# 3/8" ENGINEERED FLOORING INSTALLATION INSTRUCTIONS

# Floor Care Guide & Residential Warranty

Please read the following information and instructions in their entirety before proceeding with installation.

This flooring is manufactured in accordance with accepted industry standards, which permit a defect tolerance not to exceed 5%. The defects may be manufacturing or natural.

## **IMPORTANT**

- To ensure the full benefit of warranties, these instructions and maintenance procedures must be followed.
- Hardwood flooring is a beautiful product with natural variations in color, tone and grain. We cannot warrant against color variations within a floor nor variations between samples and the installed floor.
- Subfloors must be dry, level and clean.
- Both room and flooring must be properly acclimated to temperature and humidity conditions.
- Installers: Inform your customers of the details in section: "Installers – Advise Your Customer of the Following."

- Do not open flooring packages until you are ready to begin installation.
- Work out of several cartons at the same time to ensure color and shade mix.
- Do not use water based adhesives over sheet vapor barriers or sound insulation.
- Not recommended for bathroom or other high moisture installations.
- Use of stain, filler or putty stick for defect correction during installation should be accepted as normal procedure.

# INSTALLER/OWNER RESPONSIBILTY

- When flooring is ordered, 5% must be added to the actual square footage needed for cutting and grading allowance.
- The installer assumes all responsibility for final inspection of product quality. This inspection of all flooring should be done before installation. Carefully examine flooring for color, manufacturing, factory finish and quality before installing it. The installer must use reasonable selectivity and hold out or cut off pieces with defects, whatever the cause. If material is not acceptable, do not install it and contact the seller immediately.
- Prior to installation of any hardwood-flooring product, the
  installer must determine that the job-site environment and the
  subfloors involved meet or exceed all applicable standards and
  recommendations of the construction and materials industries.
  These instructions recommend that the construction and subfloor be
  dry, stiff, and flat. The manufacturer declines any responsibility for
  job failure resulting from or associated with sub-surface or job-site
  environmental deficiencies.

## INSTALLERS - ADVISE YOUR CUSTOMER OF THE FOLLOWING -

#### Radiant Heating

See the "Radiant Heat Applications" under "Residential Warranties" section for specific details to inform your customers about radiant heating.

#### Floor Repair

Minor damage can be repaired with a touch-up kit or filler. Major damage will require board replacement, which can be done by a professional floor installer.

#### Seasons: Heating and Non-Heating

Recognizing that wood floor dimensions will be slightly affected by varying levels of humidity within your building, care should be taken to control humidity levels within the 35–55% and  $68^{\circ}$ – $72^{\circ}$  Fahrenheit

temperature range. To protect your investment and to assure that your floors provide lasting satisfaction, we recommend the following:

- Heating Season (Dry) A humidifier is recommended to prevent excessive shrinkage in wood floors due to low humidity levels. Wood stoves and electric heat, in particular, tend to create very dry conditions.
- Non-Heating Season (Humid, Wet) Proper humidity levels can be
  maintained by use of an air conditioner, dehumidifier, or by turning on
  your heating system periodically during the summer months. Avoid
  excessive exposure to water from tracking during periods of inclement
  weather. Do not obstruct in any way the expansion joint around the
  perimeter of your floor.

## TOOLS NEEDED FOR INSTALLATION

- Handsaw, circular saw or jigsaw
- Chalk line
- Hammer
- Tape measure
- Pull bar
- Tapping block
- Wooden or plastic spacer wedges
- Moisture meter (wood, concrete or both)

For glue-down installations, use DriTac® 6200, DriTac 9200, Parabond® Millennium 2002, Bostik Best®, Taylor 2071 or equivalent flooring adhesive (See your distributor for adhesive recommendations.) Follow manufacturer's guidelines and tool recommendations when using adhesive. Do not use water based adhesives over sheet vapor barriers or sound insulation. For floating installations, use white wood glue (PVAC).

**CAUTION:** By not using proper tools, "puckering" may result on the face of the plank. The manufacturer is not responsible for problems caused by use of improper tools. See your distributor for tool recommendations and use. **NEVER** hit planks directly with a hammer. **ALWAYS** use a wooden block to protect the edges of the boards.

