

Laminate Professional Installation Guidelines

Storage & Handling

- Thoroughly inspect laminate panels before installation. The warranty does not cover labor for repair or replacement when a panel with visual defects is installed.
- Always store flooring horizontally in the original, unopened package.
- The storage area must be climate controlled with a temperature range between 65°F and 90°F (18°C and 32°C) and a relative humidity between 30% - 65%.
- Always handle cartons carefully. Do not puncture packaging. Cartons should not be opened until time of installation.

Jobsite Conditions

- Under normal conditions laminate flooring does not need to be acclimated to the job site. If extreme temperature and humidity variations exist during storage or transportation, acclimating the laminate flooring to jobsite conditions is required.
- In all cases, jobsite temperature should be at least 65°F and no greater than 90°F and the relative humidity should be between 30% - 65%. The temperature and humidity must be controlled and maintained within the ranges described above for the life of the laminate flooring.
- The continuous installation area cannot exceed 3,000 square feet and no greater than 55 linear feet length or width without a T-mold expansion break.
- Considerations for transitions must be made at substrate changes, room to room environment changes, extremely complex layouts, subfloor elevations, or areas larger than recommended.

Subfloor/under floor Recommendations&preparation

- Subfloors must be structurally sound, clean, dry and smooth. Subfloor variations should not exceed 1/8" in 6' (3.18 mm in 1.8 m). All high spots must be sanded or ground. Fill low spots, cracks and depressions with high quality Portland based cement patch.
- You may install laminate Flooring over existing vinyl floor coverings (does not apply to loose lay or multiple layers of vinyl flooring), wood flooring and ceramic tile (grout joints must be leveled).
- Appropriate laminate underlayment must be used when installing over all hard surfaces.
- Do not install laminate Flooring on top of carpeting.
- Do not install laminate Flooring in high-humidity areas where the floor is usually wet (steam rooms or saunas).

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Wood sub floors

- Structurally sound wood subfloor systems will not have movement or deflection. Subfloor movement or improper subfloor installation can negatively impact the performance of laminate floors. Be certain the substrate and substructure are in compliance with all local building codes.
- All wood floors must be suspended at least 18" above the ground. Adequate cross-ventilation must be provided, and the ground surface of the crawl space must be covered with a suitable vapor barrier. Wood substrates directly fastened to concrete or installed over sleeper construction are not satisfactory for installation of laminate.
- All wood subfloors must have an adequate vapor barrier retarder below the subfloor system.
- Wood subfloors must be structurally sound, clean, dry, smooth, and flat. Subfloor variations cannot exceed 1/8" in 6' (3.18 mm in 1.8 m).
- Wood subfloor moisture shall not exceed 12%.

Concrete sub floors

- Concrete subfloors must meet requirement prescribed in ASTM F710 Standard Practice for preparing concrete.
- Concrete on or below grade require a vapor barrier retarder directly under the slab.
- Concrete subfloors shall be Sound, clean, dry, smooth, and flat. Free from dust, solvent, wax, grease, oil, asphalt sealing compounds and other extraneous materials. The surface must be hard and dense, and free from powder or flaking. Furthermore, the concrete must be flat within 1/8" in 6' (3.18 mm in 1.8m).
- High or low spots in the slab should be grinded down or filled with a highquality portland based patching or leveling compound.
- The final responsibility for determining if the concrete is dry enough for installation of laminate lies with the floor covering installer. Due to environment and indoor quality, laminate floors should not be installed where excessive moisture emissions may exist. In accordance with ASTM 1869, moisture emission from the concrete may not exceed 5 lbs. per 1,000 sq. ft. per 24 hours measured with the calcium chloride test. If using the ASTM 2170 In Situ Relative Humidity Test, relative humidity cannot exceed 75%. We will not assume responsibility for floor covering failure due to hydrostatic pressure or moisture vapor emission. New concrete slabs should be thoroughly dry (at least six weeks) and completely cured. Excessive subfloor moisture is an ideal breeding ground for mold, mildew, and fungus – all of which can contribute to an unhealthy indoor environment. The Limited Warranties do not cover discoloration from mold or flooring, leaking plumbing or appliances, water entering through sliding glass doors or similar conditions.

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Radiant-Heated sub floors

The laminate Flooring may be installed over hydronic radiant-heated subfloors, provided the surface temperature of the system does not exceed 85°F. Before installing the laminate Flooring over newly constructed radiant heating systems, operate the system at maximum capacity to force any residual moisture from the cementitious topping of the radiant heating system. Then set the thermostat to a comfortable room temperature for the installation. Radiant Heating mats are acceptable if designed and warranted to be used with Laminate flooring by their manufacture. Electric mat products cannot exceed 80F.

