

## WOOD FLOOR INSTALLATION GUIDELINES

Collection	Installation Method			Installation Grade			Standard Acclimation	Radiant Heat	Finish Warranty	
	Glue	Staple/Nail	Float	Above	On	Below			Residential	Lt Commercial
French Premier	√	√	√	√	√	√	√	√	50 Year	5 Year
Country Provence	√	√	√	√	√	√	√	√	25 Year	N/A
Smooth Square Edge	√	√	√	√	√	√	√	√	25 Year	3 Year

### READ COMPLETELY BEFORE BEGINNING INSTALLATION

**INSTALLER AND OWNER'S RESPONSIBILITY:** It is the installer and owner's responsibility to check the accuracy and acceptability of the color, finish and quality before beginning installation. Installation constitutes acceptance of the flooring material as installed. Nature's Beauty accepts no responsibility for any costs incurred when a floor with visible defects or color or finish variations has been installed. **UNDER NO CIRCUMSTANCES WILL NATURE'S BEAUTY BE LIABLE FOR ANY LOSS OR DAMAGE ARISING FROM THE PURCHASE, USE OR INABILITY TO USE THIS PRODUCT, OR FOR ANY SPECIAL, DIRECT, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.**

### Engineered Hardwood Flooring Installation Instructions

**GENERAL INSTALLATION GUIDELINES AND INSTRUCTIONS** Whenever possible, install flooring planks perpendicular to the joists for maximum strength. The installer must leave a minimum expansion space equal to the thickness of the flooring around the perimeter and all vertical obstructions such as kitchen islands, half walls, doors and columns. Leave a minimum 1/2-inch expansion space on the side and end perimeters. Molding will cover this space after installation is complete.

Inspect all wood subfloors and concrete slabs for moisture. Concrete slabs determined as "dry" at the time of installation could be designated as "wet" later or different time of year, which would make them unacceptable for installation. As a minimum, all concrete slabs require a 6 Mil thick, polyethylene film moisture barrier between the concrete and the ground. All concrete slabs must be tested for moisture content prior to installation. These slabs and any other recommended subfloor must be dry, flat and clean. The installer accepts all responsibility for subfloor acceptability, which includes job-site humidity and moisture content levels at the beginning of product installation. Refer to both the adhesive manufacturer and NWFA guidelines for moisture content restrictions and vapor barrier requirements.

To ensure a natural looking blend of color and wood grain throughout the floor, installers should work from several cartons of flooring simultaneously. Open three to four cartons of flooring, and mix the planks. Racking the floor and staggering the end joints is necessary for a random appearance. Stagger end joints at least 15 to 18 inches away from other end joints on adjacent rows. Following this guideline will result in a visually pleasing and structurally sound installed floor. End cuts from starter rows can be used either for finishing rows at the ends of the room or for starting another row.

### A. GENERAL INFORMATION

1. The installer is responsible for inspecting the job site conditions prior to installation. The installer should ensure both the job site's ambient humidity and subfloor moisture content are within the NWFA Guidelines. All wet work such as painting, drywall and ceilings on the job site must be complete and dry, and concrete subfloors must be completely cured.

2. The installer assumes responsibility for final inspection of the flooring prior to product installation. Flooring examination for defects, color and finish must be completed prior to installation. If a defect or variation exists, the

installer should not install the flooring and contact the retailer immediately. Never install any defective or questionable planks. When ordering flooring, add 5 percent to the square footage needed to account for cutting waste and normal culling. In most collections knots, splits and natural indentations help enhance the flooring's character and are not considered manufacturing defects.

## B. STORAGE

1. Store flooring in a dry facility with a properly regulated environment to ensure the product's correct moisture content is maintained.
2. Use pallets or racking to elevate cartons of flooring from the jobsite floors.
3. Do not store material directly against an exterior wall.
4. Do not deliver flooring to the job site until the job site environment is within the product's acceptable range over a period of at least 14 days.