## - INSTALLERS - CAUTION: WOOD DUST

Sawing, sanding and machining wood products can produce wood dust. Airborne wood dust can cause respiratory, eye and skin irritation. The International Agency for Research on Cancer (IARC) has classified wood dust as a nasal carcinogen in humans.

Precautionary Measures: If power tools are used, they should be

equipped with a dust collector. If high dust levels are encountered, use an appropriate NIOSH-designated dust mask. Avoid dust contact with eye and skin.

First Aid Measures in case of Irritation: In case of irritation, flush eyes or skin with water for at least 15 minutes.

# PRE-INSTALLATION PROCEDURES

#### ACCLIMATING THE HARDWOOD FLOORING

HVAC systems should be fully operational at least 14 days prior to flooring installation, maintaining a consistent room temperature between 68-72° Fahrenheit and relative humidity between 35-55%. This not only stabilizes the building's interior environment, but also is essential when acclimating hardwood flooring to the job site.

Hardwood flooring should be unloaded and handled with care and stored within the environmentally controlled site. Flooring stored upon "on-grade" concrete floors should be elevated at least four inches to allow air circulation under cartons. Cartons should be spaced out, not stacked or stored on pallets. Leave hardwood flooring in closed cartons during acclimation period. Typical applications require at least a 48-hour acclimation period.

#### ROOM PREPARATION

Remove existing baseboards, quarter rounds, thresholds and undercut door jambs, using a piece of flooring material as a guide. Door frames and other wooden elements should be sawed off at the bottom in order to be able to push the panels under them.

#### PRE-INSTALLATION INSPECTION

It is the responsibility of the installer to **inspect each board for visible defects before installation**. Any board with visible defects will be replaced at no cost. If the defective board has been installed, no cost of labor will be paid for repair or replacement of defect.

#### SUBFLOOR TYPE

This flooring can be installed over the following subfloors if properly prepared. For other types of subfloors please contact your distributor.

- Concrete: On, above or below grade installations are acceptable.
   Must be clean, dry and smooth within 3/16" over 10'.
- Acoustic Cork: Must be bonded to the surface. Density must be between 11.4 and
  - 13 lbs/cubic foot. Cork must be a maximum of 1/4" thick, made from pure cork with polyurethane binders.
- Terrazzo and Ceramic Tile: Should be lightly sanded and cleaned with mineral spirits. Allow the mineral spirits to dry prior to spreading the adhesive. If grout lines are too deep they need to be filled and allowed to dry before installation.
- Wood Type Subfloors: Includes plywood, OSB, and underlayment
  particle board and tongue and groove boards. Must be smooth and
  dry. Squeaks and popping areas should be screwed prior to spreading
  adhesive.
- Vinyl: Includes sheet and vinyl tile. Vinyl must be securely fastened to
  the subfloor with full spread adhesive. Loose laid or perimeter glued
  sheet vinyl must be removed. Lightly sand vinyl, clean with mineral
  spirits and allow to dry prior to spreading adhesive.

#### **SUBFLOOR PREPARATION** - Subfloor must be:

- Clean and free of wax, paint, oil, and debris. Scrape smooth and sweep.
- Subfloor should be flat to 3/16" over 10'. If subfloor prep work is required, "hills" should be sanded down and "valleys" filled with an underlayment patch, developed by a reputable manufacturer for use with hardwood flooring. Do not sand sub-surfaces such as vinyl or synthetic tiles that may contain asbestos. For depressions less that 1/4", it is possible to use dry sand as a leveler.
- Structurally sound. Screw loose areas to reduce squeaking and replace water damaged or delaminated sub-flooring or underlayments.

#### WOOD SUBFLOOR MOISTURE TESTING

Check moisture content of subfloor especially adjacent to exterior walls and plumbing fixtures. Moisture content of subfloor must not exceed 12% or have more than a 4% difference than moisture level of product being installed. If more than a 4% difference, determine the source of moisture and remedy prior to installation.

#### CONCRETE SUBFLOOR MOISTURE TESTING

Several tests are outlined below. These tests do not guarantee a dry concrete slab year round. With that in mind, a moisture barrier using a minimum of 6 mil poly film should have been installed between the ground and concrete. See "Moisture Barrier System" below.

