

INSTALLATION INSTRUCTIONS | Hardwood

C|B
Nuvelle Chateau Blanco
PREMIUM HARDWOOD FLOORS

These installation Instructions are for oiled & UV Urethane Finish

IMPORTANT: Pre-Installation Checklist and Homeowner Review

Before proceeding with installation, the Pre-Installation Checklist must be read carefully and signed by the installer. It is essential that this checklist is reviewed in detail with the homeowner to ensure they fully understand the scope, appearance, and expectations of the flooring product.

- The homeowner or authorized customer representative must be present on-site during the layout phase. They are required to visually inspect and approve the specific planks that will be installed. Approval must be given before any installation begins.

- DO NOT proceed with installation if the homeowner or customer expresses any uncertainty or dissatisfaction regarding:
  - Color variation or shading differences
  - Natural wood characteristics or grading
  - Overall visual appearance of the material
  - Any discrepancies between the sample boards and delivered product

- Be aware that sample boards are for general reference only and may not represent the full range of color, grain, or character that will appear in the actual flooring. Natural hardwood products often include wide variations that are inherent to the species and grade selected.

- It is the installer's responsibility to ensure the homeowner has approved the final product selection before installing. Once the floor has been installed, no claims related to appearance, color, variation, or grading will be accepted.

- Document all approvals and ensure that both the installer and homeowner (or customer) sign off on the final selection prior to installation. This protects both parties and ensures alignment on expectations.

PLEASE NOTE: Sample display boards, room scenes, and product images are provided as general visual references and may not fully represent the actual flooring. Flooring from newly opened cartons may appear different in color compared to the samples. This is normal and can be influenced by natural aging processes, hardwood flooring will change in appearance over time due to exposure to sunlight and environmental conditions. Always inspect and approve the actual flooring material prior to installation.

PRE-INSTALLATION REQUIREMENTS & GUIDELINES

Before beginning installation, carefully review all installation instructions and warranty information in full. If you have any questions or require clarification, contact your local dealer or distributor prior to proceeding. Please note that all installation guidelines must be strictly followed for warranty coverage to remain valid.

Prior to the delivery of flooring materials, the job site must be thoroughly evaluated to ensure the structure is suitable for hardwood installation. Use the following installation options as applicable:

- Staple with glue assist
- Full-spread adhesive application

For installations over radiant heat, refer to page XXX of the installation guide. Always verify with your local distributor or manufacturer whether the product is approved for use over radiant heat systems.

- Flooring equal to or less than 8 33/50 (220mm) in width is considerd radient heat approved.
- Flooring greater than 8 33/50 (220mm) is not radiant heat approved.
- American Hickory engineered floors, regardless of size, are not approved for radiant heat installations.

Understanding the climate zone of the installation site is critical. We work closely with the builder and property owner to determine the appropriate conditions required to ensure long-term performance of the interior finishes.

PLEASE NOTE: Once the flooring is installed, it is considered accepted as is. The manufacturer will not be responsible for any labor or material costs associated with removal or replacement after installation. To reduce visible color variation, do not mix more than two production runs, and ensure all runs used are within a six month production window.

PRE-INSTALLATION REQUIREMENTS

PRE-INSTALLATION INSPECTIONS

Before installation, inspect the hardwood flooring in well-lit conditions to identify any potential issues. Examine the flooring carefully for grade, color, finish, sheen/gloss level, and overall quality. Any material that is considered unsatisfactory based on personal preference but still meets the Manufacturer's grading standards will not be eligible for replacement. However, material with visible defects may be returned and replaced (up to 10% of the total order) through the dealer.

If any product is deemed unacceptable, stop installation immediately and contact the Manufacturer to arrange for replacement material. Once the flooring is installed, it is considered accepted by the end user, homeowner, or contractor.

ENVIRONMENTAL CONDITIONS

Before installation, inspect the hardwood flooring in well-lit conditions to identify any potential issues. Examine the flooring carefully for grade, color, finish, sheen/gloss level, and overall quality. Any material that is considered unsatisfactory based on personal preference but still meets the Manufacturer's grading standards will not be eligible for replacement. However, material with visible defects may be returned and replaced (up to 10% of the total order) through the dealer.

If any product is deemed unacceptable, stop installation immediately and contact the Manufacturer to arrange for replacement material. Once the flooring is installed, it is considered accepted by the end user, homeowner, or contractor.

NOTE: We do not warranty wood flooring in environments where indoor humidity falls outside the recommended range of 35% to 50%. Consult an HVAC specialist for advice on humidification or dehumidification solutions.

SITE PREPARATIONS

Before starting installation, the installer must confirm that the job site and subfloor conditions comply with the specifications outlined in the manufacturer's instructions. Hardwood flooring should be installed after other construction work is completed to minimize damage. Foot traffic should be limited after installation to preserve the finish.

IMPORTANT INSTALLATION WARNING

If the supplied flooring does not meet your expectations, do not proceed with installation. THis decision must be made within the first 5% or 100 square feet of opened flooring, whichever is less. Any opened matieral beyond this amount will not be eligible for return.

MAINTENANCE & WARRANTY LIMITATIONS

Improper maintenance or unsuitable environmental conditions may cause wood flooring to chip or splinter. These issues are not covered under warranty. Additionally, any floor noise (squeaking, creaking) is generally due to improper installation or plank movement. Staple with glue or floating installations are more prone to noise issues.

DISCLAIMER: If the homeowner does not maintain a consistent indoor humidity level between 35% and 50% year-round, all warranties are void. We reserve the right to reference regional humidity data based on your location to verify compliance.

UNSUITABLE SUBFLOOR CONDITIONS

DO NOT INSTALL OVER:

- DO NOT install over resilient tile flooring installed below grade
- DO NOT install over cushion backed vinyl flooring
- DO NOT install over carpeted surfaces
- DO NOT install over hardwood flooring installed directly ove concrete
- DO NOT install over stairs with sloped steps
- DO NOT install over romms with uneven floors or floor drains
- DO NOT install over any additional underlayment, as the planks come with pre-attached padding.

GRADING STANDARDS

GENERAL GRADING GUIDELINES

All flooring must be tongue and groove and end matched, unless specified otherwise. Flooring will not be accepted as Standard Grade unless it has been properly dried.

GRADING STANDARDS

Like many other flooring and lumber mills, we use our own unique grading system to produce our floors. These custom grades are typically referred to as Mill Run or Character Grade. Instead of adhering to traditional NOFMA/NWFA classifications, we blend different grades together to create a diverse and natural mix. This method allows us to offer wider and longer boards.

