

# INSTALLATION GUIDELINES FOR LAMINATE FLOORING

## Please Inspect all Flooring Prior to Installation

Carefully confirm that the Color, Finish, Styling and Quality Fully meet the owner's expectations. If you determine the product does not meet expectations, DO NOT INSTALL and immediately contact your Place of Purchase. Not assume any responsibility, including costs for removal or replacement, for flooring that has been installed that does not meet the owner's expectations for any reason. LAMINATE FLOORING is INTENDED TO BE INSTALLED by NALFA (National Laminate Flooring Association) approved Floating Floor methods.

Light Commercial applications must be pre-approved and Contact your retailer for additional information regarding the approval of Light Commercial jobs.

**PLEASE READ AND REVIEW THE ENTIRE INSTALLATION INSTRUCTIONS BEFORE PROCEEDING WITH THEACTUAL INSTALLATION.**

## OWNER /INSTALLER RESPONSIBILITY

Laminate flooring is characterized by distinctive variations in grain and color. These variations in color and grain, are not flaws, but are a part of the styling, and uniqueness of Laminate flooring. Laminate Floors are manufactured in accordance with the accepted industry standards which Installation Instructions allow a defect tolerance, (natural or manufacturing), of 5% of the total of Laminate Flooring purchase per job. Warranty 95% of the total Laminate Flooring purchase per job. The remaining 5% may be used at the owner's discretion, but is subject to the industry standard 5% defect allowance. All flooring considered defective (outside of that listed in the Warranty Exclusions on the Laminate Floor Warranty and Care sheet), after proper inspection by the installer or homeowner, should be culled, or trimmed out prior to installation and must not be installed. If an individual piece is doubtful as to grade, color, or finish, the installer should not install that piece. Warranties DO NOT cover materials that are installed with visible defects. If material in excess of 5% of the total job amount is found to be unacceptable, contact the place of purchase for your Laminate Floor immediately.

The installer and home owner must assume all responsibility for full inspection of products prior to the installation. Open and select planks from 3 or 4 cartons in order to blend color and grain characteristics, and to allow for staggering of end joints a minimum of 7 to 10 inches. Carefully examining the flooring for color, finish, texture, and quality before installing it. Use reasonable selectivity, and use touch-up markers and putty sticks, as well as culling or cutting out pieces with visible defects. Before beginning the installation of any Laminate 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 specified in the Laminate Floor installation RECOMMENDED SUB • FLOOR TYPES and PRE-INSTALLATION JOB SITE INSPECTION sections below.

Laminate Flooring is susceptible to damage when exposed to extreme changes in temperature or relative humidity. If environmental conditions and installation instructions listed below are not correctly followed, Laminate Floors may suffer irreversible damage. Does not accept any responsibility for flooring failure resulting from or associated within appropriate or improperly prepared subfloors or improper job site environmental conditions. Before any flooring is installed, the installer must make sure that the job-site environment and the condition of the subfloor involved meet or exceed the standards and recommendations as outlined in the SUB • FLOOR and JOB SITE PREPARATION sections below. The use of touch up pens, filler or putty sticks should be used for the correction of defects. When ordering Laminate Flooring, a waste factor between 5 - 10%, depending on layout, must be added to the actual number of square feet needed. (Diagonal Installations may require more.)

## TOOLS AND/OR ACCESSORIES NEEDED: FLOATING INSTALLATION

Broom/Pencil/Terry Cloths/Tape Measure/Moisture Meter/Safety Equipment (Goggles and Mask)/Circular or Hand Saw; Miter or Table Saw/Hand/Jamb Saw (for undercutting door trim)/Chalk Line and Chalk/Hammer; Rubber Mallet (Light Colored...Dark Colored Mallets damage paint on walls)/Nail Punch/Finish Nails (if installing trim and molding)/Pry/Pull Bar/Spacing Wedges/Utility Knife/Floating Floor Foam Underlayment, no thicker than 3mm, with a density meeting NALFA requirements/6 mil Polyethylene Film (if necessary as a moisture barrier)/3-M 2080 Blue Painter's Tape Laminate Flooring Cleaner with Dry Mop

WARNING: not responsible for damage caused by negligent installation practices or misuse of installation tools. Laminate flooring uses a 4 sided glue less locking system. This glue-less locking system enables you to work up to 50% faster than gluing.