- 3% Phenolphthalein in Anhydrous Alcohol Solution Do not apply solution directly to concrete surface. First, chip 1/4" deep into concrete test area and apply several drops of the solution. If any change in color is observed, further testing is required.
- Calcium Chloride Moisture transfer should not exceed 3 lbs/1,000 square feet with this test. One test must be performed every 250 sq ft.
- Tramex Concrete Moisture Encounter Meter Moisture readings using a metering device should not exceed 4.5 on the upper scale.

#### MOISTURE BARRIER SYSTEM

If the above tests reveal unacceptable moisture levels, install sheet vinyl (PVC) directly to concrete slab. Follow instructions from sheet vinyl manufacturer, using a premium grade alkaline resistant adhesive and full spread application system to bond vinyl to subfloor. Do not use water based adhesives over sheet vapor barriers or sound insulation.

#### SET UP

- Caculate area and add 5% of material to allow for cutting waste and minor natural or manufacturer's defects.
- Work out of several cartons at the same time to ensure variation.

#### LAYOUT

- Layout should be designed to save labor and materials as well as to
  enhance the appearance of the floor. The floor will be stronger and more
  stable if you lay it so that the joints in the rows are staggered at least
  10 inches. Staggered or irregular joints mean less material waste and a
  better overall appearance. Stair stepping and "H" joints are not as visually
  pleasing as randomly staggered end joints and will waste labor and material.
- Plan the layout so that the last row of flooring (which usually needs
  to be cut lengthwise) is not too narrow. In some cases, it may be
  necessary to cut the first row as well as the last row. Measure across
  the entire room to calculate the width of the last board. The last board
  cannot be less than 2" wide. If necessary, rip your first row (remove
  tongue edge) so last board can be at least 2" wide.
- Allow 3/8" expansion space along all walls. Flooring should be laid
  at right angle to the floor joist and, if possible, in the directions of the
  longest dimension of the room.
- The greater the surface area, the greater the room for expansion required. For rooms larger than 1,000 sq. ft. or exceeding 25' in any direction the perimeter expansion space must be increased 1/16" for every additional 3'. Also, additional expansion joints must be added in the middle of the room or in appropriate doorways and archways. The expansion space should be covered with transition moldings (T-moldings). Do not fill the expansion gaps.

# **INSTALLATION OVER RADIANT HEAT**

### **INSTALLERS - ADVISE YOUR CUSTOMER:**

- Maximum allowable wood surface temperature is 80° Fahrenheit. Note that rugs can increase surface temperatures 5° Fahrenheit or more.
- · Maintain 35-60% humidity at all times. If necessary, use humidifiers.
- Room temperature should not vary more than 15° F season to season.

#### **HEATING SYSTEM REQUIREMENTS**

- Only low temperature radiant heating systems with control systems assuring floor's surface temperatures never exceed 80° F are permitted.
- The entire floor area must be evenly heated. Even with perimeter heating systems the floor's surface temperature must never exceed 80° F.

#### SETTING THE HEATING SYSTEM FOR INSTALLATION

- System must be fully operating at normal temperature for a minimum of 21 days prior to floor installation.
- The heating system must be turned off 24 hours prior to installation and must remain off for 24 hours after installation.
- 24 hours after installation is complete, turn on the heating system and gradually increase the temperature over a 7-day period to normal.

#### SUBFLOOR

- The floor construction should have a heat dissipating layer that provides an even temperature across the entire floor area and avoids high temperatures in any area. Under plywood subfloors heat transfer plates or insulation must be in place.
- The subfloor should be completely dry. Moisture on a dry weight basis must not exceed 1.5% for concrete, 0.3% or less for gypsum and 6–12% for wood subfloors.
- A vapor barrier should be installed on all concrete, stone, mineral or wood subfloors. It must be directly under and as close to the flooring as possible.
- Heating pipes must be covered with 1" of concrete or be a minimum of 1/8" below bottom of plywood subfloor.
- The wood floor must lie tight against the sub-surface without an air gap that can cause considerable drying out of the wood.

