

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

#### **OWNER / INSTALLER RESPONSIBILITY**

Hidden Falls hardwood flooring is a product of nature, which is characterized by distinctive natural variations in grain and color and is 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 in accordance with 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 subfloor 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 subfloors 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, or face nail holes 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 & ACCLIMATION**

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 prior to wood flooring being installed. Heating and air systems should be fully operating, maintaining a consistent room temperature at 60-80° F and a constant relative humidity of 35-55%.

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 60 to 90 days old.

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 black polyurethane film as a vapor retarder.

Moisture content of both the sub-floor and the flooring should be checked and recorded before any work begins Solid wood flooring should be stored in the same environment in which it is expected to perform. Flooring should be at the job site at least 72 hours prior to installation for acclimation., (in dryer climates 5-7 days might be necessary) or as long as needed in order to meet the proper installation requirements. Open the cartons to allow the flooring to acclimate. **The solid flooring must be** 

properly acclimated and conditioned to temperature and humidity conditions prior to proceeding with the installation.

Follow the NWFA guidelines for acclimation (<u>www.nwfa.org</u>) on the job site and moisture equilibrium. For wide-width solid flooring (3" or wider), there should be no more than 2 percent difference in moisture content between properly acclimated wood flooring and subflooring materials.

Handle with care. Do not stand on ends. Store flooring in a dry place, being 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 installation site should have consistent room temperature of  $60^{\circ}$ - $80^{\circ}$  F and a constant relative humidity level of 35-55% for a minimum of 5 days prior to installation of any flooring product.

Solid flooring is for on grade or above grade installation only and <u>cannot</u> be installed in full bathrooms or other high moisture areas. This product <u>cannot</u> be installed over Radiant Heat.



#### SUBFLOOR 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" 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) Solid sub floors 6" wide or less
  - ) 3/4" x 5-1/2"
  - ) Group 1 dense softwoods.
  - No. 2 Common
  - Board ends fastened with 8d rosin-coated or ring-sharked nails.
  - ) Laid on a diagonal to joist
  - May require overlay.
  - Engineered, thin-classification solid strips, and parquet not approved.
- 4) Existing wood floors (installed at a right angle only).
- 5) Concrete Slab (Glue down only)

#### SUBFLOORS 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. Any irregularities may cause hollow spots between the flooring and subfloor in any installation method and are not warranted.

**STRUCTURALLY SOUND** - Nail or screw any loose areas that squeak. Replace any delaminated or damaged subflooring or underlayment.

**DRY** - Moisture content of sub floor **must not** exceed 14% prior to installation of wood flooring. All moisture testing must be before wood has been acclimated 48 hours and job site requirements met.

**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%, or read more than a 2% difference than the moisture content of products being installed.

**CONCRETE SLABS (regardless of existing floor covering):** All concrete subfloors must be tested for moisture content prior to installation of the hardwood flooring. The moisture content of the concrete subfloor must not exceed 3 lbs. /100 sq. Ft. emissions in 24hours emissions per ASTM F1869-11and or 75% per Relative Humidity Test (ASTM F2170-11)

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

- Use an approved calibrated concrete moisture meter CME (Tramex Concrete Moisture Encounter) as a preliminary measurement for moisture. Follow manufacturer's specific calibration requirements.
- The Tramex CME reading should not exceed 4.0 on the scale.
- 2) Perform a polyfilm test. Tape down 2' x 2' polyfilm squares (a clear garbage bag or plastic drop cloth will do) in several places on the floor. Wait 24-48 hours, and then check for the appearance of condensation on the inside of the bag or plastic for a darkening on the concrete subfloor. Either occurrence signals the likely presence of excess moisture, requiring a mandatory calcium chloride test.
- 3) Test with a 3% Phenolphthalein in Anhydrous Alcohol Solution. Do not apply the solution directly to the concrete surface. First chip ¼" deep into the concrete test area and apply several drops of the solution. Any change in color signals the likely presence of excess moisture, requiring a mandatory calcium chloride test.
- 4) Once you have determined the moisture content and that moisture is present a calcium chloride and pH alkalinity test MUST be performed to determine the moisture emissions through the concrete slab of the moisture and alkalinity in the concrete floor. Perform a calcium chloride test according to the manufacturer's instructions. The maximum acceptable reading is 3-lbs. /24 hours/1000 sq. Ft. for moisture emissions. Three test for the first 1,000 square feet and one test for every 1,000 square feet thereafter.
- Perform a Relative Humidity test according to the manufacturer's instructions. The maximum reading is 75%. Three test for the first 1,000 square feet and one test for every 1,000 square feet thereafter.