## INSTALLATION INSTRUCTIONS: FLOATING INSTALLATION

**STEP 1: Pre-Installation Jobsite Inspection** When installing Laminate flooring in new construction sites, Laminate Flooring should be one of the last items installed. Flooring should not be delivered until the pre-installation guidelines listed below are completed. After all the guidelines are met, the flooring should acclimate at the job site at least 48 hours prior to installation. Do not open cartons until ready to install. Prior to installation, the building must be structurally complete and enclosed. All exterior windows and doors must be installed.

Any "wet" work inside the house (masonry, drywall, and paint) must also be complete - allowing adequate drying time to eliminate unnecessary moisture content within the building. Concrete should be at least 60 days old. Permanent HVAC (heating/air conditioning) systems must be operating for at least 14 days before installation, maintaining a constant room temperature between 60-78 degrees Fahrenheit and a relative humidity of 35-55%. Exterior drainage - including gutters and downspouts, must be in place and drain away from the building. Laminate Floors can be installed on, above, or below grade, although they are not recommended for full bathroom installations. Basements and crawl spaces must be dry. Crawl spaces must be a minimum of 18" from the ground to the underside of the joists and cross ventilated at a ratio of 1.5sf per 1000sf) of the total square foot area. A vapor inhibitor (6-8 mil black polyethylene film) must be put in crawl spaces with joints overlapped and taped.

Sub-floors must be checked for moisture content using the appropriate metering device for concrete or wood. Examples of concrete moisture meters that work well are: the Delmhorst Moisture Meter Model and the Tramex Concrete Encounter.

Performing Moisture Tests:

**WOOD SUBSTRATES:** Test the moisture of the wood sub-floor 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 5% different than the moisture content of the product being installed.

**CONCRETE SUBSTRATES:** There are multiple ways to test for excess moisture in concrete. Use an approved, calibrated moisture meter such as the Delmhorst Moisture Meter Model G or the Tramex Concrete Encounter. On the Tramex Concrete Encounter Meter, moisture readings should not exceed 4.5 on the upper scale.

**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 and for a darkening on the concrete in that area. Either occurrence signals the likely presence of excess moisture, requiring a mandatory Calcium Chloride Test. Once you have determined the moisture content and that excess moisture is indeed present, a Calcium Chloride and pHAlkalinity Test must be performed to determine moisture emissions and alkalinity from the concrete slab.

**Perform a Calcium Chloride test** (these can be found in flooring retail stores or online atwww.moisturetestkit.com. The maximum acceptable reading is 3 lbs. /24 hours/1000 sq. ft. for moisture emissions. Perform a pH Alkalinity Test (a 3% Phenolphthalein in Anhydrous alcohol solution). Chip the concrete at least 1/4" deep (do not apply directly to the concrete surface) and apply several drops of the solution to the chipped area. If any color change occurs, further testing is required. Using the number method on the test, a pH reading of 6-9 on a pH scale of 1-14 is considered acceptable. Not responsible for Hydrostatic, Hygrostatic, or Thermal dynamics resulting from an improper concrete slab installation. When installing a floating installation over concrete, use a 6 mil Polyethylene Film or a 3 in 1 Underlayment and seal all seams prior to installing the floor. This will provide a proper moisture barrier between the concrete and the Laminate flooring.

## STEP 2: Storing the Material Prior to Installation

Once the building meets the conditions in Step 1, the material can be delivered to the site. Handle and unload the flooring with care and store within the area in which it is expected to perform. Flooring stored on concrete floors should be elevated at least four inches to allow circulation under the cartons. Cartons must be stored horizontally (parallel to the ground). Never store them standing on end. Stack the cartons 3-4 high to insure efficient acclimation. Do not store directly upon on grade concrete or next to outside walls. Cartons should be placed as close to the center of the installation area as possible, away from exterior walls, windows, and doors. Keep out of direct sunlight and away from air vents. Leave all boxes SEALED while they are acclimating (this allows all boards to acclimate within the boxes at the same rate). The Laminate flooring must acclimate for a minimum of 72 hours prior to installation. Extra precautions may be necessary during extreme weather conditions.

