

INSTALLATION INSTRUCTIONS FOR HARDWOOD HERRINGBONE PATTERN



STOP



NO CLAIMS WILL BE ACCEPTED UNLESS ALL SPECIFICATIONS AND REQUIREMENTS IN THIS DOCUMENT HAVE BEEN MET.

Thank you for choosing Choice Hardwood Flooring. Our hardwood options feature beautiful wood species that enhance the charm of your home. Please review the following guidelines carefully to meet warranty requirements and ensure a successful installation. Installing hardwood floors requires specialized tools and adherence to specific methods, which depend on various factors, including the type of subfloor and other site-specific attributes. For this reason, Choice Hardwood strongly recommends that installation be carried out by certified and trained installers who are proficient in hardwood flooring installation. It is the responsibility of the purchaser to select a suitable installation company. The National Wood Flooring Association is one resource that can help you identify qualified installers in your area. Please note that the following guidelines are not intended as step-by-step instructions but as important information for both the end user and the installer.

READ CAREFULLY

To ensure you receive the flooring you desire and need, the installer must inspect all flooring materials before installation. If either the installer or the buyer determines during the inspection that the flooring has the wrong color, is improperly manufactured, has finish issues, is of substandard quality, or has an incorrect gloss level, do NOT proceed with the installation. Please contact the retailer immediately where the flooring was purchased. Any claims regarding visually defective flooring will not be accepted if the flooring is installed, as the installed flooring will be considered acceptable.

Since wood is a natural material, not synthetic, standard industry practice permits up to 5% of the flooring shipped to exhibit defects in milling, handling, finish, or grade. This warranty applies only to materials that exceed this 5% threshold.

Important Note: The installer must test the subfloor for humidity to ensure it is within the proper range of 35% to 65%, which is necessary for the flooring to perform effectively.

Wood flooring installed in areas with relative humidity below 35% may experience issues such as cupping, shrinkage in width or length, or cracking; these conditions are not covered under the limited warranty. To prevent these problems in dry conditions, it is necessary to use a humidifier to maintain the relative humidity above 35%. Additionally, wood flooring installed over wet subfloors may encounter issues such as crowning (which can lead to cupping), swelling (which can lead to shrinkage), buckling, telegraphing, or edge/tip raises.

These issues are also not covered by the warranty. Furthermore, wood flooring that becomes soaked from above will experience similar problems.

DO NOT INSTALL THIS FLOORING ON WET SUBFLOORS OR IN OVERLY DRY CONDITIONS

Before installing any wood flooring, the installer must ensure that the job site and subfloor meet the requirements outlined in these instructions. Choice Hardwood is not responsible for flooring failures resulting from unsatisfactory job site and/or subfloor conditions.

The temperature in the installation area should remain between 65 and 75 degrees Fahrenheit, consistent with normal, year-round living conditions, for at least one week before installing the wood flooring. Store the unopened boxes of wood flooring in the installation area for 24 to 72 hours before installation to allow the flooring to adjust to the room temperature. Avoid placing the boxes directly on concrete.

DO NOT OPEN THE BOXES BEFORE INSTALLATION.

LIMITED WARRANTY COVERAGE APPLIES ONLY TO PROPERLY INSTALLED AND MAINTAINED CHOICE HARDWOOD FLOORING. The owner and/or installer assume all risks concerning the examination of flooring, job site, environmental conditions, and installation.

CAUTION!

- SOLID WOOD FLOORING IS NOT COMPATIBLE WITH BELOW-GRADE INSTALLATIONS.
- TEST MOISTURE CONTENT OF THE SOLID HARDWOOD FLOORING TO VERIFY PROPER ACCLIMATION.
- DO NOT INSTALL THIS FLOORING OVER RADIANT HEAT FLOORING.
- WOOD FLOORS ARE NOT RECOMMENDED IN FULL BATHROOMS.

If you require additional or more detailed information on installing hardwood flooring, please contact the National Wood Flooring Association (NWFA) at 1-800-422-4556 or visit www.nwfa.org.

NOTE TO OWNER

Installing hardwood flooring is a skilled task, and homeowners need to select their installer with care. Choice Hardwood recommends choosing a certified and trained installer who has verifiable references. Additionally, the installer should have demonstrated experience with similar projects and possess the necessary business licenses for your area. The contract for installation lies solely between the homeowner and the installer. Choice Hardwood cannot be held responsible for the homeowner's choice of an installer or any shortcomings on the installer's part.