GETTING STARTED

Assemble all required tools listed below before beginning the installation process.

Tools & Materials

Appropriate underlayment	Transition moldings
Spacing wedges—5/16" (1 cm);	Hand or power jamb saw
Utility knife	Circular or miter saw
Universal tapping block	Drill
Jig saw	Chalk line
Tape measure	Safety glasses
Pull bar	

* Always wear safety glasses when using a hammer or power equipment. Follow safety instructions and SDS Data Sheets.

Don't forget to order moldings that match or blend with the flooring. Before installing the first panel, select an adequate amount of planks that closely blend with the molding.

1. Remove existing wall base, trim, and transition moldings. Measure out the entire work area. Undercut all door casings a 1/16" higher so the new flooring will fit underneath. Use a scrap piece of the new laminate flooring as a guide. Make the cut using a power jamb saw, oscillating cutter, or a hand saw. Be certain to allow enough room under the casing for an expansion gap.
2. Inspect each plank before installing it. We will not be responsible for installed defects.
3. Determine in which direction the panels will be laid. As a general rule, the long dimension of the panels should be laid parallel to the longest wall. When possible lay out panels parallel to the light coming in from windows.

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4. A minimum 5/16" expansion gap must be provided at all walls and fixed vertical surfaces. The expansion gap is provided for the inherent movement of the structure. Homes and buildings will expand and contract throughout the changing seasons.
5. When installing in a bathroom the expansion gap including the toilet flange must be filled using 100% silicone caulking. Additionally, all expansion gaps around exterior doors.
- 6 Make sure the last row of panels to be laid in the work area will be more than 2" wide. If not, the first panel to be laid in the work area must be cut to compensate the difference on the last panel.
7. Cover entire installation area with the appropriate laminate underlayment. Install one sheet net along the starting wall. Unroll only one sheet at a time during panel installation to prevent damaging the underlayment. Once the first sheet of underlayment is covered with laminate flooring, install the second sheet. Do not overlap sheets. Butt the two edges of the sheet together and seal with sealing tape or duct tape. Always use appropriate underlayment; never install laminate flooring directly over exposed substrates.

INSTALLATION PROCEDURE

1. Carefully measure the room to determine squareness of the area and to provide for a "balanced" layout. If the width of the last row of planks will be less than one half of the panel width, adjust the width of the first row of planks by rip cutting the panels. Careful layout to minimize back-laying laminate floors.
2. If the wall along the first row of planks is irregular, scribe the planks to fit the wall and cut.
3. Always lay planks from left to right, with the tongue side against the starting wall. Remove the tongue on the first row of the planks to provide for a solid edge at the wall juncture. Provide a 5/16" expansion gap at all fixed vertical surfaces.
4. Just as the work area was laid out to provide for a balanced width it should also be "balanced" to avoid having any short planks at either the beginning or end of a row. Plan the plank layout to have the first plank and the last plank in a row to be at least 12" (300 mm) long.
5. Begin the installation by laying the first plank on the floor with the tongue side to the wall, cut off the tongue profile.
(Refer to photo #1) With a slight angle, position the end tongue of the second plank in the first row into the end groove of the first plank and lock into position (refer to photo #2).



photo #1



photo #2

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6. Begin second row with at least 12" stagger of end joints, assemble the first panel in the second row to the adjacent panel in the first row by slightly angling tongue into groove until plank locks into position. Insert the tongue at about a 15-20° angle and lock the planks together.

7. With our laminate floors, position the end tongue of the second plank over the first plank in the second row, approximately 1/8" to 1/4" away from the side groove. Lock the end seam together (refer to photo #3). Always lock the end ("head") seams together before connecting side seams (refer to photo #4). If necessary lightly tap plank as installed using a universal tapping block.



photo #3



photo #4

8. Continue laying the floor from tongue into groove, plank after plank, row after row. Maintain a 5/16" expansion gap at all fixed vertical surfaces. Work from several different cartons to minimize "clustering" of patterns. Maintain a random stagger of end seams. Unroll additional widths of the appropriate Laminate underlayment as required.

9. The last row of panels will more than likely need to be cut to fit. If not, it is still necessary to cut off the groove profile to provide a full plank thickness at the wall. If nothing prevents angling this last row of planks into position, proceed as normal to complete the installation.

10. If there are obstacles (door casing, toe kicks, radiators) that prevent the planks from being angled into position it may be necessary to plane/remove the bump from the groove side profile. With the locking system modified, it will need to be glued;

Position the panel onto the already installed rows; slide the panel under the obstruction. It's a good practice to pre-fit the panel to make certain it will slide into place before applying Glue adhesive.