Our grading standards allow for various natural features, including filled knots, mineral streaks, open checks, tight checks, and filled checks. Acceptable characteristics also include bird peck, pin worm holes, and flag worm holes (any insects are eliminated during the drying process). Additionally, plank faces may feature unlimited amounts of heartwood (the darker section of the log) and/or sapwood (the lighter section).

Please note that just because you don't see these natural features in a sample or room display doesn't mean they won't appear in the

actual boards. Our grading guidelines define what's acceptable in terms of these natural characteristics. If you have any questions, feel free to contact your local distributor.

LENGTH

For floors with random lengths, there is no guarantee regarding the exact percentage of short or long boards. The distribution of lengths is determined at the discretion of the manufacturer.

STORAGE & HANDLE

Handle and unload wood flooring carefully. Store it in a dry area, ensuring it is elevated at least four inches off the ground using dry 4" x 4" stickers or a dry pallet to allow proper airflow beneath the boxes. Before the flooring is delivered, ensure that all exterior doors and windows are installed. Any concrete, masonry, plastering, or other "wet" work should be completed and fully dry. The roofing and exterior shell of the structure must be sealed and weather-tight, with doors and windows in place. Wall coverings should be installed, and all painting should be finished, except for the final coat on the base molding. Maintain consistent room temperature and humidity levels, similar to year-round conditions, for at least one week prior to installation. If possible, install the base molding after the flooring installation is complete.

The HVAC system must be running, maintaining a room temperature between 60°F and 80°F, with relative humidity levels between 35% and 50%.

CLIMATE CONTROL

If the heating and/or air conditioning system, along with the appropriate humidity controls, are functioning properly, they must be activated. In the event that the permanent system cannot operate, a temporary solution that ensures the correct temperature and humidity levels must be implemented and maintained until the permanent system is fully operational. If no humidifier or dehumidifier is present in the home, it will be assumed that the homeowner or end user has not adhered to the manufacturer's guidelines, which will result in the warranty being voided.

FLOOR INSTALL

Hardwood floors should be the final trade completed in the house, just before baseboards are installed. All concrete work, masonry, plastering/drywall, texturing, and painting/primer coats must be finished beforehand. For floating floor installations, do not install the floor under kitchen islands, cabinets, or fixed fixtures. Covering the floor while wet trades are still in progress can cause moisture condensation on the protective paper, leading to moisture being absorbed into the paper or trapped under the covering materials. Additionally, paper coverings can result in dents and scratches on the floor.

VARIATION IN COLOR

As hardwood is a natural product, color variations are normal and should be expected. To achieve the best visual outcome, it's recommended to mix planks from several cartons, ensuring that boards with significant color differences are not placed next to one another. Please note that the sample board may not perfectly match the actual flooring, as it is from a previous batch. The color on the sample may have shifted due to factors like oxidation or sunlight exposure. To ensure the material meets expectations, it's essential to dry rack 3 to 4 cartons and obtain approval from the homeowner or end user before proceeding with installation. Once the floor is installed and accepted, no warranty will be provided for color variation, texture, gloss, or finish-related issues. The presence of the homeowner or end user during installation is mandatory, this is an absolute requirement.

ACCLIMATIZATION

Since humidity levels can vary significantly by region, it's crucial to properly acclimate the flooring prior to installation to avoid issues. This allows the wood to adjust its moisture content to match the conditions of the environment. Failing to acclimate the flooring correctly can lead to problems such as buckling, shrinking, or cupping after installation. Additionally, environmental factors may cause the wood to chip, crack, or splinter, which is a natural reaction to local conditions, not a defect from the manufacturer.

Damage resulting from improper handling, environmental factors, installation errors, or maintenance issues will not be covered under the product's grade warranty.

IMPORTANT: Do not open the boxes prior to installation. The boxes should remain sealed until the flooring is ready to be installed.

SUB FLOOR PREP

The sub-floor must be level, dry, and free of defects. An uneven sub-floor can result in an unstable floor, leading to premature wear and noise. These issues are not covered under warranty.

READ BEFORE INSTALL: Before beginning the installation, make sure to thoroughly read these instructions. Additionally, we recommend that the installer adhere to all installation guidelines provided by the National Wood Flooring Association.

INSPECT FLOORING MATERIAL BEFORE INSTALLATION

The Manufacturer is not responsible for determining the suitability of the flooring and related products for each specific installation, nor can it control the installer's application process. If any plank appears defective in appearance or dimensions, the installer should not use it. The Manufacturer will promptly provide a replacement for any questionable pieces.

PRE-INSTALLATION JOB SITE REQUIREMENTS

- The Manufacturer is not liable for site conditions. Before installation, carefully inspect the flooring for grade, color, finish, and overall quality. Ensure the area is adequately lit for a thorough inspection. If the flooring does not meet expectations, contact your supplier immediately to arrange for a replacement. The Manufacturer will not be held responsible for any flooring installed with visible defects. Before proceeding with installation, the Installer must verify that the job site and sub-floor meet the requirements outlined in these instructions. The Manufacturer is not responsible for flooring failure due to unsatisfactory job site or sub-floor conditions. Do not install any planks that may be deemed unacceptable by the homeowner.
- Flooring should be installed near the end of any new construction or remodeling project. All work involving water or moisture must be completed prior to flooring installation. Water and wood are not compatible. Installing flooring on a damp sub-floor can lead to cupping, edge and tip lifting, core telegraphing, as well as gapping and finishing issues
- The room temperature and humidity in the installation area should be stable and reflect typical, year-round living conditions for at least one week before installing the flooring. An ideal room temperature of 70°F and humidity levels between 35-50% are recommended during installation. Humidity levels below 35% can cause the flooring to shift, resulting in gaps between planks, cupping, and surface cracking.
- Store the flooring in the installation area for at least 72 hours before installation to allow it to adjust to the room temperature. Avoid placing the boxes directly on concrete floors. Proper acclimation is essential for moisture equalization before installation. For the best visual effect, shuffle the boards to mix the lengths and colors evenly.

