



**PRIVATE RESERVE  
ENGINEERED HARDWOOD FLOORING  
INSTALLATION INSTRUCTIONS**

Glue-Down and Nail-Down Installations  
Applicable to floors purchased after 5/1/2010



**Applicable to:** NAPA COLLECTION · MENDOCINO COLLECTION · SONOMA COLLECTION

**Important Information before You Begin**

It is **EXTREMELY IMPORTANT** that you read and understand this information completely prior to starting, since improper installation can void the warranties. Only a professional hardwood floor installer should perform the installation.

**Installer/Owner Responsibility**

Prior to installation the Installer/Owner should perform a final inspection of the grade, manufacturing and factory finish of the purchased products. Materials installed with visible defects are not covered under warranty. Remember – Wood is a natural product that can vary in color, grain, and contains natural characteristics that varies from plank to plank and is to be expected. We do not warrant against these natural variations from plank to plank or variations from sample to plank. Remember – If you are not satisfied with the flooring prior to installation, simply return the cartons to your dealer for a full replacement. Accepting or rejecting the material must be done on full shipment of quantities only, not carton by carton or plank by plank. . The Installer must use reasonable selectivity and hold out or cut off pieces with defects, whatever the cause. Beautiful hardwood floors are a product of nature and therefore not perfect. Our wood floors are manufactured in accordance with accepted industry standards, which permit a defect tolerance not to exceed 5%. The defects may be of a manufacturing or natural type.

**Summitt Forest Products** shall not accept responsibility for visible defects in flooring that has already been installed. Before installing **Private Reserve** floors, the Installer and Owner should ascertain that the jobsite and sub floor meet all necessary requirements of installation as outlined in these instructions. The **Private Reserve Limited Warranty** does not cover flooring failures resulting from poor jobsite and/or sub floor conditions.

**I. INSTALLATION TOOLS NEEDED – ALL INSTALLATIONS**

Broom or vacuum	Moisture Meter	Safety Glasses	Tape Measure
Hand Saw	Color Wood Filler	Chalk Line & Chalk	Electric Miter Saw
Bona® Hardwood Floor Cleaner	Hammer	Pry Bar	

**II. PRE INSTALLATION & JOBSITE CONDITIONS (applicable to glue-down and nail/staple-down installations)**

**A. General Conditions**

It is the installer/ owners' responsibility to ensure that the jobsite conditions and jobsite subfloor are environmentally and structurally acceptable prior to the installation of any hardwood flooring. The manufacturer declines any responsibility for failures or deficiencies of hardwood flooring resulting from or related to sub-floor, subsurface, or job-site environmental conditions. All substrates must be clean, flat, dry, and structurally sound.

- Subfloors must be clean and free of dirt, curing compounds, sealers, drywall mud, paint, wax, grease, urethane, or other materials that may affect the integrity of the flooring material or adhesives used to install the flooring.
- All subfloors and subfloor systems must be structurally sound and must be installed following their manufacturer's recommendations. Local building codes may only establish minimum requirements of the flooring system and may not provide adequate rigidity and support for proper installation and performance of a hardwood floor. Whenever possible install the planks perpendicular to the floor joists for maximum stability. Our warranties DO NOT cover any problems caused by inadequate substructures or improper installation of said substructures.
- Test wood sub floors and wood flooring for moisture content using a pin-type moisture meter. The moisture content of the subfloor should not exceed 13% and the moisture content of the wood should be within 4% of the subfloor moisture content

## **General Conditions, continued**

- The moisture content for concrete subfloors registered after a calcium chloride test should not be greater than 3 pounds per 1000 square feet of area. If it exceeds these limits, DO NOT install the flooring.
- Before moisture testing begins, the slab must be cured for a minimum of 30 days.
- **A “DRY” SLAB, AS DEFINED BY THESE TESTS CAN BE WET AT OTHER TIME OF THE YEAR. THESE TESTS DO NOT GUARANTEE A DRY SLAB.**
- Basements and crawl spaces must be dry. Use of a 6 mil black polyethylene is required to cover 100% of the crawl space earth. Crawl space clearance from ground to underside of joist to be no less than 18” and perimeter vent spacing should be equal to 1.5% of the total square footage of the crawl space area to provide cross ventilation. Where necessary, local regulations prevail.
- The subfloor must be flat, meeting a minimum of 3/16” within 10’ or 1/8” in 6’.
- All “wet” work – i.e. – paint, drywall, concrete, masonry, plumbing must be complete and dry well in advance of delivery of hardwood flooring.
- Gutters and downspouts should be in place and the exterior grade complete to allow for proper drainage of water away from the building’s exterior perimeter.
- Flooring should not be exposed to extremes of humidity or moisture.
- Permanent HVAC should be on and operational a minimum of 7 days and maintained between 65 – 75 degrees and a relative humidity of 35%- 55% prior to delivery, during, and after installation of the flooring.
- If HVAC is not possible at time of installation the environmental conditions must be at or near normal living conditions between 60 – 80 degrees and at the average yearly relative humidity for the area.