Perform a pH alkalinity test according to the manufacturer's instructions. A pH reading of 6-9 on a pH number scale of 1-14 is acceptable.

If the test results exceed this number, the concrete slab should be sealed with appropriate sealers to correct those emissions as per the manufacturer's recommendations.

**Note:** If excessive moisture (3-lbs. to 7-lbs.) is present or anticipated, use a moisture retardant system to seal the concrete or an inexpensive sheet vinyl/slip sheet glued directly to the concrete slab to reduce vapor intrusion. Follow the instructions of the sheet vinyl manufacturer, using a premium grade alkaline resistant adhesive, and full spread application system to bond the vinyl to the subfloor.



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

#### INSTALLATION on WOOD SUBSTRATE:

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

The subfloor 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 10-floor 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 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%. Solid sub floors 6" wide or less, 3/4" x 5-1/2" Board ends fastened with 8d rosin-coated or ring-sharked nails. Laid on a diagonal to joist.

#### **GLUE DOWN INSTALLATION METHOD**

#### **REQUIRED TOOLS AND ACCESSORIES**

- \* 3/16" x 5/32" deep v notch trowel or 1/4" x 1/4" x 3/16" square notch trowel. (Follow adhesive manufacturers' guidelines).
- Good Quality Polyurethane Wood Flooring Adhesive (see adhesive manufactures instructions)
- \* Broom
- \* Tape Measure
- \* Moisture Meter (wood & concrete)
- \* Mallet (light colored)
- \* Circular or Hand Saw
- \* Miter or Table Saw
- \* Pry Bar
- \* Drill with 1/16" bit
- \* 6 8 d screw shank nails
- \* Chalk Line and Chalk
- \* Hammer
- \* Safety Equipment (Goggles & Mask)
- \* Utility Knife
- \* Nail Punch
- Hardwood Flooring Cleaner

#### Step 1: GETTING STARTED

Install the flooring parallel to the longest outside (exterior) wall in the room. Measure out from the wall on the door side of the room in two places; 30 3/8" for 3" and 5" wide products. Mark and snap a chalk line across the two marks. The area between the chalk line and the wall is the working area and will be the last to be installed.

**Note:** Ensure Moisture test have been completed on the concrete Calcium Chloride Test (ASTM 1869-11) is below 3lb per 1000sf in a 24 hour and or Rh test (ASTM 2170-11) is below 75%.

Note: The concrete must be flat 3/16" over 10' or 1/8" in 6'.

#### Step 2: SPREADING THE ADHESIVE

Hold the trowel at a 45°-60° angle and spread adhesive onto an area no larger than 30-40 square feet at one time. After spreading, allow the adhesive to flash off for 30-45 minutes before installing wood flooring. Maximum available working time is 45-50 minutes. (Colder temperatures or high humidity will extend times, and warmer temperatures or low humidity will shorten times.)

Do not install wood flooring material after adhesive dries. Test by touching adhesive. If not readily transferred to finger, the adhesive is already dried. If adhesive has dried, remove adhesive and apply new material. Periodically check wood to confirm 100% adhesive transfer. Within one hour of setting wood, roll the installation with a 100-150 lb. roller to promote good contact with the adhesive.