PRE-INSTALLATION SUB-FLOOR REQUIREMENTS

ALL SUB-FLOORS MUST BE:

- Dry nad must remain dry: The sub-floor must stay dry throughout the year. The moisture content of wood sub-floors should not exceed 11%. For concrete sub-floors, moisture content must be tested using methods such as the Anhydrous Calcium Chloride test, a non-invasive moisture meter, or a pin/probe moisture meter.
- Stable & secure
- The sub-floor must be thoroughly swept and free of all debris. If the flooring is being glued down, the sub-floor should be free of wax, grease, paint, sealers, old adhesives, or any other contaminants. These can be removed by sanding to ensure proper adhesion.
- The sub-floor must be flat, with no deviation greater than 3/16" over a 10-foot radius.
- Wood sub-floors must be dry and securely fastened. Screws should be placed every 6 inches along the joists to prevent squeaking. If the sub-floor is uneven, sand down any high spots and fill low spots with a Portland-based leveling compound.
- Concrete sub-floors must be fully cured, at least 65 days old, and have a minimum 6 mil polyfilm barrier between the concrete and the ground. The sub-floor should be flat and level within 3/16" per 10 feet radius. If necessary, grind down high spots and use a Portland based leveling compound to fill in low spots. All concrete sub-floors must be tested for moisture prior to installation using the Anhydrous Calcium Chloride test, a non-invasive moisture meter, or a pin/probe meter. When using the Calcium Chloride test, the moisture reading should not exceed 3 lbs per 1,000 sq. ft. in a 24-hour period.
- A moisture test must be conducted to confirm that the concrete slab is dry. Keep in mind that a concrete slab on or below grade that is dry today may become damp in the future due to rising groundwater. Installing a moisture barrier now can serve as an insurance policy to protect against future moisture issues. The Manufacturer is not responsible for moisture-related problems originating from the site.

REQUIRED INSTALLATION TOOLS

FOR ALL INSTALLATION METHODS:

- Tape measure
- Tapping block (a trimmed piece of flooring)
- Pencil
- Pry bar or pull bar
- Chalk line
- Wood or plastic spacers (3/8")
- Crosscut power saw
- 3M Blue Tape (For UV Urethane finished floors only. Do not leave tape on UV-cured urethane floors for more than 24 hours, as it may damage the finish if left for extended periods.)
- No mineral spirits for oiled finish floors
- For oiled finish floors, use compatible and easy-to-clean adhesives like Bostik Green Force or Titebond 771

SUB-FLOORS TYPES THAT ARE ACCEPTED:

- CDX Underlayment Grade Plywood (at least ½" thick; using OSB sub-floors may cause movement and squeaking, which is not covered by the manufacturer's warranty)
- Concrete slab (install with glue assist or full spread glue-down method only)
- Existing wood floor (install with glue assist or full spread glue-down method only)
- Ceramic tile (install with glue assist or full spread glue-down method only)
- Resilient tile & sheet vinyl (install with glue assist or full spread glue-down method only)

FOR GLUE DOWN INSTALLATION:

- Recommended flooring adhesive
- Trowel (follow the adhesive manufacturer's recommendations for trowel size and application)

BEFORE INSTALLATION STARTS

- Ensure the sub-floor is tested for moisture and properly prepared before installation. Since natural flooring expands with any increase in moisture content, always leave an expansion gap between the flooring and all walls. The required expansion space will depend on the thickness of the floor and any permanent vertical obstructions (such as pipes or cabinets).
- Ensure you account for a minimum of 10% waste during installation.
- This gap will be covered once the base moldings are reapplied around the room. Use wood or plastic spacers during installation to ensure the expansion space is maintained.
- Work from multiple open boxes of flooring and "dry lay" the floor before permanently installing it. This will give you the chance to mix and match the grains and colors, arranging them in a way that creates a balanced and visually pleasing pattern. It also provides an opportunity to set aside very dark or light pieces for hidden areas, ensuring a more uniform appearance across the floor. Keep in mind that it is the installer's responsibility to first confirm the end user's expectations for the finished floor and then remove any pieces that don't meet those standards.
- Start the installation next to an exterior wall, as it is typically the straightest and most reliable reference for creating a straight working line. To establish this line, measure an equal distance from the wall at both ends and snap a chalk line. The distance you measure should include the width of one plank plus the thickness of the floor to account for the necessary expansion gap. If the wall isn't perfectly straight, you may need to scribe cut the first row of planks to match the wall, ensuring a straight installation line.

You may want to "dry lay" a few rows of flooring (without glue or nails) before starting the installation to confirm your layout and working line. When laying the flooring, make sure to stagger the end joints by at least 8" between each row. If you need to cut the last plank of a row, you can use the cut-off piece to begin the next row. However, if the cut-off piece is 8" or shorter, discard it and instead cut a new plank to a random length to start the next row. Always begin each row from the same side of the room.

To bring the planks together, always use a tapping block (a short piece of flooring) to avoid damaging the edges. For best results, flip the tapping block upside down and use the groove side to tap the tongue edge of the plank being installed. Ensure the end joints are tightly fitted before tapping the long edges together. When working near a wall, a pry bar can be used to tighten the side and end joints.

IMPORTANT: Do NOT use tape of any kind on oil-finished floors. Use straps to hold the installed floor in place. If using tape on UV-cured finishes, do not leave the tape on for more than 24 hours, as it can damage the finish, and such damage will not be covered under warranty.

EXTERIOR CHECKS

- Is the exterior soil elevation 6" below the edge of the flashing?
- Does the exterior slope away from the foundation at a rate of 6" per 10' for soft landscaping, and 3" per 10' for hard-paved surfaces?



NOTE: Proper drainage away from the structure is crucial for weather-tightness and hardwood flooring performance. If near a hill, grade the lot with a swale to redirect moisture from the foundation. Do not leave tape on the wood finish for over 24 hours, as it may damage the UV-cured finish, which is not covered by the warranty.

MANAGING AIR FLOW IN CRAWL SPACES

- The crawl space floor (earth or thin concrete slab) should be completely covered with a vapor barrier made of black polyethylene (at least 6 mil) or a recommended puncture-resistant membrane, such as Class C per ASTM D1745. Verify local codes for any additional requirements.
- Vents should be sized to equal 1.5% of the crawl space's square footage. The relative humidity should match that of the interior of the home. The moisture content of the subfloor should not differ by more than 2% from the top to the bottom.
- Temperature/humidity-activated exhaust fans may need to be installed to improve air circulation in the crawl space. Uncontrolled humidity and moisture can cause mold growth, structural damage, and harm to the hardwood floor. In such cases, a contractor specializing in dehumidification systems should be hired to maintain proper humidity levels in the crawl space, particularly in high-humidity areas.
- Make sure clothes dryers are vented properly to the outside of the foundation. Also, check for any signs of plumbing leaks, both pressurized and non-pressurized/drain.



NOTE: Completely sealed crawlspaces (without exterior cross-ventilation) require a dehumidification system as part of the design.

