitable for the installation. A 5% cutting or waste allowance must therefore be added to the net square meters required for the site to be installed.

The installer or owner assumes all responsibility for final inspection of the product quality prior to installation. The installer or owner must determine that the job site environment and the sub-surfaces involved meet or exceed all requirements within these instructions; claims will not be accepted if a fault was visibly noticeable or preventable prior to installation.

These conditions are noted further within.

- All flooring must be stored in the correct conditions prior to installing.
- This product must not be stored on site until all sub floors; plastering, cement work; decorating and all other wet work is completely dry.
- The owner has final responsibility to ensure that they have received the correct species and finish that was selected in store.
- The installer/owner must inspect each board and deselect pieces with defects whatever the cause, under no circumstances should these be installed.
- Engineered flooring is suitable for conservatories and under floor heating provided that the strict guidelines are followed.

21 / 22mm engineered flooring can be glued, nailed or floated.

- It is normal practice to use stain, putty or filler stick for defect correction or minor dimension differences.
- Always work from 3 to 4 packs at a time mixing boards to achieve the appearance you require, taking into consideration the texture of the wood and the natural change in colours. Each floor, even each board is an individual piece of nature, which is guaranteed to make your home a place of beauty.

**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 and in order to accurately determine acclimatisation. These measurements will be required by the manufacturer or supplier if there are any future problems.

### Acclimatising Your New Floor:

Engineered flooring does not require acclimatising.

Prior to installation, it is the installer's responsibility to ensure that the internal site conditions are stable and are suitable for the installation of the engineered flooring. A room temperature of between 18 -22°C and relative humidity of between 45-65% must be maintained. Screed / concrete subfloors must be under 4% moisture

content. Failure to do this could cause ongoing behavioural problems with the floor and will invalidate the warranty.

The building should be fully enclosed including doors and windows and heating should be operational. All wet work must have been completed otherwise the moisture will transfer from walls floors and ceilings to the flooring.

The delivered flooring must be left in the packaging with polythene wrapping intact and only opened immediately prior to installation.

The flooring should be stacked horizontally no more than 2 to 3 packs high or wide. Do not store next to radiators.

You can expect your engineered flooring to be supplied at 8 to 10% relative moisture content at the point of delivery. The correct moisture content for installation within the UK & ROI climate is 10-12%. Testing must be carried out to ensure the product is within this window. If the product has moved beyond 12% action should be taken to reduce the moisture / humidity readings within the area / product. A reputable installer will have testing equipment such as "Tramex" to check relative humidity and the moisture content of the subfloor and wood.

### **New Build and Renovation Projects:**

A new installation site needs to dry out before engineered flooring is delivered. There is nearly always excessive moisture on either new construction sites or major refurbishment contracts. In these instances the wood will absorb the excess moisture; resulting in stress issues. Always protect against excessive moisture ingress, where it helps use dehumidification equipment to stabilize the site conditions.

Explanation of why the flooring should be one of the last jobs to be undertaken on site; Other trades can damage an excellent installation if care is not taken to safeguard against moisture ingress in hard wood floors. In new building projects moisture is introduced into the fabric throughout the construction process.

Example; Under BS882 a concrete mix of (1:2:4) one cubic metre of concrete will contain 187 litres of water. This will have to dry out to below 4% moisture content before your flooring is installed. This may take up to a day per 1mm thickness of concrete to dry out; therefore you must always take a new moisture reading of the concrete sub floor before proceeding with the installation.

