



1. GENERAL INFORMATION/ BEFORE YOU START / IMPORTANT NOTICE/ OWNER OR INSTALLER RESPONSIBILITY

PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE YOU BEGIN INSTALLATION

Carefully inspect **ALL** materials prior to installation for defects. Materials installed with visible defects are not covered under warranty. Wood is a natural product containing variations in color, grain, and natural characteristics that vary from plank to plank. We do not warrant against these natural variations from plank to plank or variations from sample to plank. Remember – If you are not satisfied with the flooring prior to installation, contact Floor & Décor – **DO NOT INSTALL** the flooring. Accepting or rejecting the material must be done on full shipment quantities only, not carton by carton or plank by plank. Material is manufactured to exceed industry standards (**ANSI/HPVA EF 2009**).

- Homeowner/ Installer is the final inspector to inspect the flooring for proper color, finish, style, and quality PRIOR to installation. Please verify that the flooring is the correct material. The manufacturer declines responsibility for any costs incurred when plank(s) with visible defects have been installed.
- Any installation guidelines are not intended to supersede federal, state or local regulations which may require modifying the existing installation, materials or structural components. The owner assumes responsibility for compliance with all building codes, including maintaining the required distance from heat sources such as fireplaces.
- Care should be taken at this time to remove or repair characteristics you do not desire. The use of stain, filler, or putty sticks for the correction of minor defects during installation should be accepted as normal procedure.
- A 5% - 10% cutting allowance, depending on layout, must be added to the actual square footage amount needed. (**Diagonal, herringbone, or bordered installations will require a higher percentage**).
- Install cabinets prior to flooring to prevent damage to the flooring. The manufacturer is not responsible for the removal of cabinets in the event of a claim.
- All “wet” work – i.e. – paint, drywall, concrete, masonry, plumbing must be complete and dry well in advance of delivery of hardwood flooring.
 - Exterior doors and windows need to be installed for the flooring to be installed.
- Gutters and downspouts should be in place and the exterior grade complete to allow for proper drainage of water away from the building’s exterior perimeter.
- Flooring should not be exposed to extreme humidity or moisture.
- Permanent HVAC should be on and operational a minimum of 5 days and maintained between 65°F – 75°F (18°C – 24°C) with a relative humidity of 35% - 55% prior to delivery, during, and after installation of the flooring. Humidity should never be allowed to drop below 30% as this may cause gapping. (**DIAGRAM 1**)
- If HVAC is not possible at the time of installation the environmental conditions must be at or near normal living conditions between 65°F – 75°F (18°C – 24°C) and at the average yearly relative humidity for the area.
- For the best results, make sure to always work from 2-3 cartons at a time and mix the planks during installation, this will result in a more natural-looking floor.
- If existing baseboards or moldings are difficult to remove, they may be left in place. Quarter round molding is all that is needed to cover the expansion space between flooring and baseboard.

2. SITE & SUBFLOOR REQUIREMENTS (Including Underlayment)

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

- Subfloors must be clean and free of dirt, curing compounds, sealers, drywall mud, paint, wax, grease, urethane, or other materials that may affect the integrity of the flooring material or adhesives used to install the flooring.

- All subfloors and subfloor systems must be structurally sound and must be installed following their manufacturer's recommendations. Local building codes may only establish minimum requirements of the flooring system and may not provide adequate rigidity and support for proper installation and performance of a hardwood floor. Whenever possible install the planks perpendicular to the floor joists for maximum stability. The warranties **DO NOT** cover any problems caused by inadequate substructures or improper installation of said substructures.
- Test wood subfloors and wood flooring for moisture content using a pin-type moisture meter. Take readings of the subfloor – minimum of 20 readings per 1000 sq. ft. and average the results. In most regions, a “dry” subfloor that is ready to work on has a moisture content of 12% or less and the wood should be within 4% of the subfloor moisture content.
 - **ASTM F-2170 – in-situ relative humidity – 85% relative humidity or less is acceptable.**
 - **ASTM 1869 – 5.0 lbs. or less is acceptable.**
 - **Readings greater than 85% relative humidity or 5.0 lbs. require the use of a proper vapor retarder or adhesive/moisture abatement system.**
- For concrete subfloors, before moisture testing begins, the slab must be cured for a minimum of 30 days.
- Basements and crawl spaces must be dry. Use of a 6-mil polyethylene vapor retarder is required to cover 100% of the crawl space earth. Crawl space clearance from ground to underside of joist is to be no less than 18”.
- The perimeter vent spacing should be equal to 1.5% of the total square footage of the crawl space area to provide cross ventilation. Where necessary, local regulations prevail.
- The subfloor must be flat, meeting a minimum of 3/16” within 10’ or 1/8” in 6’.