Always refer to the specific instructions on the hardwood flooring adhesive label.



#### Step 3: INSTALLING THE FLOOR

The flooring should be installed from several cartons at the same time to insure proper color, grain and shade mix. After the adhesive has been spread following the above-mentioned instructions, start with the first piece of flooring. Install the piece of wood with the groove towards you and the tongue facing the opposite wall. Line up the groove of the flooring with the chalk line then press the flooring into the adhesive.

Working from left to right, lay the next board and continue working towards the right until you need to cut a piece to complete the first row. Measure the size you need to complete the first row and cut to length.

Distribute lengths, avoiding "H" patterns and other discernible patterns in adjacent runs. Stagger end joints of boards row to row a minimum of 6" for strip flooring, 8-10" for 3" to 5" plank, and 10" for plank winder then 5".

If the leftover piece is less than 6" long, cut another piece at a random spot, and start the second row with it. Be attentive to staggering the ends of the boards at least 6" in adjacent rows to avoid clustering end joints. A soft rubber mallet can be used to tap the boards on the face until they are pulled into proper position.

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.

For wood subfloors: If you are working on a wood type subfloor, use small finishing nails to hold the first row in place. Fill nail holes with filler which is manufactured to blend with your flooring.

For concrete subfloors: If you are working on a concrete subfloor, take a piece of 1" x 2" x 8' pine board and using 1" concrete nails, nail the board onto the dry side of your chalk line. This will hold your first row of starter boards in place.

Complete the rest of the installation in your working area by following the same installation procedures that are stated in Step 2 of this section.

Lift a plank periodically to make sure that there is 100% contact between the board and the hardwood flooring adhesive.

#### 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, unglued, with the tongue toward the wall, directly on top of the last row installed.

Take a short piece of the hardwood flooring that is being installed with the face down and the tongue side against the wall. Draw a line with a pencil 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.

You will need to use the pull bar extensively to make the last row properly flush.

#### Step 5: FINISHING THE FLOOR

A drying time of 24 hours is recommended before any damp mopping, cleaning or heavy objects or furniture can be put back into place.

The use of putty or a non-silicone based filler to cover small cracks or face nails holes should be considered normal in hardwood flooring installations. 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, 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.

#### Note: LIGHTWEIGHT CONCRETE:

Do not install over lightweight concrete.

#### INSTALLATION on SUB-FLOORS OTHER THAN WOOD OR CONCRETE:

Note: Perimeter glued resilient vinyl and rubber tiles are unacceptable underlayment's and must be removed.

Do not install over carpet.

**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.



#### INSTALLATION ON RADIANT HEAT SUBFLOORS:

This product is not approved for installation over radiant heat applications. The Warranty will be voided if used for any radiant heat.

#### JOB SITE PREPARATION

Verify floor is level and structurally sound. Repair as needed. Subfloor irregularities may cause any wood flooring installation to develop hollow spots between the flooring and the subfloor. These are not the result of any manufacturing defect. Proper moisture testing is the key to determine readiness for installation.

Follow the NWFA guidelines for acclimation (<u>www.nwfa.org</u>) on the job site and moisture equilibrium.

Undercut door casings

Remove any existing wall base, shoe molding, quarter round or doorway thresholds.

Acclimate product at the job site at least 72 hours prior to installation or as long as needed in order to meet the proper installation requirements.

Cover the clean surface, wall to wall, with 15 lb. asphalt saturated felt the paper, butting the edges together. Regardless of the installation method, all floors should be racked.