## C. JOB SITE INSPECTION

1. Check the product collections recommendations for which products may be installed ABOVE, ON or BELOW grade or over radiant heat (restrictions apply per product line and species). Do not install in damp or high humidity areas such as bathrooms or laundry areas.
2. All subfloors serving as substrates for flooring installations must be properly cured, dry and flat (i.e. within 1/8 inch over a 6-foot span or 3/16 inch over a 10-foot span).
3. All crawl spaces must have a 6 to 8 Mil thick vapor barrier, with all seams overlapped and taped, covering the ground within the crawl space area and be properly vented. Refer to NWFA guidelines for subfloors and crawlspaces.
4. For a 14-day minimum prior to installation, air conditioning and heating systems must be in place and operating with a consistent room temperature between 60° and 80° F and a relative humidity range between 30 – 50%. This temperature range and humidity must be maintained throughout occupancy to ensure the proper environment for the flooring.
5. With any flooring installation, all subfloors must be clean, dry and secure.
6. All exterior grades and elevations must drain away from the building with a minimum grade of 6 inches in 10 feet. Graded exteriors must extend for a minimum of 10 feet. High grade areas located near the job site may require additional drainage system installation.
7. Aim exterior sprinklers away from all exterior walls.

## D. JOB SITE ACCLIMATION

1. Inspect job site for humidity, subfloor moisture content and moisture content of other wood surfaces that have been at the job site for at least two weeks prior to the installation date.
2. Open cartons and rack out flooring on the subfloor at the installation site. Allow flooring to acclimate a minimum of 48 hours or until reaching a moisture content recommended by NWFA Guidelines.

## E. METHODS OF INSTALLATION The following methods are acceptable flooring installation methods:

1. Staple/Nail Down-Use a nail or staple gun and fastener designed for hardwood flooring installations and the thickness of the flooring to be installed. Acceptable wood subflooring includes most existing solid wood flooring, 3/4-inch plywood, 3/4-inch OSB (PS2 type) and most vinyl tile or non-cushioned resilient floors that have been installed over a wood subfloor and are securely adhered. See manufacturer's installation recommendations for specific rules and guidelines regarding installation procedures and acceptable subfloors. Any questions regarding the acceptability of a subfloor for application is the sole responsibility of the fastener manufacturer and the flooring

contractor. The air pressure on all staple guns must be adjusted so the staple is fully seated within the stapling groove. Never drive the staple far enough into the flooring that it causes the planks to crimp or the staple is counter-sunk below the surface of the tongue. Always adhere to manufacturer instructions for the mechanical fastener to ensure proper installation.

Parts that engage planks must not have any sharp burrs that can scratch or damage flooring, especially the pre-finished surface. Make certain the fastener's adapter seats properly on tongue of flooring and matches the product thickness being installed. Follow manufacturer's instructions for proper set-up, fastening and operation of your equipment.

Warning: Using non-recommended mechanical fasteners may result in dimpling, damage to planks or improper installation.

2. Glue Down-Glue down planks with a quality wood flooring adhesive over concrete (with a compression strength greater than 2500 PSI), or other subfloors as approved by the adhesive manufacturer. Make sure all existing subfloors are securely adhered and free of any surface wax or sealers. See adhesive manufacturer's installation recommendations for specific rules and guidelines regarding installation procedures and acceptable subfloors. NOTE: Do not glue down these floors over perimeter-glued resilient flooring.

All concrete must be properly cured, clean, dry and free of surface contaminants such as sealers and old adhesive residue. All subfloors must be structurally flat and within NWFA standards. All sub-surfaces must have a sound but still rough or porous surface to ensure a good bond. Remove old adhesive residues. A slick or sealed surface should be ground or blasted with beads. Use a trowel and spread rate specified by the adhesive manufacturer. See the adhesive manufacturer's installation recommendations for specific rules and guidelines regarding installation procedures and acceptable subfloors. Any questions regarding the acceptability of a concrete slab or other subfloor types or subfloor coating for adhesive application is the sole responsibility of the adhesive manufacturer and the flooring contractor.

3. Floating - Use an approved underlayment over a minimum 6 Mil thick plastic over concrete (with a compression strength greater than 2500 PSI), wood subfloors, marble, stone, ceramic, vinyl tile and non-cushioned resilient sheet goods and many other existing hard surface floor coverings.

NOTE: Never use a rubber mallet or a hammer directly on flooring to engage tongue-and-groove. These tools can damage the flooring and its finish.

NOTE: Blending planks from several cartons is extremely important and ensures a good balance of color and graining.

Important Note for wide-width plank layout: Before measuring from the starter wall, calculate to determine the width of the last row of planks. If the last row is less than one-half the plank's width, add this dimension to the width of the plank being installed and divide the sum by two. The resulting dimension plus the width of two planks will determine the distance of the chalk line from the starter wall.