#### LAYOUT

Separate adjoining radiant heated and non-radiant heated areas with expansion joints. Continue with Floating Installation.

# FLOATING INSTALLATION

#### **INSTALL UNDERLAYMENTS**

Install 6 mil Polyethylene vapor barrier over entire flooring surface. Overlap sheets of Polyethylene 16" and tape together creating an airtight seal. Using 1/8" foam padding, roll out one roll at a time over vapor barrier being careful not to poke holes or otherwise damage material during installation. Run padding up walls 1" to 1.5" and secure in place with tape. Join padding sections with tape strip. Tape down any additional loose edges. A "2-in-1" foam padding /moisture barrier may be substituted for Polyethylene.

#### INSTALLING THE FLOOR

Boards are installed left to right with the groove side facing the wall. A stair-step pattern will be repeated throughout installation. Stagger the ends of the boards a minimum of 8 inches. Leave a minimum 3/8" expansion around all vertical objects such as walls, poles, and stairs. If starting wall is uneven, trace the contour of wall, using a scriber, onto first row of planks and cut to size.

#### APPLICATION OF ADHESIVE

To secure a durable wood floor the boards must be bonded with adhesive in the tongue and groove. We recommend waterproof PVAC glue. The glue must be applied in a continuous 1/8" bead on the inside top of the groove on both the long and short edges.

#### GLUING AND TAPING

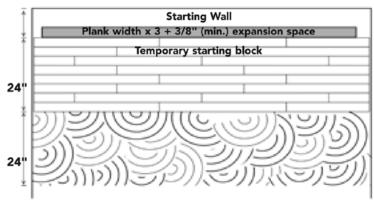
Dry fit first row using stair-step pattern. Number each plank in the order of installation. When you reach the last plank in first row, turn plank 180° so tongue is flush against tongue of previous plank. Mark the plank and cut to length. Dry fit final plank of row. Begin dry fitting second row, starting with (if possible) left over piece from previous row. Be sure to stagger end of boards at least 10" to achieve effective stair step pattern. Floating installation is completed by gluing and taping flooring profiles together. Separate first two rows noting installation order. Holding the first board with the tongue resting in the palm of your hand, apply a thin bead of glue in the groove on the side and end of the board. Repeat process with subsequent planks. Press each board firmly together, tapping profiles lightly with a block and hammer if necessary.

Clean excess glue from between boards with a damp cloth. Tape each board together at side and end seams. Often the last row will not end with a full plank. When this happens, place a full row of planks on top of the last row installed. Insert a 3/8" spacer against wall, and using a full width plank, trace distance from wall onto final row. Cut planks for final row to designated width. Apply glue and fit into place. Tape may be removed within one hour. Allow 12 hours before placing furniture on floors and 24 hours before introducing heavy objects or full traffic.

Note: Do not install cabinets or walls on top of floating floors.

## GLUE-DOWN INSTALLATION

- To determine a straight first starting row, use a snap line the width of a few boards plus 3/8" expansion space from the wall. To keep first rows straight and in place, nail a straight 1" x 2" or 1" x 4" holding board on the first snap line.
- Make another snap line at about 24" from the holding board.
- Spread adhesive in first working area. Do not spread more adhesive than can be covered within 20 minutes.
- When the first section is complete, strike another parallel snap line from the last row installed, spread the adhesive and complete the section.
- Repeat section by section until complete. Remove starting board, spread adhesive and complete the area from the starting board to the wall.
- To fit the last piece, lay it upside-down with the tongue edge parallel to the tongue edge of the piece next to it, the short end butting up against the wall. Mark the cutting line on the back of the board and cut it to the correct width (save the cut off piece for the second row). Turn it over, fit it and glue in place.



# STAPLE-DOWN W/ GLUE ASSIST INSTALLATION

## SUBFLOOR PREPARATION

Remove all dirt and rough areas by thoroughly cleaning, sanding and leveling. Note: particle board is not a suitable subfloor for staple-down installation. See "Wood Type Subfloors: for details. If installing over a crawl space or wet basement, it is advisable to use the full glue down method, this will help to retard moisture from below. Keep in mind there is no complete moisture barrier system for staple down installations.

CAUTION: Nail telegraphing (puckering) is a risk with nail-down installation and is not included in the warranty.