#### NAIL DOWN INSTALLATION PROCEDURE

#### REQUIRED TOOLS AND ACCESSORIES

- \* Solid Wood-Manual or Pneumatic Nailer or Stapler with 1 ½"-2" Staples or Cleats with 15.5 gauge.
- B Engineered woods-Manual or Pneumatic Fastening Machines with 15-18 gauge 3/16" Crown Staples 1 1/4"-1 1/2" length.
- Powernail 1-1 1/4" 18-20 gauge cleats
- \* 6-8 d screw shank nails
- \* Moisture Meter (wood & concrete)
- \* Circular or Hand Saw
- \* Miter or Table Saw
- \* Drill with 1/16" bit
- \* Broom
- \* 15 lb. Asphalt Saturated Felt (not rosin paper)
- \* Tape Measure
- Mallet (light colored)
- Pry Bar
- Chalk Line and Chalk
- \* Hammer
- \* Safety Equipment (Goggles & Mask)
- Utility Knife
- \* Nail Punch
- \* Hardwood Flooring Cleaner

#### NOTE: Planks wider than 5" Glue down and nail method is preferred

# GENERAL INFORMATION FOR FASTENING MACHINES RECOMMENDED FASTENERS

- Porta-Nails, Inc. 800-634-9281
   Manual Model 402 Hammerhead Porta Nailer
  - Recommend to use with Catalog #40248 Nailer Shoe.
- High Pro Tools 503-632-3100 or 888-232-2960
  - Pneumatic Model FS 50 Stapler LFN-50 Cleat Nailer with the White ½" adapter pad. Switch out the initially supplied black pad to the white pad to properly fasten the flooring.
- Bostitch 800-556-6696 Pneumatic Nailer Model Number M111FN with an M111 Foot – Kit. Will require the installer to insert a piece of cardboard between the foot and the nailer to adjust for the flooring size.
- *J* Powernail Com 800-323-1693
  - Pneumatic Model 50P Model 200 TG Powernailer LJ-1 Adapter Plate Model 445 TG Powernailer 5/8" Adapter Plate Manual Model 50M TG Powernailer Model 250 TG Powernailer U-1 Adapter Plate



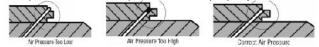
# NOTE: Improper adapter plates and/ or staples/cleats can cause severe damage. Contact your Fastener Manufacturer for the proper adapter as well as recommended staples, cleats and air pressure.

Avoid striking the edge of the prefinished flooring with the fasteners mallet. Edge crushing can occur causing cracks and splinters. Use a block to hammer against if necessary. Use only a flooring nailer that engages the top profile over the tongue at the appropriate angle. Make sure that the flooring nailer is flat against the board to prevent top edge damage. The plate in contact with floor must be smooth and free from nicks or scratches. Faceplates should be covered with protective materials to prevent damage to the surface of the flooring.

For manual fasteners, improper plate selection can cause severe edge damage. Check with the fasteners manufacturer to ensure that the proper adapter has been used for this nominal 3/4" flooring (18 mm).

For pneumatic fasteners, improper air pressure settings, and failure to use the proper adapters can cause damage

to the flooring. The correct adapter and air pressure setting will properly set the fasteners in the nail pocket. Set air compressor to the fastener manufacturers recommended PSI setting or an initial pressure of 75 PSI. Use a compressor with an in-line regulator with an air hose for proper adjustments. Adjust the air pressure to ensure proper setting of staples. If tongue damage occurs, lower the air pressure. If the staples do not set properly, increase the air pressure.



If you need to remove a side nailed staple, do not pull straight up from the tongue. This will damage the surface of the board. Instead, pull out the staple from the tongue at the front of the board with all pressure from the hammerhead directed into the subfloor.

The manufacturer of the flooring is not responsible for any damage caused by the use of improper fasteners, improper adapters as well as staples or cleats or tools or minor squeaking on mechanically fastened floors.