**STEP 3: Subfloor Types** Radiant Heat Subfloors are Not Approved and installation of Laminate Floors are not warranted over Radiant Heated Substrates. It is the sole responsibility of the purchaser to determine that all subfloor types meet the required specifications. Wood Panel Subfloors (Truss/joist spacing will determine the minimum acceptable thickness. On truss/joist spacing of 16" on center or less, use a minimum 5/8" CDX or better grade plywood panel or 23/32" APA E1 PS 2 rated NWFA approved OSB panel. On truss/joist spacing of more than 16" up to 19.2" on center, use a minimum 3/4" Tongue and Groove CDX or better grade plywood panel, glued and mechanically fastened, or a minimum 3/4" APA E1 PS 2 rated NWFA approved OSB panel, glued and mechanically fastened. Truss/joist systems spaced over more than 19.2" up to a maximum of 24" on center require a minimum 7/8" Tongue and Groove CDX or better grade plywood panel, glued and mechanically fastened, or a minimum 7/8" APA E1 PS 2 rated NWFA approved OSB panel glued and mechanically fastened. Floating Laminate Installation methods may be used for installations over APA Underlayment Grade particle board and APA approved OSB Substrates.

**Concrete Substrates** Concrete subfloors on all grade levels must be tested for moisture content prior to installation of the Laminate flooring. The moisture content of the concrete subfloor must register in the approved range, according to whichever test method is used to determine the slab condition. (see performing moisture tests above).

Concrete must be 60 to 90 days old with a PSI rating (3000 psi or higher) that is approved by NFWA for installations of Engineered and Laminate Flooring. Concrete slabs must be totally flat - less than 3 lbs. / 1000 sf. / 24 hr. moisture vapor transmission. Lightweight (Acoustic) Concrete must be solid with a PSI rating of at least 2000 psi, that has no spalling (loose patches), or friable, (crumbling), surface areas.

All Concrete subfloors must be: CLEAN - Scraped or sanded, swept, and free of wax, grease, paint, oil and other debris. SMOOTH and FLAT - Within 1/8" in a 6' span. Sand or grind high areas or fill low areas with cement-based leveling compound with no less than a 3000 psi rating.

Other Subfloors- Test all substrates and follow all recommendations regarding determining proper Substrates, conditions and exclusions. Existing engineered wood floors (installed perpendicular to new floor) must be fully adhered, level, flat, and abraded to accept adhesives, if staple installation method is used, the existing engineered floor must be at least 1/2" thick and installed over a NFWA approved substrate. Existing solid wood floors over wood substrates must be capped with and approved Plywood or APA E1 PS 2 rated NFWA approved OSB panel.

Acoustic Concrete -must be sound, and with an approved PSI rating (2000 psi or higher) Cork (acoustic underlayment) -Ceramic, Terrazzo, Marble, or Slate must be fully adhered, level, flat, and prepped Resilient Vinyl or Tile- must be fully adhered, over NFWA approved substrates, and prepared Do not Sand existing resilient tile, sheet vinyl, attached felt, or asphalt cutback adhesive as they may contain asbestos fibers that are not easily identifiable and are known to cause cancer. Metal -must be level, flat, and prepped STEP 4: Preparing the Sub-floor For wood panel subfloors: Ensure that there is proper expansion space (1/8") between the panels. If the panels are not tongue and grooved, and if there is not sufficient expansion space, use a circular saw to create the necessary space. Do not saw through tongue and groove joints on T&G subfloors. Ensure they are structurally sound: Replace any water-damaged, swollen or delaminated sub-flooring or underlayment. When possible, 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. It is normal form mechanically (staple/nail/cleat) fastened floors to make minor occasional noises such as popping, squeaking, or crackling which can change as environmental changes occur. Noise from subfloors is not considered a manufacturing related issue. To reduce popping, squeaking, or crackling, be sure that the subfloor is secured properly (as explained above) and is structurally sound, that there is no loose joists or decking, and is swept very thoroughly prior to installation. All Sub-floors must be: CLEAN: scraped, sanded, or swept; free of wax, grease, paint, oil, and other debris.

