

Waterproof Wood installation guide lines With Core Click Technology

Fifty Year Finish residential warranty / 15 year Light commercial

PLEASE READ THE ENTIRE INSTALLATION INSTRUCTIONS BEFORE PROCEEDING WITH THE ACTUAL INSTALLATION

OWNER / INSTALLER RESPONSIBILITY

- Hardwood flooring is a product of nature, which is characterized by distinctive natural variations in grain and color and not considered flaws. Hardwood flooring will also experience a change in color over a period of time. The degree of change depends upon the species and the amount of UV exposure. This hardwood flooring is manufactured to accepted industry standards, which permit a grading defect tolerance not to exceed 5%. The defects may be of a manufacturing or natural type.
- The owner/installer assumes all responsibility for final inspection of product quality. This inspection of all Flooring should be done <u>before</u> installation. Carefully examine the Flooring for color, factory finish, grade, and quality before installing it. Do not install (or cut off) pieces with glaring defects whatever the cause. If the material is not acceptable, contact your distributor or dealer immediately before installation. Installation implies acceptance. No warranty will be offered for material with visible defects once the product is installed.
- Before beginning the installation of any hardwood flooring product, the installer must determine that the environment of the job site and the condition and type of the sub-floor involved is acceptable, ensuring that it meets or exceeds all requirements, which are, stipulated in the installation instructions which follow. The manufacturer declines any responsibility for job failure resulting from or associated with inappropriate or improperly prepared sub-floors or job site environment deficiencies. For best results, we suggest using a National Wood Flooring Association Certified Professional for your flooring installation.
- The installer must document all site tests, and the records must be available if a claim is filed.
- The use of stain, filler, or putty stick for the correction of defects, small cracks, during installation, should be accepted as normal procedure.
- When ordering, 5-10% must be added to the actual square footage amount needed for grading and cutting allowances.
- We strongly recommend that you visit the NWFA website at www.woodfloors.org for installation help and maintenance tips.

JOB SITE INSPECTION & CONDITIONS

- In new construction, hardwood flooring should be one of the last items installed. All work involving water or potential ground debris (plumbing, drywall, etc.) should be completed before wood flooring being installed. Heating and air systems should be fully operating, maintaining consistent room temperature at 60-80° F.
- Flooring should not be delivered until the building has been closed in, and cement work, plastering, painting, and other materials are completely dry. New concrete and plaster should be cured and at least 30 days old before moisture testing.
- Check basements and under-floor crawl space to be sure that they are dry and well ventilated to avoid damage caused by
 moisture. Crawl spaces must have a minimum 6mil polyurethane film as a vapor retarder on the ground surface if the crawl space
 is not finished with cement.
- The moisture content of both the sub-floor and the Flooring should be checked and recorded before any work begins.
- The engineered Flooring must be properly conditioned to temperature before proceeding with the installation. Do not
 open cartons until ready to install. Follow the NWFA guidelines for (www.nwfa.org) on the job site temperature equilibrium.
- Handle with care. Do not stand on ends. Store flooring in a dry place, be sure to provide at least a four-inch airspace on or around cartons.
- Do not store directly upon on-grade concrete or next to outside walls. Cartons should be placed in the installation area.
- The room temperature of installation areas should be consistent with normal, year-round living conditions before proceeding with the installation. Do not open cartons until ready to install. Maintaining an optimum yearly room temperature of 60-80° is recommended.
- Waterproof Flooring is for below grade, on grade, or above grade installation only and <u>can</u> be installed in full bathrooms or other high moisture areas if installation instructions are followed.
- Some Waterproof flooring can be installed over Radiant Heat using the floating floor method on or above grade. See approved species below or check with your distributor.

SUB-FLOOR PREPARATION

APPROVED SUB-FLOOR TYPES:

- 1) Agency approved 5/8"(19/32") minimum thickness or 3/4" (23/32") CDX Exposure 1 plywood 16" on center floor joists properly nailed.
- 2) Agency approved 3/4" (23/32") underlayment grade OSB Exposure 1 16" on center floor joists properly nailed.
- **Note:** When installing approved plywood or OSB, refer to specific structural panel manufacturer's instructions for fastening and spacing. 3) Agency approved underlayment grade particleboard. (Glue down installation not recommended on particleboard)
 - NOTE: Engineered wood flooring installed under the H2Ome Flooring may be affected by moisture in concrete slabs.
 - 4) Concrete Slab
 - 5) Resilient tile, sheet vinyl, and ceramic tile only over those mentioned above and approved sub-floor and must note be floating.