Begin installation along the longest wall, or an outside wall, which is most likely to be straight and square with the room. Measure out from this wall, at each end, the width of 2 planks plus the tongue. Snap a chalk line from these points that is parallel to the wall and perpendicular to adjacent walls. Since most walls are not square, some planks may need edge trimming along the walls. Using the longest and straightest board possible, install your first plank with the tongue facing away from the wall and along the chalk line. Drill pilot holes through the plank face (in dark grain) and near the chalk line side. Secure planks with finishing nails.

NOTE: Proper alignment is critical. Misaligned starter rows can cause side and end gaps. When the starter row is complete, you may begin the next row. Staple or nail 1 inch from the end of each plank and follow the fastener manufacturer's recommendation or NWFA Guidelines for spacing along the length of the plank. Do not use the stapler on the last few rows. To fasten final planks in place, either manually nail into the tongue or face-nail through the surface. To nail into the tongue, drill pilot holes at a 45-degree angle to the floor and install finishing nails. Alternately, drill pilot holes in the face and use finishing nails or a brad nailer to secure planks.

Make sure no gaps are present at the sides or the ends of adjacent planks. At the far wall, cutting the final row in width to fit against the wall may be required. Do so by laying a plank in position and scribing a line on the plank. Cut

the board, and install. Remove all expansion spacers at walls and any temporary face nails before applying trim moldings. Allow adhesive to cure for approximately 24 hours before permitting foot traffic or moving furniture onto floor. See the adhesive manufacturer's instructions for more detail.

**FLOATING FLOOR INSTALLATION INSTRUCTIONS** Begin installation with the grooves facing the wall. Floating installation requires use of approved foam underlayment over a minimum 6 Mil thick plastic. Lay underlayment so that seams are abutted. Then, secure seam with tape. Do not overlap underlayment. Otherwise, it will create a bulge, and your flooring will not lay smooth and flat. Proper expansion must be left at all walls and all vertical obstructions (e.g., fire places, doorjamb).

Use a wood glue approved for tongue and groove, floating installations.

**IMPORTANT:** Do not open cartons of flooring until ready to begin installation.

**Step 1, First Row-**Open two or three cartons of flooring and dry lay flooring prior to installation to ensure proper end joint staggering. Start with groove sides of board facing starting walls. From the wall, measure out the width of the plank plus a 1/2 inch for expansion space. When ready to begin installation, apply adhesive to upper inside of grooves on sides and ends of boards.

**NOTE:** Since first row boards lie against the starting wall, only apply adhesive to the groove at the end of the boards. **IMPORTANT:** The first row must be square to ensure a good base for installing the remaining floor. Always leave appropriate expansion space between flooring and walls. Expansion spacers or shims should be placed every 12 inches along the walls to maintain the expansion space and to help prevent movement during installation.

**Step 2-**Start each subsequent row with the cut-off end of the last board from the previous row. Stagger end joints by a minimum of 15 to 18 inches. Apply glue to the upper inside of grooves on the sides and the ends of boards. Remember to allow for expansion space and to shim accordingly at the end or start of each row. Only engage the new board at the end joint. Starting at the opposite end from the engaged end joint, begin tapping the length of the board to engage the side groove with the tongue of the adjacent board. If needed, use a pull bar or tapping block to reset the end joint before completely engaging the side groove with the tongue of the adjacent board. Once the long joints are engaged, closing end joints will be difficult. If a gap exists at the end joint after engaging the long joint, work or wiggle the board away from the adjacent board to slightly open the seam. Then, tap the board end to close the end joint. Finish setting the board by placing a tapping block against the tongue side and gently tapping the board flush to the previous row.

**IMPORTANT:** Never tap groove side or top surface layer! At the end of row, cut the board to the appropriate length while also allowing for an expansion gap. Apply adhesive and install as described above. If necessary, use the pull bar to gently ease the board into place. Check all seams for a tight fit, and move on to the next row. Continue in this manner until the last row is reached.

**NOTE:** Changing Directions-If continuing the floor in a reverse direction (e.g., through a doorway) or away from a groove is necessary, a spline must be used. Apply glue to the groove and insert the spline, which converts the groove into a tongue.

**Step 3, Last Row-** When the far wall is reached, cutting the final row in width to fit it against the wall will likely be required. Do so by laying a plank in position and scribing a line on the plank. Cut the board and install. Engage all seams with a pull bar.

**NWFA INSTALLATION GUIDELINES - RADIANT HEAT INSTALLATIONS - Section IV–Appendix H**  
**PLEASE SEE CHART FOR APPROVED NATURE'S BEAUTY PRODUCTS**

With radiant heat, the heat source is directly beneath the flooring, making the flooring dry out faster than a similar floor in a home with a conventional forced air heating system. Wood flooring can be installed over radiant heat as long as you understand radiant heat and how it can impact wood flooring, what precautions to take, and what type of wood flooring and species to use.