SMOOTH/FLAT: within 3/16" over 10' and/or 1/8" over 6' Sand high areas or joints. Fill low areas (no more than 1/8") with a cement type filler.

DRY: Moisture content of sub-floor must not exceed 12% prior to installation of wood flooring. All moisture testing must be done before wood has been acclimated for a minimum of 72 hours and job-site requirements met.

**STEP 4: Installing the Floor GENERAL TIPS:** Open several different cartons and mix the pieces to maximize the color and shade variations. Install the product parallel to the longest wall to provide the most appealing visual effect. Stagger the ends of the boards at least 8" in adjacent rows for a more appealing overall look. Allow a 5/16" minimum expansion gap around all vertical obstructions. Laminate flooring expands and contracts with changes in humidity. Laminate flooring will buckle and/or cup if an adequate expansion space is not allowed for. ALWAYS allow for expansion space when making cuts around or beside vertical objects (i.e. walls, pipes, etc.). DOORWAY/WALL PREPARATION: Undercut or notch-out door casings 1/16" higher than the thickness of the floor being installed. Remove existing base and shoe molding on walls as well as doorway thresholds. These can be reinstalled after the laminate installation is complete.

#### **ESTABLISH A STARTING POINT: FLOATING INSTALLATION**

An exterior wall is usually the straightest and best reference line to start the installation. Start installing the floor in one corner, preferably parallel to the longest exterior wall. For hallways, the installation usually works best when planks are installed parallel to the longest wall instead of perpendicular to it. Establish a starting line by leaving a minimum 5/16" expansion gap around all vertical obstructions. In at LEAST 2 places, measure out equal distances from the starting wall. It is recommended to measure 5/16" out from the starting wall and 12" - 18" in from the corners. Mark these points and snap a working chalk line parallel to the starting wall allowing the required expansion space between the starting wall and the edge of the first row of flooring. Plan the floor layout (widthwise) so you don't have to rip (which is cutting the board lengthwise to make it narrower) the last row

NARROWER than 2". You may have to rip the FIRST row to ensure the LAST row is at LEAST 2" wide. Also, when installing a floor that is more than 40 feet in length, an expansion joint is required. The most effective way of providing the required expansion joint is to install T-Molding in that area. Expansion joints are also required when transitioning from one room to another.

#### **INSTALLING THE UNDERLAYMENT: FLOATING INSTALLATION**

Install your first row of High Density Closed Cell Foam 2 mm to 3 mm thick, NALFA approved, Floating Floor Foam Underlayment in the SAME direction you will be installing the laminate flooring. Extend the underlayment a few inches up the wall on either side. Trim this excess underlayment off above the laminate surface AFTER installing the laminate floor, but BEFORE you install trim or moldings. Make sure all underlayment seams are taped and sealed, NOTE: While some underpayments include a moisture barrier (i.e. 2-in-1 foam or 3-in-1foam), many do not. If a moisture barrier is needed (if floating a laminate floor over concrete using an underlayment without polyethylene film already attached), a 6 mil polyethylene film is required: run the film up the walls 3" -5" with the edges overlapped 18" and taped. Roll the foam underlayment over the top of the polyethylene film (again if using a non-adhesive underlayment, tape all seams together) then install the laminate floor over the top of the foam underlayment.

#### **INSTALLING THE FLOOR: FLOATING INSTALLATION Establish your starting row (SEE ESTABLISH A STARTING POINT ABOVE).**

Select your first board. Take boards from multiple boxes while installing. Do not install 2 or more pieces from the same box or boards with identical designs in sequence in the same row or in adjacent rows. Mix the colors and shades while installing to get a more favorable overall look. Stagger the end-joints of adjacent rows at least 8" to add structural stability and create a more aesthetic look. The tongue of the boards must be facing the starting wall. Use the longest boards available for the starter row. The Laminate flooring should be installed from left to right. Plan the floor layout (width-wise) so you don't have to rip (which is cutting the board lengthwise to make it narrower) the last row NARROWER than 2". You may have to rip the FIRST row to ensure that the LAST row is at LEAST 2" wide. NOTE: If using full width planks in the starting row (the row closest to the starting wall), trim the long tongue off of the boards prior to installation to ensure the correct expansion space (if you leave the long tongue on the starter row the expansion space will be larger and require wider wall base to cover it).