SUB-FLOORS MUST BE:

- CLEAN Scraped or sanded, swept, free of wax, grease, paint, oil, previous or existing glues or adhesives, and other debris
- **SMOOTH/FLAT** Within 1/8" on 6' radius. Sand high areas or joints, fill low areas (no more than 1/8") with a cement type filler no less than 3000 p.s.i. Follow the instructions of the leveling compound manufacturer, but make certain the leveling compounds are completely dry before beginning installation. Any irregularities may cause hollow spots between the Flooring and sub-floor in any installation method and are not warranted.
- STRUCTURALLY SOUND Nail or screw any loose areas that squeak or show movement. Replace any delaminated or damaged sub-flooring or underlayment. Avoid subfloors with excessive vertical movement. If the subfloor has excessive vertical movement or deflection before installation, it is likely it will have deflection after the Flooring is installed.
- DRY Moisture content of the sub-floor should exceed 14% before the installation of wood flooring.
 WOOD SUBSTRATES: Test the moisture of the wood substrate using a calibrated moisture meter approved for testing wood moisture according to the meter manufacturer. The reading should not exceed 14%. THESE TESTS ARE TO AVOID MOISTURE BUILD UP UNDER THE FLOORING, CREATING CONDITIONS FOR MOLD AND MILDEW TO GROW.
 CONCRETE SLABS (regardless of existing floor covering): All concrete sub-floors must be tested for moisture content before installation of the hardwood flooring. The concrete subfloor must be a minimum of 30 days old before moisture testing. The moisture content of the concrete sub-floor must not exceed 5 lbs. /1000 sq. ft. /24-hour emissions per CCTM and or 90% per Relative Humidity Test

THESE TESTS ARE AVOID MOISTURE BUILD UP UNDER THE FLOORING, CREATING CONDITIONS FOR MOLD AND MILDEW TO GROW.

Below are methods to evaluate to indicate moisture is present in the concrete subfloor:

- 1) Use an approved calibrated concrete moisture meter (Tramex Concrete Moisture Encounter) as a preliminary measurement for moisture. Follow the manufacturer's specific calibration requirements.
 - Any reading higher than 5% indicates the need for a Calcium Chloride (ASTM F-1868) and/or Relative Humidity test (ASTM F-2170) and pH test.

Note: If a subfloor has been flooded or rained upon, it may not be suitable to install the flooring until it is dry.

INSTALLATION on WOOD SUBSTRATE:

Note: Do not use the glue-down installation method on underlayment grade particleboard.

Sub-floor should be constructed of 5/8" (19/32") or thicker plywood or 3/4"(23/32") OSB when installing directly over a minimum 2 x 10floor joists 16" on center. For up to 19.2" on center 3/4"(23/32") plywood or OSB should be used. For 19.2" to 24" on center 7/8" plywood or OSB should be used. Structural Panels must be installed sealed side down. Plywood sheets should be laid with grained outer plies at right angles to joists; adjacent rows staggered four feet and nailed every 6" along each joist with 7D or larger nails. When installing directly over old wood or strip floor, sand any high spots, re-nail old floor to eliminate squeaks or loose boards, and install new planks at a right angle (perpendicular) to the old floor, or overlay old floor with 1/4" plywood underlayment. Leave a 1/8" gap at the edges and nail with 7D or larger nails every 6" at the edges and every 12" in both directions and through the interior of each sheet of plywood. Edge swell should be flattened. The moisture content of the wood or plywood should not exceed 14%.

INSTALLATION on CONCRETE SLABS:

All concrete sub-floors should be tested for moisture content. New concrete slabs require a minimum of 30 days curing time before moisture testing and installation. Concrete sub-floors must be free of existing adhesives, grease, oil, dirt, and curing compound. These may be removed chemically or mechanically, but do not use a solvent-based stripper. The residual solvents can prohibit satisfactory bond of floor adhesives, the concrete, and the Flooring. To ensure a lasting bond make sure the perimeter of the foundation has adequate drainage and vapor retarder.

Apply a liquid-based moisture vapor retarder coating to the subfloor. Over concrete, use only concrete moisture sealer systems that are specifically designed for moisture suppression and adhesive bonding properties. Follow the manufacturer's guidelines and recommendations. The underlying floor must be permanently dry and protected against moisture and alkalynity. If this requirement is not met, the planks can swell, shrink, warp, discoloration, which will allow for mold and mildew. This may void the warranty. If there is an existing product installed on the concrete, it must be removed before installing K2Ome.