## INFORMATION FOR PNEUMATIC FASTENING MACHINES

Note: Use pneumatic staplers with correct shoe base for thickness of the product.

When installing these engineered wood planks by stapling, it is necessary to use the proper type of flooring stapler made for these engineered wood floors. Incorrect tool adjustment or cleat size may cause displaced wood to create blemishes on the floor surface.

For 3/8" flooring, use 1-1/4" long staples or 20 gauge cleats. Place 2" from the ends and every 12" along the edge tongues. This will help insure a satisfactory installation. It is best to set the compressor PSI at 80-85 lb. to keep the fasteners from going through or breaking the tongues. Improper fastening techniques can cause squeaks in the floor.

Adjustments may be necessary to provide adequate penetration of the fastener into the tongue. You want the fastener flush in the staple pocket, not counter sunk or protruding. Improper pressure settings and failure to use proper adapters can cause severe damage to the flooring.

Low air pressures may fail to properly set the fastener and damage adjoining boards. Air pressures set too high may cause damage to the tongue which may dramatically reduce the holding power of the fastener causing loose, squeaky floors. Make certain that the compressor has a regulator in-line with the air hose for proper adjustment.

Set the compressor pressure to recommended PSI and adjust accordingly using a "practice" board. Use a scrap piece of flooring material to set tools properly before installation. Check for surface and tongue damage before proceeding with installation.

#### SUPPLEMENTAL ADHESIVE REQUIRED

It is required that supplemental construction adhesive be used with staple down installation of wide planks. Failure to supplement staple use with adhesive may result in board movement or noises to emanate from moving boards which will not be considered a manufacturing defect. These adhesives may be trowelled on using methods and trowel recommended by the manufacturer or laid down in a bead if using sausage or cartridge adhesive. If trowelling and stapling the floor you should spread rows of adhesive that are perpendicular to the board direction and no more than 12 inches apart. If beads of adhesive are used they should be applied to the subfloor in a serpentine fashion along the entire length of the boards. A flexible wood flooring adhesive such as Bostik Best, Liquid Nail, Bona R851, R850T (tube), or urethane construction adhesive should be used. (See your distributor for adhesive recommendations.) Follow manufacturer's guidelines and tool recommendations when using adhesive. Do not use water based adhesives over sheet vapor barriers or sound insulation. Care must be taken to remove excess adhesive from the floor surface immediately or permanent damage may result.

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# STAPLE-DOWN W/ GLUE ASSIST INSTALLATION (CONT.)

#### SETTING FIRST ROW

To determine a straight first starting row, use a snap line the width of a few boards plus 3/8" expansion space from the wall. To keep first rows straight and in place, nail a straight 1" x 2" or 1" x 4" temporary starting block on the first snap line. (See illustration above.)

#### BEGINNING INSTALLATION

Place the planks with the tongue facing away from the wall and along your temporary starting block.

Blind nail at a 45° angle through the tongues. Pre-drill the holes in the tongues to avoid splitting the tongue. Place 6d nails 2" from the ends and every 6" along the sides. It will be necessary to blind nail the next 2 rows. A brad nailer with 1"-1/2" brads can also be used to blind nail and no pre-drilling is needed. Pre-test to see that tongue does not split.

Counter sink the nails and fill with a filler that blends with the flooring installed. Place the nails in a dark grain spot in the board. The base or shoe moulding will cover the nails when installed after completion of the

installation. Continue the installation using an engineered wood flooring stapler, using recommended staples.

#### CONTINUE WITH STAPLING

Continue installation with several rows at a time, tightening boards as necessary to reduce gaps before fastening. Use 18 Gauge staple, at least 1-1/2" long with 1/4" crown. Place 2" from the ends and every 6" along the edge tongues.

#### **LAST ROWS**

The last 1–2 rows will need to be face nailed where clearance does not allow blind nailing with stapler or brad nailer. Brad nail or face nail on tongue side. Rip the final row to fit and face nail. If the final row is less than 1" width, it should be edge-glued to the previous row, before installation. The two joined rows can be face nailed as one board. Go back to the starting wall, remove the temporary starting block and complete final rows using 6d nails, counter sunk and filled.

