



Emerald Collection

INSTALLATION INSTRUCTIONS

General Information Regarding All Hardwood Floors

Real Hardwood floors, unlike plastic or vinyl substitutes are a work of nature and therefore vary in character from piece to piece. This characteristic ensures the unique nature of every floor, its enduring charm and warmth. This characteristic also means owners and installers should expect variations they may not wish to see in a particular area.

It is vitally important that owners:

- choose the right 'look' and or 'grade' of product
- communicate properly to the installer exactly what you want / don't want to see in finished floor
- Installers must do thorough inspection of each piece as it's being 'racked' before installation to ensure it complies with the owner's expectations.

- Installers must take responsibility for final control of the flooring appearance. Placing inconsistent pieces in un-seen areas such as closets is expected of the installer.
- It is the responsibility of the installer to ensure the job site meets necessary conditions outlined in "Job site preparation". Manufacturers of wood flooring cannot control this aspect of installation, therefore neither do they accept warranty liability if failure results from improper site preparation or evaluation.
- Industry standards allow 5% tolerance of grade. Hence 5% extra square footage should be ordered as allowance for possible cutting waste, grade allowance, or manufacturing deficiency. Unless a particular aspect of the product exceeds 5% of the total, it's considered within grade and not eligible for claim.

Owner expectations - "Squeaking floors"

Floor assembly systems consisting of wooden trusses, joists, sub-flooring and finished wood flooring are susceptible to squeaks caused from movement of the various components in relation to each other.

Specifically, the sound often comes from movement between:

- Sub-floor to joist contact where no adhesive is used.
- Separate boards in the sub-floor moving in contact with each other
- 'Bounce' in the whole system due to weakness of joists
- Finished flooring to sub-floor contact
- Mechanical fasteners (staples, cleats, etc.) connecting various components

Proper sub-floor construction or preparation can limit the problem however there is no guarantee the floor won't squeak at some time as result of conditions beyond the control of manufacturers of the various components including finished wood flooring. Varying conditions of humidity throughout seasonal changes in our climates cause these wooden components to swell then shrink repeatedly. The result is that over time this can result in movement and squeaking. There is no warranty offered against the condition.

Owner expectations - "Shrinkage" or Gapping between boards

"Cupping or the opposite, Crowning" of floorboards.

Those same conditions of the environment surrounding and affecting your floor will result in varying degrees of 'shrinkage' during dryer seasons, or in arid climates, and expansion during humid seasons or in generally humid climates. This condition is limited by proper drying and conditioning of solid wood floors, however since manufacturers do not control the conditions in your home, neither do they warrant that such conditions won't result in unacceptable damage to your floor.

Proper installation requires checking the moisture content of the flooring before installation to confirm it is within the correct range 7% - 9% depending on specie. Installers are also charged with responsibility to acclimate the flooring to the jobs site. Having done so, at least your floor starts with the best efforts man can contribute. This is by no means a guarantee that the floor will not react adversely to its environment after installation. This preparatory work does however increase the probability of success in achieving the desired result of a beautiful floor.

SUB-FLOOR PREPERATION

1. **Sub-floors** must be flat. **Dry, and free of any debris. Depressions or low spots of 1/8" or greater measured with a 6' straight edge and** must be filled using self-leveling compound. **Flooring** may be installed over concrete, plywood, tile, or sheet vinyl, provided the floor is flat & secure.
**** Creaking or open joints caused by installation over low spots in sub-floors are the responsibility of the INSTALLER.**
2. **Moisture** must be prevented from penetrating the flooring from the sub-floor. It is highly recommended to use 6mm vinyl vapour barrier beneath all installations since this is very inexpensive protection. Installations over concrete sub-floors, new construction, above saunas, steam rooms, or other spaces of high humidity require a good quality, properly installed vapour barrier to validate warranty. Concrete sub-floors on or below grade should be sealed beneath the vapour barrier. The vapour barrier should extend 2 - 3cm up the walls around the perimeter. Overlaps in adjacent rows of vapour barrier should be sealed using a bead of silicone.

Required Tools: Cross cut saw, Hammer & tapping block, Pry bar, T&G Flooring Glue (Not woodworkers glue), String, Pencil, square & wooden wedges. A '**last board bar**' available from your dealer will help seating the last row.
A damp cloth is necessary to wipe up glue, which may ooze up from the joint.

- Never use regular masking tape on the flooring, use only 3M Scotch Safe Release 2080 Blue Mask Tape as regular tape can strip the finish from the flooring. Never leave tape on flooring for more than 24 hours.
- Always Use the correct trowel as designated by the adhesive container. Excess adhesive can affect curing of the product and prevent flooring from adhering properly.