**It is the Installer/Owner responsibility to ensure that the conditions are acceptable prior to the installation of the hardwood floors. The manufacturer declines any and all problems with the hardwood flooring that are related to or attributed to improper jobsite conditions.**

### **B. Recommended Subfloor Surfaces**

**Concrete subfloors:** Concrete slabs should be of high compressive strength and constructed to prevent groundwater from permeating the concrete. Engineered hardwood flooring can be installed on, above, or below-grade. In addition, it can be installed over above-ground, suspended concrete floors. The suspended concrete must be a minimum of 1 1/2 inches thick and must be structurally sound. The exception to this is lightweight concrete (which usually contains high amounts of gypsum) having a density of 100 pounds or less per cubic foot. Test for lightweight concrete by using a nail to scratch the surface of the concrete. If the concrete crumbles or turns to powder, it is not sound and you should **NOT** install the hardwood flooring.

**Wood Subfloors – Preferred:** 3/4” CDX grade Plywood subfloor/ underlayment (Exposure 1), 4’x8’ sheets or 3/4” OSB subfloor/ underlayment grade, PS2 rated, sealed side down, with joist spacing of 19” on center or less.

**Wood Subfloors – Minimum:** 5/8” CDX Plywood subfloor/ underlayment (Exposure 1), 4’x8’ sheets, maximum 16” on center joist construction. Follow panel manufacturer’s recommendations for spacing and fastening. Typical panel spacing and fastening for joist systems, 1/8” (3.2mm) around perimeter and fastened every 6” on bearing edges and every 12” along intermediate supports.

### ***Recommended Subfloor Surfaces, continued***

Installation of flooring should not be made over joists spacing greater than 19" on center or parallel to the joists unless the subfloor has been properly strengthened, applying a second layer of underlayment may be necessary to bring the overall subfloor thickness to 1-1/8".

- Test the moisture content of the wood subfloor and wood flooring with a pin type moisture meter. Wood subfloors must not exceed 13% and the wood flooring should be within 4% of the wood subfloor.
- For existing wood floors install new flooring at right angles to the existing flooring.
- Do not glue, staple, or nail down hardwood flooring over particle board.
- Do not install over existing glue down hardwood floors.

#### **C. Storage and Acclimation**

Engineered wood flooring should be stored in the same environment in which it is expected to perform. Acclimate the product for a minimum of 72 hours or as long as needed in order to meet the proper installation requirements. Opening of the cartons will help to better acclimate material. Material is acclimated once it has reached a moisture equilibrium consistent with the temperature and relative humidity of the job site and normal living conditions. Do not deliver material in inclement weather. Always store material in a dry place.

### **III. PREPARING FOR INSTALLATION**

**STOP! All questions or concerns in regard to the grading or milling of this product are required to be resolved prior to installation. The manufacturer accepts no responsibility or liability for the cost of this product, replacement and/or labor when flooring containing grade, milling, distressing or finishing defects has been installed prior to resolutions. Installing this product assumes full acceptance of this flooring.**

**Inspect the Flooring** – Inspect material for color, finish, milling, and grade. Hold out pieces that may not be acceptable once installed. **PLEASE NOTE: We do not accept responsibility for any costs incurred when plank(s) with visible defects have been permanently installed.**

**Undercut Door Casings** - Undercut all door casings 1/16" higher than the thickness of the flooring being installed. To do this, use a scrap piece of flooring as a guide. Lay it on the substrate and cut the casing with a handsaw or use a power jamb saw set at the correct height.