## ALL INSTALLATIONS – COMPLETING THE JOB

- Remove spacer wedges.
- Cover all expansion gaps along walls and vertical protrusions with base board, quarter round or pocket moldings. Nail moldings to wall, never to the flooring.
- Clean, sweep and vacuum installed flooring before use.
- Use of stain, filler or putty stick for defect correction during installation should be accepted as normal procedure.
- If the floor is to be covered, use a breathable material such as cardboard. Do not cover with plastic or any other material acting as a vapor barrier.

# **FLOOR CARE GUIDE**

#### PREVENTATIVE MAINTENANCE

To ensure the full benefit of warranties and to extend the beauty of your new hardwood floor, we recommend the following preventative maintenance steps for your hardwood floor.

- Use floor mats at all entrances to help keep dirt and moisture from being tracked in. Area rugs are recommended in high traffic areas and at sinks. Mats and area rugs should be slip resistant with backing that will not discolor the floor.
- To help guard against scratches and dents, install felt floor protectors under furniture legs and equipment.
- Use soft rubber castors for rolling furniture.
- Remove high heels or shoes that need repair. Some types of high heel shoes can severely damage the surface of any floor covering.
- Maintain a healthy humidity at 35-55%. Certain regions within North America have extreme changes in humidity levels that can affect all wood floors. To maintain healthy humidity of 35-55%, it may require either a humidifier or a dehumidifier.

See your dealer for recommended maintenance and floor care products for polyurethane finished hardwood flooring.

#### REGULAR MAINTENANCE

- · Do not let sand, dirt and grit build up on your floors.
- · Dust, sweep and vacuum floors regularly.
- For normal cleaning use a sponge mop with clear water, squeezed very dry. DO NOT wet mop your hardwood floor.
- All newly installed flooring needs to be swept or vacuumed, removing
  any dirt or debris before using liquid flooring cleaner. For heavier
  cleaning, use hardwood floor cleaner specified for polyurethane
  coated hardwood floors with a sponge or sponge mop. Hardwood
  floor cleaner is available at most local hardware stores. DO NOT use a
  steam cleaner and never use wax! Never use wax!







# RESIDENTIAL WARRANTIES

#### LIMITED STRUCTURAL INTEGRITY WARRANTY

Products, in their original manufactured condition, to be free from defects in lamination, assembly, milling and dimension. Products will remain free from these structural defects for life provided they are installed in accordance with our installation guidelines and are maintained in a controlled environment as outlined in our installation guidelines. This warranty is extended to the original purchaser of the goods and is not transferable.

#### LIMITED FINISH WARRANTY

Warrants to the Buyer that the factory applied finish of the wood floor will not wear through or lose adhesion to the bare wood as a result of normal use for the duration of the warranty period, as stated for the product at the time of purchase (25 years). Diminished gloss, scratches, and dents is not considered wear through of the finish. In the event the finish wears through or releases from the wood floor, we will, at our option, repair or replace the affected planks or area. The warranty applies to defects in excess of 10% of the total square foot purchased.

#### **FINISH WARRANTIES**

Urethane Finished Products: 25 year residential, no commercial warranty.

#### RADIANT HEAT APPLICATIONS

This warranty does not cover radiant heat applications. For information about our warranty as it relates to radiant heat applications please contact dealer.

#### **SEASONAL CHANGES**

Wood is a hygroscopic material and will expand and contract with changing moisture conditions (seasons). Some minor separation between boards might occur during seasonal change. This is not considered a defect and is not covered by this warranty.

#### WARRANTY EXCLUSIONS

Warranties do not cover structural damage that results from products installed or maintained in environments with relative humidity outside the range of 35-55%. Extreme moisture conditions, specifically dry environments, can damage the structural integrity of the flooring. Carefully read our Installation Guidelines for a complete list of Acceptable Jobsite Conditions.

Warranties do not cover indentations, scratches, defects or damages caused by the failure to follow all of the manufacturer's installation procedures. Responsibility for inspection and approval of wood floors falls to the consumer and installer prior to permanent installation. The installer is the final inspector of the product. We are not responsible for labor costs associated with the repair or replacement of visually defective planks after the floor is installed. In addition, prior to installation the installer should make certain that the subfloor is properly inspected for flatness and moisture conditions according to the NWFA guidelines.