INSTALLATION

1. Check the starting wall with your string to see if it is straight. If more than 3/8" variation is present, the first row will have to be scribed to the wall and sawn length wise, so that the first row follows the contour of the wall and the tongue side will be straight.
2. Lay the vapor barrier, then the first row of under pad (Make sure you cut out for heat vents). Place the first row **groove edge** to the wall using wedges to establish an expansion gap (1/4" on rooms less than 20' wide). At this point if the butt joints are tight the boards are straight. Check again to ensure the expansion gap is correct. If scribing is required, it is done at this time.
Caution: Do not use more wedges than necessary to establish the minimum expansion gap.
3. Start the second row using the 'off-cut' from the first row. Ensure that end joints are 40cm or 16" apart on adjacent rows. Lay both first & second rows without glue, to ensure the joints are tight and the first two rows are straight.
**** Special Note - Time spent ensuring the joints on the first two rows are perfect pays! Don't try to "cut corners".**
Once sure the first two rows are straight and the joints are fully seated, disassemble & reassemble, this time gluing them together (**Apply glue to the upper edge of the groove rather than on the tongue**). Clean the joint with a damp cloth to remove glue residue before it sets. After having done so, leave these first rows for 1/2 hour to allow the glue to set before continuing with laying the floor.
4. **Glue & set boards** in place by tapping with hammer & hardwood strip or block. The boards will fit together well, if the butt joints are seated before setting the side joint. Start setting the side joint from the opposite end from where the butt joint is, working toward the butt joint. In doing so the butt joint will be tight once the side is fully set. This is important as once the side joint is in place & tightened, it is impossible to move the board end-wise to tighten the butt joint. Once feasible during installation, cover the flooring already laid to protect it from possible damage from tools.
5. **Fitting around obstacles.** Place the board to be cut adjacent to the obstacle in position where the cutout must be. Using the square, mark the position of the obstacle from both the sides & ends of the board. Ensure measurements are correct before cutting. Replace the board & test fit before applying glue.
6. **In doorways.** Undercut doorjambs using a handsaw & a piece of scrap flooring in order to allow flooring to fit beneath the jam leg forming a nice joint. Finish off joints between boards & other flooring with appropriate mouldings from your dealer.
7. **Last board.** Measure between the second last board & wall. Deduct the allowance for expansion gap. Rip the last board to width and test fit. If necessary scribe this board to the wall to ensure an even width of expansion gap. Glue & place the last board in position & tighten the joint using the pry bar or last board bar. Wedge in place, or tape the joint, to prevent joint separation while the glue sets.
8. Replace baseboard trims to cover perimeter expansion gap. Moulding should fit snug to the flooring. Fill any open joints with appropriate wood fillers available from your dealer.



COMMON INSTALLATION PROBLEMS & SOLUTIONS

1. **UN-EVEN SUB-FLOOR:** The most common error made by installers of wood flooring is not ensuring the sub-floor elevation is sufficiently flat. A deviation of 1/8" is the maximum you should accept. If the sub-floor has either high or low spots they must be found and corrected prior to installation. Correction of this problem entails either grinding down the high spots or filling the low areas with self-leveling filler compound. If low spots are not filled, the result is that the floor surface will show the low area. In an extreme the depression in the sub-floor can allow the Hardwood to flex up and down causing either squeaking, the sound of air rushing in and out beneath the floor, joint separation, or perhaps even de-lamination which in this circumstance is not warranted. Without question, filling the sub-floor requires effort, costs money, and delays the installation. Regardless, it is vitally important to a successful installation, which ultimately reflects on everyone involved.
2. **NEGLECTING TO 'SCRIBE TO THE WALL':** In instances where the starting wall is not sufficiently straight, IE: compared to a straight edge or chalk line there is more than 1/4" variation in the straightness of the wall. If this is not the case, the first row of boards must be scribed to fit the starting wall; otherwise it is very likely that open joints will result. **CAUTION:** If the gap exceeds 1/4" the temptation is to use more than one shim to fill the gap. This will not work well, as it allows the board to "bounce" against the wall while the boards adjacent to it are being tapped into place. The result is an inability to seat the joints tightly.
3. **INSTALLING OBJECTIONABLE BOARDS:** Manufacture and grading of Hardwood flooring is a process influenced by human beings. Owing to this, there is inevitably boards produced which may not meet the particular expectations of the homeowner. To avoid the possibility of having boards installed, which are inappropriate, we caution the installer to inspect each board before installing and make their own judgment as to suitability. Occasional colour variations in a board, which naturally occur, can generally be used in places such as closets where it makes little difference, as opposed to the centre of a floor area where such variation may be objectionable. Again the installer must make the call and apply their own standards. Clearly in this case, as well as in the unlikely event of miss-machined boards, it is the responsibility of the installer to do final Q.C. on the product as part of the installation.
4. **NOT USING VAPOUR BARRIER:** Experience has taught us that people would rather not work over a vapour barrier. Frequently installers are un-aware of, or question the need for one. Our response is that typically Hardwood floors are a feature in the home, a source of pride and often a significant investment. A good quality vapour barrier is a very inexpensive insurance toward maintaining the value of your investment. Accept the cost and use vapour barrier! You risk voiding the warranty and inviting disaster if you don't.
5. **USE OF THE WRONG GLUE:** Floated installation requires the use of glue formulated to remain flexible while retaining its bond strength. Woodworkers' glue is not the same or equivalent so don't use it. Use one of the many brands of T&G Floated flooring glues available.