



INSTALLATION INSTRUCTIONS

Our goal is your full satisfaction with our premium flooring. Following these guidelines will prolong your enjoyment of the investment you have made.

We strongly recommend that you use a licensed & experienced installer.

INSPECTION and JOB SITE CONDITIONS

Inspect all materials carefully BEFORE installation. Wood is a natural product containing natural characteristics such as natural variations in color, tone, and graining. Some variation in color is to be expected in a natural wood floor. It is the customer and installer's responsibility for final inspection prior to installation. Bel Air Wood Flooring warranties DO NOT cover materials with visible defects once they are installed.

It is the responsibility of the installers/owner to determine if the job site sub-floor and job site conditions are environmentally and structurally acceptable for wood floor installation. Bel Air Wood Flooring declines any responsibility for wood failure resulting from or connected with sub-floor, subsurface, job site damage or deficiencies after hardwood flooring has been installed.

SUBFLOORS

Please note, this is a general overview of acceptable subfloor conditions, Please refer to the NOFMA or NWFA guidelines for specific information regarding your subfloor prior to proceeding with installation.

WOOD JOIST SYSTEM

- **PREFERRED SUBFLOORING:** 3/4" (23/32, 18.3mm) CDX grade Plywood subfloor/underlayment (Exposure 1), 4'X8' sheets, OR 3/4" (23/32, 18.3mm) OSB subfloor/underlayment grade, With joist spacing 19.2"(475 mm) on center or less. **MINIMUM SUBFLOORING:** 5/8"(19/32", 15.1 mm) CDX Plywood subfloor/underlayment (Exposure 1), 4'X8' sheets, maximum 16" (400mm) on center joist construction.

With minimum specified materials, at maximum span and spacing (i.e. greater than 19.2") plank flooring will exhibit minimum performance. Minimum performance may result in the following conditions: movement, gaps, noises, etc)

CONCRETE

- Concrete must be flat, dry, structurally sound and clean. Test concrete for moisture Before moisture testing begins , the slab must be cured for a **MINIMUM** of 60 days, Excess moisture should not be present.
- Tolerance should be flat to within 3/16" in 10' or 1/8 6'. Substrate should be flattened to tolerance.
- A 10 cm moisture barrier must be used over concrete and below subfloor material.
- A subfloor of 9-15mm particle board should be placed over concrete and moisture barrier prior to installation.
- Lightweight concrete (less than 300 psi)-Where adhesive used has a higher psi rating than concrete, use with a Subfloor-Floated. **RULE OF THUMB:** Draw a nail across the top and if it leaves an indentation, it is probably lightweight concrete. If psi of concrete unknown use Subfloor-Floated.
- **SOLID PLANK FLOORS** :Nail down plank flooring must have approved subfloor over the concrete. Plank cannot be shot to the concrete. 3/4" plank cannot be directly glued to concrete.

SUBFLOOR-FLOATED

- If necessary, add moisture barrier before applying underlayment.
- **PREFERRED** Subfloor system: 2 layers 1/2" (15/32", 11.9mm) CD X Plywood subfloor/underlayment (Exposure 1), 4"X8" sheets. **MINIMUM** Subfloor system: 2 layers 3/8" (10mm) CD X plywood subfloor/underlayment (Exposure 1), 4"X8" sheets.
- Place first plywood layer with edges parallel to wall, without fastening. Plywood should be placed with 1/8" gaps between sheets. Lay second layer perpendicular or at 45 degree angle to first Plywood should be placed with 1/8" gaps between sheets 3/4" minimum space at all vertical obstructions and wall lines staple, screw, or nail second layer on 12" grid pattern.

GLUE DOWN SUBFLOOR

- If necessary, add moisture barrier before applying underlayment.

- **PREFERRED** Subfloor:3/4" (23/32", 18.3mm) CDX Plywood subfloor/underlayment(Exposure 1), 4X8" sheets. **MINIMUM** Subfloor:5/8" (19/32), 15.1mm) CDX Plywood subfloor/underlayment, (Exposure 1), 4X8" sheets
- For single layer system:Apply adhesive per manufacturers recommendations (typical spread rate-30-35 sq. ft. per gallon with a 1/4"X1/4" notched trowel), cut plywood to 2'X8' or 4'X4' sections: score on the back 1/2 the thickness on a 12"X12" grid; lay sections in a staggered joint pattern in the adhesive; 1/8" spacing between sheets; 3/4" minimum expansion space at all vertical obstructions.