Separate the panel to completely expose the groove. Apply a thin bead of Glue adhesive onto the groove; slide the panel back into position (refer to photo #5). If necessary, use a pull bar to position the panel and lightly tap panel to close any gaps. Wipe off excess glue, and secure with blue releasable tape.



photo #5

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11. Remove spacers and install appropriate trims and moldings.
12. Be certain moldings maintain proper expansion gap where applicable.
13. Moldings cannot be secured through the laminate to the substrate. Always ensure the laminate can float freely within and under the moldings. Never hard caulk moldings to laminate any caulking must be done with 100% silicone caulking.

Coordinating Moldings



Step Nosing



Quarter Round



Reducer Strip



T-Molding



Wall Base



End Cap

REPAIRS

Always inspect panels before installation; however, if damage occurs after installation the following repair procedures may be used:

- If a panel is slightly damaged or chipped, fill the void with a Color Matched Filler. Several products are now available to fill small chips; such as Robert's Universal Flooring and Furniture Repair Kit.
- If a panel is severely damaged and must be replaced the flooring will need to be disassembled back to the damaged planks. Determine the shortest distance from a sidewall and remove the molding. Carefully lift up and out on the panels and remove the entire row back to the damaged area. Replace the damaged plank and reassemble the flooring.
- If the planks are not damaged, the laminate planks can be carefully disassembled and reassembled several times.

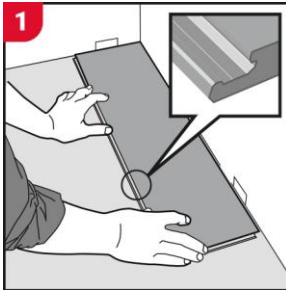
For future repairs, wrap remaining panels in original shrink wrapping and store in a normal, dry interior storage area.

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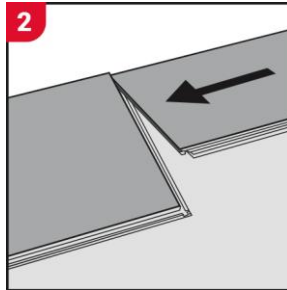


Fold Down General Installation Instructions



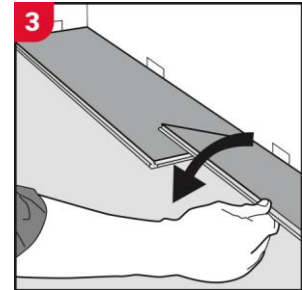
First row, first plank

Starting from the left-hand corner, place $\frac{3}{8}$ " spacers against walls on each side and place the first plank with the groove side facing out.

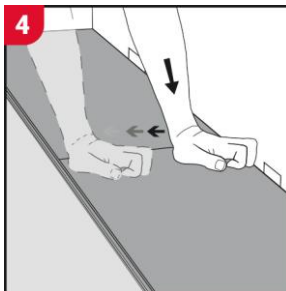


First row, second plank

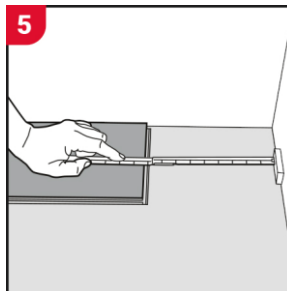
Gently place the second/next plank close to the short end of the first/previous plank.



Starting from the corner closest to the previous plank, fold down towards the center in a single action.

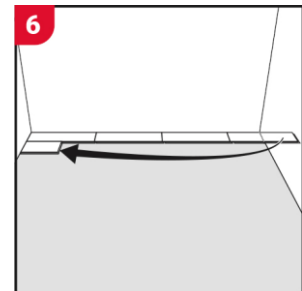


Press down firmly and listen for the click that means it's locked in place. No tapping is required.



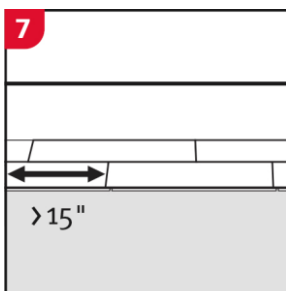
End of row

At the end of the first row, place a $\frac{3}{8}$ " spacer against the wall and measure the length of the last plank to fit. Cut to size and install.



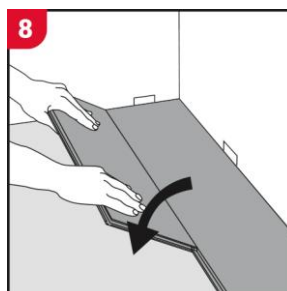
Starting the next row

Place $\frac{3}{8}$ " spacer against the wall and use either the cut part from the last row, or a new plank measuring at least 15" in length.



