

# Installation Instructions Engineered Drop Loc Flooring

ENG Drop Loc  
August 2008

Engineered wood floors are suitable for all rooms other than those that are subject to excessive moisture and high levels of humidity.

## Important notice

All wood is hygroscopic (it will react to the moisture in the environment) and as a result will expand or contract accordingly. All sources of moisture must be rectified prior to the installation of the floor, and moisture levels in rooms fitted with wood flooring should be maintained at a stable level, in line with normal living conditions. Any construction dampness must be completely dry. It is important that you check each plank for any manufacturing defects. Any faults must be reported back to the store of purchase for an immediate refund or replacement prior to the flooring being installed. The boards in this pack are of random lengths and should be laid randomly across the floor to create the best effect. It is advisable to open a few cartons at a time to mix boards from each pack as they are installed.

## I. Before You Start

- Calculate the total square meters or square footage of the room(s) and add 10% for cutting and waste.
  - The wood boards should be placed in the room in which they are to be fitted to acclimatize for 48 hours and should be carefully stacked, in their packaging, to allow air to circulate. The boards should be stored and laid in a relative humidity between 45%-60% and at a room temperature of between 18°C and 23°C (65 degrees to 70 degrees Fahrenheit). Engineered wood flooring is a natural product which will mature with age. The boards will change shade over time through exposure to sunlight.
  - All substrates must be structurally sound, flat and dry. The surface should be free of all contaminants and loose material. All potential sources of moisture e.g. walls, drains, damp proof courses, plumbing, fridges, washing machines etc. MUST be thoroughly checked and rectified if found to be an issue.
  - The boards should be fitted lengthways to towards the main incoming light source and, where possible, down the length of the room.
- IMPORTANT:** This flooring has to be installed correctly according to the above mentioned instructions. The warranty covers regular use. The warranty does not cover the use in damp and wet spaces or spaces where the Relative humidity is not between 45% and 60%. Warranty will not be applicable in case of the floor fitted in a room with Relative Humidity below 45% or higher than 60%.

### If installing onto a concrete or screed base

In good drying conditions allow one day per 1mm of new screed/concrete to ensure it is dry. Further time may be necessary depending on site conditions. Existing screeds/concrete must be checked for moisture. This can easily be carried out using a moisture meter, or alternatively sheets of polythene approximately 1 meter<sup>2</sup> 1 meter square can be taped on to the screed and a heavy weight placed on top for 24 hours. Presence of moisture in the screed will be confirmed if the screed is discolored, or moisture is apparent on the underside of the polythene. If moisture is present, i.e. over 12%, wood floors must not be fitted until the problem has been rectified. Please seek a professional installer's advice for options to resolve.

### If installing onto a wood subfloor

Engineered wood flooring can be fixed directly onto prepared wood subfloors. If the existing subfloor is sufficiently flat, the new boards can be laid directly on to them at 90°. If the existing floor is not suitably flat then it must be made flat and level by overlaying with Exterior Grade plywood. Loose boards must be secured or the new floor may squeak. Please note: If nails/staples/screws are being used, care must be taken not to damage pipes or electrical cables beneath. If the new boards are to be laid in the same direction as the old, plywood sheets (minimum depth 6mm) should be nailed, stapled or screwed to cover the existing floor, allowing a 15mm (5/8") perimeter gap for expansion.

### Subfloors with radiant heat

**IMPORTANT:** Due to the speed of sudden temperature changes, which has potential to negatively affect flooring construction, it is not recommended to install with an electrical radiant heating system. This will not be covered by the manufacturer's warranty. Below instructions is for radiant heating system using water. Ensure the radiant heat surface temperature never exceeds 27 degrees celsius (81 degrees Fahrenheit). Before installing over newly constructed radiant heat systems, operate the system at maximum capacity to force any residual moisture from the cementitious topping of the radiant heat system. Then set the thermostat to a comfortable room temperature for the installation. It is recommended that the radiant heat be applied in a gradual manner after installing the laminate flooring. Refer to the radiant heat system's manufacturer recommendations for additional guidance.