NAIL DOWN SUBFLOOR

- If necessary, add moisture barrier before applying underlayment.
- **PREFERRED Subfloor:3/4" (23/32", 18.3mm) CDX Plywood subfloor/underlayment(Exposure 1), 4X8" sheets. MINIMUM Subfloor:5/8" (19/32), 15.1mm) CDX Plywood subfloor/underlayment, (Exposure 1), 4X8" sheets**
- **1/8" Spacing between sheets with staggered joints fasten every 12" and 6" from edge along the border for a minimum of 32 shots per 4'X8" sheet. Areas with higher humidity may require additional nails (shots). 3/4" minimum expansion space at all vertical obstructions.**

SCREED SYSTEM

- **Engineered wood flooring cannot be installed directly to screeds. Solid plank flooring 4" and wider cannot be installed directly into screeds. Screenshot system must be overlaid with 3/4" (23/32" 18.3mm) Exposure 1, or 5/8" (19/32" 15.1mm), Exposure 1, CDX Plywood subfloor/underlayment or 3/4"(23/32, 18.3mm) OSB underlayment properly spaced and oriented perpendicular to screed direction.**
- **Screeds should be 2"X4" or 2"X3", Group 1 species, pressure treated, kin-dried after treatment to 12% m.c. or less; flat, with minimum twist or crook, cut as necessary to maintain flatness, typical, 18"-48" in length; lay in runs maximum 16" on center at right angles to flooring direction; set screeds widest dimension in adhesive with 100% contact ; use cold bond adhesive approved by the manufacturer; lap along sides at ed joints 3"-4" with 1/8" spacing between; stagger all screen and joints; leave 3"-4" space at all vertical obstructions; apply necessary vapor retarder.**

EXISTING FLOORING GUIDELINES

- Glue down applications of Engineered wood flooring may be successful over existing sheet vinyl or vinyl tile. Some types of adhesive may require the use of primer of vinyl blocker when installing this type of surface.
- Nail or staple down applications may be successful over existing sheet vinyl or vinyl tile if fastener. Penetration is not significantly diminished and the subfloor meets minimum requirements. (Particle board is not an acceptable underlayment).
- Where present old finish should be removed from an existing floor.
- Subflooring should be flattened to tolerance should be flat to within 3/16" in 10' or 1/8" in 6'.

ACCLIMATION GENERAL CONDITIONS

- The grade level should be <+/- 2mm level over a distance of 10 feet.
- Subfloor must be flat, clean, dry, structurally sound and free of squeaks and free of protruding fasteners.
- Subfloor (wood or concrete) should be checked by an appropriate method for establishing moisture content. Average subfloor moisture content should be within the range as specified for the product and the product specifications according to the geographical location of the installation. It should not exceed 12%. Refer to the NWFA or NOFMA installation guidelines for more information.
- Moisture content differences between a plywood subfloor and Engineered wood should not exceed 4%. Difference between a plywood subfloor and solid wood should not exceed 2%.
- The flooring can be delivered and stored in the rooms in which it will be installed.
- Allow 3 days of acclimation time for Engineered Wood Flooring products; Allow 7 days for all Solid Wood Flooring. Breaking the floor units into small lots and/or opening packaging can facilitate acclimation.
- Where building codes allow, operating permanent HVAC systems at least five days preceding installation promotes proper acclimation. Where building codes do not allow operation of the permanent system, acclimation of the flooring must be completed with the temperature and humidity maintained at or near normal living conditions between 60 to 80 degrees Fahrenheit and at the average yearly relative humidity for the area.
- Note:The moisture content of the subfloor and wood flooring should be checked by an appropriate method. There should be no more than 4% moisture content difference between properly acclimated wood flooring and subflooring materials, taking into consideration normal living conditions and equilibrium moisture content
- Following installation, the flooring should be maintained in an environment with **relative humidity between 35% to 55%** and **temperature of 55 to 80 degrees Fahrenheit.**

ENGINEERED FLOORING INSTALLATION:

- Bel Air Wood Engineered Wood Floors perform best with a 'floating' installation.
- Flooring Grade Level: Engineered wood floors can be installed successfully above grade level. The entire flooring level is considered to be BELOW grade where soil is present along any perimeter wall and is more than 3" above the installed wood flooring level. Ground should be sloped away from the house for proper drainage. Check local building codes prevail. Follow local building codes.
- Test substrate for moisture. Excessive/elevated moisture should not be present. Subfloor should be within acceptable moisture before installing.
- If necessary, add moisture retarder before applying underlayment.
- Be sure to blend the wood from several cartons to ensure a good grain and shading mixture through out the installation
- Start at one side wall with the first row of boards allowing a 1/2" expansion along side and end walls with the use of wood wedges (equivalent spacers). If the starting wall is out of square, it is recommended the first row of boards is scribed to allow for 1/2" of expansion and a straight working line.
- Use random length planks from the carton or by cutting four to five planks in random lengths, differing by at least 6". As you continue working across the floor be sure to maintain the 6" minimum between and joints on all adjacent rows. Never waste material;use the left over pieces from the fill cuts to start the next row or to complete a row.