Note: LIGHTWEIGHT CONCRETE:

Lightweight concrete has a dry density of 100 pounds or less per cubic foot and is only suitable for engineered wood floors when using the floating installation method. Many products have been developed as self-leveling toppings or floor underlayment. These include cellular concrete, resin-reinforced cementations, underlayments, and gypsum-based materials. Although some of these products may have the necessary qualifications of underlayment for wood flooring installation, others do not. To test for lightweight concrete, scrape a coin or key across the surface of the sub-floor. If the surface powders easily or has a dry density of 100 pounds or less per cubic foot, use only the floating installation method.



INSTALLATION on SUB-FLOORS OTHER THAN WOOD OR CONCRETE:

Do not install over carpets.

Terrazzo, marble, tile, and any other hard surfaces that are well bonded to sub-floor, dry, structurally sound, and level, as described above, are suitable as a sub-floor for this H2ome hardwood flooring installation. As above, the surface must be sound, tight, and free of paint, oil, existing adhesives, sealers, wax, grease, and dirt. Terrazzo, marble.

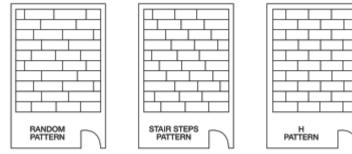
Suspended hardwood flooring that is fully adhered, smooth and square edge without texture

The Flooring can be glued or floated directly over full spread permanently bonded acoustical cork. Density should be a minimum of 11.4 lb. / cubic ft. (max 3mm thick) and installed according to cork manufacturer's recommendations. Do not use foam underlayment when using the floating method.

ASBESTOS WARNING! Do not sand existing resilient tile, sheet flooring, backing, or felt linings. These products may contain asbestos fibers that are not readily identifiable. Inhalation of asbestos dust can cause asbestosis or other serious bodily harm. Check with local, state, and federal laws for handling hazardous material before attempting the removal of these floors.

JOB SITE PREPARATION

- Verify floor is level and structurally sound. Repair as needed. Sub-floor irregularities may cause any wood flooring installation to develop hollow spots between the Flooring and the sub-floor. These are not the result of any manufacturing defect.
- Proper moisture testing is also needed to determine readiness for installation.
- Follow the NWFA guidelines for acclimation (<u>www.nwfa.org</u>) on the job site temperature.
- Undercut door casings.
- Remove any existing wall base, shoe molding, quarter round or doorway thresholds
- Regardless of the installation method, all floors should be racked.



Random pattern is recommended

FLOATING FLOOR INSTALLATION METHOD

REQUIRED TOOLS AND ACCESSORIES

- * Tape Measure
- Moisture Meter (wood / concrete)
- Underlayment and Vapor Retarder (if needed)
- Mallet (light colored)
- Circular or Hand Saw
- Miter or Table Saw
- Tapping Block
- Pull bar
- Chalk Line and Chalk
- Hammer
- Safety Equipment (Goggles & Mask)
- Utility Knife
- * 3/8 "or 1/2" Spacers
- * Hardwood Flooring Cleaner
- * Broom
- * Silicon caulk and caulk gun



This waterproof Flooring, when installed using the floating installation method, can be installed below grade, on grade, and above grade.

Note: Any pre-existing wood panels or strips that are floating or glued to the concrete slab must be removed before installation using the floating method.

INSTALLATION ON RADIANT HEATED SUBFLOORS:

PREFINISHED OAK, ELM, MAPLE OR BIRCH ARE APPROVED FOR USE ON RADIANT HEAT APPLICATIONS. DO NOT USE AMERICAN CHERRY, HICKORY OR ANY EXOTIC SPECIES. WARRANTY WILL BE VOIDED IF ANYTHING OTHER THAN APPROVED SPECIES IS USED.

RADIANT HEATING SYSTEMS USED MUST BE DESIGNED AND CONTROLLED SPECIFICALLY FOR HARDWOOD FLOORING BY THE SYSTEM MANUFACTURER AND MUST INCLUDE AN OUTSIDE TEMPERATURE PROBE AND SURFACE TEMPERATURE CONTROLS.

IMPORTANT: FLOATING METHOD ONLY OVER RADIANT HEAT

Follow the below-grade instructions (above) for underlayment requirements and installation instructions. Most radiant heat installations call for the requirements below when installing over radiant heat systems. Always refer to the manufacturer of the radiant heating system for detailed instructions.