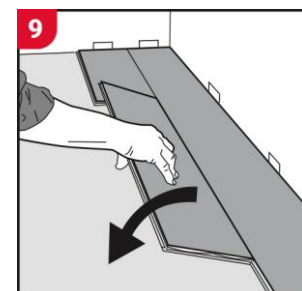
Staggering end joints

The minimum distance between plank end joints in parallel rows must be at least 15" for plank lengths of 48" to 60" and 22" for plank lengths greater than 72".



Second row, first plank

Place the plank at an angle against the plank in the previous row, inserting it into its groove, pressing forward and folding down at the same time.



Second row, second plank

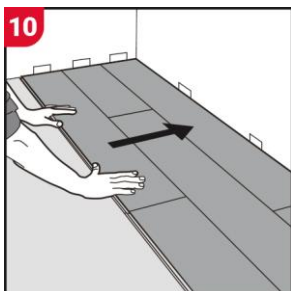
Gently place the plank close to the short end of the previous plank and fold down in a single action.

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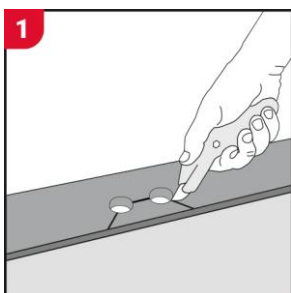
After 2-3 rows

As installation proceeds, check that the installed planks are tightly locked and snug against the $\frac{3}{8}$ " expansion gap spacers on each wall. Remove the spacers once the installation process is complete.



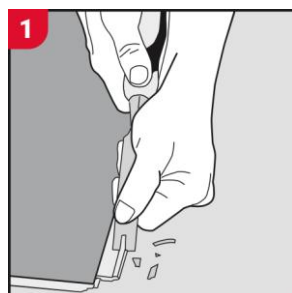
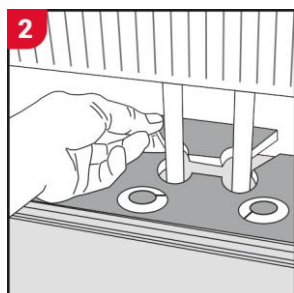
First or last row at uneven walls

The first and last rows may need to be trimmed at uneven walls. Scribe the wall line to the plank row as shown, cut and then continue with installation. The last row plank width must be at least 2" wide.



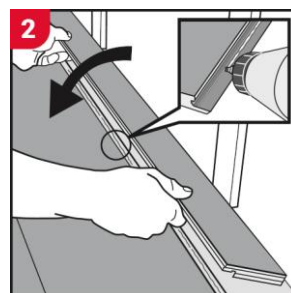
Installation around radiator/heating pipes

Drill holes two times larger than the diameter of the pipes. Remove a piece of the plank with a utility knife. Position the plank on one side of the pipes and the cut piece on the other side. Glue cut edges together.

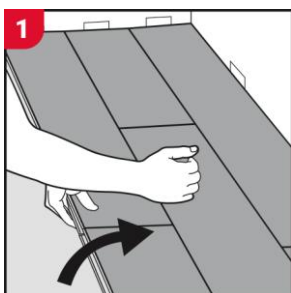


When angling is not possible

Remove the vertical locking part of the strip with a chisel. Apply glue on the strip and push the planks together to join them. Ensure that $\frac{3}{8}$ " spacers are between the last plank and the wall to maintain the required expansion gap.



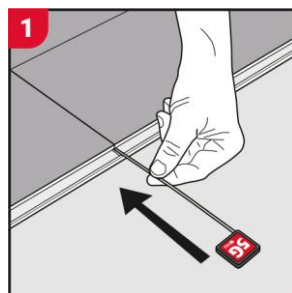
Dismantling planks



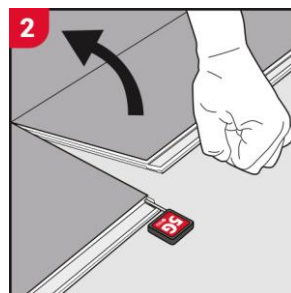
Separate the entire row by carefully lifting up and releasing it. Fold up the row and release the whole long side.



Disassemble each plank by sliding the short ends horizontally. **Never fold up the plank as this will damage its locking profile.**



Insert the dismantling tool into the gap between the tongue and groove on the short end of the plank. Push it into the short side.



The short side should now be unlocked and the plank can be lifted up and away from adjacent planks. **This tool is not needed to separate planks.**