When installing the first row, starting from left to right, lay the first board flat on the floor. Move to the second board (which will be immediately right from the first board) and position it at a 20 - 45degree angle to the board you have already laid down - then fold down with a single action movement. Make sure the long sides of the plank form a straight line. Continue doing this for the entire first row.

Place 5/16" spacers to provide for the expansion space along the wall. Complete the first row. Remember to keep a 5/16" expansion space on all sides touching the wall. Install wedges all along the wall against your first row to maintain that expansion space while you're installing. AVOID installing any boards shorter than 16" in the first four rows. Start the second row by shortening your starter board to make sure you are maintaining at least an 8" stagger of joints between rows: position the long tongue at a 30 - 45 degree angle into the first board in the first row, then press forward and fold down at the same time (which will lock it into place).

Place the second floorboard TIGHT to the short end of the first board in the second row and fold down in a single action movement. Using 3-M 2080 Blue Painter's tape, tape all of the boards together after they have been clicked together. This ensures that the boards will remain tightly connected to each other while you are clicking and installing the rest of the floor. Remove the 3-M 2080 Blue Painter's tape within 12 to 24 hours after the installation. Install the remaining rows in the same manner.

Remember to insert the 5/16" spacers on the ends of the rows (as necessary) to restrain the movement of the floor during the installation.

When installing a floor that is more than 40 feet in length, an expansion joint is required. Install a matching T-Molding allowing for a 5/16" gap on each side of the center of the T-Mold to cover the expansion gap. Expansion joints may also be required when transitioning from one room to another if the continuous span exceeds 40 feet..

To install the final boards in tight fitting areas such as doors or small closets; it may be necessary to trim away the small vertical locking flange of the groove on the board with a chisel point razor in order to allow for fitting in areas in which the board cannot engage at the necessary angle. Trimming the vertical lock will prevent the trimmed board from locking properly and it will be necessary to use a Tongue and Groove adhesive designed for floating floors is necessary to permanently install the last board if it was necessary to trim away small vertical locking flange.

**Step 5:Installing Laminate Flooring Trim and Nosings and Installing Laminate Flooring on Step Down or Stair Tread Applications:** Prior to beginning the Stair Trim installation, loose or damaged treads or risers should be repaired or replaced. Any loose paint, debris or old adhesives must be removed prior to installation.

**Step Down from a Floating Floor.** Cut the stair nosing to the desired length and attach to the sub floor as per manufacturer's instructions. A 1/4" expansion space must be maintained beneath the stair nosing and the floating floor. Insert the stair nose in place per manufacturer's instruction. Staircases Cut the stair nosing to the desired length and attach to the sub floor as per manufacturer's instructions. Tread Floor or Even with Riser The riser must be installed before the nosing is fit into place. If installing from a floating floor, follow the above instructions. When installing on a stair tread, the nosing will be installed after the tread and riser are glued into place.

Tread with an Extended Round Edge Nosing Cut off the rounded portion of the extended nosing. Do not cut off the entire extended nosing. Glue a narrow strip of laminate on the edge of the squared nosing to finish the exposed edge of the tread. Install the tread and the riser and finish the edge with a stair nosing. Tread with an Extended Square Edge Nosing On this style of tread, simply cut a narrow strip of laminate and glue it on the edge of the existing tread. Install the tread and the riser and finish the edge with a stair nosing.