#### Step 1: ESTABLISH A STARTING POINT

- Before beginning the actual installation, provide a proper layout of flooring by laying out several rows of flooring end to end in a staggered pattern.
- Leave an expansion space the thickness of the wood flooring at all vertical surfaces.
- Allow for a minimum 6" stagger of the end joints of the adjoining row, distributing short and long lengths equally over the areas where the flooring is to be installed.
- Distribute lengths, avoiding "H" patterns and other discernible patters in adjacent runs. Stagger end joints of boards row to row a minimum of 6" for strip flooring, 8-10" for 3-5" plank, and 10" for plank wider than 5",
- Flooring is to be installed at right angles to the floor joists and if possible, in the longest dimension of the room.
- Work out of several cartons at a time to insure proper color and shade mixture.
- To ensure that you have a good straight-line place a mark 1" plus the width of the flooring on the end wall near a corner of the starting wall. Repeat on the opposite corner wall and insert nails into each mark. Snap a chalk line to provide a straight line to help align the planks
- Leave at least 3/4" for expansion at all vertical surface or at least what the baseboard will cover or quarter round trim.

#### Step 2: INSTALLING THE FLOOR

- Fasten a sacrificial board to the floor and check for surface damage, air pressure settings, and tongue damage before proceeding. Make all proper adjustments before installation. Then remove and destroy the board.
- For the first row use the longest straightest boards.
- Leave an expansion space the thickness of the wood flooring at all vertical surfaces.
- Align the first piece on the chalk line with the tongue out. The groove side and end will be facing the starting wall. Pre-drill holes to avoid splitting. Drive 7D or 8D finish nails or screw type flooring nails into the face of the board every 12" approximately 1/3" 3/4" from the edge closest to the starting wall and within 2"- 3" from the ends and in the darker grain of the wood. Keep the starter strip aligned with the chalk line.
- Edge nail the plank by driving the same type nails at a 45° angle through the tongue of the first piece, spacing the nails every 6" 8" and within 2" 3" from the ends. Repeat this process for the entire first row. Upon completion of the first row, go back and sink the face nails with a nail punch. If it appears that the holes will not be covered by the quarter round or wall base fill with putty that blends with the floor color.
- Repeat the edge nailing for the second row but do not face nail like the first row. Typically the first few rows must be edge nailed by hand rather than with a nailing machine due to the close proximity to the wall. When clearance allows, a nailing machine, which drives 2" fasteners with an appropriate mallet, can be used to simplify and speed up the nailing process
- For ease of installation work left to right. Left is determined by having your back to the wall where the starting course is laid.



- Install each succeeding row of planks by edge nailing the tongue side every 8" 10" to within 2" 3" from board ends. Be attentive
  to staggering the ends of the boards at least 6" in adjacent rows to avoid clustering end joints. Even short boards need three or
  more nails.
- Upon reaching the last row to be installed, the planks should be ripped to allow a 3/4" expansion space. The last rows must be
  fastened by nailing approximately 1/2" 3/4" from the back edge of the board every 12". The same process of countersinking the
  face nails and applying putty should be repeated (as above on starting wall).

#### Step 3: FINISHING THE FLOOR

The use of putty to cover small cracks or face nails holes should be considered normal in hardwood flooring installations. Make sure when the installation is complete that the expansion spacers are removed, 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.

#### **GENERAL INSTALLATION TIPS**

- ) Sometimes it is necessary to reverse the direction of the flooring to extend it into a closet or hallway. To do this join groove edge to groove edge using a slip tongue (available from your distributor). Glue the slip tongue in place and blind nail the edge. Proceed in the opposite direction laying and nailing the flooring in the recommended procedure.
- ) For a professional and finished appearance frame hearths and other obstructions using mitered joints at the corners.