NOTE TO INSTALLER

The owner should understand that wood will change color over time. Potential changes in the gloss level and overall appearance of the finish should be discussed. The owner should also be informed that the finish may scratch and wear down with time. Proper installation and maintenance are essential to preserving the wood's beauty.

EQUALIZING AND ACCLIMATION OF YOUR WOOD FLOORING

During the final pre-installation inspection, it is essential to check the moisture content of the subfloors using an appropriate moisture meter designed for wood. All solid wood flooring must be properly acclimated to the installation environment before installation. Wood is a porous material that absorbs moisture based on the surrounding humidity. If the wood is not adequately acclimated, this moisture absorption can lead to issues such as cracks, separation, and warping in the flooring. Solid wood flooring should be stored in the same environment where it will be installed to ensure optimal performance. Just before installation, the flooring must be delivered to a climate-controlled location and handled carefully. Eventually, the wood will acclimate to

its environment and reach what is known as the "equilibrium point," or equilibrium moisture content. This means that if the wood is neither gaining nor losing moisture, it has achieved a balanced state.

RECOMMENDATIONS FOR EQUALIZING SOLID WOOD:

- Flooring stored upon "on-grade" concrete floors should be elevated at least four inches to allow air circulation under boxes.
- The flooring must acclimate for as long as necessary to meet minimum installation requirements for moisture content. Using the equilibrium moisture content chart below, determine the proper moisture content for the installation.
- Always use a moisture meter to determine where the flooring and present job site conditions are in relation to the projected final equilibrium point considering seasonal changes.
- Monitor the flooring and job site conditions as they acclimate. An equilibrium condition has been reached if the wood is neither gaining nor losing moisture.

NOTE: No single fixed moisture content is right for all sites, as equilibrium points can vary dramatically in different environments. The owner and installer are responsible for monitoring all variables that can impact the target equilibrium point.

TESTING FOR MOISTURE CONTENT

Determining moisture content is a crucial aspect of quality control in the flooring installation process. If applicable, flooring installers need to assess the dryness of the wood flooring, the subfloor, and any concrete slab beneath it. A moisture meter is essential for checking whether the floorboards are dry enough for installation. Moisture levels are one of the most significant concerns during this process. Monitoring the flooring and job site conditions throughout the preparation and installation phases is important. The moisture content of the subfloor must not exceed 11%, and the moisture difference between the subfloor and hardwood flooring should not be more than 4% for 3-5/8" planks or 2% for wider planks. If the subfloor moisture exceeds these limits, it is crucial to identify and eliminate the source of moisture before proceeding with the installation. Additionally, a minimum moisture barrier, such as a 6-millimeter polyethylene film, may be required alongside the 15-pound asphalt felt. It's important to note that asphalt felt is not considered a moisture barrier.

PRODUCT INSPECTION

Hardwood flooring is a natural product; variations in color, grain, pattern, and texture occur normally and are not considered defects. Prior to installation, inspect all the hardwood flooring for visible defects. Do not install defective flooring. Choice Hardwood will replace defective flooring that exceeds the allowable 5% tolerance above, provided that it has NOT been installed. Once Installed, visibly defective flooring is not covered by warranty. You may discard or trim and use such defective flooring in hidden areas. Choice Hardwood is not liable for defective flooring that results, in whole or in part, from any job site or subfloor condition that does not comply with standard industry standards, these instructions, or environmental conditions.

These are inspections that must be performed before installation, including a careful examination of the flooring for style, grade, color, finish, dimension and quality, job site, and environmental conditions. To understand how the floor will look after installation, it is important that the installer and owner review the control samples to ensure the owner's expectations are met:

Grade: Since grade may vary slightly from batch to batch, the flooring to be installed should be reviewed for proper grade.

Color & Graining: Determine whether light or exotic-grained pieces need to be culled to meet the owner's expectations.

Color Change: Choice Hardwood proudly manufactures all hardwood floors within strict tolerances accepted by the industry, which allows for up to 5% defective product (natural or manufacturing related) based on the original

hardwood flooring purchase. Be sure to order at least 5% additional flooring material beyond actual square footage requirements to allow for cutting and grading of material if your installation is on a diagonal, order 10-15% extra material.