BASEMENT MOISTURE & HUMIDITY CONTROL

- Basements should be fully weather-tight with proper drainage around the foundation walls to keep the space dry.
- Rain gutters should be installed to direct moisture away from the house. French drains are recommended, and basement walls must be properly sealed.
- The relative humidity in basements should not exceed 10% higher than that of the upper floc
- Basement humidity control is essential to prevent mold growth and protect the structure anc hardwood flooring from damage.
- Basement walls should be checked for cracks and signs of excessive moisture.
- Drains should be installed at basement windows to prevent water accumulation.
- Sprinklers and irrigation systems should be positioned away from the foundation to prevent moisture intrusion. Drip irrigation systems for plant beds are the preferred option.



CONCRETE SUBFLOOR MOISTURE TESTING

- Since wood flooring is not suitable for wet conditions, the manufacturer does not cover moisture-related issues or damage under warranty (see Manufacturer Maintenance & Warranty Guides). This is an industry standard, and manufacturers generally do not provide moisture warranties. However, moisture warranties may be available through certain adhesive manufacturers.

NOTE: Because concrete is porous, vapor emissions can fluctuate over the life of the floor installation. These emissions are a common cause of damage to hardwood floors. Given that concrete moisture levels can change over time and there are no moisture warranties for wood flooring, it's wise to choose an adhesive system with moisture abatement properties.

- Adhesive manufacturers offer moisture warranties for moisture abatement systems, but these warranties are conditional. Carefully follow their instructions to ensure compliance and full warranty coverage. Proper spread rate and coverage are crucial, use the recommended trowel size and replace trowels as specified by the adhesive manufacturer to maintain the correct application thickness.

- Some adhesive manufacturers offer adhesive/moisture abatement systems that do not require pre-installation slab testing to maintain a moisture warranty. Contact the adhesive manufacturer to confirm which products allow installation without the need for pre-checking or testing the slab.
- The installer is fully responsible for proper installation, and the moisture warranties are solely dependent on the adhesive moisture abatement system selected by the manufacturer for the job.

ADDITIONAL NOTE: The manufacturer makes no guarantees regarding the performance of any adhesive or vapor abatement system.

NWFA & INDUSTRY STANDARDS

The NWFA (industry standard) uses specific test methods to determine the optimal conditions for hardwood floor installation and performance. Some adhesive manufacturers offer systems that create a vapor barrier to protect wood flooring from moisture emissions rising through the slab. Many adhesive manufacturers require the tests listed below to be completed before installation. Be sure to carefully read and follow the adhesive manufacturer's instructions.

CALCIUM CHLORIDE: ASTM F1869

Under ideal conditions, the slab should not emit more than 3 lbs. of moisture per 1,000 square feet per 24-hour period. Be sure to follow the instructions in the test kit carefully to ensure accurate results.

NOTE: Slab emissions can vary depending on soil humidity and room temperature. Always consult the adhesive manufacturer's guidelines for the recommended moisture abatement system.

HUMIDITY PROBE & DIGITAL METER: ASTM F2170

This test measures the humidity level in the slab, helping to assess its potential for moisture emissions. Follow the meter manufacturer's guidelines carefully for accurate testing. Under ideal conditions, slab readings should be 75% RH. Caution: Post-tension slabs require special care to avoid cutting cables, as damaging these cables can cause serious structural issues or even fatalities.

New concrete slabs must cure for a minimum of 65 days before installing a wood floor. The slab must be fully cured and consist of a Portland-based mix with a minimum compressive strength of 2,500 PSI.

SUB FLOOR PREP FOR CONCRETE

For glue-down applications over gypsum or lightweight concrete, a minimum compressive strength of 2,500 PSI is also required.

NOTE: Some adhesive systems include primers and adhesives specifically designed for use over gypcrete or lightweight concrete, which may have different PSI compressive strength requirements. The adhesive manufacturer is responsible for the performance of their systems when applied over gypcrete or lightweight concrete. Remove all paint, oil, existing adhesives, wax, grease, dirt, sealers, and curing compounds. Avoid using solvent-based strippers, as residual solvents can interfere with the bonding of the vapor barrier and adhesive systems. Ensuring a clean surface is crucial for creating a strong, lasting bond between the adhesive, concrete, and flooring boards.

FOLLOW ALL ADHESIVE APPLICATION INSTRUCTIONS

Industry standard practice is to use a sanding system with 20-grit #3½ open-face paper to remove loose, flaky concrete. For heavy surface contamination, bead blasting the concrete surface may be required.

NOTE: Adhesive manufacturers typically recommend using prep fillers and patches that are compatible with the adhesive system being applied. Be sure to use the prep products recommended by the adhesive manufacturer. The subfloor tolerance for a flat surface is 3/16" within a 10' radius and 1/8" within a 6' radius, as established by NWFA industry standards. Use a straight edge to assess whether the subfloor requires grinding or filling.

NOTE: A quarter is approximately 1/16" thick and can be used as a simple thickness gauge. Grind down high spots and fill low spots with the filler recommended by the adhesive manufacturer.

NOTE: Use the filler specified by the adhesive manufacturer for optimal compatibility and performance.

CAUTION OF ASBESTOS

State and federal agencies have classified asbestos as a respiratory carcinogen. Avoid sanding or scraping old vinyl, linoleum, and VCT flooring, as they may contain asbestos. Take appropriate precautions and consult an asbestos abatement company to safely remove any flooring that may contain asbestos. Additionally, cut-back adhesive and other types of adhesives can also contain asbestos.

CLEANING THE SUB FLOOR

- Once all prep work is finished, sweep and/or vacuum the subfloor to remove dust and dirt, as these can interfere with the adhesive or vapor barrier's ability to bond to the slab. When installing over concrete, perimeter-glued resilient vinyl, VCT, and rubber tiles are not acceptable underlayments and must be removed.
- Terrazzo, tile, and full-spread glue-down vinyl that are dry, structurally sound, and level (as described above) may be suitable as subfloors for installation. Always refer to the adhesive manufacturer's guidelines. The manufacturer is not responsible for the performance or suitability of existing flooring products that are not removed from the concrete.
- As mentioned above, the surface must be sound, tight, and free of paint, oil, existing adhesives, wax, grease, and dirt.
- Terrazzo and ceramic tile must be adequately scuffed to ensure proper adhesion. Portland-based products must be used to meet flatness requirements of 3/16" in a 10' radius or 1/8" in a 6' radius. Refer to the adhesive manufacturer's guidelines for further details.
- Existing vinyl, tile, or terrazzo are not considered vapor barriers and can still allow excessive moisture to reach hardwood flooring. Any existing hardwood flooring must be removed before installing a new wood floor over concrete.