Concrete/Wood subfloors - Grind high spots or use of gypsum-based patching and/or leveling compounds which contain Portland or high alumina cement and meet or exceed the compressive strength of 3,000 psi are acceptable. Follow the leveling compound manufacturer’s instructions. Leveling compounds must be allowed to thoroughly cure and dry prior to installation of wood flooring.

RECOMMENDED SUBFLOOR SURFACES

Concrete Subfloor Guidelines

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

Wood Subfloors Guidelines

Subfloor panels should conform to U.S. Voluntary Product Standard PS1-07, Construction and Industrial Plywood and/or US Voluntary PS 2-04 and/or Canadian performance standard CAN/CSA 0325.0-92 Construction Sheathing. Other CSA standards also apply.

Acceptable Panel Subfloors: Truss/joist spacing will determine the minimum acceptable thickness of the panel subflooring.

- On truss/joist spacing of 16” o/c or less the industry standard for single panel subflooring is minimum 5/8” 19/32” (15.1 mm) CD Exposure 1 subfloor panels, 4’x8’ sheets.
- On truss/joist spacing of more than 16”, up to 19.2” (488mm) o/c, the standard is nominal 3/4” (23/32”, 18.3mm) T&G CD Exposure 1 Plywood subfloor panels, (Exposure 1) or nominal 3/4” 23/32”, (18.3mm) OSB Exposure 1 subfloor panels, 4’x8’ sheets, glued and mechanically fastened.
- Truss/joist systems spaced over more than 19.2” (488mm) o/c up to a maximum of 24” (610mm) require minimum 7/8” T&G CD Exposure 1 Plywood subfloor panels, (Exposure 1), or minimum 7/8” OSB Exposure 1 subfloor panels, 4’x8’ sheets glued and mechanically fastened – or two layers of subflooring or brace.
- Between the truss/joist in accordance with the truss/joist manufacturer’s recommendations and with local building codes. Some truss /joist systems cannot be cross-braced and still maintain stability.
- For existing wood floors install new flooring at right angles to the existing flooring.
- Do not glue down hardwood flooring over particle board.
- Do not install over existing glue down hardwood floors.



- **Ceramic tile and terrazzo:** All wax and sealers must be removed with an appropriate cleaner/stripper. Ceramic tile and terrazzo should be abraded to allow for proper adhesion. Check for loose tiles by tapping and re-adhering. Fill grout lines with a cementitious latex fortified leveling compound.
- **Resilient tile, resilient sheet vinyl:** Material must be fully spread and secured to the subfloor. Do not install over perimeter glued floors. Do not install over more than one layer that exceeds 1/8" in thickness.
- **Glue Down Only** – Do not install over more than one layer that exceeds 1/8" thickness. Clean the flooring with an appropriate cleaner and allow it to thoroughly dry. If necessary, de-gloss the floor using an abrasive pad to enhance the bonding of the adhesive, if wax or other coatings are present, completely remove the material with a quality stripper, rinse the floor and allow to dry. Always check for proper adhesion bond prior to installation.

CAUTION: DO NOT SAND any existing resilient tile, sheet vinyl flooring, or flooring felt as if they may contain asbestos fibers that are not readily identifiable. Inhalation of asbestos dust can cause serious bodily harm. Check local, state, and federal laws for handling hazardous material before attempting the removal of these floors.