**Blending of Cartons**- To achieve a uniform appearance across the entire floor, we highly recommend that you open and work from several cartons at a time and dry-lay the flooring, mixing the planks from several cartons. This will allow you to blend the planks for maximum aesthetic appearance. Make certain the room is well lit to ensure color is consistent and that any visual defects can be seen and removed.

**Match Transition Moldings:** For best appearance blend all transitions and moldings to planks that have similar color and graining. Set them aside for use as needed.

**Layout of Flooring:** "Racking the Floor" is essential to achieve a random appearance. Start by either using random-length planks found in the carton or by cutting four or five planks in random lengths, differing by at least six inches. As you continue working across the floor try to maintain a six-inch minimum between end joints.

Randomly install different lengths to avoid a patterned appearance.

Never waste materials; the end cuts from starter rows should be used at the opposite side of the room to complete rows or used to start the next row.

**Expansion space:** Expansion space around the perimeter is required and should be equal to the thickness of the flooring material.

## IV. INSTALLATION

### A. **Glue-down Installation Guidelines**

(for installations over Radiant Heat systems, see also the section on Radiant Heat Installations)

**Before you begin using the following instructions, please refer to the Pre-Installation Jobsite Conditions section above.**

#### **Additional tools & materials needed:**

1/4" x 1/4" x 1/4" square notch trowel Rags Urethane Adhesive Remover Straight edge  
Bostik's Best Urethane Wood Flooring Adhesive

(Note: From time to time Summitt Forest Products may approve additional adhesives – for a complete list see our website [www.privatereserveflooring.com](http://www.privatereserveflooring.com))

#### **Getting Started**

1. Select a starter wall. An outside wall is best: it's most likely to be straight and square with the room. Measure out from this wall, at each end, the width of two planks including the tongue plus the space needed (3/8" or 1/2") for expansion.
2. Snap a chalk line from these points, parallel to that wall.
3. Prior to installing the flooring, secure a straight edge inside the chalk line to act as a guide and to prevent the row of planks from shifting during installation. The straightedge could be a straight piece of lumber or piece of flooring. Alternatively, the first row can be face-nailed with finishing nails into the wood subfloor or sprig nailed into a concrete subfloor.

#### **Installing the Floor**

4. Apply the adhesive according to the adhesive manufacturer's directions. Spread adhesive from the chalk line/straightedge out to approximately the width of two planks. Install the first row of starter planks along the chalk line/straightedge and secure into position with the tongue facing the starter wall. NOTE: Proper alignment is critical. Misaligned starter rows can cause side and end gaps to appear in proceeding rows of flooring. When you have the starter rows complete, you can begin the next row
5. When you are certain the first two starter rows are straight and secure, spread adhesive 2 to 3 feet wide across the length of the room. As a general rule, never spread more adhesive than can be covered in 30 to 45 minutes. If the adhesive has skinned over remove dried adhesive and trowel new adhesive.
6. Continue to install planks and push them into place. Place the tongue of the board into the grooves of installed boards and press into the adhesive. As you continue working across the floor try to maintain a six-inch minimum space between end joints. Randomly install different lengths to avoid a patterned appearance.

**NOTE:** Never strike a rubber mallet or hammer directly on the flooring to engage the tongue-and-groove. This practice can damage the flooring and/or the finish.

7. Remove the adhesive from the surface of the installed flooring as you work – this will help to save time. Use the adhesive manufacturer's recommended adhesive remover.
8. As you approach the end wall it may be necessary to cut the width of the last row – be sure to allow for the expansion space along the end wall. Once the final cuts are made set planks into place.
9. After the floor is complete remove the straight edge and glue down the first two boards.
10. Restrict foot traffic for a minimum of 6-8 hours and wait 24 hours before moving furniture onto the floor.
11. Clean any wet adhesive from the flooring with a lightly dampened clean cloth or sponge. If the adhesive has dried, use the adhesive manufacturer's recommended adhesive remover.