JOB SITE INSPECTION

Ensure that the job site environment and subfloor surfaces meet all applicable local codes and standards as well as construction and material industry standards (laying the floor should be the last step in your installation). The building must be structurally complete and properly enclosed, with all doors and windows installed. The installer must cull or cut off defective flooring material prior to installation. Concrete, plaster, masonry, drywall, paint, wall coverings, and subfloor must be completely dry so as not to raise moisture (humidity) content within the building. Ensure the exterior grading is complete, with drainage directed away from the structure, and all gutters and downspouts should be installed and functional. Wood floors are not recommended in full bathrooms. If the flooring is to be installed on a subfloor under which is a crawl space, the floor of the crawl space must be at least 18" to 24" from the ground to the underside of joists, ground cover of 6 mil black polyethylene must be utilized as a vapor barrier and joints must be overlapped 6" and sealed with moisture-proof tape. The crawl space must also have perimeter air venting equal to 1.5% of the crawl space square footage.

SUBFLOOR REQUIREMENTS

Recommended Subflooring, Maximum: ¾" (19mm) CDX Grade Plywood or ¾" (23/32") OSB PS2 Rated Underlayment with a minimum of 40 lbs. density. Minimum: 5/8" CDX Grade Plywood with a minimum of 40 lbs. density.

CAUTION: DO NOT use particle board or similar products, including gypcrete.

DOORWAY AND WALL PREPARATION

Undercut, or notch-out door casings are 1/16" higher than the thickness of the flooring being installed to avoid difficult scribe cuts during installation. Also, remove the existing base, shoe moldings, and doorway thresholds; each can be replaced after installation.

RECOMMENDED MATERIALS & TOOLS

- Measuring Tape
- Chalk Line Reel
- Rubber Mallet
- 4d-6d Flooring nails
- 15lbs. asphalt felt
- 3M blue tape
- Broom
- Putty Knife
- Floor protectors
- Pencil
- Jamb saw or hand saw
- Table saw or band saw
- Crowbar or last plank puller
- Hammer
- Powernail manual 45 T&G Powernailer, pneumatic
- 445 Powernailer or other machine designed or adapted specifically to 3/4" wood flooring.
- A high-quality moisture meter with relevant information from the manufacturer.
- Exotic species calibration figures

For all installation methods, use a Tape measure, tapping block (or trimmed piece of flooring), Pencil, Pry bar, Chalk line reel, Wood or plastic spacers (3/8"), Crosscut power saw, Hammer, and 3M Blue Tape.

Flooring adhesive for Rotary & Sliced Hardwood: Any Choice Flooring-approved adhesive made for engineered hardwood that suits the job site conditions. When job site conditions are outside supplier recommendations, the installer/contractor must contact the relevant adhesive supplier in order to receive approval for that particular adhesive being used, given the site conditions.

NOTE: Use only urethane adhesives – DO NOT USE water-based mastics as they will cause this floor to fail)

On concrete slabs that are on/below grade, we strongly recommend installing sheet vinyl first and then installing the wood floor on the vinyl or using the Bostik or Mapei Moisture Barrier Systems. Trowel per the flooring adhesive manufacturer's recommendations.

For nail-down installation, you will need an industrial flooring stapler or nailer with the appropriate adapter to ensure the nails or staples are positioned correctly. Use $\frac{1}{2}$ " x 1-1/2" staples for the floor runner stapler (18 gauge) and 1-1/2" L-shaped cleats (18 gauge), along with an air compressor.

For floating installation, you'll also need a 6-mil polyfilm, approved foam underlayment such as Healthier Choice Omnichoice Underlayment, WF Taylor 2049 Floating Tongue & Groove Adhesive and 3M blue tape.

