

ELKA  
LOC

real wood  
engineered  
flooring

## installation guidelines

Congratulations with your new 'Engineered Flooring incorporating the Välinge locking system'. 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 may 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 underfloor heating provided that the strict guidelines are followed.

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. These measurements "will be" required by the manufacturer or supplier if there are any future problems.

## Acclimatising Your New Floor

This product does not require acclimatisation.

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 -24°C and relative humidity of between 45-60% 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. Break up stacked cartons with battens to increase air circulation. The use of gas or paraffin heaters should be avoided. Do not store next to radiators. Further checks must be undertaken by the installer to confirm the engineered wood flooring is in equilibrium with the site it to be installed.

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 such as cupping, expanding and later contraction. Always protect against excessive moisture ingress, where it helps use dehumidification equipment to stabilise 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".

## Underfloor heating

This product is suitable for use with underfloor heating systems subject to the relevant 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:

- 1 The heating has been started up at least three weeks before laying the floor to achieve an ambient living environment.
- 2 Make sure that there is no water leaking from the pipes.,
- 3 If the subfloor is concrete, make sure the concrete is dry. This means not more than 4% moisture, full depth of screed.
- 4 The subfloor has to meet all the requirements for under floor heating.
- 5 Installation method should be as a floating floor and a combination underlay incorporating a DPM must always be used.
- 6 The surface temperature of the ground (below the engineered flooring) cannot exceed +27°C.
- 7 The heating has to be turned off 48 hours before laying the floor.
- 8 2 days after laying the floor, the heating should be turned on gradually, increasing 2-3°C every 24 hours.
- 9 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 using Tramex / Other non destructive moisture meter (2.5% CM Test / Din Standard), above this will cause excessive dimensional change in the wood flooring resulting in problems such as delaminating 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 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. Therefore it is important when installing an engineered floor to leave the proper expansion area around the perimeter. 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 – General

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

- 1 Generally you will want the flooring to run the length of the room towards a natural source of light for aesthetic reasons.
- 2 Under cut the bottom of door frames, wardrobes, etc. to allow for the floor board and underlay to fit under it.
- 3 Open 3-4 packs and "shuffle" the boards to ensure an even distribution of colour and character.
- 4 If you discover a defective piece DO NOT LAY IT. You are the final judge of acceptable quality.
- 5 Elka or its dealers will not be responsible for costs associated with installing, finishing and/or replacing of flooring installed with obvious defects.
- 6 If the last board required is too narrow in width, it may be necessary to install boards cut length-wise on both sides of the room to give it an overall balanced look.
- 7 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.
- 8 The first board should be laid groove to the wall allowing for expansion of approx. 15mm between the wall and first board.
- 9 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.
- 10 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 250mm, this leaves the floor stronger and is visually more attractive.
- 11 All perimeter gaps should be covered with skirting or Scotia using cover strips at thresholds.

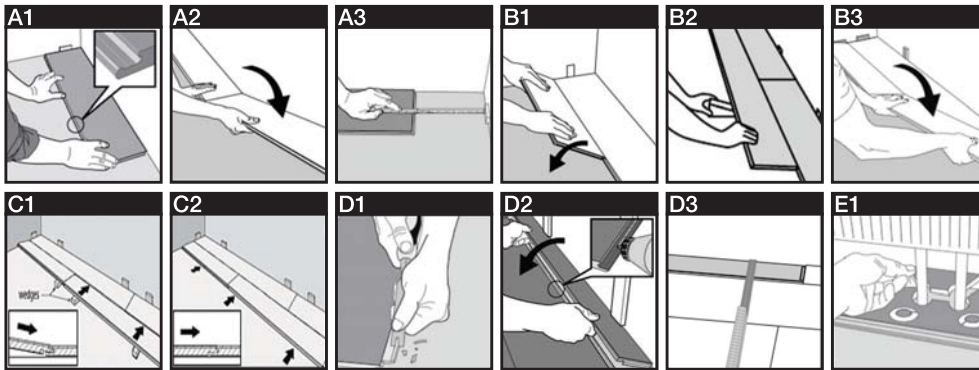
**First Row:** Start in a corner of the room with the locking strip (groove end) facing the room (see picture: A1). Using spacers as required, maintain a 15mm gap between the flooring and fixed objects such as walls. Install the second plank (see picture: A2), pressing the end of the second floorboard in at an angle to the first one and then laying it down flat on the ground to engage the locking mechanism. Continue with this method until you are ready to install the last plank of the first row. Cut the last plank of the first row to size again maintaining a 15mm gap at the end (see picture: A3),

**Second Row:** Start the second row beginning with the off cut left over from the first row (piece must be at least 250cm in length). If the piece is too short, start with a new board, cut in half. Always ensure that the end joints are staggered at least 50cm Maintaining a 15mm gap between the end of plank and the wall, insert the long edge of the plank into the adjacent plank of the first row (see picture: B1). Push forward and press down at the same time to fully engage the locking mechanism. With the plank resting flat on the floor, ensure there is no gapping on any of the joints. Next, lift the end of the plank and rest it on an installation wedge so that it is not lying flat on the floor (see picture: B2). Insert the end of the next plank into the end of the previously installed plank (see picture B3), lowering the plank until it is parallel to the ground with the long edge of the plank resting on the edge of the first row's locking mechanism. Rest the end of this plank on an installation wedge so that the entire edge of the plank is at the same angle as the end of the first plank.