Laminate on Stair Treads and Risers Cut the laminate planks net from side to side, no expansion space is necessary. Remember that the depth of the laminate tread material will be cut to accommodate the width of the laminate nosing which overlaps either arise of laminate or the piece of laminate which is glued to the edge of the step. One plank of laminate will finish most risers; if two planks are needed to accommodate the depth of the tread, position the joint close to the riser. After dry fitting the treads and risers, start with the bottom riser an install each step until the last top riser is installed. Start with the top riser and install each step until the last bottom riser is installed. Use a premium urethane adhesive to adhere the treads and risers. Install quarter round where the tread meets the riser if needed.

Allow the recommended amount of time for the adhesive to fully set up before using the stairs. A stair application is the ONLY time that a laminate floor is glued directly to a substrate. Laminate flooring must be installed as a floating floor for a step down and all other applications.

**Transition Molding:** Transition moldings are used to give a finished appearance to laminate installations. This includes laminate-to-laminate, laminate to other flooring materials, and laminate to fixed objects or vertical surfaces. Transition moldings come in many different widths and lengths. Moldings may be installed by securely fastening a custom track made specifically for the molding and provided by the manufacturer with screws(wood substrates), screws with dowels or anchors(concrete) or a premium urethane adhesive, directly into the substrate; and inserting the molding into the secured custom track. If no track is available, or not provided, the molding may be secured by gluing in place directly to the substrate with a premium urethane adhesive, or permanently attach with screws (wood substrates), screws with dowels or anchors(concrete). Important!! (Do not glue or attach moldings directly to a floating laminate floor.) T-molding-molding joins laminate flooring to laminate flooring where recommended by the manufacturer. They also may be used to join other Hard Surface floorings of EQUAL height such as ceramic tile, Laminate, vinyl, or other resilient flooring installed over underlayment. Carpet Transition Carpet Transitions and moldings are to be used where laminate flooring meets a carpeted floor. T-molding should NOT be use to transition laminate to carpet.

**End Molding** End molding finishes laminate flooring at sliding doors, exterior door thresholds, and other vertical surfaces not receiving wall base or quarter round.

**Reducer** Reducer transitions laminate to a lower hard surface floor such as vinyl, wood, or tile.

**Stair Nose** Stair Nose is used to finish stair edges or step down applications. All Stair Nosings must be permanently fixed directly to the substrate or stair tread(base)with a premium urethane adhesive. All Stair Nosings must be secure and without movement throughout the life of the floor. Flush Stair Nosings (not overlap type) must be used for Stairs where the matching laminate floor is also permanently glued to the stair tread base and not floating over underlayment. Overlap Stair nose may be use for balcony (no step down options) , or single step down applications that transition two floors on two separate planes, no more than the height of one step.

## Step 6: COMPLETING THE INSTALLATION: FLOATING INSTALLATION

After you have finished, remove all of the tape and clean the floor using a laminate flooring cleaner. Inspect the floor closely, filling in any gaps with a laminate floor filler or matching putty. Trim off all excess underlayment, remove all spacers, and install (or re-install) any trims or moldings as may be needed. Remember to nail the moldings into the WALL, not the FLOOR.

After installation is complete, you can immediately walk on your floor. This is a major benefit of using the glue-less locking system. If further construction is necessary after the laminate floor is installed, you can protect the installed floor by laying a quality paper or cardboard that allows the floor to breathe, taping it to the baseboards. NEVER use plastic, solid rubber, or polyethylene film to cover the installed floor since they both trap moisture and will damage the installed flooring (creating cupping or swelling issues).

**GENERAL TIPS: LAMINATE FLOORING AND FLOOR REPAIR** If the floor becomes scratched or dinged, it can be repaired with a putty, filler, or touch-up kit. If aboard is severely damaged, it may need to be replaced by a qualified flooring professional.