Acoustic Cork Underlayment: (Glue Down Only) – Install the cork underlayment according to the manufacturer's instructions. The cork underlayment must be fully adhered to the subfloor. The cork underlayment should be of pure granulated cork combined with a polyurethane binder with a minimum density of 11.4 lbs. per cubic foot and not to exceed 13 lbs. per cubic foot.

3. PRE-INSTALLATION / JOB PREPARATION

The underfloor or subfloor must be thoroughly even, dry, clean, solid and free of any deflection. Carpet staples or glue residue must be removed and the floor be clean to ensure proper installation.

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

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

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

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

Layout of Flooring: "Racking the Floor" is essential to achieve a random appearance. Start by either using random-length planks found in the carton or by cutting four or five planks in random lengths, differing by at least 8". As you continue working across the floor try to maintain an 8" minimum between end joints. Randomly install different lengths to avoid a patterned appearance. Never waste materials; the end cuts from starter rows should be used at the opposite side of the room to complete rows or used to start the next row.

Expansion space: Expansion space around the perimeter is required and should be equal to the thickness of the flooring material. For commercial installations use a minimum of 1/2" expansion.

THIS PRODUCT IS NOT SUITABLE FOR DAMP ROOMS SUCH AS SAUNAS, AND ROOMS WITH DAMP CONCRETE, ROOMS WITH FLOOR DRAINS OR ROOMS THAT COULD POTENTIALLY FLOOD.

For wet areas such as bathrooms caulk the perimeter of the floor with a silicon caulk.

Installation over radiant heat (FLOATING FLOOR INSTALLTION ONLY /Direct glue down is NOT recommended)

- Your engineered hardwood can be laid over a radiant sub-floor heating system. Follow the manufacturing installation instructions for the sub-floor heating system. Failure to follow the guidelines may produce unsatisfactory results.
- Moisture content of concrete must not exceed 2.0 lbs. per CaCl test method (ASTM1869-89) Wood subfloors not to exceed 12% and be within 4% of the wood flooring. Concrete must be allowed to properly cure and dry a minimum of 4 weeks prior to operation of radiant heat system.
- The operation of a radiant heat system should be set to run at 2/3 maximum output for a minimum of 2 weeks prior to installation of flooring to further allow moisture from concrete to dissipate and reach a final moisture content. This must be done in both heating and non-heating seasons.
- Prior to installation (4 days) reduce the radiant heat to a temperature of 65°F (18°C).
- Floating Installation - Install flooring according to floating floor installation guidelines. Use of a 2-in-1 polyethylene underlayment is required. (Note: 2-in-1 polyethylene underlayment features a plastic film backing to prevent moisture seepage from subfloors plus the foam cushioning provides additional comfort and protection).
- When gluing planks run a continuous bead of adhesive in the groove on both the end and length of the board.

After Installation and Seasonal Operation

- 48 hours after completion of installation, slowly raise the temperature of the heating system to its preferred operating level over a period of 5 days. **Do not allow the surface temperature to exceed 80° (27°C).**
- The humidity level for radiant heat must be maintained between 35%-55% relative humidity.
- Seasonal gapping should be expected.
- Surface checking can be expected if the proper humidity level is not properly maintained between 35-55% relative humidity or if the floor's surface temperature exceeds 80°F (27°C).