Types of wood flooring that are best suited-for radiant heat subfloor are products that possess improved dimensional stability such as these:

1. Engineered wood flooring is more dimensionally stable than solid wood flooring.
2. Certain species are known for their inherent dimensional stability such as North American oak, and others. Denser species such as maple and Brazilian cherry are less stable.
3. Quarter sawn and rift-sawn wood flooring is more dimensionally stable in width than plain sawn wood flooring.
4. Narrow boards expand and contract less than wider width boards.

#### General Radiant Heat Installation Guidelines

1. To minimize the effect that rapid changes in temperature will have on the moisture content of the wood floor, NWFA recommends that an outside thermostat be installed. If one is not present; suggest to your customer that this should be considered. Unlike conventional heating systems, which switch on as needed, radiant systems work most effectively and with less trauma to the wood floor if the heating process is gradual, based on small incremental increases in relation to the outside temperature.
2. Subfloors should have proper moisture tests per the moisture testing procedures outlined in Chapter 3, Moisture Guideline and Vapor Retarders.
3. The essential requirement in proper applications of wood flooring over radiant heated systems is to avoid penetration of the heating element. Radiant-heated subfloor systems can be concrete, wood or a combination of both. The type of subfloor as described in the previous chapters determines subfloor preparation.
4. If the subfloor is concrete and it has cured, turn the heat on, regardless of season, and leave it on for at least 5 - 6 days to drive out residual moisture before installation of the wood flooring. Some installation systems, particularly glue-down applications, require the heat to be reduced or even turned off before installation of the flooring begins, so the adhesive does not cure excessively. Test concrete in accordance with Chapter 3, Moisture Guideline Testing and Vapor Retarders.
5. With water-heated radiant-heat systems, a pressure test must be performed and documented by a qualified plumber or the system installer prior to beginning the installation of the wood flooring. Electric under floor systems should also be tested prior to floor installation. Check heat system manufacturer guidelines.
6. If flooring materials that conduct heat at different rates are on the same circuit or heating zone, check with the HVAC mechanical engineer and Radiant Panel Association ([www.radiantpanelassociation.org](http://www.radiantpanelassociation.org)) before proceeding.
7. Radiant heat is dry heat. A humidification system may be necessary to maintain wood flooring in its comfort zone.

**FLOOR PROTECTION DURING INSTALLATION** Always protect surface of installed flooring during construction by laying a quality rosin paper, other paper or cardboard that will allow floor to breathe, over floor and tape it to the baseboards. Never use plastic or polyethylene sheeting to cover floor since it will trap moisture that may damage flooring. Affix the trim and molding to the walls. Never affix the molding to the floor itself, as it will prevent the expansion and contraction of the flooring into the expansion space.

**FINAL INSPECTION** After the floor has been cleaned, inspect it for nicks, scratches, or any other imperfections that need attention. Touch up nicks and scratches with touch-up products. In typical climates, the new floor can accept foot traffic within 24 hours. In areas where additional curing time is required, more time may be needed.

**IMPORTANT:** Keep a carton or several planks for possible future repairs.

See the care and maintenance section for detailed guidelines.

Nature's Beauty Hardwood Floors are unique in design, color and surface texture. Due to the individual nature of wood flooring, variations inherent in wood such as knots, grain and splits, may or may not be shown in small samples of these products. Small samples or individual planks may not be representative of the floor's overall appearance. Knots, splits and natural indentations are intended to enhance the character and should not be considered defects. Some floors may experience changes in color when exposed to light for periods of time. The amount of color or shade change will vary from species to species. Area rugs and furniture should be rearranged frequently to avoid

a drastic change in the floors' color and shade.

**INSTALLER AND OWNER'S RESPONSIBILITY:** It is the installer and owner's responsibility to check acceptability of color, finish and quality before installation. Installation constitutes acceptance of flooring material. Nature's Beauty accepts no responsibility for any costs incurred when a floor with visible defects has been installed. **UNDER NO CIRCUMSTANCES WILL NATURE'S BEAUTY BE LIABLE FOR ANY LOSS OR DAMAGE ARISING FROM THE PURCHASE, USE OR INABILITY TO USE THIS PRODUCT, OR FOR ANY SPECIAL, DIRECT, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.**