**LAMINATE FLOORING CARE & MAINTENANCE** Do not warrant floors that are not properly maintained.

### Routine Maintenance

1. Use a damp cloth to blot up spills as soon as they happen. Never allow liquids to stand on your floor.
2. For tough spots, such as oil, paint, markers, lipstick, ink, or tar, use Mineral Spirits, Denatured Alcohol(Clear Hand Sanitizer containing Ethanol) on a clean white cloth, then wipe the area with a damp cloth to remove any remaining residue. IMPORTANT! Never use Lacquer Thinner, of Citrus Based Solvents to Clean the Laminate Flooring. Test all cleaning chemicals on an inconspicuous area or loose piece of the flooring before use.
3. Sweep, dust, or vacuum the floor regularly with a proper hard surface non motorized attachment (not the beater bar) or microfiber dusting pad (such as available in the Bona floor care kit), to prevent accumulation of dirt and grit that can scratch or dull the floor finish. Do not Use Swiffer type dust mops, Steam Cleaning Equipment or Swiffer Type steam or wet mops of any kind on the Laminate flooring surface.
4. Periodically clean the floor with the Laminate Floor approved cleaning products, or a Bona Laminate Floor Cleaner Kit, made specifically for prefinished Laminate floor care. Apply cleaning liquid to dampen (not dripping), a soft clean cloth or terry cloth mop cap. Dry the floor immediately after cleaning with a dry terry cloth towel to remove excess cleaner residue and avoid streaking.
5. Do not apply liquid cleaners directly to the flooring surface, never wash or wet mop the floor with soap, water, oil-soaps, detergents, vinegar, or any other liquid cleaning material. This can cause swelling, warping, delaminating, or joint-line separation, and will void the warranty.
6. Do not use steel wool, abrasive cleaners, or strong ammoniated or chlorinated type cleaners.
7. Do not use any type of finish restorer, coatings to enhance shine, floor wax, or polishes.
8. For spots such as candle wax or chewing gum, harden the spot with ice in a plastic bag, immediately dry, and then gently scrape with a plastic scraper, such as a credit card. Be careful not to scratch the flooring surface. Wipe clean with a damp cloth.
9. For tough stains, you may need to use a heavy-duty stain remover made specifically for Laminate floors.
10. A more frequent dust mopping or vacuuming schedule may be required in very sandy areas such as a beach home.
11. Maintain a 35-55% air humidity and 60-78° F temperature at all times within the room.

### On Site Protection

1. Entry mats will help collect the dirt, sand, grit, and other substances such as oil, asphalt, or driveway sealer that might
2. When placing a rug, do not use rubber or foam backed plastic mats directly on the flooring as they may discolor the flooring finish. To prevent slippage, use an approved vinyl rug underlayment.
3. Use 1" minimum diameter felt floor protectors. As a rule, the heavier the object, the wider the floor protector. Proper Floor Protectors " on feet of all furniture is defined as any soft, cushioned product that will cover the feet/posts entirely. Metal or Plastic gliders, cardboard, or any other hard surface or pads too small for the feet are not considered "proper floor protectors" .
4. Maintain a normal indoor relative humidity level between 35 and 55% throughout the year to minimize the natural expansion and contraction of the wood. a. Heating season (Dry): A humidifier is recommended to prevent excess shrinkage due to low humidity levels. Wood stoves and/or electric heat tend to create very dry conditions. b. Non Heating Season (Wet): An air conditioner, dehumidifier, or periodically turning on your heating will help to maintain humidity levels during summer months.
5. Avoid excessive exposure to water during periods of inclement weather.
6. Do not walk on your floor with stiletto heels, spiked golf shoes, or other types of sports cleats.
7. Do not allow sharp, pointed, or rough textured objects to be exposed to the Laminate flooring.
8. Keep your pet' s nails trimmed to prevent them from scratching your floor.
9. Periodically rearranging your area rugs and furniture will allow the floor' s finish to age evenly and the color to remain uniform. UV sunlight may change the color of Laminate to varying degrees based on exposure and product type.

10. Use a dolly when moving heavy furniture or appliances; but first, put down a piece of quarter inch plywood or Masonite to protect the floor. Never use Cardboard to protect the floor when moving or rolling heavy objects. Never try to slide or roll heavy objects across the floor.

11. A hard, smooth bottomed protective mat designed for Laminate Flooring should be used for furniture or chairs with casters.