Slowly and evenly push the entire length (the long edge) of the second plank's locking mechanism fully into place (see picture C1). Once completely inserted, remove all wedges and press the entire plank down to lock the plank. Use a rubber mallet and a tapping block to ensure all edges are perfectly mated. Lift up the very end of the newly installed plank and place an installation wedge underneath it in preparation for installation of the next plank. Continue to install the whole row (see picture C2). When the entire row is completed, remove all wedges and review the row to ensure there is no gapping and that all locking mechanisms are fully engaged (all planks are perfectly flat). Repeat as per second row until the last row is reached.

**Horizontal installation:** Cut off the locking element with a chisel (see picture D1), put PVAc D3 white glue on the adjusted strip and push the planks horizontally together (see picture D2). If necessary, clamp the flooring to keep the planks together during the curing time of the glue (see picture D3). This method also applies to Short End horizontal connection.

**Radiator pipes:** Drill the holes 20 mm larger than the diameter of the pipes then replace the cut out and put PVA D3 White glue to the cut edges (see picture E1).



**Wood Floor Care Guide**

Room climate – humidifier or de-humidifier needed? At all times, the recommended room relative humidity (RH) of 45-60% and temperature of 18-24°C should be kept. If necessary install a humidifier/dehumidifier to ensure the best climate for yourself, furniture and your floor. If the climate is not kept or the floor is not correctly installed, by natural properties the floor can show fine gaps or sound can be noticed. 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 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. Always perform this process before and after a major event that involves a high volume of traffic on the floor.
- Do: Keep high heel shoes in good repair, as well as keeping your 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 specialised products for wooden flooring should be considered.
- Do Not: Wax a urethane or oiled finish

**Checklist of Critical Guidelines**

The following checklist must be completed before the Installation of wood floor products. The information on the checklist MUST be followed in every way. If any of these requirements are NOT completed, you WILL be jeopardizing your wood floor performance and/or warranties and guarantees. Allowing any items to be over looked, could cause the installation to fail in the short or long term. Once this information is secured, a signed copy should be kept in a safe place in case future concerns arise.

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**CONCRETE SLAB CONDITIONS**

1 DPM HAS BEEN INSTALLED UNDER THE SLAB:

YES NO

2 CONCRETE HAS A MOISTURE CONTENT OF UNDER 4%:

YES NO

3 IF WOOD FLOOR IS TO BE INSTALLED OVER SLAB, IT IS FLAT

in the short or long term. Once this information is secured, a signed copy should be kept in a safe place in case future concerns arise.

PRE-INSTALLATION EVALUATION OF JOB SITE:	
Date	Time
Job Name	
Address	
City	
Postcode	
Telephone	

**UNTIL THE FOLLOWING GUIDELINES HAVE BEEN MET, THE JOBSITE IS NOT READY FOR WOOD FLOOR INSTALLATION!**

**EXTERIOR CONDITIONS:**

1 GUTTERS AND DOWN PIPES ARE PROPERLY PLACED TO DRAIN WATER AWAY FROM STRUCTURE:

YES	NO
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2 SOIL SURROUNDING THE STRUCTURE IS PROPERLY GRADED TO DRAIN WATER AWAY FROM THE STRUCTURE:

YES	NO
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**INTERIOR CONDITIONS:**

1 ALL WET TRADES (TILE, PAINT, PLASTER, ETC.) HAVE COMPLETED WORK ON SITE:

YES	NO
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2 HVAC (HEAT VENTILATION, AIR CONDITIONING) ARE IN PLACE AND OPERATING PROPERLY: (3-5 days prior to delivery of wood floor products)

YES	NO
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3 THE BUILDING IS ENCLOSED; WEATHER TIGHT, INCLUDING DOORS AND WINDOWS:

YES	NO
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4 THE TEMPERATURE AND RELATIVE HUMIDITY WITHIN THE STRUCTURE ARE AT "MAXIMUM CONDITIONS" (AIR TEMP- BETWEEN 18 -24°C AND RELATIVE HUMIDITY BETWEEN 45 - 60%)

YES	NO
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AND TO SPECIFICATIONS:

YES	NO
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**DELIVERY AND WORKING CONDITIONS:**

1 DRIVEWAY AND SIDE WALKS ARE INSTALLED:

YES	NO
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2 THE FLOORING WILL NOT BE INSTALLED BELOW GROUND LEVEL:

YES	NO
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**MOISTURE CONDITIONS**

1 MOISTURE CONTENT OF THE WOOD SUBFLOOR IS NO MORE THAN 4 PERCENTAGE POINTS ABOVE OR BELOW THE FINISH FLOORING AND IS WITHIN REGIONAL MOISTURE CONTENT GUIDELINES.

YES	NO
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2 MOISTURE TESTING OF CONCRETE BEGAN NO SOONER THAN 30 DAYS AFTER THE SLAB WAS POURED. TEST RESULTS (BELOW 4%) INDICATED THAT IT IS SAFE FOR WOOD FLOORING INSTALLATION TO BEGIN, AND ALL READINGS HAVE BEEN DOCUMENTED:

YES	NO
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WHAT TYPE OF TESTING EQUIPMENT WAS USED?
RESULTS / READINGS:
INSTALLER
COMPANY
TEL:
<b>I verify jobsite is ready for wood flooring installation</b>
Signed
Date

FOR YOUR OWN BENEFIT IT IS VERY IMPORTANT THESE GUIDELINES ARE MET, AND FOLLOWED TO THE LETTER.

IF NOT, SOME ONE (BUILDER, OWNER, WOOD FLOOR CONTRACTOR, or ALL) NEEDS TO SIGN OFF THAT THESE ITEMS HAVE NOT BEEN FOLLOWED.

**THAT PERSON COULD ULTIMATELY TAKE SOME, IF NOT ALL, RESPONSIBILITY IF THE JOB FAILS OR HAS RESULTING PROBLEMS.**