SUB FLOOR PREP FOR WOOD

- Wood subfloors must be securely nailed or screwed in place. Use ring-shank nails, and ensure screws are countersunk. The subfloor should be structurally sound, free of loose boards, vinyl, or tiles. The tolerance for a flat surface is 3/16" within a 10' radius and 1/8" within a 6' radius, as per NWFA industry standards.
- Engineered subfloor panels must be ANSI-rated plywood of the specified thickness to meet the joist spacing requirements listed below, or solid lumber subfloor that is at least 3/4" thick and dry.
- For panel product subflooring, check for any loose panels and re-nail or screw them down securely. Ensure that nails and screws are countersunk properly.
- Ensure proper expansion space (floor thickness) between the panels. If the panels are not tongue-and-groove and lack sufficient expansion space, use a circular saw to create the required gap. Do not saw through the joints on tongue-and-groove subfloors.
- Inspect the subfloor for any delamination or damaged areas and repair them as necessary.
- Ensure the subfloor is clean and free of debris before starting the installation.
- Acceptable Panel Subfloors: The minimum acceptable thickness of the panel subfloor is determined by the truss/joist spacing.

    A. For truss/joist spacing of 16" (406 mm) o/c or less, the industry standard for single-panel subflooring is a minimum of 5/8" (19/32", 15.1 mm) CD Exposure 1 plywood subfloor panels, typically 4' x 8' in size.

B. For truss/joist spacing of 16" (406 mm) o/c or less, the industry standard for single-panel subflooring is a minimum of 5/8" (19/32", 15.1 mm) CD Exposure 1 plywood subfloor panels, typically 4' x 8' in size.

C. For truss/joist spacing greater than 19.2" (488 mm) o/c and up to a maximum of 24" (610 mm) o/c, a minimum of 7/8" tongue-and-groove CD Exposure 1 plywood subfloor panels (4'x8' sheets) are required, glued and mechanically fastened.

JOINT CROSS BRACING

- A subfloor that is too thin to support the span of the joists can result in unacceptable deflection. An alternative to adding additional plywood on top of the subfloor is to install cross-bracing between the joists. The cross-bracing should be placed at the appropriate on-center distance to meet specifications and reduce deflection within acceptable tolerance.
- Check with the joist or truss manufacturer to confirm if cross-bracing is allowed with their system. If cross-bracing is not compatible, the only alternative would be to sheet the subfloor with a second layer of CD or better-grade plywood. (See the double layer subfloor section for more details.)

DIRECTION OF INSTALLATION IN RELATION TO JOIST DIRECTION

The best application is to install the floor at a 90° angle across the joists, as this provides optimal stability. Alternatively, the floor can be installed at a 45° angle to the joists. However, if the floor is installed in the same direction as the joists, an additional sheet of plywood must be added on top of the existing wood subfloor.

DOUBLE LAYER SUB FLOORS

- When the subfloor does not meet the required thickness for the span between joists, a second layer of plywood is necessary to reinforce and stiffen the subfloor.
- The second layer should consist of nominal ½" (15/32", 11.9 mm) CD Exposure 1 plywood subfloor panels, typically 4' x 8' sheets, depending on the extent of deflection correction needed between the joists.
- The top layer of plywood should be offset by 2' from the joints in the first layer and installed perpendicular to the bottom layer. Glue both layers together with construction adhesive and screw them into the truss/joist system every 12 inches. Additionally, nail (ring-shank) or staple the layers together in a minimum 12" grid pattern for added stability.

EXISTING WOOD FLOOR (INSTALL ON WOOD SUB FLOOR)

When installing over an existing solid hardwood floor that is already attached to the wood subfloor, ensure the existing floor is sound and securely attached. Install the new flooring at a 90° or 45° angle (across the grain) to the existing hardwood floor.

NOTE: Do not install in the same direction as the existing floor, and do not install over wood flooring that is glued to concrete.

CEMENTITIOUS PATCHING FOR WOOD SUBFLOORS

If moisture is present, identify the source, eliminate it, and allow the subfloor to dry completely. If the subfloor is thinner than the specified thickness or has been sanded to less than the required thickness, refer to the standards above for top sheeting.

NOTE: DParticle board sheeting over existing wood subfloors and Portland-based leveling compounds are suitable for glue-down applications only. They are NOT recommended for nail-down installations.

ACCLIMATION

Wood flooring is a hygroscopic material, meaning it can change in size due to fluctuations in moisture, temperature, and humidity in the environment. For proper installation, wood flooring must reach a moisture content level that is in equilibrium with the surrounding environment (EMC), typically between 35% and 50% relative humidity (RH). This process, known as acclimation, allows the wood to adjust to the normal living conditions within the structure, ensuring it adapts to the temperature, humidity, and moisture levels that will be experienced once the building is occupied and climate control is stable.

PROPER ENVIRONMENTAL CONDITIONS ARE KEY TO PERFORMANCE

Heating and ventilation systems must consistently maintain indoor conditions with a relative humidity between 35% and 50%, and temperatures ranging from 60°F to 80°F throughout the year. During production, flooring is dried to a moisture content of 7–9% and kept in environments with 35% to 50% relative humidity. For best results, the installation site should mirror these humidity levels.

ACCLIMATION OF ENGINEERED PRODUCTS

- To ensure relative humidity stays above 35% and below 50% RH, the use of appropriate equipment is recommended. Not maintaining this range can cause damage to wood flooring.
- Correctly sized and operational cooling unit
- Dehumidifier (as needed) to keep relative humidity below 50%. Whole-house humidifier (properly sized and functional, if needed) to maintain levels above 35%.
- Acclimation is not just about time. It depends on the actual living conditions within the home. Refer to the Manufacturer's Climate Control & Radiant Heat Guide for full details.

A. Before the wood flooring is delivered, verify and document the ambient conditions at the jobsite, as well as the subfloor moisture levels, to ensure they meet the specified requirements for the selected wood flooring.

B. Once the flooring arrives on-site, again measure and record the temperature and relative humidity of the area where the flooring will be installed. These conditions must align with the manufacturer's specified standards.

C. Upon delivery, also reassess and document the subfloor's moisture content. Consult your moisture meter's manufacturer to ensure the meter is properly set for the type of wood subfloor being evaluated.

1. Measure the moisture content (MC) of the wood subfloor at no fewer than 20 locations per 1,000 square feet, with 4 extra readings for each additional 100 square feet. Calculate the average from all collected readings—more measurements typically yield a more precise average. Any significantly high or low readings should be identified and managed separately. Be sure to log, date, photograph, and document all findings.

2. Concrete subfloors must be tested for moisture, and proper moisture control systems must be established before installing any solid wood flooring.