- Use floating floor installation only. Do not use the glue-down installation method (without the adhesive manufactures approval) on radiant heat flooring.
- Oak, Maple, or Birch are approved for use on radiant heat applications. Do not use American Cherry, Hickory, or any Exotic Species.
- Warranty will be voided if anything other than the approved species or installation method is used.
- The end consumer should be aware that there might be minor gapping between wood planks during the heating season is a normal occurrence with hardwood flooring installed over radiant heated systems.
- Newly installed water-heated-radiant-heat systems should be operational for a minimum of 4 weeks, with the temperature set between 64°-68°F to ensure a dry subfloor with the proper moisture content.
- Existing water- heated-radiant- heat systems must be operated a temperature of 64°F for a minimum of 4 days before installation of hardwood flooring.
- A pressure test must be performed and documented before installation.
- At the time of installation, the subfloor must be 64°-68°F.
- Use floating floor installation only. Do not use the glue-down installation method on radiant heat flooring.
- Use an adhesive approved by the system manufacturer for edge and end joints.
- After installation, do not change the radiant heat settling for 48 hours.
- Gradually increase the heat 3 5 ° increments daily to adjust the heating system temperature up or down to allow the Flooring to adjust to the temperature changes.
- The maximum temperature of the subfloor under normal use should not exceed 85° F. (Check with heat system manufacturer).
- For correct water temperature inside heating pipes, check with the manufacturer's suggested guidelines.
- Heating pipes must be covered with 1 1/4" of concrete or minimum 1/8" below the bottom side of the plywood sub-floor. Also, for
 plywood sub-floor, heat transfer plates or insulation boards must be under pipes.
- The room temperature should be maintained between 60-80 ° F and not vary more than 15° F from season to season.
- Relative Humidity must be maintained in the range of 35-55% humidity in the home for radiant heated rooms.

*Wood stability refers to the predictable movement that can be expected in a given wood species after installation once in service. Note that even when using an ideal species for radiant applications, actual wood performance can still vary due to the radiant system construction, its operation, and installation techniques

IMPORTANT: DO NOT INSTALL CABINETS OR WALLS ON TOP OF THE FLOORING WHEN USING THE FLOATING INSTALLATION METHOD.

Step 1: GETTING STARTED

Important: The Flooring should be installed from several cartons at the same time to ensure proper color, grain, and shade mix.

• Before starting, first, measure the width of the room, and then divide the width of the room by the width of the plank. If this means that the last row of planks will be narrower than 2", then you will need to cut the first row of planks to make it narrower. Cut in such



a way that both rows of planks (the first and last to be installed in the room) will have the same approximate width for an overall continuous look. See installing the last row.

- **Note:** To cut the boards, always saw with the teeth cutting down into the face or top of the board. Cutting from the top-down helps protect the surface.
- The planks install easily without glue. Simply attach the tongue on one plank to the groove side on another plank, and the planks will lock snugly together.
- Begin the installation of the planks in the left-hand corner of the room with the long direction parallel to the incoming sunlight source
 or to the longest wall of the room (if this is possible). Be sure to install the first row of boards with the tongue side facing the wall.

Note: Slightly bowed boards can be installed and are not considered defective.

- Use 3/8" expansion spacers to provide a gap for the seasonal expansion of the Flooring along the walls of the entire room. Always place expansion spacers against the wall where the two boards meet. This will help to keep the flooring square.
- **Note:** Larger rooms require additional expansion space. Add 1/16" to the width of the spacers for every 3' the room extends beyond 25'. Dimensions exceeding 40' may require a larger expansion space.

Step 2: POSITION THE FIRST ROW

- Begin installing the first row by laying a plank flat over the underlayment.
- With the tongue side facing the wall, align the end of the second plank at a 45° angle inset the end joint, lay the planks flat
- Lock the ends of the planks together until the first row is finished. Cut the last board in the row to the necessary length. If the leftover plank is 12" or longer use it to begin the next row or use a shorter length board from the box.
 - If the starting wall is out of square, it will be necessary to scribe the first row to match the wall, allowing the opposite side, if the row to present a true square base for the rest of the floor. Then the first row is complete; you **must** have a straight, the even base established.

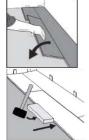
Step 3: INSTALLING THE REST OF THE FLOOR

 Always stagger 12" between the end joints of adjacent plank rows. The end joints should not repeat visually across the installed floor and avoid "H" patterns.



- After installing the first row of planks, Line up the first plank of the second row, so the outside and is even with the outside end of the first plank of the first row.
- Lock the long edge of the plank by inserting the tongue into the groove at an angle and drop in place. Slide plank toward the end of the previously installed plank until the tongue just touches the groove.

IMPORTANT! Use a hammer and tapping block to tap the long edge of the plank to ensure a tight fit. ANY GAPPING CAN COMPROMISE THE LOCKING SYSTEM!



• The planks cannot be forced together. If they are not lying flat, then they will not align properly during locking. If this occurs, begin again, ensuring the edges of both planks meet evenly while applying equal pressure while rotating the plank.