PRE-INSTALLATION SUBFLOOR REQUIREMENTS

The subfloor must be structurally sound. The subfloor must be dry and free of wax, paint, oil, and debris. Replace any water-damaged or delaminated subflooring or underlayment. Scrape smooth and sweep prior to installation. The subfloor must be level, within 3/16" over 10' and 1/8" over 6', and dry from moisture (plywood subfloors not to 11% moisture or concrete subfloors with less than 3.5 lbs. moisture as measured by Tramex Commercial Concrete Moisture Meter or equivalent). If the subfloor is concrete, a minimum of 30 days of drying time is required for a reliable moisture reading. DO NOT use gypsum-based (white) patching compounds. Follow the manufacturer's recommendations for applying the leveling compound. The area containing the new leveling compound must be completely dry (meeting moisture vapor emission tolerances) before proceeding with the wood floor installation. High areas or joints must be sanded flat if the subfloor is plywood or equivalent. If plywood or equivalent, the subfloor must be properly secured with nails or screws every 6 inches along joists to reduce the possibility of squeaking after final installation. Appropriate moisture tests must be performed as outlined in the "Testing for Moisture Content" section listed above. Minimum thickness subfloor material recommendations are satisfactory for 16" on center joist spacing. Thicker subfloor recommendations will allow up to 19.2" joist spacing. Subfloor panels should be spaces 1/8" apart to allow for expansion. It is highly recommended that Choice Hardwood solid floors are not installed over existing glue-down wood floors or over wood floors that exceed three ¼" face size. Cover the sub-floor area with 15 lbs. asphalt felt. If installing over the subfloor, use vapor retarders such as asphalt, saturated craft paper, or 15 lbs. felt. If you are gluing down over concrete (even if you believe it is dry) on or below grade, you should install sheet vinyl first and then glue the wood flooring on top, providing an effective permanent moisture barrier. Another alternative to sheet vinyl is to use the Bostik or Mapei Moisture Barrier Systems, which provide warranties. Ceramic, resilient, and sheet vinyl-covered subfloors must be well bonded to the subfloor, clean, and level, and in good condition.

NOTE: Do not use an impermeable vapor retarder material with a perm rating of 7 or less, such as a 6-mill polyurethane film or other polymer materials, over a wood subfloor, as it may trap moisture on or in the subfloor.

DO NOT sand existing vinyl floors, as they may contain asbestos.

Radiant Heat: When installing flooring over radiant heat, use only a floating installation method. Ensure that the subfloor temperature does not exceed 80 degrees Fahrenheit. Always consult the guidelines provided by the radiant heat manufacturer for the maximum water temperature allowed in the heating pipes. You must turn off the heating unit one to two days before the flooring installation and gradually increase the temperature after the installation is complete.

ACCEPTABLE SUBFLOOR TYPES

- Plywood (at least ¾" thick), underlayment grade particleboard (floating/glue-down only), OSB PS2 rated (at least ¾" thick) NOTE: Some OSB type products will not hold the nail in place, which can result in squeaky floors. This is a subfloor issue.
- Concrete Slab (floating/glue-down only)
- Existing wood floor
- Ceramic Tile (floating/glue-down only)
- Resilient tile & sheet vinyl (floating/glue-down only)

INSTALLATION OF HEALTHIER CHOICE PREMIUM ACOUSTICAL UNDERLAYMENT

For added acoustic benefits, including reducing sound transfer to the room below, install Healthier Choice premium acoustical underlayment on the subfloor before installing Choice Hardwood Flooring. This underlayment is supplied in rolls.

Before installation of the underlayment, be sure the subfloor is clean and dry. Roll out one section of Healthier Choice underlayment parallel to a wall and perpendicular to the direction of the flooring. The perimeter edges of the Healthier Choice underlayment need to be flush with the wall. Install additional sections of underlayment, butting the seams together until installation is complete. Tape may be used to hold the Healthier Choice underlayment in place.

NOTE: When installing Choice Hardwood Flooring over the underlayment using a pneumatic nailer, adjust the air pressure so that the underlayment is not compressed or puckered at the nail's location.

- It is suggested that you buff the floor with lamb's wool pads to "pull any splinters," remove any residues and handprints/footprints, etc.
- Install any transition pieces that may be needed (reducer, T-moldings, nosing, etc.)
- DO NOT allow foot traffic or heavy furniture on the floor for the first 24 hours (if glued-down or floating).
- Sweep or vacuum with a soft brush attachment to remove dust or debris. Avoid brooms with hard bristles, as they can scratch the surface.
- Maintain a consistent temperature (65-75 degrees Fahrenheit) and humidity level (35-65%) to prevent the
 wood from expanding or contracting. Properly protecting the surface is important when placing furniture
 back onto the flooring. Avoid sliding the furniture into position. DO NOT use cardboard, as it does not provide
 adequate protection.
- Use felt protectors on furniture legs.
- Clean the floors with an approved hardwood floor cleaner such as Bona brand.
- Avoid long periods of sun exposure to the flooring. Close blinds and drapes during peak sunlight hours.
 Excessive heat can cause expansion and warping of the product.
- Caster wheels should have wide rubber casters. Protective mats are required under rolling chairs.
- Use walk-off mats at entrance doors to prevent grit and dirt from being tracked on the floor.
- Sweep or vacuum the floor regularly. Use a vacuum designed for hard surface floors that does not have a beater bar. The beater bar should be turned OFF.
- DO NOT use harsh chemicals such as bleach or abrasive cleaners on this floor.
- Wipe up spills immediately with a dry cloth.