3. Any subfloor moisture readings that fall significantly above or below the norm should be identified and resolved before proceeding with wood floor installation.

E. Wood flooring may be installed immediately once it has reached the expected in-use (e.g., normal living) conditions and the manufacturer's required ambient levels, the subfloor moisture content aligns with these conditions, and all environmental factors are being consistently maintained.

GLUE DOWN INSTALLATION

Always test the subfloor for moisture content and confirm it is properly prepared before beginning installation. For concrete subfloors at or above grade level, it's best to assume they may present moisture issues—even if readings appear dry. To help ensure a smooth and problem-free installation, we recommend following these steps:

- Moisture content testing and documentation before installation
- Sealing the subfloor where necessary
- Refer to the adhesive manufacturer's guidelines for correct trowel size, minimum temperature requirements, adhesive set time, and open time before starting the flooring installation.
- Once the adhesive has set according to the manufacturer's instructions, begin installing the first row of flooring with the groove side facing the wall, then proceed with the remaining rows. Regularly check your reference lines to ensure the floor remains properly aligned. Use a tapping block to fit planks securely, but take care not to shift the installed flooring on the still-tacky adhesive. Always leave an expansion gap, equal to the thickness of the flooring, between the floor and all walls or vertical structures (e.g., pipes and cabinets). Use wood or plastic spacers during installation to maintain this gap. Be sure to stagger the end joints by at least 8 inches from row to row.
- After completing the first section, continue spreading adhesive and installing the flooring one section at a time until the entire area is finished. Use a damp cloth to IMMEDIATELY CLEAN ANY ADHESIVE that comes into contact with the flooring surface. If any residue remains, use the adhesive remover recommended by the manufacturer.
- Never allow flooring adhesive to fully dry on the finished surface. After installing each section, walk over it to ensure the flooring is properly bonded to the subfloor within the adhesive's working time. Planks along the room's perimeter may need to be weighted down until the adhesive cures sufficiently to keep them in place.

STAPLE DOWN WITH GLUE ASSIST INSTALLATION

INSTLLATION TOOLS FOR STAPLE DOWN

Tape measure, pencil, chalk line, table saw, cut-off saw, jamb saw, tapping block, pull bar, spacers, hammer, safety glasses, hearing protection, utility knife, wall spacers, straight edge, broom, speed square, hardwood floor cleaner, pin/finish nails, adhesive, air compressor, and shop vacuum.

CAUTION: Do not strike the finished surface or edge of the planks. Flooring mallets are designed solely to activate the nail gun. Hitting plank edges with mallets, hammers, or rubber mallets may cause damage to the plank's edge.

Correct fastener placement is essential for optimal floor performance. Driving fasteners too deeply can weaken the tongue and may cause visible damage to appear on the surface. Avoid striking the plank edges with mallets or the nail gun, as this can also cause damage. Improper fastening can result in a noisy and unstable floor.

GLUE ASSIST

Moisture must always be considered in any flooring installation. If the subfloor falls outside the acceptable moisture tolerance range, a moisture vapor retarder must be used. One method is to install underlayment paper, cutting ½" channels perpendicular to the direction of the flooring every 12" on center. Alternatively, a moisture barrier coating can be rolled over the entire subfloor to serve as a vapor retarder.

During installation, apply a minimum ½" bead of an approved adhesive, such as Bostik's Best or Titebond 771, using a caulking tube in a serpentine pattern, as illustrated in the diagram. Ensure each plank is firmly bonded to the subfloor with no movement.

1) Before beginning installation, test the substrate for moisture using proper moisture testing methods, following the Moisture Guideline and Vapor Retarder recommendations. Excess or elevated moisture must not be present. Ensure the subfloor's moisture content falls within the acceptable range specified by both the adhesive and wood flooring manufacturers prior to installation.



CORRECT TOO HIGH TOO LOW

2) Select a starting wall based on the room's most visually or architecturally significant features, such as fireplaces, doorways, cabinetry, and transition areas. Also consider how square the room is. Typically, the best starting point is the longest uninterrupted wall.

3) Leave expansion space around the room's perimeter. From the starting wall, measure the width of one flooring plank plus an expansion gap equal to or greater than the thickness of the flooring. Mark two points near each end of the wall, then snap a chalk line between them to guide the first row.

4) Use only adhesives approved by the flooring manufacturer. Follow the adhesive manufacturer's installation instructions carefully, including guidelines for subfloor moisture content, spread rate, trowel size, open time, working time, and flash time.

5) Using a trowel (or a roller if permitted by the adhesive manufacturer), spread adhesive along the chalk line just wide enough to install the first row of flooring. Avoid covering the chalk line. Follow the manufacturer's recommended wet lay time before proceeding.

6) Align the tongue side of the first row with the chalk line. Face-nail the boards in place approximately ¾" from the wall side (groove side), spacing fasteners every 4" to 6". Once secured, use a 6-d finish nailer or pneumatic stapler to blind-nail through the tongue side of the boards every 4" to 6", and 1" to 3" from each board end. Confirm that the first row remains straight along the chalk line before continuing.

7) Spread adhesive for the next 2–3 rows and proceed with installation.

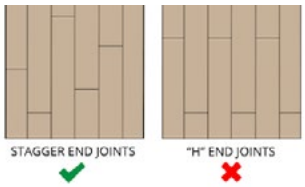
8) Install the second row by fitting the groove over the tongue of the first row. Secure it using a blind/edge stapler, placing fasteners every 4" to 6" and 1" to 3" from each end joint. Stagger all end joints by at least 8". Vary board lengths to avoid repeating patterns such as "H" joints in adjacent rows. Maintain a stagger of at least 6" between end joints for strip flooring, 8"–10" for 3"–5" plank, and at least 10" for planks wider than 5". (Refer to Figures 8-1 and 8-2.)

9) Continue installing the flooring by nailing and gluing 2–3 rows at a time across the room. Avoid aligning end joints directly across rows, especially near the previously installed rows. Use cut board ends to start the next row, discarding pieces shorter than 8".

10) During installation, clean any adhesive from the surface of the boards as you go, following the adhesive manufacturer's cleaning instructions.

11) Trim the boards in the final row to ensure the required expansion gap is maintained along the far w

12) Near the finishing wall, you may need to face-nail the last 2–3 rows due to limited space for staplin
Use a pulling bar to snugly fit the last rows together if needed.



13) Complete the installation by reinstalling existing base moldings or fitting new ones as necessary.

14) Do not allow foot traffic on the floor for 24 hours after installation is complete.