- Attach a scrap piece of floor to bridge the gap between ends of planks.
- Tap the end of the plank with a hammer and tapping block to lock the ends of the planks together. Remove the bridge and continue towards the wall until installing the final plank in the row. BE SURE TO TAP ON EDGE OF VINYL SO AS NOT TO DAMAGE LOCKING PROFILE.
- Use a hammer and pull-bar to lock the final piece in the row. Insert spacer at the end of the row. Continue installation to the final row.
- Once the third row has been clicked into place, check for a tight fit on sides and ends and that the spacers are in place.
- To install the rest of the Flooring, continue placing the boards from left to right, plank by plank, and row by row.
- If under doorjambs or toe kicks of cabinets, there is not enough clearance to achieve the 45-angle necessary to engage the sides. The tongue portion of the sides should be cut away using a wood chisel or a utility knife. The boards can be glued together using a high-quality white wood (PVAC) glue. Remove any excess glue with a damp cloth.
- To disengage the planks, lift the long side to a 45 degree Angle and remove. Slide the ends in opposite directions to disengage. Do not pull upwards to disengage the short ends so as not to break them.

Step 4: INSTALLING THE LAST ROW

Most often, the entire length of the last row will need to be cut so that it is narrow enough to fit the remaining space. When this occurs, follow this simple procedure:

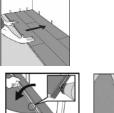
- Lay a row of boards with the tongue toward the wall, directly on top of the last row installed.
- Take a full-width scrap piece of the product that is being installed with the face down and the tongue side of the wall. Use 3/8" spacers against the wall to ensure the proper expansion space.
- Draw a line along the row, moving down the wall. The resulting line gives the proper width for the last row, which, when cut, can • then be wedged into place using the pull bar.

Step 5: FINISHING THE FLOOR

- The use of putty or a non-silicone-based filler to cover small cracks. Test filler on spare pieces first to ensure it blends with the floor.
- Make sure when the installation is complete that the expansion spacers are removed, the cut edges are sealed with silicone caulk, and the expansion space is covered with the appropriate molding such as baseboard and 1/4 round or shoe molding. Do not nail moldings into the floor but nail into the wall.
- Vacuum the floor thoroughly using the soft brush attachment or dust mop to remove any dirt and debris.
- Use a quality Hardwood Flooring cleaner to finish the floor. We recommend Bona Swedish Formula Hardwood Cleaner
- If the floor is to be covered, do not use plastic, use a breathable wrap, or material such as cardboard or kraft paper to protect the finish.
- Final inspection by the end-user should be conducted from a standing position.
- After damp mopping and cleaning, furniture or heavy objects can be put back into place immediately after installation.















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CAUTION: WOOD DUST WARNING

The State of California (OEEHA Prop 65, California Health, and Safety Code Section 25249.6) has classified Wood Dust as a substance known to cause cancer. Drilling, sawing, sanding, or machining wood products generate wood dust.

The State of Minnesota(Statute 1984 sections 144.495 and 325F.18) require all HDF and plywood sold or used in Minnesota meets the HUD Formaldehyde EmissionStandard 24 CFR Sections 3280.308 and 3280.406.

Airborne wood dust may cause lung, upper respiratory tract, and eye and skin irritations. Some wood species may cause dermatitis and respiratory allergic reactions. The International Agency for Research on Cancer (IARC) has classified wood dust as a nasal carcinogen in humans. Wood dust can also cause a flammable or explosive hazard

Precautionary measures:

- Recover dust for disposal. Sweep or vacuum dust for disposal or if power tools are used, equip them with a dust collector.
- Avoid dust contact with an ignition source
- Avoid prolonged or repeated breathing of wood dust in the air. If there are elevated levels of dust, then use a NIOSH- designated dust mask.
 Avoid dust contact with eyes and skin.

First Aid Measures: If inhaled, move to fresh air. In case of contact flush eyes and skin with water. If irritation persists, call a physician.

Please contact your dealer or distributor to request a Material Safety Data Sheet (MSDS)

IMPORTANT NOTE: The information and data above are based on the experience of occupational health and safety professionals. It comes from sources believed to be accurate or otherwise technically current. It is the user's responsibility to determine if this information is suitable for the specific application and to follow any necessary safety precautions.