Herringbone Installation Instructions

INTRODUCTION

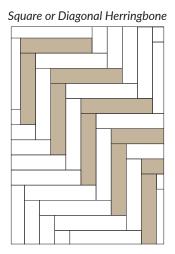
This manual introduces the basic notices to know before you install herringbone engineered hardwood flooring. Please read the entire installation instructions carefully before proceeding with the installation.

PRE-INSTALLATION WARRANTY

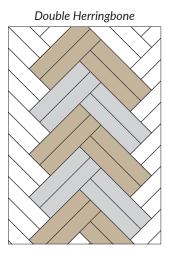
To ensure you are receiving the floor that you like and need, it is installer's duty, whether professional or DIY (do it yourself), to inspect all flooring before installation. If during inspection the installer or buyer feels the flooring is the wrong color, improperly manufactured, has finish problems, is off-grade or is the wrong gloss level, do NOT install the flooring. Please immediately contact the retailer from which the flooring was purchased. No claim will be accepted for flooring which is visually defective If such flooring is installed, the installed flooring is deemed to be acceptable. Since wood is a product of nature, not plastic, standard industry practice allows for up to 5% of flooring shipped to have milling, handling, finish and/or grade defects. This warranty applies only to material that is in excess of this 5%.

IMPORTANT

Herringbone Flooring must be installed using glue down and nailed down method only. Precision is the key when installing Herringbone hardwood flooring. Verify measurements and frequently check row alignment to ensure the pattern is laid accurately and evenly. Installing Herringbone flooring requires technical ability and suggested to be performed by qualified professional installers. Warranty coverage may be lost due to failure of installation and/or the use of improper materials or tools.







This manual introduces the basic notices to know before you install herringbone engineered hardwood flooring. Please read the entire installation instructions carefully before proceeding with the installation.

1) All work involving water or moisture should be complete before installing hardwood flooring. For any new construction or remodeling project, hardwood flooring should be one of the last items installed. The jobsite should be monitored for consistent, normal room temperature of 68 deg. F (16 deg. C) in winter and 74 deg. F(22 deg. C) in summer, and relative humidity of 40~60% for at least one week before installation. This flooring should be kept in the shrink-wrapped boxes until immediately before installation. DO NOT remove from packaging and acclimate like solid hardwood floors! This can make the flooring very difficult to install. Tolerances between the tongue and groove are so exact that any

expansion of the tongue due to acclimation might make the T&G fit too tight for easy installation. DO NOT install in areas subject to moisture, such as bathrooms or laundry rooms. Although this flooring can be glued directly to concrete, DO NOT use a concrete sealer nor install over one. See adhesive manufacturer's instructions and follow them to ensure problem free installation and access to their glue warranty. The concrete must be high compressive strength. All concrete sub-floors should be tested for moisture content using the calcium chloride test. In case of a claim, the only acceptable, accurate test method for sub-floor moisture content is the calcium chloride test.

2) All sub-floors must be level and clean

The maximum tolerance is 3/16" per 10'. If necessary, flatten out any irregularities using #20 grit paper and fill any low spots with leveling compound recommended by adhesive manufacturer. Prepare slab according to adhesive manufacturer's recommendation.

3) Wood sub-floors must be

Dry and well secured, with a moisture content under 12%. The bottom side, if facing outside (like a crawl space) must be under 15% MC and a 6-mil Polyfilm placed over the dirt in the crawl space. Adequate ventilation must exist, with clearance of 18" to 24". Nailed down or screwed down every 6 inches along the joist to avoid squeaking.. Leave 1/8" gap around perimeter. Leveled by sanding or grinding down high spots and filling in low spots with an underlayment patch as necessary. Preferred subfloor: 3/4" CDX grade Plywood subfloor / underlayment (Exposure 1), 4' x 8' sheets or 3/4" OSB subfloor / underlayment grade, PS2 rated, sealed side down, with joist spacing of 19.2" on center or less.