#### FLOATING FLOOR INSTALLATION METHOD for Click Products (2G)

#### **REQUIRED TOOLS AND ACCESSORIES**

- B Tape Measure
- B Moisture Meter (wood / concrete)
- B Underlayment and Vapor Retarder( if needed)
- B Mallet (light colored)
- B Circular or Hand Saw
- B Miter or Table Saw
- B Drill with 1/16" bit
- B Tapping Block
- B Chalk Line and Chalk
- B Hammer
- B Safety Equipment (Goggles & Mask)
- B Utility Knife
- B 3/8 "or 1/2" Spacers
- B Hardwood Flooring Cleaner
- B Broom
- B Foam Underlayment
- B 6 mil polyethylene film
- B Clear Packing Tape

#### NOTE:

When installed using the floating installation method all sub-floors should be covered with either a 3 in 1 Underlayment or an approved 1/8" thick closed cell foam underlayment following the instructions inside the packaging. When using a 1/8" thick closed cell foam underlayment over a concrete sub-floor, you must also use a 6 or 8 mil polyethylene film which acts as a vapor retarder.

All engineered products when installed using the floating installation method can be installed below grade, on grade, and above grade. However, the following instructions must be followed for below grade installation.

The concrete slab should be sealed or painted with a good concrete sealer. Then the 3 in1 Underlayment or the 6 mil poly film should be installed with ends butted together and taped with a clear 2" packaging tape to prevent any moisture from coming up through the seams. The 3 in 1 underlayment or 6 mil poly film should be lapped up the wall 4" all the way around the room. This can be trimmed off after moldings are installed. If you are using the 3 in1 underlayment, you are ready to begin the installation. However, if you have used the 6 mil poly film, roll out on top of the 6 mil poly film a 1/8" thick closed cell foam, butting the edges but not overlapping.

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.



#### RADIANT HEAT SUB FLOORS:

This product is not to be installed over radiant heated floors.

# 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 room's width 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" or 1/2" expansion spacers (depending on the thickness of the flooring) 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 make maintaining a good square easier.
- **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' require the use of at-molding for expansion.

#### 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 with the first and lock the end joints together by pushing it straight down on top of the first plank.
- 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 side of the second-row plank onto the plank on the first row by inserting the tongue of the second plank into the groove on the first plank while holding the plank at a 45-degree angle from the floor. Press the second plank down flat, and the tongue will lock firmly into place.



After locking in place, lay the remaining planks in the row by first locking the long side in place and then tapping the end of the plank to slide firmly into place at its end. (Gently tap down end joint with the light colored mallet to ensure they ends are locked).

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 insuring the edges of both planks meet evenly while applying equal pressure while rotating the plank.

) 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 and the boards glued together using 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" or 1/2" 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, 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.



#### FLOATING FLOOR INSTALLATION METHOD for Tongue and Groove

#### REQUIRED TOOLS AND ACCESSORIES:

- B Tape Measure
- B Moisture Meter (wood / concrete)
- B Underlayment and Vapor Retarder( if needed)
- B Mallet (light colored)
- B Circular or Hand Saw
- B Miter or Table Saw
- B Pry Bar
- B Drill with 1/16" bit
- B Tapping Block
- B Chalk Line and Chalk
- B Hammer
- B Safety Equipment (Goggles & Mask)
- B Utility Knife
- B 3/8 "or 1/2" Spacers
- B Hardwood Flooring Cleaner
- B Tongue and Groove Flooring Adhesive (PVAC)
- B Broom

#### NOTE:

When installed using the floating installation method all sub-floors should be covered with either a 3 in 1 Underlayment or an approved 1/8" thick closed cell foam underlayment following the instructions inside the packaging. When using a 1/8" thick closed cell foam underlayment over a concrete sub-floor, you must also use a 6 or 8 mil polyethylene film which acts as a vapor retarder.

All engineered products when installed using the floating installation method can be installed below grade, on grade, and above grade. However, the following instructions must be followed for below grade installation.

The concrete slab should be sealed or painted with a good concrete sealer. Then the 3 in1 Underlayment or the 6 mil poly film should be installed with ends butted together and taped with a clear 2" packaging tape to prevent any moisture from coming up through the seams. The 3 in 1 underlayment or 6 mil poly film should be lapped up the wall 4" all the way around the room. This can be trimmed off after moldings are installed. If you are using the 3 in1 underlayment, you are ready to begin the installation. However, if you have used the 6 mil poly film, roll out on top of the 6 mil poly film a 1/8" thick closed cell foam, butting the edges but not overlapping.