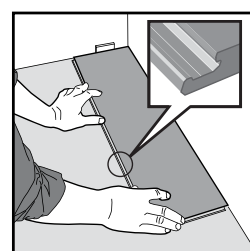
## II. Installation Methods

There are a number of methods for installing wood floors, nailing, floating, gluing or stapling. Apart from where specified in the following sections most existing floor finishes e.g. lino, carpet etc., and should be removed prior to installation of a new wood floor. (note – do not try to remove old vinyl as it may contain asbestos. If in doubt, contact a professional flooring contractor for guidance).

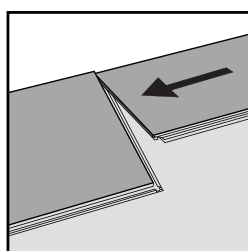
### 1. Floating installations

Before floating installation of the engineered flooring begins, install a foam underlay. Run the foam underlay in the same direction as the flooring planks. The underlay should be butted side-by-side with no overlap. Tape seams together. Your floor is made to be installed floating without glue: Leave an open expansion gap of min 6/16" (10mm) around the whole perimeter (use the distance wedges), i.e. also at pipes, stairs, columns, doorframes and thresholds. In large rooms, calculate 1/16" (1,5mm) / m floor around. Install maximum 32ft 11/16" (10m) length /width; over this: allow for an expansion gap, to cover with a profile of wood or metal. The floor must be able to move freely - do not connect or install tight to any construction part. Rooms with off square areas like for example L-, F-, T-, U- shapes, separate the areas with an expansion joint and especially always in door openings. At any question contact your distributor for further information, installation at doors, glue down, etc. Claims regarding visible defective floor panels must be made prior to installation. Each board should be inspected to ensure that the quality is acceptable. No claims relating to surface defects can be accepted after installation.

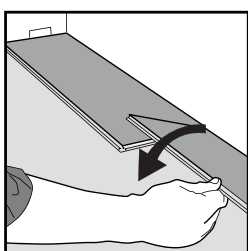
#### Installation method of floorpanels



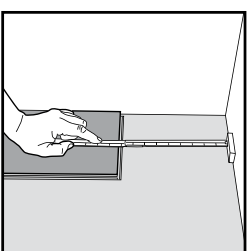
1. First plank, first row. Place a distance ca 3/8" (10mm) width to the left and position the plank against the wall. Later, after 3 rows, you can easily re-position the flooring on the front wall with 3/8" (10mm) expansion gap.



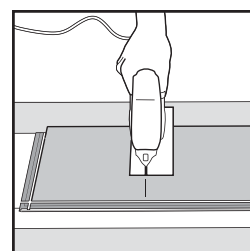
2. Second plank, first row. Place this plank tight to the short end of the first one.



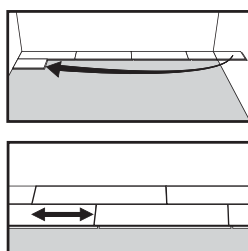
3. Fold down with a single action movement.



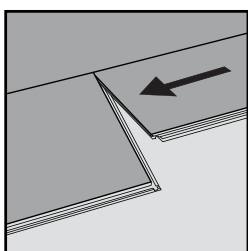
4. At the end of the first row, leave an expansion gap of 3/8" (10mm), to the wall and measure the length of the last plank to fit.



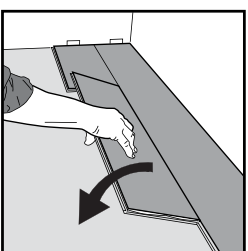
5. At the end of the first row, leave an expansion gap of 3/8" (10mm), to the wall and measure the length of the last plank to fit.



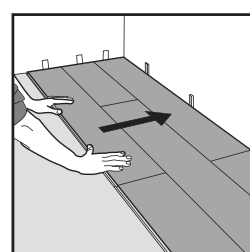
6. Second row, first plank min length 11'7 11/16" (500mm). Leave an expansion gap of 3/8" (10mm) against the wall. Generally, minimum distance between short ends of planks in parallel rows shall not be less than 9" (150mm).



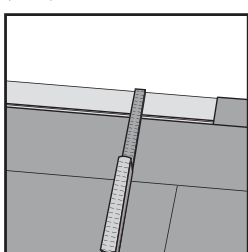
7. Second plank second row.