4) Concrete sub-floor must be

Fully cured for at least 60 days. Installed properly with minimum 6-mil Polyfilm between concrete and ground. Dry all year round. DO NOT install over concrete if you are not sure it will remain dry. Tested for moisture by using calcium chloride test. Follow adhesive manufacturer's suggestions.

5) Sheet vinyl must be

Well bonded and fully glued to the floor. Do not install over perimeter glued floors. This warranty does not apply if not fully and securely bonded to subfloor. DO NOT install over vinyl thicker than 1/8" or more than one layer of vinyl. In good condition. Clean and level, no debris. DO NOT install over vinyl tiles. Consult adhesive maker about suitability - adhesive is not warranted. Please follow adhesive maker's guidelines. Abrading of the vinyl surface might be necessary.

PREPARATION

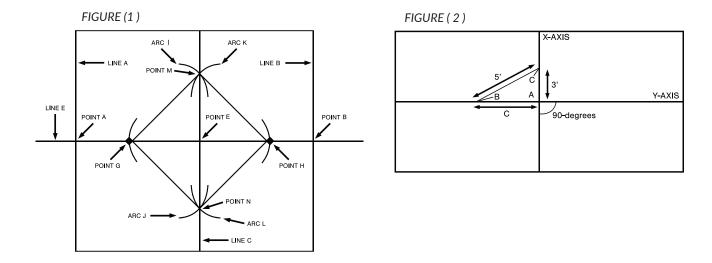
Visually inspect the boards before installation. Once installed, the boards are considered accepted by the installer and the homeowner. Each pack of Herringbone contains six left planks and six right planks. A left-tongue plank and a right-tongue plank will be required to form each joint. The Herringbone direction should run in accordance with client preference. The pattern may look best with the points in the direction of the longest dimension of the room or toward a major focal point. Flatness of the subfloor is critical when dealing with a herringbone installation.

START INSTALLATION

Mark Center of the room and Working Lines

Typically herringbone looks best with the points running in the longest direction of the room or directed at a focal point. When that is determined, snap a line down the center of the room. Using trammel points and follows these guidelines to find and mark the center of the room and to define working lines. The overall board pattern is readily definable in herringbone layouts. The faces of a left board and a right board are mirror images of each other. Equal amounts of both are shipped with flooring order

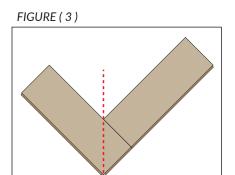
- Measure the width of the place from top to bottom left of center (Line A in Figure 1).
- Find the center of Line A and mark it (Point A).
- Measure the width of the room from top to bottom right of center (Line B).
- Find the center of Line C and mark it (Point B).
- Adjust for any difference in center between Point A and Point B. For example, if Point A is one inch different than Point B, divide the difference by two to establish the new center point of Line A.
- Snap a line the length of the room from Point A through Point B. This is now Line E.
- Find the center point of Line E and mark it Point E.
- From Point E, use trammel point at fixed position on flat board to mark through Line E left of center to right of center, and mark it Point G and Point H.
- From Point G and H, use trammel point at a fixed position, on flat board to draw arc above and under Line E. Mark this Arc I and J.
- From Point G and H, use trammel point at a fixed position, on flat board to draw arc above and under Line E. Mark this Arc K and L.
- Where Arc I and Arc K intersect, mark it Point M.
- Where Arc J and Arc L intersect, mark it Point N.
- Snap a line from Point M through Point N, and mark it Line C.
- Where Line C intersects Line E is the center of the room. Line E and Line C also form a 90-degree angle.
- Check the 90-degree angle using the 3- 4- 5 method as shown in Figure 2.



LAYING OUT A HERRINGBONE PATTERN

- 1. Determine the diagonal dimension of the flooring.
- 2. 2) Determine the herringbone pattern orientation in the room.
- 3. Measure for true center on the herringbone pattern to establish working lines as shown in Figure 3.
- 4. Measure the room for center and strike the main control, perpendicular and diagonal reference lines using the trammel point method described previously and shown below in Figures 4.
- 5. Divide the measurement by four and establish the working Lines on both sides of the control line.
- 6. Using the measurement derived above, strike two working lines on either side of the main control line as shown in Figures 4.
- 7. Measure the distance from two working lines. Control line should be half the distance and run parallel to two working lines. The centerline of the room and the center of the pattern is represented by control line..