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.

#### Step 1: POSITION THE FIRST ROW

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

Before starting, first measure the width of the room, and then divide the room's width 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.
- Begin the installation of the planks in the left hand corner of the room with the long direction parallel to the incoming sun light source or to the longest wall of the room (if this is possible). Be sure to install the first row of boards with the groove side facing the wall. Use 3/8" or 1/2" expansion spacers (depending on the thickness of the flooring) 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.
- 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' require the use of a t-molding for expansion.



Note: When using the Floating install method, every doorway less than 6' wide must be transitioned using a "T" molding.

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 of the row to present a true square base for the rest of the floor. When the first row is complete, you must have a straight, even base established.

#### Step 2: GLUING THE BOARDS TOGETHER

When installing the products which have been **approved** for the floating installation method, the boards must be side and end glued using tongue & groove Adhesive.

Always apply the adhesive into the bottom of the groove on each board. <u>Do not fill the groove</u>. Apply a continuous bead, filling the bottom of the groove no more than halfway full. Start & stop adhesive 2" from the ends on the long side of the board and 1" from the ends on the butt end.

**Note:** If any excess adhesive squeezes up to the finished surface, wipe it off immediately using a water dampened cloth or adhesive remover. Then dry the surface and buff with a dry cloth. If the adhesive has dried, use a soft white cloth moistened with adhesive remover. Do not abrade the wood surface.

#### Step 3: INSTALLING THE REST OF THE FLOOR

Note: Always stagger 12" to 18" between end joints of adjacent board rows. The end joints should not repeat visually across the installed floor.

After installing the first row of boards, apply the adhesive to the first board on the second row using the above gluing instructions. Connect that board to the first row making sure that there is at least a 6" stagger between the end joint of the board on the first row.

- Distribute lengths, avoiding "H" patterns and other discernible patters in adjacent runs. Stagger end joints of boards row to row a minimum of 6" for strip flooring, 8-10" for 3-5" plank, and 10" for plank wider than 5",
- Work out of several cartons at a time to insure proper color and shade mixture.

Tap the boards together with a a hammer and a tapping block. Be sure that the tapping block is against the tongue only and use only a gentle tapping motion to tap the boards together. Excessive force will damage the board making it difficult to install additional boards. Do not tap on the groove side of the boards as this will cause damage to the boards. Once the board has been tapped into place check for a tight fit on sides and ends.

To install the rest of the flooring, continue placing the boards from left to right, plank by plank, and row by row.

**Note:** When installing around fixed objects, small areas or even in general installation areas, the use of installation straps may prove helpful for securing boards together. Installation straps are a handy tool that will insure a tight fit when used to strap each continuous row of installation.

#### 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, unglued, 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 against the wall. Use 3/8" or 1/2" 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.

#### Note: Floor should remain free of foot traffic for a minimum of 12 hours while adhesive sets.

#### Step 5: FINISHING THE FLOOR

A drying time of 24 hours is recommended before any damp mopping, cleaning or heavy objects or furniture can be put back into place.

The use of putty or a non-silicone based filler to cover small cracks should be considered normal in hardwood flooring installations. 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 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.

# HIDDEN FALLS TECHTANIUM Lifetime Residential Warranty

### **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 generates wood dust.

The State of Minnesota( Statute 1984 sections 144.495 and 325F.18 ) require all HDF and plywood sold or used in Minnesota meet 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 /or 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 high 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 professional. 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 they happen. 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.

• 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** damp mop. Periodically clean the floor with a hardwood flooring cleaner, which is specially formulated for the finish. We recommend a Formulated Hardwood Floor Cleaner.

**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, water, oil soap detergent or any other liquid cleaning material. This could cause swelling warping, delamination, and joint-line separation, and void the warranty.