### **Under floor heating:**

This product is suitable for use with under floor heating systems subject to the manufacturer's recommended installation guidelines with timber flooring. When laying a floor where under floor heating has been installed it is important to follow these guidelines:

- The heating has been started up at least 3 weeks before laying the floor to achieve an ambient living environment.
- Make sure that there is no water leaking from the pipes.
- If the subfloor is concrete, make sure the concrete is dry. This means not more than 4% moisture, full depth of screed.
- The subfloor has to meet all the requirements for under floor heating.
- Installation method should be as a floating floor and a combination underlay incorporating a DPM must always be used.
- The surface temperature of the ground (below the engineered flooring) cannot exceed +27°C.
- The heating has to be turned off 48 hours before laying the floor.
- 2 - 3 days after laying the floor, the heating should be turned on gradually, increasing 2-3°C every 24 hours.
- A minimum temperature of 18°C must be maintained.
- Always check the heating manufacturer's detailed instructions to ensure compatibility.

### **Sub base:**

This flooring can be floated on most types of flooring which is dry and level, e.g. sand and cement screeds, timber floor boards, chipboard, ply etc. When fitting to a sub base (Screed, ply, chipboard etc) the sub base must conform to BS 8204: Part 1 1987, which states that it must not deviate by more than + or - 3mm under a 3m straight edge in any one direction. Wooden sub structures must be sound and securely fixed. They must be a minimum of 18mm in depth in order to be supportive. (This applies to Ply or Chipboard also). Screed subfloors must be under 4% moisture content, above this will cause excessive dimensional change in the wood flooring resulting in problems such as delaminating which is not covered by the guarantee. On ground floors a

surface moisture inhibitor such as Elka Combi Underlay or 1000g Visqueen must be laid with joints over lapped by 6" (150mm) or more and lapped up the wall behind the skirting board. These joints should be taped.

### **Underlay:**

Engineered flooring, if floated must be installed over a minimum of 2mm foam or poly type underlay. If an acoustic underlay has been installed first and is suitable according to manufacturer's instructions for flooring to be laid directly on top then a 2mm foam or poly type underlay is not necessary. However, if a 1.5mm cork or bitumen type acoustic barrier is used, then a 2mm foam in particular is recommended to install over same. The foam stops "grinding" between wood flooring and O.S.B., ply, etc. underneath.

Moisture inhibitors (such as 1000g poly) will only assist in protecting the floor from residual moisture when the concrete sub floor is 4% or less. They will not cover up an inherent moisture problem that should be addressed prior to installing the flooring.

### **Expansion:**

All engineered floors will react to changes in the presence of moisture within the boards. In the winter months when central heating is present, moisture leaves the wood causing the floor to contract. In the summer months when the humidity is higher the wood will expand. This needs to be allowed for during the fitting process. An expansion gap of 15mm must be in place around the "FULL" perimeter of the room. Flooring must "NOT" be run through doorways in to other rooms, instead it should be broken in the doorway again allowing 15mm; this gap is covered by a profile (such as the Elka 3 in 1 system) that is not fixed to the new flooring. Please note with a large area (lengths in excess of 10 m) the floor must be divided with an expansion gap provided on both length and width. On completion, this gap is again covered by a profile that is not fixed to the new flooring

### **Installation of floor - all methods:**

On completion of the preceding tasks the following steps should be followed for Installation.

- Generally you will want the flooring to run the length of the room towards a natural source of light for aesthetic reasons.
- Undercut the bottom of door frames, wardrobes, etc. to allow for the floor board and underlay to fit under it.
- Open 4 or 5 packs and "shuffle" the boards to ensure an even distribution of colour and character.
- If you discover a defective piece - do not lay it. You are the final judge of acceptable quality.

***Elka or its dealers will not be responsible for costs associated with installing, finishing and/or replacing of flooring installed with obvious defects.***

- Tapping blocks should be used to tap boards together, direct contact of hammer or mallet on the board edge is not recommended.
- Mark a straight line parallel to the chosen wall, allowing a 15mm gap for expansion. It may be necessary to scribe the first row of boards to achieve correct alignment
- The first board should be laid groove to the wall allowing for expansion of approx. 15mm between the wall and first board.
- The last board in the first row should be fitted using a puller bar ensuring a 15mm expansion gap at the head of the board.
- The second row and all following rows should be started with the off cut from the last board on the previous row. It is necessary to ensure that the end joints of adjoining rows are at least offset 150mm, this leaves the floor stronger and is visually more attractive.
- Measure and trim the last board to fit allowing the 15mm expansion gap.
- All perimeter gaps should be covered with skirting or Scotia using cover strips at thresholds.

