

Installation Guide — Laminate

PLEASE READ COMPLETELY BEFORE INSTALLATION

Warranty Information: Refer to Lions Floor Warranty Guidelines.

Please inspect product for color, finish, quality and style BEFORE installing any material. Lions warranty DOES NOT cover materials with visible defects once they have been installed. Any defects should be reported to the flooring dealer IMMEDIATELY for inspection and/or replacement.

ALL PLANKS, ONCE INSTALLED, ARE CONSIDERED ACCEPTED BY THE INSTALLER AND/OR HOMEOWNER AND THE MANUFACTURER ASSUMES NO RESPONSIBILITY FOR THE ABOVE

A. INTRODUCTION

Lions Floor laminate flooring is intended for interior use only and is suitable for applications above, on, and below grade. DO NOT install in saunas, seasonal porches, rooms that are prone to flooding and rooms or homes that are not temperature controlled.

Lions Floor laminate is a floating floor and should be allowed to expand and contract freely. It must not be glued, nailed, or fastened to the sub- floor in any way. Permanent cabinets, vanities, islands, and similar items should be installed first. Install laminate flooring around them, leaving the proper expansion gap of 3/8". Laminate can be installed under toilets. Leave proper expansion space around the flange and use a premium waterproof 100% silicone caulk. Do not anchor toilet through the material.

Lions Floor laminate is a water-resistant floating floor, but it cannot inhibit the growth of mold or prevent structural problems associated with or caused by flooding, excessive moisture, alkalis in the subfloor, or conditions arising from hydrostatic pressure. Regardless of location, always remove standing water, urine, and other liquids promptly. Subfloor moisture issues should be addressed and corrected prior to installation.

Long-term exposure to direct sunlight can potentially damage laminate flooring, causing it to discolor, fade, or buckle. Protect laminate from exposure to direct sunlight via the use of window treatments or UV-tinting on windows.

If the flooring is to be installed by an installation contractor, it is suggested that the homeowner and flooring contractor should discuss installation and layout to maximize satisfaction.

Before beginning a Lions Floor laminate flooring installation project, it is critical that you 1) fully acquaint yourself with the detailed installation instructions for your flooring and subfloor type, and 2) conduct a complete job site evaluation. Make sure that jobsite conditions are maintained between 65° and 85°F for 48 hours prior to, during and after installation. We recommend a moisture barrier if there are concerns of moisture at the jobsite testing higher than 75%.

Do not glue, nail, screw or fasten to substrate. Install cabinetry, island and peninsula counters, vanities, tubs, and showers first. Then install Laminate around them with proper expansion space.

Determine the quantity of Lions Floor laminate flooring, flooring transitions and wall trim needed for your installation. It is recommended that you add an additional 10% to your square footage for standard installations to account for cuts. For diagonal installations, add 15%s



B. APPROPRIATE INSTALLATION TOOLS

- Tape Measure
- Utility Knife
- Eye Protection
- Tapping Block

- Soft Faced Hammer
- Pull Bar
- 3/8" Spacers Level
- Reciprocating Saw

- Miter or Circular Saw
- Carpenter's Square

C. GENERAL INFORMATION

I. Preparations:

Prior to installation make sure job site conditions (including subfloor, ambient temperature, and relative humidity) will not negatively affect the floor. The manufacturer is not responsible for damages associated with improper installation or poor site conditions.

The surface of the subfloor must have no variation greater than 3/16" in a 10' radius. Surface flatness must not vary more than 1/8" when measured with a 3' straight edge. Additionally, the subfloor must not slope more than 1" in 12'. All high areas must be sanded or ground down and low areas must be filled with a Portland cement floor patch.

Floating laminate flooring must not be installed on ramps.

Subfloors must be structurally sound without deflection.

II. Crawl Spaces:

The ground in the crawl spaces should be completely covered using 6 mil polyethylene. Crawl space clearance between the earth and underside of joists should be no less than 18". Perimeter vent area should be equal to 1.5% of the total square footage of the crawl space or as mandated by code.

Carefully remove any existing quarter round or base board molding.

Always remove carpet, carpet pad and tack strips.

Remove any existing floating or un-adhered flooring.

Be sure the surface of the subfloor is flat, clean, dry, and sound before starting.

Inspect every plank for any shipping damage when removing from the carton.

Kitchen cabinets must be installed before the floor is installed. Do not install cabinets on top of floating laminate flooring.

III. Other Subfloor Prep

Adhered and sound vinyl sheet goods, vinyl tiles, linoleum and resilient (VCT) tiles usually do not need to be removed if they are fully bonded and free of any notable damage. Some older vinyl sheet goods and tile contain asbestos. Should existing flooring contain asbestos, special precautions must be taken for your safety. Contact a professional immediately for inspection and removal.