INSTALLATION OVER RADIANT HEAT

All necessary pre-installation testing and preparation must be completed prior to beginning the flooring installation. If moisture issues are identified during this phase, an approved moisture barrier must be properly installed. The manufacturer's warranty does not cover flooring failures caused by improperly installed hydronic radiant heat systems.

It is the responsibility of the Owner/Purchaser and Installer to ensure the radiant heat system is correctly installed in accordance with the system manufacturer's specifications and is fully operational before proceeding with the flooring installation.

For installations over radiant heat, only floating (glue tongue-and-groove) or full-spread glue-down methods are approved. Staple-down installation is not permitted. Radiant heat is not suitable for dry climate regions; always consult your local distributor or dealer to verify whether this product is approved for use in your area.

NOTE: Any material with a width of 8 33/50" (220 mm) or less is considered radiant heat approved. Any product exceeding that width is not radiant heat approved. Regardless of dimensions, American Hickory Engineered floors are not approved for use over radiant heat systems.

APPROVED RADIANT HEAT TYPE
- Hydronic radiant heat systems only

INSTALLATION METHODS
- Floating Installation (Glue Tongue & Groove)
- Full Glue-Down Installation

ACCEPTABLE SUBFLOORS
- CDX Plywood
- Concrete - With a minimum compressive strength of 3000 PSI.

UNDERLAYMENT RECOMMENDATION
- Cork

APPROVED HYDRONIC RADIANT SUBFLOOR SYSTEMS
- Aluminum Hangers
- Channel Aluminum Board
- Sleeper Systems
- Ligthweight Thermal Mass Concrete with min. 3000 PSI compressive strength
- 1 ⅛" T&G Warmboard

NOT APPROVED FOR RADIANT HEAT SUBFLOOR
- Electric Heat Mats System

HEATING CONTROL REQUIREMENTS

Radiant heat installations must include a heat control system that maintains a consistent baseline temperature and prevents overheating. Temperatures exceeding 80°F will damage hardwood flooring and void the manufacturer's warranty. Radiant heat cannot serve as the home's sole heating source, your HVAC system must remain operational whenever the radiant system is in use. HF Design requires the installation and continuous operation of an exterior thermostat. Unlike conventional heating systems that activate on demand, radiant heating works best with hardwood floors when adjusted gradually, with small, incremental increases that respond to changes in outdoor temperatures.

RADIANT HEATING SYSTEM ACCLIMATION PROCESS

The hydronic radiant heating system must be fully operational and running for at least 7 days prior to installing HF Design engineered oak flooring. An incremental temperature control approach should be used to gradually transition the subfloor through temperature changes. Begin by turning on the system at least 3 days before installation at 70°F, then increase the temperature to 80°F and maintain it for an additional 3 days. During this process, the jobsite should be ventilated daily to allow excess humidity to escape the structure. Once the radiant heat acclimation process is complete and the flooring is ready for installation, turn off the radiant system and allow the subfloor to cool to room temperature for 3 to 4 hours before beginning the install.

PREPARING FOR INSTALLATION

Before installation begins, it is the responsibility of both the Owner/Purchaser and the Installer to verify that the radiant heating system is operating correctly and not shared with circuits controlling other floor coverings that permit higher temperatures. Failure to confirm this may result in excessive heat exposure, leading to shrinkage and permanent damage to the hardwood flooring, and will void the manufacturer's warranty. Heating pipes must be embedded in at least 1¼" of concrete or positioned a minimum of ⅛" below the underside of a plywood subfloor. Since radiant heating systems generate dry heat that can reduce interior humidity levels, HF Design LLC strongly recommends integrating a separate humidifier with the HVAC system to maintain the required 35%–50% indoor relative humidity. Before proceeding with the flooring installation, the installer must test the hydronic heating system and confirm that all radiant heat requirements have been satisfied.

NOTE: Any flooring material with a width of 8 33/50" (220 mm) or less is considered approved for use over radiant heat systems. Materials exceeding 8 33/50" (220 mm) in width are not approved for such installations. American Hickory Engineered floors are not approved for use over radiant heat systems, regardless of their width or length:

- ☐ Hydronic Radiant Heat System
- ☐ Engineered Oak Product
- ☐ Floating Installation Method
- ☐ Exterior Thermostat Installed
- ☐ Sensor Attached to Heating Unit
- ☐ Radiant Heat Acclimation Compeleted
- ☐ Separate HVAC Humidifier
- ☐ Radiant Heating System Working Properly

STARTING INSTALLATION

NOTE: Always maintain a ½" gap between the heating system and the floor planks by using an approved underlayment.

Begin installation by laying the first row with the groove side facing the starting wall. Insert wood wedges between the planks and the wall or any obstructions to maintain the required ½" expansion gap. Use a hammer and tapping block against the tongue side to snug planks tightly together. Near walls, use a crowbar or pull bar to close end joints. Do not strike the groove side or the ends of the planks, as this can damage the surface finish and will void the manufacturer's warranty. To prevent clustering of end joints in adjacent rows, it's recommended to rack out 3 to 4 rows in advance. Always allow at least 10" to 12" between end joints in neighboring rows. Apply a high-quality tongue-and-groove glue along the top portion of the groove on both the sides and ends of each plank to ensure a strong, secure bond.

As you install each plank, promptly inspect and clean off any excess tongue-and-groove (T&G) glue or spills. Leaving residue on the surface can damage the factory finish and will void the manufacturer's warranty.

Certain installation methods, especially glue-down applications, may require the radiant heat to be lowered or temporarily turned off before starting installation to prevent the adhesive from curing too quickly.

Use a soft, dry or slightly damp cloth to clean up any excess T&G glue or spills. Do not use paint thinner or harsh chemical adhesive removers on the hardwood surface, as this can damage the factory finish and will void the manufacturer's warranty. As you install each row, cut the final plank to allow for the required ½" expansion gap, and use a crowbar or pull bar to securely fit the last plank in place.

IMPORTANT: Never apply adhesive or masking tape directly to the hardwood floor surface, as it can damage the factory finish and void the manufacturer's warranty. After installation is complete, immediately turn the radiant heating system back on to continue acclimating the flooring to the site environment. Leave all expansion spacers in place for at least 8 hours to allow the tongue-and-groove (T&G) glue to fully cure. Avoid any foot traffic for a minimum of 8 hours, and wait at least 24 hours before placing heavy furniture on the floor.

STARTING INSTALLATION

Remove all ½" expansion spacers from around the perimeter of the room. Install or reinstall baseboards and/or quarter round moldings to cover the expansion gaps. Add transition pieces such as T-moldings and reducer strips where needed. Thoroughly clean the new floor by

dry dust mopping to remove any dust and debris. Be sure to follow the "Floor Care and Maintenance" guidelines to preserve the long-term beauty and durability of your HF Design LLC® hardwood flooring.