### **Floating Installation:**

- Elka Grip specialist adhesive (or equivalent D3 rated PVA glue) should be applied to the head of the board in a 150mm strip.
- Along the length of the board apply glue every 150-200mm leaving a gap of 80-100mm between each application of glue. This is to allow any excess glue space to fill up, rather than glue being squeezed to surface.

### **Nailing on to Wooden Sub-Floor:**

- Before you start make sure the sub-floor is in good shape. Bouncy, squeaky or uneven areas must be repaired.

- Note: 18mm plywood, solid wood or battens hold porta-nails better than mdf or chipboard.
- If fitting over an existing floor, Install at a right angle to floorboards, if this is not possible, fit 6mm plywood so that the direction can be changed. This way the floor will be stiffer and less prone to joints separating.
- Securing can be done by using a porta-nailer or other form of secret nailing. The porta-nailer will fire a nail at a 45° angle through the tongue in to the batten or ply substructure. Secret nailing should be spaced at 150-200mm intervals.

#### **Gluing on to Wooden or Concrete Sub-Floor:**

- You must use a water-free, alcohol or polyurethane glue, specially formulated for use with wood flooring. Installation can be by either the traditional trowel method or by applying a glue batten system (such as Elka Bond), in all cases follow the instructions of the adhesive manufacturer.
- With this method, you adhere direct to the sub floor and you do not need to apply glue to the tongue and groove.
- Any surplus glue that may seep out on to the surface of the wood must be removed immediately with a damp cloth.
- Flooring straps can be used to pull the boards together and hold them firm whilst the glue sets.

#### **Wood Floor Care Guide:**

Woods are a lifetime investment and decisions concerning them should not be taken lightly. Routine maintenance should include protecting the surface finish from moisture and heavy wear which creates scratches. Our recommended Elka maintenance program requires more than sweeping and vacuuming.

#### **Consumer Expectations:**

Wood floors are not impervious to the day to day impact of grit, food, spills, and water.

Preventive maintenance like area rugs, floor protectors (on all furniture on your wood floors), and routine maintenance with proper hardwood floor cleaner (such as Elka Clean) should always be exercised (improper products can contribute to additional wear, may void your warranty, and cause failure when recoating).

#### **Good Practice:**

**Do:** Place Protector pads on ALL furniture legs resting on your wood floor.

**Do:** In high traffic areas use added protection (such as Elka Protect) to prolong the surface life of your floor. These products works in conjunction with Elka 3in1 cleaner as part of the manufacturers recommended maintenance program.

**Do:** Place walk off mats and area rugs in high traffic areas (make sure they stay dry and are cleaned underneath on a regular basis)

**Do:** Perform routine maintenance; this should include sweeping, vacuuming and/or dust mopping to remove dirt and grit. Keep this as a regularly scheduled event, especially before and after a major event that involves a high volume of traffic on the floor.

**Do:** Keep high heel shoes in good repair and pets nails trimmed on a regular bases

**Do Not:** Use WET mops

**Do Not:** Use ammonia

**Do Not:** Use dust cleaning substances.

**Do Not:** Track dirt over the surface of the floor, clean immediately

**Do Not:** Use other general floor cleaning products, only specialized products for wooden flooring should be considered.

**Do Not:** Wax a urethane or oiled finish

**For further technical information on this product visit [www.elkaflooring.com](http://www.elkaflooring.com)**

#### **Important:**

Elka Warranty. Please remember to download and validate your Elka flooring warranty at either [www.elkaflooring.com](http://www.elkaflooring.com) or by contacting your Elka retailer for a 'Warranty Registration Pack'.

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