4. TOOLS AND SUPPLIES

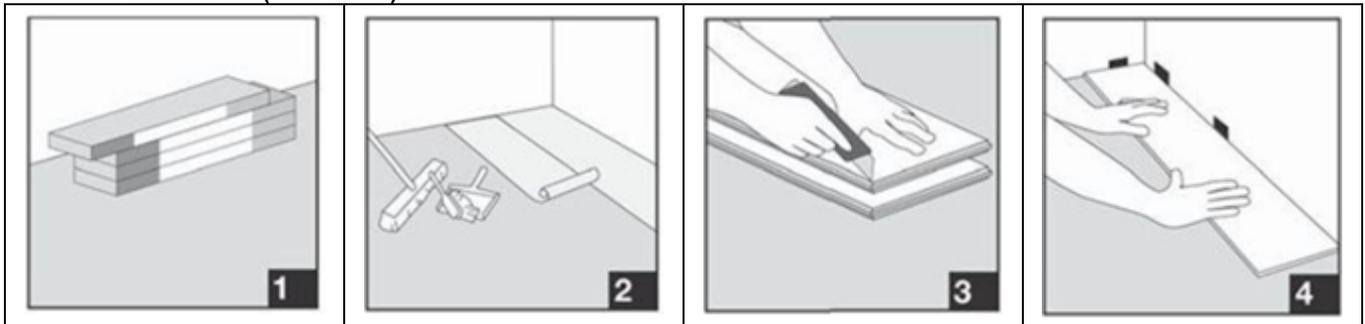
For Floating Installations:

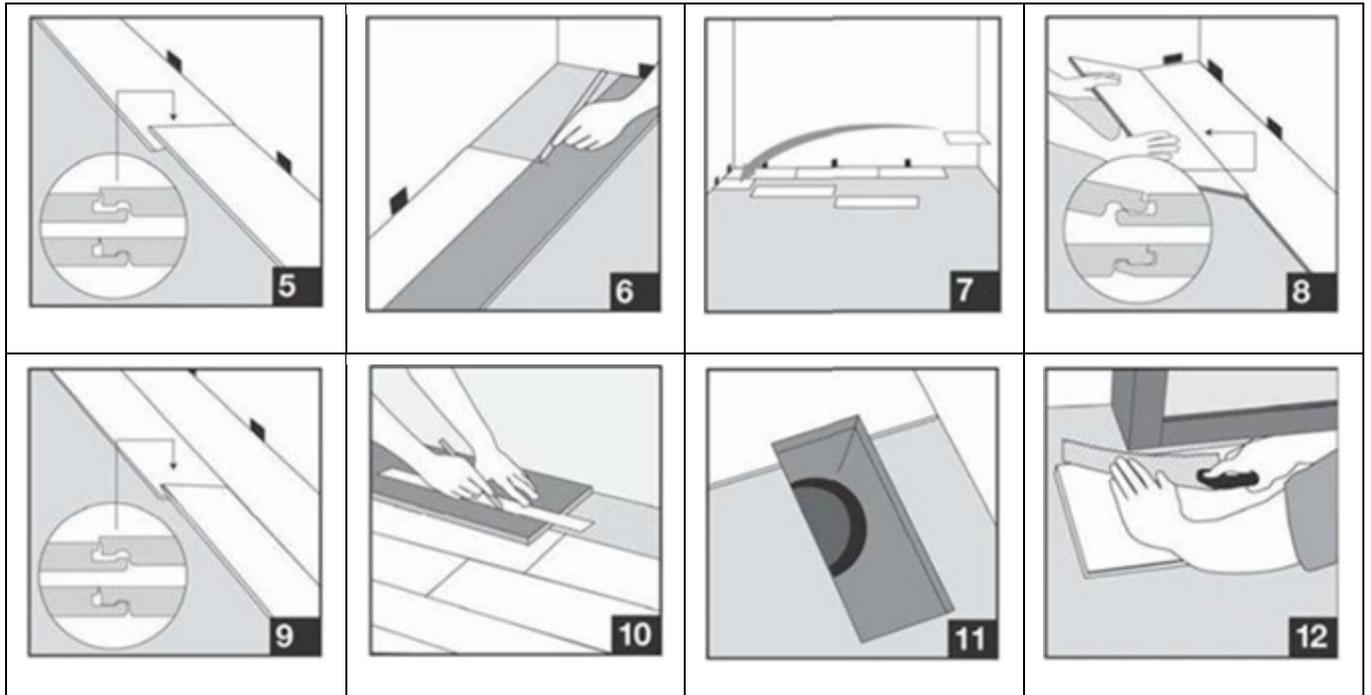
2-in-1 polyethylene underlayment | Spacers | Saw (Electrical, Hand, Jamb Saw)
 Hammer | Utility knife | Tape Measure | Straight Edge
 Chalk Line & Chalk | Moisture Meter | Pry Bar
 Pressure sensitive polypropylene adhesive such as Tuck Tape (or comparable / equivalent alternative)
 Pencil | Eye Protection & Dust Mask | Broom & Dustpan and/or Vacuum
 Transitions and wall moldings | Color Wood Fill