Ceramic tiles and terrazzo usually do not need to be removed. Laminate flooring may be installed directly over ceramic tiles that are flat (not pillow edge) and terrazzo, provided they are fully adhered, smooth, sound, and dry. These flooring materials must be smooth and flat to within 3/16" in a 10' radius and must not vary more than 1/8" when measured with a 6' straight edge.

Do not install over more than one layer of existing vinyl.

- After market radiant heated floors must be approved by the manufacturer for use with resilient flooring applications
- The heated floor system temperature must never exceed 85°F (29°C).



Subfloors

Concrete, plywood, OSB, particleboard, chipboard, hardwood, tile (ceramic, terrazzo, stone, asbestos, peel and stick), sheet vinyl and metal are acceptable substrates.

Concrete Subfloor Prep

Perform moisture tests as directed by ASTM F1869 and ASTM F2170

High spots can be removed by grinding. Depressions can be filled with patching compound formulated for use in floor installation.

Newly laid concrete slabs must cure for at least 90 days prior to installation.

Concrete can be either sealed or unsealed.

Moisture levels of concrete slabs before, during and after installation must be 5 lbs or less using calcium chloride test according to ASTM F1869, and pH must be between 5.0 and 9.0; or, if using ASTM F2170 in-situ probes, relative humidity should be less than 75%. Always measure, record, and retain your testing results.

It is required to use a moisture barrier when installing over a on grade and below grade concrete slab. A 6-mil polyethylene must be used under entire flooring install area. Overlap polyethylene seams 6" and use waterproof tape on seams. Remember to roll the 6-mil polyethylene out perpendicular to the direction you are installing your floor.

Wood Subfloors and Underlayment (Plywood, OSB, Particleboard, Chipboard, Solid Hardwood, Luan)

Perform moisture tests using a reliable moisture meter in multiple locations. Moisture readings should never exceed 14% for wood subfloors.

Other Subfloor Prep

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Radiant Flooring Heating Prep

After market radiant heated floors must be approved by the manufacturer for use with resilient flooring applications. The subfloor temperature should not exceed $85^{\circ}F$ ($29^{\circ}C$).

D. INSTALLATION INSTRUCTIONS

Lions Floor Laminate flooring is intended for indoor use only.

Temperatures within the room must be maintained between 65 and 85 degrees Fahrenheit 48 hours before, during and after installation.

A 3/8" expansion space must be maintained around the perimeter of the room and all fixed objects such as pipes.

Doorjambs and casings must be undercut so that the plank can slide underneath. A 3/8" expansion space must also be included around the undercut jambs and casings. A reciprocating saw is recommended to create the necessary undercut. Never undercut metal door casings. Cutting Tip: To undercut the casing lay a scrap piece of flooring next to the casting and lay the saw flat on top of the flooring so that the saw easily cuts to the height of the plank.



Inspect all laminate planks to ensure it is not damaged prior to installation. Check the tongue and groove to ensure both are free of debris or damage.

It is recommended to blend flooring from multiple cartons during installation.

Cartons should be evenly stacked prior to installation, no more than five cartons high on a flat surface and away from any heating or cooling ducts or direct sunlight.

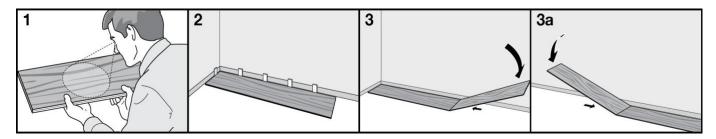
Excess flooring should be stored in a protected and climate-controlled environment for possible future repairs.

The HVAC system should be on and functional before, during and after installation.

Inspect each plank. Blend planks from several cartons at the same time to ensure good color and shade mixture throughout the installation.

It is recommended that installation begin in a corner of the room. Between the first row of flooring and the wall, insert spacers so that a 3/8" gap is maintained.

When installing the first row, insert the short edge of one plank into the short edge of another plank at slight angle and rotate downward. Continue to complete the starter row, maintaining a straight edge for the following row.



Use a tapping block and soft faced hammer to close any gaps between the planks.

Once you reach the end of the first row, measure and cut the final plank so that it completes the row while also leaving the necessary 3/8" expansion gap. Last planks of rows must be at least 6" long.

Start the second row of flooring by using the trimmed planks from the previous row. First pieces must be at least 6" long. End joints should be staggered a minimum of 6" from one row to the next.

At a slight angle, insert the long edge tongue of the first plank in row 2 into the long edge groove of the plank in row 1 until the plank edges meet, and then rotate down until the joints lock.

When joining the next plank in the second row, join the short side edges first. There will be a gap on the long side joints when the plank is rotated down.

Raise the outside long edge of the plank upward approximately 1". Maintain this angle as you push the plank in until the long edge of the plank meets the long edge of the first row. Rotate downward on the plank until the joint locks.

After tapping the long side joint closed, close the short edge joints using a tapping block or pull bar.

Repeat these steps to complete the installation.

After each row is complete, ensure there will be a 3/8" gap to the wall.