CARE GUIDE

CLEANING YOUR FLOOR

- Use a damp cloth to blot up spills and spots as soon as possible. For tough spots such as oil, paint, markers, lipstick, ink, tar, or cigarette marks, use acetone/nail polish remover then wipe with a damp cloth. Always avoid allowing liquids to stand on your floor more than 72 hours
- Vacuum, (using the hard floor attachment, not the beater bar), dust mop, or sweep the floor to minimize abrasive grit, debris, and dirt.
- **Do not** use oil-based, wax, and polish, strong ammoniated or abrasive cleaners, steel wool or scouring powder to clean the floor.
- Do not wash or wet mop the floor with soap, oil soap detergent or any other liquid cleaning material except for water. This could void the warranty.
- Do not use any buffing machine or steam cleaner.

PROTECTING YOUR FLOOR

- Use quality area rugs and doormats by outdoor entrance areas to prevent dirt, sand, grit, and other substances such as oil, asphalt, or driveway sealer from being tracked onto your floor. The rugs must be made of a breathable material to prevent moisture entrapment. Rugs with rubber bottoms or non-skid pads may leave an imprint on the Flooring.
- Sweep, dust, or vacuum the floor regularly to prevent accumulation of dirt or grit that can scratch or dull the floor finish.
- Use protective casters/caster cups or felt pads on the legs of furniture to prevent damage to the Flooring. Use wide-bearing leg bases, barrel type caster wheels, rubber rollers to minimize indentations and scratches from heavy objects. As a rule of thumb, the heavier the object, the wider the floor protector should be. Make certain to keep them clean and well maintained.
- Do not use rubber or foam backed plastic mats as they may discolor or leave an imprint on the floor. To prevent slippage use an approved vinyl rug underlayment.
- Avoid gouges or cuts in your floor from sharp objects. While your floor is very wear resistant, sharp or pointed objects can nevertheless damage it.
- Do not walk on your floor with stiletto-style heels, spiked shoes, or cleats; they may cause indentations in your floor.
- Keep pet's nails trimmed to minimize finish scratches.
- Rearrange area rugs and furniture periodically so the floor ages evenly. UV sunlight will soften the tone of distinct species of hardwood to varying degrees.

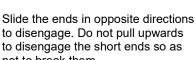


- Protect your floor from direct sunlight. Use curtains and UV resistant film on large glass doors and windows. Over time, natural and artificial light could discolor the floor.
- Use a dolly when moving heavy furniture or appliances. But first, put down a sheet of quarter-inch plywood or Masonite to protect the floor and help prevent denting. Carpet or cardboard is not adequate to prevent surface compression scratches. Never try to slide or roll heavy objects across the floor to avoid denting.

REPAIRING YOUR FLOOR

- Minor damage can be easily repaired with finishing putty available in blending colors.
- Retain several planks for future repairs.
- Major damage will require board replacement. If using the floating installation only, your floor can easily be disassembled to allow for replacement.

To disengage the planks, lift the long side to a 45-degree angle and remove it. You may need to gently knock just above the joint.





to disengage. Do not pull upwards to disengage the short ends so as not to break them.



MOLDINGS

Installation Tips:

- Moldings must be pre-drilled avoid splitting whenever they are to be secured with nails or fasteners. Use a 10 or 12" miter saw with pre-set adjustments for the basic miter cuts at 22.5°, 45°, and 90°. A carbide tipped blade makes the best cuts.
- On Wall Base or Quarter Round moldings, never restrict the hardwood floor's natural contraction/expansion movement by driving the fasteners at a downward angle. Rather, attach the moldings to the wall or vertical surface.
- Always miter cuts rather than having butt cuts when splicing. Decide the direction of the miter by cutting the molding with the long point oriented in the same direction as your natural line of vision when you enter the room.

Wall Base - Borders the wood floor at the base of the wall to give the room a finished look. This molding conceals the required expansion space between the wall and the hardwood flooring. It is also sometimes used under cabinets and toe kicks.

Quarter Round - This molding conceals the required expansion space between the wall and the hardwood flooring. It is also sometimes used under cabinets and toe kicks where a wall base won't fit or at the base of the stairs to provide a subtle blend between the floor and the wall or vertical surface.

Threshold - Typically used at exterior doorways as a transition between Flooring and the doorway threshold. It is also used to transition a wood floor to different floors to make them fit together perfectly, such as high-pile carpeting or tile. Another typical use for a threshold is to conceal the expansion space between the Flooring and a vertical surface such as fireplace hearths and sliding glass doors.

T-Molding - Commonly used in doorways to join two wood floors in adjoining rooms. Also recommended when making transitions from a wood floor to another floor that is approximately the same height such as ceramic tile, hardwood or laminate floors, not carpet. T-Moldings are also used to provide expansion joints when a floor dimension exceeds the length of 40' or a width of 30'.

Reducer - Used to join hardwood floors that have been glued down or nailed down with floors of different heights such as vinyl, ceramic tile, or low-pile carpeting.