If installing over a crawl space or on a concrete floor, you must install a minimum 6-mil polyethylene vapor retarder. Use of a 2-in-1 polyethylene underlayment is an acceptable substitute. DO NOT tape seams while installing 2-in-1 polyethylene underlayment over a wood subfloor.

5. INSTALLATION METHOD PROCEDURE (FLOATING FLOOR APPLICATION)

BASIC INSTALLATION (FLOATING)





- For installation on concrete floors or any floors over a crawl space, a 6-mil polyethylene vapor retarder or a 2-in-1 polyethylene underlayment (or comparable /equivalent) **MUST** be laid down first. For concrete, use a 6-mil polyethylene vapor retarder, run 2" (50.8mm) up the walls and overlap seams 18" (457mm). Tape seams when installed over concrete. **DO NOT** tape seams over any wood subfloor.
- All flooring installations require 2-in-1 polyethylene underlayment. Run the 2-in-1 polyethylene underlayment underlay in the same direction as the planks. The underlayment should be butted side by side with no overlap. Tape seams together **OR** use a 2-in-1 polyethylene underlayment (or comparable / equivalent) as shown in **(DIAGRAM 2)**.
- You will need to remove the tongue on the long side of the panels that face the wall, from the appropriate number of planks for your first row. This is to ensure that the decorative surface is well under the finished trim when installed. Use a utility knife to score through the tongue several times until it easily snaps off. **(DIAGRAM 3)**
- Start in the corner by placing the first plank with the trimmed side facing the wall. Use spacers along each wall to maintain an expansion gap of 1/2" (12mm) between the wall and the flooring. **(DIAGRAM 4)**
- **REMEMBER THAT THIS PRODUCT IS PRIMARILY WOOD AND NEEDS THE ROOM TO EXPAND AND CONTRACT. AT NO POINT SHOULD YOU ATTACH THE FLOORING TO ANY SURFACE. ALSO, THE FLOOR SHOULD NOT RUN FOR MORE THAN 26' W (8m) x 40' L (12m). FLOOR EXCEEDING THESE DIMENSIONS NEEDS TO BE SEPARATED IN AREAS SMALLER THAN A 26' W (8m) x 40' L (12m) USING A T-MOLDING. ROOMS SEPARATED BY AN OPENING OF 36" (915mm) OR LESS, SHOULD BE SEPARATED BY A T-MOLDING AT THE DOOR OPENING.**
- To attach your second plank, lower and lock the end tongue of the second plank into the end groove of the first plank. Make sure the end channels are free from debris to ensure a close, tight fit. Line up edges carefully. The planks should be flat to the floor. **(DIAGRAM 5)**
- Continue connecting the first row until you reach the last full plank. Fit the last plank by rotating the plank 180° with the pattern side upward, place beside row, mark and then saw off excess. Attach as described above. **(DIAGRAM 6)**

WHEN USING A HANDSAW CUT ON THE DECORATIVE SURFACE. IF YOU ARE USING A JIG OR CIRCULAR SAW, CUT WITH THE DECORATIVE SIDE DOWN TO AVOID CHIPPING.