- Floating engineered flooring is edge glue. We recommend Bostic Best's adhesive. Apply adhesive at the spread rate to the side grooves.
- The boards must be side and end. Apply in 8" long sections with 12" between each 8" section. Each 8" glue line is flush to the top of the groove. Fully glue every end joint, if any excess glue squeezes up to the finished surface, wipe off using paper towel or cloth. Install the first row using the appropriate expansion space with the groove side facing the wall.
- The subsequent rows are installed, side and end glued, tap together with a hammer and tapping block to prevent damage to the protruding tongue. Tapping block should be against tongue only. Use only flat side of tapping block against tongue. Do not tap on groove side of board as this will cause damage! Check for tight fit on sides and ends.
- Stagger 18 inches between end joints of adjacent board rows. End joints should not repeat visually across installed floor. Never install without some end joints in the floor.
- Most often the last row does not fit in width. When this occurs, follow this procedure: lay a row of boards, unglued, tongue toward wall, directly on top of last installed row. Take a short piece of board with the face down and the tongue side against the wall. Draw a line with a pencil along the row moving down the wall. The resulting line gives the proper width for the last row which, when cut, can then be wedged into place using a crow bar. Make sure when the installation is complete that wedges and spacers are removed and the expansion space is converted with an appropriate molding. Always attach the trim to the wall or vertical object and never to the boards.

SOLID PLANK FLOORING INSTALLATION:

- Solid plank should be installed perpendicular to joists or on a diagonal for any single layer subfloor.
- When laying 3/4" solid plank flooring parallel with the floor joists either add an additional layer of minimum 1/2" (15/32") CDX plywood underlayment to the existing subfloors (as previously recommended) or brace between joists with 2"X6" or wider boards every 24" minimum. Subfloor must be within 4% moisture content of the hardwood floor before installing
- Snap a working line parallel to the starting wall allowing 3/4' expansion space between the starting wall and the edge of the first plank.
- A 3/4" expansion space must be left around the perimeter and at all vertical obstructions.
- Start with the widest board, then the next width, etc, and repeat the pattern.
- Lay one row of plank along the entire length of the working line.
- Top and blind nail the first row (hand nail if necessary), using appropriate fasteners.
- Each succeeding row should be blind nailed with the nailing machine wherever possible. At the finishing wall and other obstructions, it may be necessary to blind nail by hand until top nailing is required.
- Racking rule of thumb: Stagger end joint a minimum of 6" between pieces on adjacent rows. Avoid Hjoints.
- Add each additional row of flooring, watching the pattern repeat and offsetting or staggering the end joints at least 6 inches.
- On floors wider than 20' to minimize expansion: More or less spacing may be needed depending on geographical area, interior climate control and time of the year. In some areas, additional spacing may not be necessary. Where spacing is required: Use a washer or removable spacer to leave additional space every few rows and/or start in center of room and work out to both sides.
- Nailing: Blind nail through the tongue using 2" barbed flooring cleat, 7d or 8d flooring nail, or 2"(15 gauge) staples with 1/2" crown. Use 1 1/2" length, fasteners with 3/4" plywood subfloor direct to concrete slab. Face nail boards where needed using 7d or 8d flooring nail-casing, nail-galvanized, nail-finishing nail, or flooring cleat. Fasteners should be spaced every 8"

CARE INSTRUCTIONS

Real wood floors are not impervious to damage caused by spills, dirt, grit, water or impact. All hardwood floors require regular maintenance to keep them looking their best and lasting to their full potential. Here are some guidelines to help you maintain the beauty of your Bel Air Harwood Floor.

- Real wood will expand and contract with change in humidity, leaving small cracks in between the boards. This affect can be minimized with the use of humidity control in the home.
- To protect floors from dirt or water, place rugs at entry points to help trap grit and absorb moisture that may damage the finish. However, note that rugs with rubber bottoms or non-skid pads may leave an imprint on the floor. Natural fiber rugs are a safer choice.
- Regularly sweep or vacuum the floor with a soft brush to prevent abrasive dirt and dust from accumulating and scratching the finish. Vacuuming should only be done with machines that have a hard surface setting to prevent damage from the rollers.
- Don't Damp Mop: Use only the cleaning products designed specifically for hardwood floors.
- Never use wax, oil-based detergent or any other household cleaners on the floors. These may dull or damage the finish, leaving a greasy film and making the floor slippery and more difficult to clean. Do not use spray polishes or other cleaners that are designed for other types of wood furnishings.
- Wipe spills immediately. Be especially attentive to sink, dishwasher, stove tops and dining rooms, which are more prone to harmful spills.
- Add felt pads to all furniture and chair legs to prevent damage to the floor. Replace the felt pads when dirty or worn. For extremely heavy objects, use wide, non-staining rubber cups.
- Damaged or worn high heel shoes may expose a metal tip which is certain damage the surface finish. Keep high heel shoes in good condition.
- Protect your floor against direct sunlight or any intense of artificial lighting. Over time, intense natural and artificial light will discolor hardwood floors.