Do not use any type of buffing machine.

#### **PROTECTING YOUR FLOOR**

- Use quality area rugs and doormats by outdoor entrance areas to prevent dirt, sand, grit and other substances such as oil, as phalt 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 no-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.

Maintain a normal indoor relative humidity level between 35 and 55% and a temperature of 60°-80° F throughout the year, to minimize the natural expansion and contraction of wood.

- Heating Season (Dry): A humidifier is recommended to prevent excess shrinkage due to low humidity levels. Wood stove and electric heat tends to create very dry conditions.
- **Non-Heating Season (Wet):** An air conditioner or dehumidifier or periodically turning on your heating system can maintain humidity during the summer months. Avoid excessive exposure to water during periods of inclement weather.

Avoid gouges or cuts on your floor from sharp objects. While your floor is very wear resistant, sharp or pointed objects can nevertheless damage it.

Don't 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 different 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.

#### MOLDINGS

#### Installation Tips:

- ) Moldings must be predrilled 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 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 Prefinished Solid and Engineered Hidden Falls Hardwood Flooring in North America to the following warranties:

#### 5 - YEAR 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 5 years from the date of retail purchase under normal commercial traffic conditions so long as all care and maintenance instructions provided are followed. Failure to do so may void this warranty.



#### LIMITED LIFETIME FINISH and WEAR WARRANTY

Manufacturer warrants that the factory applied finish will not wear through to bare wood, peel off, or delaminate for a limited lifetime of the purchase under normal and ordinary residential use, with proper maintenance and floor care. These warranties apply only to the original purchaser and the original residential location where the product is installed and are not transferable.

#### 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 dry residential applications.

Any product designated as "tavern," "economy," "cabin grade," "seconds," 'B grade" or "as is" is not covered by any of these warranties.

Hidden Falls hardwood flooring is a natural product 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 and shall not be considered a structural defect.

What finish wear-through is defined as 100% finish removal over a minimum of 10% 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, THE MANUFACTURER, AT ITS OPTION, WILL EITHER:

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.

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. Installation of the replacement products will be at the homeowners expense. If professionally installed, the manufacturer will pay the reasonable labor costs to perform the replacement or repair during the first five (5) years from the date of the original purchase. Any and all labor costs must be pre-approved by the manufacturer. In the event that 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 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 construction only.

Do not use over Radiant Heat.

The flooring must be installed on grade or above grade according to the recommended installation instructions. Solid cannot be installed below grade.

Material and relative humidity in the area of use must be within a normal range of 35%-55%.

Problems caused by the failure of the homeowner or installer to evaluate the job site and job site conditions are not covered. All site test records must be available.

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 clearly 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, and original purchase price.

The manufacturer must receive written notice within 30 days after discovery of any claimed defect or failure covered under this warranty but within the time period applicable to the limited warranty.

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 in accordance with industry standards from a standing position with normal lighting and no glare.

Written notice and 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 and/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. This includes splitting or cupping resulting from exposure to improper environmental conditions.

Hollow spots between the flooring and the subfloor.

Expansion and contraction of the hardwood due to seasonal changes in climate shall not be considered defects.

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, water, moisture and saturation, insects, 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.

Failure to follow the manufacturer's written installation instructions including protecting the floor from subfloor moisture, storage, and handling.

Failure to follow the manufacturer's written installation instructions on approved adhesives. Damage caused by use of water-based adhesive over sheet vapor retarder or sound insulation

Excessive or inadequate humidity in the area. Relative humidity in the area of use must be within a normal range of 35-55%. Stains as a result of negligence, chemical or industrial products, wax, or oil soaps for cleaning, or standing liquid for a prolonged period of time.

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 or wet 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 made void if man-made or natural disasters including leaking or broken plumbing, fire, flood, wind, lightening, earthquake, prolonged power outages, or standing water occur during or after installation.

Planks installed with obvious defects finish defects.



#### 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.