Warranties do not cover normal wear and tear, indentations, scratches, defects or damages caused by improper maintenance, insufficient protection, misuse or improper alterations of the original manufactured product.

Warranties do not cover damages caused by the use of oil soaps, liquid or paste wax products or other household cleaners that are not recommended maintenance products.

Warranties exclude non-factory applied finishing including, but not limited to refinishing.

Warranties do not cover indentations, scratches, defects or damages caused by negligence or abuse including, but not limited to water, insects, pets, spiked or damaged heel shoes, vacuums, furniture, appliances, casters, falling or dropped objects or construction traffic, or failure to take proper precautions to protect furniture legs and feet with protective pads and properly functioning casters or improper protection during the construction process when moving heavy objects, or during times of heavy traffic.

Warranties do not cover defects and damages caused by man made or natural disasters including but not limited to, leaking or broken plumbing, fire, flood, earthquake or standing water during or after construction. Warranties do not cover splits, checks or cracks in flooring discovered after installation. No warranties apply to any product or products designated as off-goods or goods sold "as is".

Limited structural integrity warranty does not apply to product subjected to environments that fall outside of 35% - 55% interior relative humidity. Warranties do not cover squeaking, creaking or popping in flooring.

#### THE FOLLOWING ITEMS ARE NOT COVERED BY WARRANTY:

- Flooring installed in a method other than provided by the included installation instructions.
- Damage caused by normal wear and tear, negligence, accidents, misuse or abuse.
- Damage caused by vacuum cleaners.
- Damage caused by appliances, furniture and casters.
- Damage caused by cutting from sharp objects.
- Damage caused by flooding, fire, and other natural disasters and acts of God.
- Reduction in gloss, scratches or indentation due to sand or other abrasives, pets, insects, construction traffic, or failure to maintain the floor as required.
- Color, shade, sheen or texture variations between samples or replacement flooring and the actual material.
- Color variations between flooring and/or samples and other flooring or wood products, which you wish to match (e.g. cabinets, stair railings, trim, etc.).
- Changes in color due to exposure to sunlight and age.
- Deficiencies related to subfloor/floor assemblies, subfloor preparation materials, and fasteners including, but not limited to, uneven subfloor surfaces, floor deflection or voids in the subfloor.
- Noises, squeaks, etc.
- Natural wood characteristics such as variations in grain, color, mineral streaks and knots.
- For reclaimed and hand scraped style products, including, but not limited to Durango and Helmsman Collections: overwood or underwood, or variations in natural or man-made textures.
- Natural expansion and contraction resulting in damage or separation between boards or damage caused by low or excessive humidity.
- Sheer, delamination, or other structural damage due to relative humidity levels below 35%.
- Products designated "off-goods" Such products are sold "AS IS."
- Commercial installations of residential products.
- Construction or installation-related damage.
- Floor damage, finish damage, or adhesive breakdown caused by subfloor moisture or water damage, including but not limited to, broken or leaking water pipes, flooding, wet-mopping spills or weather conditions.
- Any failure or damage due to adhesive, adhesive systems, fasteners, or fastening systems.
- Any nail telegraphing (puckering) from nail-down installation.

#### NO OTHER WARRANTIES

This limited warranty is the only warranty given as pertaining to the Limited Structural Integrity Warranty, Limited Finish Warranty, and Commercial Application Warranty, and no other warranties of any kind have been made with respect to flooring products. No warranty of fitness exists beyond the general written description of the product purchased. Some laws do not allow limitations on certain implied warranties. This warranty gives specific legal rights, and there may be other rights which vary from state to state. For further questions please contact your dealer.

IMPORTANT: YOU AND YOUR INSTALLER ARE RESPONSIBLE TO INSPECT FLOORING PRIOR TO INSTALLATION. WE ACCEPT NO RESPONSIBILITY FOR LIABILITIES, CLAIMS OR EXPENSES, INCLUDING LABOR COSTS, WHERE FLOORING WITH VISIBLE OR MEASURABLE DEFECTS HAS BEEN INSTALLED.