- Begin the next row with the cut off piece from the previous row to stagger the pattern. Pieces should be a minimum of 8" (203mm) long and joints offset should be at least 16" (406mm). **(DIAGRAM 7)**
- To start your second row, tilt and push the side tongue of the plank into the side groove of the very first row / plank at about 30°. When lowered, the plank will fold into place. **(DIAGRAM 8)**
- Attach the second plank of the new row first on the long side. Tilt and push this plank as close as possible to the previous row at 30°. Make sure the edges are lined up. Lower the plank to the floor, folding the end tongue into the end groove of the first plank. Continue laying the remaining planks in this manner. **(DIAGRAM 9)**
- To fit the last row, lay a plank on top of the previous row. With the tongue to the wall, lay another plank upside down on the one to be measured and use it as a ruler. Don't forget to allow room for spacers. Cut the plank and attach it into position. **(DIAGRAM 10)**
- Door frames and heating vents also require an expansion room. First, cut the plank to the correct length then place the cut plank next to its actual position and use a ruler to measure the areas to be cut and mark them. Cut out the marked points allowing the necessary expansion distance on each side. **(DIAGRAM 11)**
- You can trim door frames by turning a plank upside down and using a handsaw to cut away the necessary height so that planks slide easily under the door frame. **(DIAGRAM 12)**

GLUE DOWN INSTALLATION

For Glue Down Installations:

Mapei Ultrabond Eco 995 Wood Flooring Adhesive (or comparable / equivalent) | Adhesive Trowel
Spacers | Saw (Electrical, Hand, Jamb Saw)
Hammer (Rubber) | Utility knife | Tape Measure | Straight Edge
Chalk Line & Chalk | Moisture Meter | Pry Bar | Color Wood Fill
Pencil | Eye Protection & Dust Mask | Broom & Dustpan and/or Vacuum
Transitions and wall moldings | Clean Cloths | Mineral Spirits /Urethane Remover Cleaner

NOTE: REFER TO THE ADHESIVE LABEL FOR PROPER TROWEL REQUIRED, SPREAD RATES AND INSTALLATION APPLICATION INFORMATION!

INSTALLATION FOR GLUE DOWN METHOD REQUIRES THE USE OF MAPEI ULTRABOND ECO 995 WOOD FLOORING ADHESIVE (or comparable/ equivalent). ADHESIVE MUST BE APPLIED WITH THE PROPER TROWEL AT THE 30-35 SQ. FT. SPREAD RATE WHEN INSTALLING OVER CONCRETE SUBFLOORS

NOTE: REFER TO THE ADHESIVE LABEL FOR PROPER TROWEL REQUIRED, SPREAD RATES AND INSTALLATION APPLICATION INFORMATION

Before you begin using the following instructions, please refer to the Pre-installation Job Prep information above.

GETTING STARTED

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

SPREADING THE ADHESIVE

- Using the proper trowel, hold the trowel at a 45° angle to ensure proper spread rate of adhesive. Apply pressure to allow the trowel to leave ridges of adhesive on the substrate with little adhesive left between the ridges. This will help to achieve the proper spread rate of the adhesive. Temperature and air flow across the adhesive can influence the open time of the adhesive. 3X (or urethanes) will have a longer opening time in areas of low humidity and will have a shorter opening time in areas of high humidity. **(See adhesive label for further information).**

INSTALLING THE FLOORING (GLUE DOWN APPLICATIONS)