## B. Nail / Staple-down Installation Guidelines

(for installations over Radiant Heat systems, see also the section on Radiant Heat Installations)

### Additional tools and material needed:

Drill      Tapping Block                      Compressor                      Air Hose                      In-line Air Regulator  
Pneumatic Nailer/Stapler                      15 lb. Roofers Felt

Additional materials for flooring wider than 5":  
Bostik's Best Wood Flooring Adhesive in 28 oz cartridges

**Before you begin using the following instructions, please refer to the Pre-Installation Jobsite Conditions section above.**

**NOTE:** Our products are not warranted against squeaking, popping or crackling when using staple-down or nail-down installation methods. Some squeaking, popping or crackling is normal and possible when using staple-down or nail-down installation methods. These symptoms may be aggravated in arid areas or during dry conditions. This is not a manufacturing defect and is therefore not covered under our warranties (see warranty brochure for complete warranty coverage). You can help reduce squeaking, popping, and crackling by being sure that the subfloor is structurally sound, does not have any loose decking or joists, and is swept clean prior to installation.

### SET UP AND USE OF PNEUMATIC STAPLERS AND NAILERS

You must make certain that your stapler or nailer is setting the fastener properly, not damaging the planks, and that you are using the correct nailing schedule. When used improperly, staples or cleats can damage wood flooring. If the tool is not adjusted properly the staples/ cleats may not be positioned at the proper angle and cause blistering, peaking, squeaking, or crackling of the floor. Some models may require the use of an adapter to adjust for proper thickness. Test the tool on a piece of scrap material first - set the stapler/ nailer flush on the tongue side of the plank and install a staple/ cleat. Should the staple/cleat penetrate too deeply reduce the air pressure; if the staple/ cleat is not deep enough then increase the air pressure using an in-line regulator. The crown of the staple/ cleat should sit flush within the nail pocket to prevent damage to the flooring and to reduce squeaking. The flooring manufacturer is not responsible for damage caused by the mechanical fasteners.

**IMPORTANT NOTE: Only use manufacturer's recommended staples or cleats.**

**For 1/2" thick products the recommended length staple/cleat is 1 1/2"**

Read and follow the manufacturer's instructions for complete set-up and operation of equipment.

### Getting Started

1. After the subfloor has been properly cleaned and prepped cover the subfloor with 15lb. asphalt felt paper. This material will help to keep the floor clean and help to retard moisture from below (there is no complete moisture barrier system for staple or nail-down applications).
2. Select a starter wall. An outside wall is best: it's most likely to be straight and square with the room. Measure out from this wall, at each end, the overall width of the plank (board width + tongue + the space needed (3/8" or 1/2") for expansion).
3. Snap a chalk line from these points, parallel to that wall.
4. Install the first row of starter planks along the chalk line/straightedge and secure into position with the tongue facing away from the starter wall (toward you). Drill pilot holes through the face of the plank every 6" (in the dark grain); approximately 1" from the back edge of the board and secure planks with 1" finishing nails. Countersink nails and fill with appropriate colored wood filler – remove excess filler from surface.
5. Blind nail at a 45° angle through the tongue 1"-2" from the end joints and every 6" in between along the length of the starter boards (Predrill holes to make this easier). Depending on the width of the flooring it may be necessary to do this for the first few rows prior to using a pneumatic stapler/ nailer. **NOTE:** Proper alignment is critical. Misaligned starter rows can cause side and end gaps to appear in proceeding rows of flooring.

## ***Nail / Staple-down Installation Guidelines, continued***

### **Installing the Floor**

6. Continue to install the flooring making sure to nail/staple 1"-2" from the ends and every 3" – 4" thereafter. Make certain the tool is adjusted properly to ensure that the fastener is at the proper angle and is flush within the nail pocket. As you continue working across the floor try to maintain a six-inch minimum space between end joints. Randomly install different lengths to avoid a patterned appearance.

### **Supplemental Adhesive:**

For flooring wider than 5", we require the use of supplemental adhesive in the form of Bostik's Best Urethane Wood Flooring Adhesive (available in convenient 28 oz. tubes). This adhesive should be applied as follows:

A 3/16" bead should be applied lengthwise either to the back of the flooring on the groove side or on the subfloor such that when the plank is put in place the adhesive is on the groove side of the plank. The adhesive bead should be applied so that it does not fall closer than 1/2" from the edge of the plank. An additional bead of glue should be applied in the same manner across the width of the back of the plank approximately 1/2" from the grooved end-match, or on the subfloor such that when the plank is put in place the adhesive is on the groove side of the end-match.