Stair Nose - Provides the proper transition for stairways or steps which have hardwood floors that have been installed by either the nail down or glue down installation method. Also, it provides the proper overhang for a transition from one floor level to the next such as the step into a sunken living room.



RESIDENTIAL WARRANTY

Manufacturer warrants the original purchaser of its Hardwood Flooring in North America to the following warranties:

FIFTY YEAR FINISH and WEAR WARRANTY

The manufacturer warrants to the original purchaser that its factory applied finish will not wear through, peel off, or delaminate for fifty years of the wood flooring from the purchase under normal and ordinary residential use and with proper maintenance and floor care.

LIMITED LIFETIME STRUCTURAL INTEGRITY WARRANTY

Manufacturer warrants its products in their original manufactured condition to be free from manufacturing and workmanship defects, including delamination (separation between plies), milling, and grading. (Up to 5% of industry standard).

These warranties, which begin from the date of purchase, apply only to products used in indoor residential applications either below grade, on grade, or above grade and are valid only in North America.

These warranties apply only to the original purchaser and the original residential location where the product is installed and is not transferable.

Hardwood flooring is a natural product that will continue to expand and contract during seasonal and temperate changes. The product, when properly installed, may experience slight separation (up to 1/32") between boards. If minor separation or seasonal cracks occur, they are not covered by this warranty.

The accepted industry standard is an allowance of up to 5% of the Flooring shipped to contain milling, grading, handling, and occasional finish defects. It shall not be considered a structural defect.

Finish wear-through is defined as 100% finish removal over a minimum of 5% of the total installation.

Product thought to be defective by the person doing the installation should be returned to your dealer for inspection and possible replacement **BEFORE INSTALLATION**. Installation implies acceptance. **No warranty will be offered** for obvious visual defects or appearance-related claims, such as grade or color, once the products are installed.

IF THE FLOORING SHOULD FAIL TO MEET THE TERMS OF THE WARRANTY, MANUFACTURER, AT ITS OPTION, WILL EITHER:

- The supply replacement product or parts to repair, refinish, or replace the defective product at the manufacturer's option.
- Refund up to the full purchase price of the defective products.
- We reserve the right to inspect the installed flooring and to remove samples if needed. We may also pay resnable labor cost to repair or replace any defective product if the floor was professionally installed and a claim is submitted during the first year after installation.
- This limited warranty is a diminishing warranty. If we approve a claim after the first year following the date of installation, we will pay
 a pro-rated percentage of the cost based on the warranty period (50 years for the lifetime warrantes) and the date of the purchase.
- For example, if you purchase a product with a 50-year warranty and you make a claim 20 years after the original purchase, we will
 pay 30/50th (60%) of the original floor cost if the claim is approved.

FIFTEEN YEAR LIGHT COMMERCIAL SURFACE FINISH LIMITED WARRANTY

The surface finish for Flooring purchased for commercial use is warranted not to wear through or separate from Flooring for fifteen years from the date of retail purchase under indoor light commercial traffic conditions so long as all care and maintenance instructions provided are followed. Failure to do so may void this warranty.

THIS WARRANTY IS EXCLUSIVE. It covers the repair or replacement of defective materials only and does not cover labor costs unless professionally installed by a certified flooring installer. The installation of the replacement products will be at the original purchaser's expense. If professionally installed, the manufacturer will pay reasonable labor costs to perform the replacement or repair during the first five (5) years from the date of the original purchase. All labor costs must be pre-approved by the manufacturer. If the



style installed in the home is no longer available, the manufacturer will replace the affected floor with another style of equal value. Under no circumstance will the value of a warranty claim exceed the original purchase price of the product.

THE ABOVE DESCRIBED REMEDY IS THE ORIGINAL PURCHASER'S SOLE AND EXCLUSIVE REMEDY FOR CLAIM UNDER THIS LIMITED WARRANTY.

CONDITIONS

The manufacturer will honor claims under this warranty only if all of the following conditions are satisfied:

- At all times between purchase and installation, the Flooring must be properly stored according to installation instructions.
- Interior residential and standard commercial construction only.
- Only approved products for use over Radiant Heat.
- The Flooring must be installed below grade, on grade, or above grade according to the recommended installation instructions and adhesives.
- Problems caused by the failure of the homeowner or installer to evaluate the job site and job site conditions are not covered.
- This limited warranty applies only where the affected area of the Flooring is visible and covers an area greater than 10% of the room.
- A description of the problem, photographs, and a sample that shows the warranty problem must be presented to the retailer/distributor for presentation to the manufacturer.
- The covered person must provide valid proof of purchase for material and labor in the form of a sales receipt or invoice. This must show the date of purchase, original purchase price, and that he/she is the original purchaser
- The manufacturer must receive written notice within 30 days after the discovery of any claimed defect or failure covered under this warranty but within the time period applicable to the limited warranty.
- The manufacturer reserves the right to have a manufacturer's designated representative or firm inspect and take samples of the hardwood floor for analysis.
- The manufacturer must be given 60 days following notice to inspect the product to confirm any failure.
- Inspections of the hardwood floors must be performed by industry standards from a standing position with normal lighting and no glare.
- Written notice, all photographs, samples, and other documentation should be sent to the distributor/dealer from which the Flooring
 was originally purchased.

WARRANTY EXCLUSIONS

This limited warranty shall not apply to damage to the hardwood floor or the finish arising from and specifically excluding any of the following:

Natural wood characteristics such as mineral streaks, small knots, grain variations, etc., are normal and natural characteristics and shall not be construed as defects. No two pieces of wood are the same, and color or other variations will occur. The manufacturer does not guarantee against natural variations or the normal difference between color samples or photographs and colors of installed floors. New or replacement flooring may not match samples and/or existing Flooring or warrant a color match to other wood products such as stairs, cabinets, trim, molding, etc.

- Squeaking and cracking of the hardwood by any cause other than mis-manufacturing is not considered a defect.
- Hollow spots between the Flooring and the subfloor.
- Natural color changes due to full or partial exposure to sunlight and weather. Maple, Merbau, Kempas, Pine, Cherry, and Exotic
 species such as Brazilian Cherry may darken or yellow due to light exposure over time. This is a natural occurrence and is not
 covered by this warranty.
- Indentations, scratches, or damage caused by negligence, insect infestation after the product has left the factory, animals, pebbles, grit, sand, or other abrasives, and high heeled or spiked shoes, or failure to use pads under rolling chairs or other furniture.
- This warranty does not cover, moving furniture, molding replacement, hotel, motel stays or per-diems.
- Mold, mildew is not covered under this warranty.
- Failure to follow the manufacturer's written installation instructions including protecting the floor from subfloor moisture, storage, and handling.
- Stains because of negligence, chemical or industrial products, wax, or oil soaps for cleaning.
- This warranty does not cover removal or replacement of cabinets, appliances, furniture, or other fixtures.
- Insufficient or improper protection, care or maintenance, or failure to use Manufacturer approved installation and maintenance products.
- Damage from improper cleaning practices. Do not use steam mops to clean your floors.
- Misuse or abuse



- Use of Flooring for purposes other than for which it was designed.
- Improper alterations of original manufactured product. Alterations or repairs to the manufacturer's original product will void any and all warranties. This includes sanding, top coating, recoating, or attempted re-finishing of the factory-applied finish.
- Gloss reduction is not considered surface wear through.
- Freight costs or expenses and any damage occurred during shipping.
- Failure due to structural changes in the subfloor, settling of the building or uneven subfloor that has not been adequately leveled.
- Accidents, negligence, abuse, or misuse. Warranty will be voided if man-made or natural disasters including, fire, wind, lightning, earthquake, or prolonged power outages, occur during or after installation.

STANDING WATER WARRANTY

Waterproof wood flooring will resist damage from moisture due to wet mopping, and everyday household spills with silicone sealed expansion space and on all cut ends. This product is waterproof. However, when excessive moisture accumulates in buildings or on building materials, mold and/or mildew growth can occur (particularly if the moisture problem remains undiscovered and unaddressed). The moisture warranty excludes damage resulting from mold and/or mildew growth due to prolonged exposure to moisture. H2Ome has a 72-hour submergible warranty. H2Ome can be removed, dried, and reinstalled. (remove the flooring per the installation instructions).

WARRANTY DISCLAIMERS

THE FOREGOING IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

THE MANUFACTURER DOES NOT GRANT TO ANY PERSON OR ENTITY THE AUTHORITY TO CREATE FOR IT ANY OBLIGATION OR LIABILITY IN CONNECTION WITH THE FLOORING.

MANUFACTURER SHALL NOT BE LIABLE FOR LOSS OF USE OR ANY OTHER INCIDENTAL, SPECIAL CONSEQUENTIAL COSTS, EXPENSES, LOSS OF INCOME OR PROFITS, OR OTHER SIMILAR DAMAGES INCURRED BY THE ORIGINAL PURCHASER.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO THE PURCHASER. THIS WARRANTY GIVES YOU SPECIFIC RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS, WHICH MAY VARY, FROM STATE TO STATE.