- Spread adhesive from the chalk line/straightedge out to approximately the width of two planks. Install the first row of starter planks along the chalk line/straightedge and secure into position with the tongue facing the starter wall.
NOTE: Proper alignment is critical. Misaligned starter rows can cause side and end gaps to appear in proceeding rows of flooring. When you have the starter rows complete, you can begin the next row.
- When you are certain the first two starter rows are straight and secure, spread adhesive 2' to 3' wide across the length of the room. As a rule, never spread more adhesive than can be covered in 30 to 45 minutes. If the adhesive has skinned over remove the dried adhesive and trowel new adhesive.
- Continue to install planks and push them into place. Place the tongue of the board into the grooves of installed boards and press into the adhesive. As you continue working across the floor try to maintain a six-inch minimum space between end joints. Randomly install different lengths to avoid a patterned appearance.
(NOTE: Never strike a rubber mallet or hammer directly on the flooring to engage the tongue-and-groove. This practice can damage the flooring and/or the finish).
- Remove the adhesive from the surface of the installed flooring as you work – this will help to save time. A damp rag with water or mineral spirits will remove adhesive. Frequently change towels to avoid leaving a haze on the flooring surface. **DO NOT** use water to remove urethane adhesives from the finish.
- As you approach the end wall it may be necessary to cut the width of the last row – be sure to allow for the expansion space along the end wall. Once the final cuts are made, put planks into place.
- After the floor is complete, remove the straight edge and glue down the first two boards.
- Restrict foot traffic for a minimum of 6-8 hours and wait 24 hours before permitting furniture to move onto the floor.
- Clean any wet adhesive from the flooring with a lightly dampened clean cloth. If the adhesive has dried, use mineral spirits on a clean cloth. For urethane adhesive use the recommended urethane adhesive remover.
- If specified in the adhesive instructions roll and cross roll floor with a 100-150 lbs. (45-70 kg) roller at the end of the installation to ensure proper transfer of adhesive.

6. WALL MOLDINGS / TRANSITION

FINISHING MOLDING – acclimate 48 hours prior to installation

- **Reducer molding** is used to finish flooring when the adjoining surface is lower than the flooring or when the flooring meets carpet
- **T-molding** is used to finish flooring when two-level surfaces meet in the doorways or for expansion joints. If your room is more than 26' W (8 m) x 40' L (12m), you will need to allow for an ½" expansion joint.
- **Baby Threshold** – used at exterior doorways between flooring and doorway threshold. It can be used to transition wood floors into different floor types or conceal the expansion space such as a fireplace hearth and sliding glass doors.
- **Stair Nosing** – provides the proper transition for stairways or steps with the proper overhang between steps.
- **Quarter round molding** is used to finish the perimeter of the room. A quarter round molding is nailed directly to the baseboard with finishing nails.

7. MAINTENANCE / AFTER CARE

- Vacuum or sweep regularly.
- Remove spills promptly using an appropriate floor cleaner (pH Neutral cleaner) and a clean white cloth.
- Use felt protectors under heavy pieces of furniture and chairs.
- Use protective mats at all exterior entrances.
- Spiked heels or shoes in need of repair can severely damage your wood flooring.
- Never use oil soaps, wax, liquid or other household products to clean your floor.
- The sun's UV rays can change the color of your floors. Always protect floors from direct sunlight that can cause the wood or stain to change color.
- Keep animal nails clean and trimmed.
- Protect your floor when using a dolly for moving furniture or appliances.
- Never slide or roll heavy furniture or appliances across the flooring.
- Preferable temperature should be approximately 65°F– 75°F (17°C - 23°C) with a relative humidity of 35% - 55%. Humidity should never be allowed to drop below 30% as this may cause gapping.

ROUTINE MAINTENANCE

- Daily removal of dirt and dust is important to prevent particles from abrading the floor's surface. Sweeping, dust mopping, and vacuuming are recommendations to remove soil particles that can result in scratches and worn appearances. Do not use vacuums with rotating beater bars on hard surfaces.
- Periodic cleaning will be necessary to help maintain the floor's appearance. Always pre-vacuum or dust mop before any type of cleaning. Neutral pH cleaners are recommended
- Do not use abrasive cleaners or cleaning agents that leave dull residues on the surface of the floors. Never wet mop the floor with water and do not allow excess cleaner to remain on the floor's surface as this may permanently damage the wood.
- Steam cleaners are not recommended.
- Do not use oil soaps, liquid or paste wax products, cleaners with citrus type oils, Tung oils, silicon or ammoniated products as well as 2-in-1 cleaner with polish additives. Problems with these types of products can affect the floor, which would not be considered in the warranty.