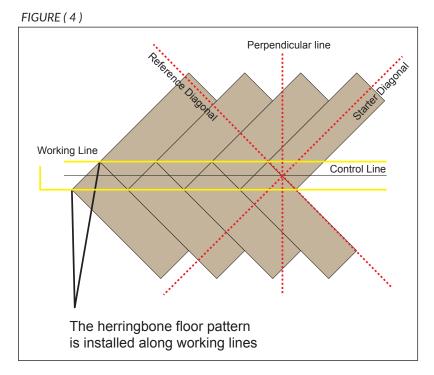
8. Herringbone can be laid out parallel to the room or at a 45-degree angle to the room. Regardless of the direction, herringbone will require a control line and two working lines.



To establish working lines, figure out what the distance will be between the corners of the slats

Or, an alternate method is to use a framing square to mark 45-degree angles off each corner from the same end of a slat. Measure the distance from one corner to the intersection of the lines.

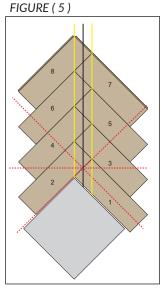
when they are laid out.

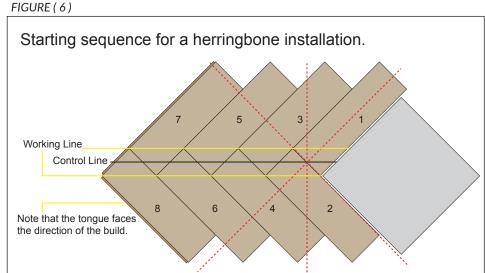


Once the working lines are established, the installation can begin. The starting point must include working lines and diagonal lines as described previously.

- For direct glue, do not spread adhesive over working lines.
- Start with the tongue toward the build direction.
- Install pattern one row at a time.
- Periodically check alignment.

To keep the installation square, cut a square piece of plywood the size of the herringbone pattern and anchor it at the intersection of the working lines and diagonal lines as shown in Figures 5 and 6 below.

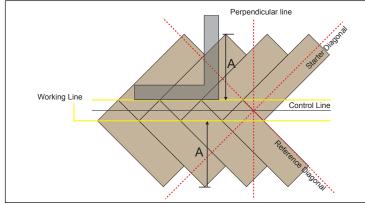


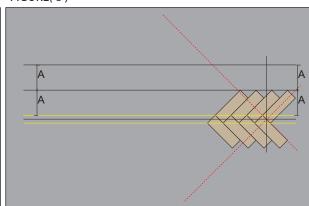


TO CONTINUE THE PATTERN

- Dry lay eight boards.
- Lay a framing square from the points on the working line to the outermost point.
- Record measurement A, this becomes your working line for the next course.
- Once measurement A has been established the working lines can be repeated throughout the installation as shown below Figures.







AFTER INSTALLATION

- If nailed, the newly installed floor is complete and can be walked on immediately.
- If glued, allow the newly installed floor to fully cure based on adhesive recommendations before allowing foot traffic or moving furniture on the floor.
- Remove any adhesive from the surface of the flooring (smudges, fingerprints, etc.) before it dries.
- Use wood filler or putty to correct minor flooring damage that might occur during installation.
- Retain excess planks for future repairs.

General Installation Instructions (see NWFA at www.nwfa.org for more details)

- Flooring should be laid at right angles to the floor joists and, if possible, in the direction of the longest dimension of the room.
- All products have a UV-cured factory finish. It is important to make sure that the nail gun face plate nwill not damage the surface finish.
- Keep face plate clean scratching caused by abrasive material on nailer face are not warranted.
- End joints of plank: These should be staggered to achieve the best appearance in the finished floor. (minimum 6")
- Nailing schedule for flooring: Nail on 6" to 8" centers in the tongue, also nail within 2" of each end joint. The last few rows might require hand nailing and/or face nailing, countersinking, and filling with putty.

Important Notes

- Baseboards should be installed so that their lower edge is slightly above the level of the finished floor but not
- nailed into the floor.
- DO NOT install any product with visible defects.
- To avoid movement in hardwood floor, relative humidity should be maintained year round at 40%~60% Relative Humidity.