7. If needed use a tapping block to help engage the boards together until the tongue-and-groove is flush and tight and no gaps are present between adjacent planks. NOTE: Never use a rubber mallet or hammer directly on the flooring to engage the tongue-and-groove. This can damage the flooring and/or finish.
8. As you approach the end wall it may be necessary to cut the width of the last row – be sure to allow for the expansion along the end wall. Once the final cuts are made set planks into place.
9. The last few rows will need to be fastened by hand. To fasten the final planks into place, you must either manually blind nail and/or face-nail through the surface on the final planks. Drill pilot holes at a 45-degree angle to the floor and blind nail using 1" finishing nails. Alternatively, drill pilot holes in the face every 6" (try to drill holes in darker portion of the wood) and install with 1" finishing nails. Countersink nails and fill with appropriate colored wood filler – remove excess filler from surface with a clean rag and proper cleaner.

## C. Installation over Radiant Heat Systems

All ½" thick Private Reserve Engineered Floors are warranted for Installation over Radiant Heat system provided the following installation guidelines as well as the After Installation and Seasonal Operation guidelines detailed herein are strictly followed

Private Reserve Solid Floors are not warranted for installation over Radiant Heat systems.

Failure to strictly follow these guidelines may void all Private Reserve Warranties.

- Sub floor must be prepared and tested as detailed under *PRE INSTALLATION & JOBSITE CONDITIONS* (pages 1-2 of this document).
- Relative humidity of the jobsite must be maintained between 35-55% relative humidity. Use of a humidification system may be required to maintain the proper humidity level. Failure to maintain proper humidity level can result in excessive dryness of flooring.
- It is highly recommended that the radiant heat system be designed specifically to accept a wood floor
- Use of floor temperature sensor(s) as well as a separate thermostat for each individual room is required.
- An outdoor temperature sensor should be used to adjust water temperature according to anticipated heat loss.
- Prior to installation of flooring the radiant system must be installed per manufacturer's instructions.
- Radiant heat system should be set to run at 2/3 maximum output for a minimum of 2 weeks prior to installation of flooring to further allow moisture from concrete to dissipate and reach a final moisture content. This must be done in both heating and non heating seasons.
- Prior to installation (4 days) reduce to a temperature of 65°.
- Install flooring following the instructions for glue-down and nail/staple-down installations as detailed earlier in this document. It is strongly recommended that nail/staple-down installations also be glued.

### AFTER INSTALLATION & SEASONAL OPERATION

- 48 hours after completion of installation, slowly raise temperature of the heating system to its preferred operating level over a period of 5 days. Do not allow the surface temperature to exceed 82°
- Humidity level must be maintained between 35%-55% R.H.
- Seasonal gapping should be expected.
- Surface checking can be expected if the proper humidity level is not maintained between 35-55% R. H. or if the floor's surface temperature exceeds 82°.

The floor's surface temperature must never be allowed to exceed 82°F. Failure to control the maximum floor temperature may void your Private Reserve Hardwood Flooring Limited Warranties.

Humidity level must be maintained between 35%-55% R.H. Failure to control the humidity level may void your Private Reserve Hardwood Flooring Limited Warranties.

#### **IV. COMPLETING THE JOB – ALL INSTALLATIONS**

- Sweep or vacuum floor
- Clean the floor with Bona® Swedish Formula® Hardwood Floor Cleaner  
Note: From time to time Summitt Forest Products may approve additional cleaners– for a complete list see our website [www.privatereserveflooring.com](http://www.privatereserveflooring.com))
- Install transition pieces -i.e. – thresholds, t-moldings, base boards and quarter round.  
Nail moldings to wall, not the floor.
- Inspect final floor for nicks and or minor gaps – fill with appropriate color wood putty.
- Leave Warranty and Maintenance brochure with customer.
- Unused material should be left with owner and stored in a dry place in case of future repairs are needed.
- Use plywood or hardboard when moving heavy appliances or furniture across floor.

**Floor Protection During Construction:** Always protect the surface of the installed flooring during construction by laying a quality rosin paper or other paper that will allow the floor to breathe, taping it to the baseboards. Never use plastic or polyethylene sheeting to cover the floor since they will trap moisture that will damage the flooring.

#### **AFTER THE JOB**

Carefully follow all guidelines as detailed under Private Reserve Flooring Care and Maintenance Instructions, available on our website at [www.privatereserveflooring.com](http://www.privatereserveflooring.com).