For the last row, align the plank to be used on top of the 2nd to last row. Using a full width plank as a spacer, trace the wall contour. Use a full plank as a straight edge to cut the plank. Insert the long edge tongue into the long edge groove and use a pull bar and hammer to close the gap.



After tapping the long side joint closed, close the short edge joints using a tapping block or pull bar.

When the new flooring meets a threshold or a doorway, we recommend undercutting the door jamb. To secure the right cut, turn a plank upside down and place it on the floor up to the door frame. Then place a reciprocating saw flat against the plank and simply cut through the frame. Remove the cut-out piece and vacuum away debris. Slide plank under pre-cut door frame. Door frame should be cut so that a ½" gap is located from the edge of the plank under the casing to the wall.

Tap the long side joint closed first, then tap the end joint closed.

Allow 3/8" expansion space around pipes or other fixed objects.

In rows where there is a pipe, make sure the pipe falls exactly in line with the short side of two planks. Select a drill bit with the same diameter as the pipe plus 3/4". Click the planks together on the short side and drill a hole centered on the joint between the two planks. Then install the planks.

For a double pipe, drill a hole equivalent to the diameter of the pipe plus 3/4" at each of the marked points. If located on the long side of the plank, make a 45° cut from each hole to the edge of the plank. Then, using an appropriate glue along the cut edges of the piece you cut out, glue the piece in place. Be sure no glue comes between the cut-out piece and the subfloor.

Remove all spacers

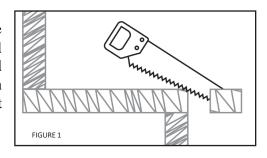
When installing Lions Floor Laminate in any room or area larger than 50' in any direction, the use of coordinating T-Molding is required to separate the floor into sections no larger than 50' x 50'

Install moldings to cover the expansion gap. When installing moldings, never allow nails or screws to enter the laminate flooring or the expansion zone around the flooring perimeter. All moldings and transition strips need to provide a 3/8" expansion space as well.

SPECIAL INSTRUCTIONS FOR INSTALLATION ON STAIRS

Preparation

Remove existing floor covering if necessary and thoroughly clean the surface of all treads and risers. Remove all residue of old glue and underlay, sand the surfaces clean and vacuum to remove all dust and debris. Make sure the existing stair treads are free from noise when walked on. Add additional fasteners if necessary. If necessary, cut back the overhang of the existing tread flush to the riser (Figure 1).



Check Run and Rise

Ensure stair treads conform with local building codes in your area for appropriate tread depth and step height. Most building codes require a rise or run difference of no more than 3/8" (10mm) throughout the entire stair system.

Adding An Underlayment (If Required)

If there is more than a 3/8" (10mm) variance on some stairs in the run, it may be worthwhile adding an underlay to some treads to minimize the height difference. To add an underlay, use a plywood type material cut to the size of the tread and affixed with urethane construction adhesive.

INSTALLATION

IMPORTANT: REMOVE ATTACHED PAD BEFORE INSTALLING ON STAIRS. SCRAPE OFF PAD AND CLEAN THE SURFACE TO REMOVE ALL UNDERLAY RESIDUE FROM THE BACK OF THE BOARD.



When installing on stairs it is recommended all flooring material be cut and dry fit prior to applying adhesive. If flush mount nosing is being used apply adhesive leaving dry spots on each end and one in the center. Use a hot melt glue on dry spots to help hold nosing from moving until adhesive has cured. Install nosing pressing firmly into the adhesive. Install flooring planks and press firmly into adhesive. Use painters' tape to hold planks and nosing in place for 24 hours until adhesive has set. Do not allow traffic on stairs for 24 hours. On top step if flooring planks are being installed on landing that is a floating installation you must use an overlap nosing that will allow expansion space between nosing and floating planks.

E. CARING AND CLEANING

Preventative Maintenance

- Prevent indentations and scratches by using non-staining floor protectors on the legs of chairs, appliances, and all heavy
 furniture. Floor protectors should be at least 1" in diameter. Periodically clean protectors to remove grit that may become
 embedded and cause scratching.
- Place walk-off mats at entrances. Mats should have a non-rubberized backing and be labeled as non-staining.
- We recommend the use of a hard surface (non-studded), non-rubber chair mat to protect your floor from office chairs with casters.
- Keep pets' nails trimmed.
- Remove shoes with cleats, spikes, or pointed high heels before walking on the floor.

Cleaning

- Sweep the floor regularly with a soft bristle broom to remove loose dirt.
- Clean your floors periodically with a professional vinyl floor cleanser. Lions Floor recommends a P/H Neutral vinyl cleanser, such as Bona®.
- For everyday cleaning, a damp mop moistened with warm water will suffice. Keep pets' nails trimmed.
- DO NOT USE A STEAM MOP

NOTE: Always read the cautionary information on all cleaners prior to use.

IMPORTANT: Never push, pull, or drag furniture, appliances, or other items across the floor. Always lift and carry furniture or heavy items.