SPOT AND SPILL REMOVAL

- Remove wet spills promptly by blotting them with white paper or cloth towels.
- Dried spots should be removed by pH neutral cleaner with gentle agitation from a clean towel or cloth. Always blot dry.
- Do not use detergents or abrasive cleaners since these products can result in a dull residue and appearance.
- Use rubbing alcohol (isopropyl alcohol) with a clean white cloth for spots requiring a solvent type of cleaner that hardwood cleaning agents cannot remove.

Please note that some stain conditions may become permanent.

8. CAUTION/ WARNING (LEGAL)

CAUTION: WOOD DUST

The International Agency for Research on Cancer has classified wood dust as a nasal carcinogen. The sawing, sanding, and/or machining of wood products can produce wood dust that can cause respiratory, eye, and skin irritations. Equipment should be equipped with a dust collector to reduce airborne wood dust. Wear an appropriate NIOSH designated dust masks to reduce exposure to airborne wood dust. Avoid contact with eyes and skin. In case of irritation, flush your eyes or skin with water for at least 15 minutes. In cases of severe irritation, seek immediate medical attention. For further technical or installation questions or to request a Product Specification Data Sheet contact the manufacturer.

WARNING: Attention California Installers & Consumers

Installation of this product and wood product may create wood dust, which is known to the State of California to cause cancer.



MINNESOTA RESIDENTIAL FORMALDEHYDE REGULATION: IMPORTANT HEALTH NOTICE THESE BUILDING MATERIALS EMIT FORMALDEHYDE, EYE, NOSE, AND THROAT IRRITATION, HEADACHE, NAUSEA AND A VARIETY OF ASTHMA-LIKE SYMPTOMS, INCLUDING SHORTNESS OF BREATH, HAVE BEEN REPORTED AS A RESULT OF FORMALDEHYDE EXPOSURE. ELDERLY PERSONS AND YOUNG CHILDREN, AS WELL AS ANYONE WITH A HISTORY OF ASTHMA, ALLERGIES, OR LUNG PROBLEMS, MAY BE AT GREATER RISK. RESEARCH IS CONTINUING ON THE POSSIBLE LONG-TERM EFFECTS OF EXPOSURE TO FORMALDEHYDE. REDUCED VENTILATION MAY ALLOW FORMALDEHYDE AND OTHER CONTAMINANTS TO ACCUMULATE IN THE INDOOR AIR. HIGH INDOOR TEMPERATURES AND HUMIDITY RAISE FORMALDEHYDE LEVELS. WHEN A HOME IS TO BE LOCATED IN AREAS SUBJECT TO EXTREME SUMMER TEMPERATURES, AN AIR-CONDITIONING SYSTEM CAN BE USED TO CONTROL INDOOR TEMPERATURE LEVELS. OTHER MEANS OF CONTROLLED MECHANICAL VENTILATION CAN BE USED TO REDUCE LEVELS OF FORMALDEHYDE AND OTHER INDOOR AIR CONTAMINANTS. IF YOU HAVE ANY QUESTIONS REGARDING THE HEALTH EFFECTS OF FORMALDEHYDE, CONSULT YOUR DOCTOR OR LOCAL HEALTH DEPARTMENT.

WARNING! DO NOT MECHANICALLY CHIP OR PULVERIZE EXISTING RESILIENT FLOORING, BACKING, LINING FELT, ASPHALTIC "CUTBACK" ADHESIVES OR OTHER ADHESIVES.

These products may contain either asbestos fibers and/or crystalline silica. Avoid creating dust. Inhalation of such dust is a cancer and respiratory tract hazard. Smoking by individuals exposed to asbestos fibers greatly increases the risk of serious bodily harm. Unless positively certain that the product is a non-asbestos containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content and may govern the removal and disposal of material. See current edition of the Resilient Floor Covering Institute (RFCI) publication "Recommended Work Practices for Removal of Resilient Floor Coverings" for detailed information and instructions on removing all resilient covering structures. The products in this carton **DO NOT** contain asbestos or crystalline silica.