**GENERAL TIPS: LAMINATE MAINTENANCE AND ANNUAL SEASONAL CLIMATE CHANGES** Laminate floors will be slightly affected by varying levels of humidity within your building. To make sure the floors are protected for as long as possible, it is necessary to keep the relative humidity levels between 35% - 55% and the indoor temperature between 60 degrees and 78 degrees Fahrenheit. Below are some recommendations on how to achieve proper indoor environment conditions throughout the year. A Hygrometer, available at most electronic stores and online, can be used to provide Relative Humidity measurements.

**Wet/Humid Seasons** Increase the indoor Relative Humidity. Heaters are not generally used during these months. Therefore the floor may gain moisture and expand. To maintain a proper humidity level, the use a dehumidifier or air conditioner may be required.

**Dry Seasons** Lower the indoor Relative Humidity. Wood-burning stoves, gas and electric heating systems, and forced air heating systems are used often during winter months – creating very dry conditions indoors. Low indoor relative humidity causes the wood lose moisture and subsequently contract and change shape, (cupping), resulting in gaps, misshapen boards, and permanent damage from cracking of the flooring surface, delaminating of the core. The use a humidifier to keep the humidity level between 35% - 55% may be required. In winter months, Forced air Heat Systems are capable of removing 15 gallons or more of water from indoor air per day in 1000 square feet of heated space.

#### **LAMINATE FLOORING WARRANTY:**

The finish of the Laminate plank is warranted not to wear through under normal indoor residential use for a period of 25 years and 5 years for normal indoor light commercial use from the date of purchase. Finish wear-through is defined as 100% finish removal over a minimum of 5% of the total installation. Gloss reduction or surface scratches are not considered surface wear. The Laminate plank is warranted to be free of manufacturing or material defects. This warranty applies to the original purchaser and original installation site.

The limited warranty applies to the original purchaser of the flooring and is not transferable with proof of purchase (original receipt of purchase with date). Manufacturer's warranty and liability does not extend beyond the Laminate flooring strips, the original installation site and is limited to a maximum value of the original purchase price of the Laminate flooring. The limited warranty does not apply to products referred to "seconds", "mill trial" or "sold as is" grade products. The limited warranty does not cover conditions or defects caused by improper installation, inadequate subflooring or improper subflooring preparation. The limited warranty does not cover construction related damages.

The manufacturer or its representative reserves the right to visit the premise of the original installation site, where the product claim is generated. The manufacturer or representative will inspect the product in dispute and may remove samples, take pictures and/or conduct technical analysis of the original installation site. Failure of the owner to provide reasonable access to the claim area or to provide requested information and/or documentation may result in negation of the claim, thus it may void the warranty.

#### **EXCLUSION FROM THE WARRANTY COVERAGE:**

- Indentations, scratches or damage caused by negligence, fire, water, wet mopping, sand, pebbles, pets, high heels, spike shoes and abuse.
- Damages resulting from vacuuming cleaners with beater bar or power rotary brush head.
- Damages resulting from the use of a steam cleaner.
- Damages from abuse; such as moving appliances or furniture across the floor without any or adequate protection.
- Noises including, but not limited to squeaks, popping etc.
- Damages caused by footwear or footwear classified as toys, such as, but not limited to sneakers/ running shoes with rollers, wheel shoes, soccer cleats, roller skates, golf shoes, high heeled footwear with missing heel lifts etc.
- Naturally occurring changes in color from exposure to sunlight.
- Damage caused by failure to provide proper environmental conditions, including but not limited to maintaining proper humidity levels.
- Problems occurring due to poor installation workmanship.
- Problems occurring due to improper care and maintenance.
- Damages resulting from or caused by improper use of maintenance, such as, but not limited to:
  - \*loss of gloss or build-up of dulling film due to lack of maintenance or improper maintenance.
  - \*damage resulting from failure to follow reasonable floor care instructions.
  - \*scuffs, scratches, cuts or damage or discoloration from carpet dyes, fertilizers or other chemicals.
  - \*damage caused by burns, flooding, fires and/or other accidents.
  - \*use of mats that are labeled "non-staining".
- Damages resulting or caused by water or excessive moisture in the floor, in the subfloor or underneath the floor (pet urine, appliance leaks, household mechanical failures, leaking pipes etc).