For oil-finished hardwood floors installed over hydronic radiant heat, more frequent oil touch-ups may be necessary. Refer to the "Oil Finish Care & Maintenance" guide for specific recommendations.

PROTECTION DURING CONSTRUCTION OR REMODELING

If hardwood flooring is installed while other trades are active on the jobsite, or during any remodeling, painting, or finishing work, the floor must be fully protected using clean, dry, plain uncoated cardboard or heavy-duty bond paper. This prevents damage and preserves the finish throughout the construction process.

IMPORTANT: Do not cover HF Design LLC hardwood floors with plastic, red rosin paper, felt, wax paper, or previously used cardboard, as these materials can damage the factory finish and will void the manufacturer's warranty. Prior to covering, the hardwood flooring must be thoroughly cleaned to remove all grit, dust, and other abrasive debris, and must be completely dry. Do not use a wet cloth or mop to clean drywall dust, as it can create a pasty residue that may damage the finish and void the warranty. When applying protective covering, use an appropriate material such as clean, dry, uncoated cardboard or heavy bond paper, overlapping it by 4 inches at seams. Secure the covering with masking tape applied only to the protective material, never directly to the floor, and fasten it at the perimeter walls or baseboards to prevent shifting. Take precautions to ensure that masking tape, wet paint, drywall dust, or other construction debris does not reach the flooring surface. **NOTE**: Never apply adhesive or masking tape directly to the hardwood surface, as this will damage the factory finish and void the manufacturer's warranty.

AFTER INSTALL

- Flooring should be installed as one of the final steps in a construction or renovation project. To protect the floors while other trades complete their work prior to final cleanup and turnover, cover the surface with rosin paper. Do not use blue tape on oil-finished floors, as it may damage the finish. Before applying the rosin paper, thoroughly clean the floor to ensure no debris becomes trapped underneath. Avoid using plastic film or other non-breathable coverings, as they can trap moisture and lead to humidity-related damage to the flooring.
- Remove the expansion spacers and reinstall baseboards and/or quarter round moldings to properly cover the expansion gap.
- Use a dust mop or vacuum to clear the floor of any dirt or debris.
- Install any necessary transition pieces, such as reducers, T-moldings, or stair nosing, as required.
- If using the glue-down method, avoid foot traffic and do not place heavy furniture on the floor for at least 24 hours after installation.
- Do not leave tape applied directly to the wood surface for more than 24 hours.

LOW MOISTURE OR HIGH MOISTURE WARNING SYSTEM

Adverse Conditions Warning: A monitoring device can be installed within the flooring during installation to alert the homeowner if the floor becomes too dry or too humid. This device continuously records data from both the floor and the indoor environment, helping to prevent damage by providing early warnings of unfavorable conditions.

The Fidbox is a widely used data logging device installed within the flooring. It connects via Bluetooth, allowing homeowners to monitor the floor's condition in real time. Acting like a "check engine" light for your floor, it alerts users to potential issues, such as excessive dryness or humidity, before damage occurs. With this information, consumers can make timely adjustments to their indoor climate control, offering the highest level of protection and maintenance for their hardwood flooring.

Although optional, this device can be a critical tool in ensuring a successful installation. Since proper climate and humidity control is

a standard requirement set by the manufacturer and widely recognized across the wood flooring industry, the use of such monitoring technology can help prevent site-induced, non-manufacturing-related flooring failures.

For detailed installation and usage guidelines, please refer to the Fidbox application instructions available at fidbox.net.

NOTE: It is the space that must be acclimated to the engineered wood flooring, not the other way around. Aim to maintain 35% to 50% relative humidity and indoor temperatures between 60°F and 80°F.

DO NOT USE blue tape or any other tape on oil-finished floors, as it may damage the finish.

PROTECTION & MAINTENANCE OF FLOORS

Achieving long-lasting beauty begins with selecting a high-quality floor covering and maintaining it with consistent, proper care.

Fading: Natural wood floors contain organic pigments that can fade over time when exposed to direct sunlight. To minimize discoloration, use drapes, blinds, or other window treatments to limit excessive light exposure whenever possible.

Joints: Natural wood flooring responds to environmental changes by expanding and contracting with fluctuations in temperature and humidity. These movements are normal but can become more noticeable without proper climate control. To minimize visible joint gaps and movement, maintain consistent indoor conditions with a recommended temperature range of 60°F to 80°F and relative humidity between 35% and 50%. In particularly dry climates, a humidifier may be necessary to preserve optimal conditions and floor performance.

Photo-sensitivity: Hardwood flooring is naturally photosensitive and will undergo color changes over time, especially when exposed to UV light. Some species may lose pigmentation, resulting in a lightened or "bleached" appearance, while others—such as exotic hardwoods like Tigerwood—develop a deeper, richer patina that enhances their natural beauty. This transformation is a normal, naturally occurring process and may be accelerated by sunlight exposure. As such, it is not considered a manufacturing defect and is excluded from coverage under the terms of the Manufacturer's Limited Warranty.

TIPS TO MINIMIZE FADING AND DISCOLORATION
- Avoid rubber-backed mats and rugs, as the backing can cause discoloration. Instead, use mats with felt or breathable underlayment.
- Rotate rugs periodically, especially those placed near doors or windows, to promote even color development.
- Install light-filtering window treatments such as blinds, curtains, or UV-blocking window film to reduce sun exposure.
- Reposition furniture seasonally to allow the floor to age and darken more uniformly across the surface.
- In high-traffic areas like kitchens and hallways, the floor finish may wear more quickly. To prevent premature wear, use area rugs or runners as protective coverings.

When extending an existing floor or replacing boards after the original installation has been in place for some time, the new flooring may initially appear lighter in color. Overtime, as it is exposed to natural light, the new material should begin to blend with the surrounding floor. However, due to factors such as the age of the existing floor, surface wear, and exposure to UV light, the Manufacturer cannot guarantee an exact match between new and existing flooring.

Keep in mind that color variation is a natural characteristic of wood products. If a plank appears questionable in terms of color, grain, or dimension, it is the Installer's responsibility not to use it in the installation.

Please follow the instructions provided in this installation guide along with the standards and recommendations set by the National Wood Flooring Association (NWFA). For more detailed guidance, visit www.nwfa.org. Note: Our Care & Maintenance Instructions are product-specific and are not universal across all flooring types. To ensure proper care and long-term performance, always refer to the individual care and maintenance guidelines specific to the product you've purchased.