8. Place the panel tight to the short end of the previous panel and fold down in a single action movement.

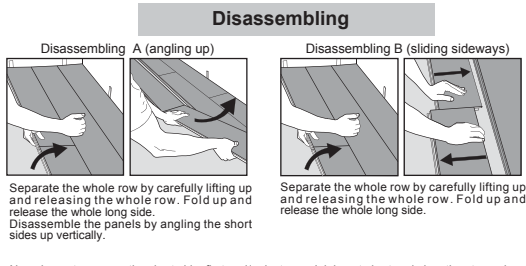


9. After 2-3 rows, adjust the distance to the front wall by leaving an expansion gap of 3/8" (10mm).



10. Last row (and perhaps also first row). Minimum width 2" (50mm). Remember expansion gap of 3/8" (10mm).

TIP! Put a distance before measuring. Cut the panels lengthwise and glue the short ends.



Disassembling A (angling up) Disassembling B (sliding sideways)

Separate the whole row by carefully lifting up and releasing the whole row. Fold up and release the whole long side. Disassemble the panels by angling the short sides up vertically.

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No polymer tongue on the short side, first and/or last row. Joining at short ends length cut panels, glue the joint with white PVA/D3 glue, (or premium wood flooring glue).

Cut off the locking element with a chisel, put PVA/D3 white glue (or premium wood flooring glue) on the adjusted strip and push the planks horizontally together. If necessary, place some distances between the last panel and the wall to keep the planks together during the curing time of the glue.

### 2. Nail-Down Installation

#### Tools Required (not supplied)

For secret nailing installation: Safety gear- mask, goggles, square, hammer or nailing gun, tape measure, spacer wedges, pencil, saw, utility knife

Engineered wood flooring can be nailed over existing wood floorboards provided they are dry, firm and level. When installing over concrete subfloors lay a DPM followed by 18-24 (12/16" – 1") exterior grade plywood first then nail the flooring into the plywood. 18mm (3/4") Engineered wood should not be fixed over batters or directly over joists.

1. Lay a suitable polythene vapor barrier onto the substrate, overlap any seams by at least 200mm (8 inches) and securely tape to provide a suitable seal. Lay 18-24 mm (12/16" – 1") Exterior Grade plywood across the floor in the opposite direction to the length of the new boards, to provide a material into which the nails can fix. The plywood sheets should be butted together allowing a 15mm (5/8") perimeter gap for expansion. Ensure that all underfloor pipe work is lagged before the floor is laid. This will prevent localized shrinkage in the floor from hot adjacent pipes.
  2. Mark out a straight line parallel to the chosen wall, allowing a 15mm (5/8") gap for expansion. It may be necessary to scribe the first row of boards to achieve correct alignment.
  3. Square the first row of boards to the pre marked line with the tongue facing into the room. Top nail\* (top nail at 250-300 mm; 9 7/8" – 11 13/16") intervals or onto every joist, and where possible within 75mm (3") of the end of each board and countersink through the boards as near to the wall as possible)
- \*Top nailing is nailing the board to the subfloor through the top of the board
4. Using the same spacing, of 250-300mm (9 7/8" – 11 13/16"), secret nail at a 45° ensuring a countersink through the tongue. For ease a mechanical floor nailer can be used for this job.
  5. Fit the next run of boards groove to tongue and secret nail.
  6. Continue to fit the board from left to right. Always stagger the end joints by a minimum of 150mm (6") and a maximum of 300mm (11 13/16"). Measure and trim the last board to fit, allowing for the 15mm (5/8") expansion gap. Where possible, use off-cuts to start the next row.
  7. For the last row of boards you can use the sandwich technique to measure the width of board required, ensuring that the row is not less than 10cm (4") in width. Place the board for last row on top of the previous row. Using a full width off cut board and spacer wedges placed up against the wall, scribe the last row to mark the correct cutting line.
  8. Top nail and countersink the last run of boards to finish.
  9. All pipes, pillars, frames etc must be cut around to provide suitable expansion gaps.

### 3. Staple-Down Installation

#### Tools Required (not supplied)

Instead of the hammer or the nailing gun, use an air pressure stapler of 74.5PSI and staples of 1cm (6/16") wide, legs of 2cm (3/4" to 1") long

Follow the same instructions as the nail-down installation. Set pressure at 70-75 PSI to begin and adjust until proper fastener setting occurs. Put one staple every 30cm (1ft) on the long side.

### 3. Glue-Down Installation\*

**IMPORTANT: For America/Asia/Middle East/Africa/Russia, the gluing down installation is not recommended and will not be covered by the warranty of the producer**

#### Tools Required (not supplied)

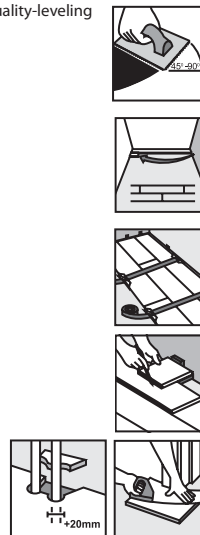
Hammer, Tape measure, Tapping Block, Pencil, Saw, Utility knife, Safety gear-mask, goggles, Spacer wedges, Square, Fitting straps, Parquet flooring adhesive, Notched trowel

This is also a suitable method for installing on top of concrete or screed sub floors. Also suitable for installation over existing suitably firm, flat and secure wood subfloors.

Note: it is not recommended that boards with a width of over 150mm (6") are fitted by gluing only. Screed floors must be flat and level with no surface lumps and depressions in their surface. If this is not the case, it must be leveled to ensure even, uniform application of a liquid applied DPM. The floor can be leveled up to a maximum depth of 5mm (0.08") with a good quality-leveling compound. This must be allowed to dry out completely before applying the suitable damp proofing liquid. With this system use an approved adhesive for gluing engineered wood to the various sub floors. The glue is applied directly to the screed sub floor / existing wood floor to fix the boards.

1. Mark out a straight line parallel to the chosen wall, allowing a 15mm (5/8") gap for expansion. It may be necessary to scribe the first row of boards to achieve correct alignment.
2. Once the first row of boards is correctly aligned and glued in place, weight them down while the glue sets (or use wedges against wall). Any surplus glue that may seep out onto the surface or the wood must be removed immediately with a damp cloth. The glue should not be applied in the groove or the tongue of the flooring.
3. Continue to fit the boards from left to the right. Always stagger the end joints by a minimum of 150mm (6") and a maximum of 300mm (11 3/4"). Measure and trim the last board to fit, allowing for the 15mm (5/8") expansion (5/8") gap. Where possible, use cut-offs to start the next row.
4. Flooring straps can be used to pull boards together and hold them in place whilst the glue dries.
5. The expansion gap of 15mm (5/8") must be maintained during installation
6. For the last row of boards, you can use the sandwich technique to measure the width of board required, ensuring that the row is not less than 10cm in width.
7. All pipes, pillars, frames etc must be cut around to provide suitable expansion gaps.

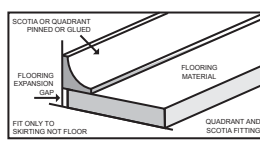
It is not recommended that boards over 152mm (6 inch) are fitted by gluing down only.



## III. FINISHING OFF

Once the flooring is installed, whichever method you have used, the expansion gap can be covered by re-fitting the skirting boards.

Alternatively, if the skirting has been kept in place attaching some molding trims to the skirting using glue or panel pins will also achieve the desired results. At doorways a door threshold strip should be used to protect the edges of the floor and provide a decorative transition from one floor type to another.



## IV. CARE AND MAINTENANCE

- It is recommended that you use felt pads under chairs and furniture (a plastic mat should be used with office chairs on wheels) Engineered wood floors will mark with use, which adds to its character.
- Rubber based castor cups should be used for heavy load furniture such as armchairs and pianos.
- Doormats should be used inside and outside of all external doorways to prevent grit from being carried across the floor, protecting the surface from excessive wear and tear. Be sure that the backing of the mat is not rubber.
- For regular cleaning a dry or damp cloth is advised. (we recommend that cloths be rung until no more drips are present before wiping the floor)
- Do not use abrasive cleaners, steel wool or scouring powder as this may damage the surface of your floor. Do not use wood oil soap products.

Lacquered floors have a surface layer protecting the wood from damage, which is durable and easily maintained. Once the lacquer has been damaged it is advisable to sand a re-lacquer the entire floor to maintain an even finish rather than spot lacquering. This is a procedure which is best carried out by a professional. Please note that repeated sanding will remove some of the textured finish. Please note that repeated sanding will remove some of the textured finish.