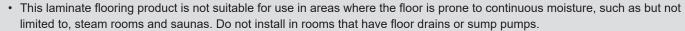
ALLEN + ROTH WATER-RESISTANT LAMINATE FLOORING INSTALLATION INSTRUCTIONS

Please read all the instructions before you begin the installation. Improper installation will void warranty.

CAUTION:

- Use safety glasses and gloves when cutting laminate floors. Laminate floors will create wood dust; always use a protective dust mask and cut the product in a well-ventilated area.
- · Never tap long edges; tap only as instructed in this guide.
- Never use tools designed for other laminate flooring installation systems.
- Never wax, polish, or use abrasive cleaners on laminate floors.



- Do not install cabinets or affix any objects (eg. kitchen islands) to or through the laminate floor. Cabinets should be installed before the laminate floor or affixed to the wall to prevent pinning the laminate floor.
- · Inspect every plank for defects or damage before installing it.
- Do not tap laminate planks directly. Always tap against a scrap piece to protect the installed planks. Tap lightly and evenly as tapping with excessive force can result in damage.



MANUFACTURER'S REQUIRED MINNESOTA DISCLOSURE – IMPORTANT HEALTH NOTICE: SOME OF THE BUILD-ING MATERIALS USED IN THIS HOME (OR THESE BUILDING MATERIALS) EMIT FORMALDEHYDE. EYE, NOSE, AND THROAT IRRITATION, HEADACHE, NAUSEA AND A VARIETY OF ASTHMA-LIKE SYMPTOMS, INCLUDING SHORTNESS OF BREATH, HAVE BEEN REPORTED AS A RESULT OF FORMALDEHYDE EXPOSURE. ELDERLY PERSONS AND YOUNG CHILDREN, AS WELL AS ANYONE WITH A HISTORY OF ASTHMA, ALLERGIES OR LUNG PROBLEMS, MAY BE AT GREATER RISK. RESEARCH IS CONTINUING ON THE POSSIBLE LONG-TERM EFFECTS OF EXPOSURE TO FORMALDEHYDE. REDUCED VENTILATION MAY ALLOW FORMALDEHYDE AND OTHER CONTAMINANTS TO ACCUMULATE IN THE INDOOR AIR. HIGH INDOOR TEMPERATURES AND HUMIDITY RAISE FORMALDEHYDE LEVELS. WHEN A HOME IS TO BE LOCATED IN AREAS SUBJECT TO EXTREME SUMMER TEMPERATURES, AN AIR-CONDITIONING SYSTEM CAN BE USED TO CONTROL INDOOR TEMPERATURE LEVELS. OTHER MEANS OF CONTROLLED MECHANICAL VENTILATION CAN BE USED TO REDUCE LEVELS OF FORMALDEHYDE AND OTHER INDOOR CONTAMINANTS. IF YOU HAVE ANY QUESTIONS REGARDING THE HEALTH EFFECTS OF FORMALDEHYDE, CONSULT YOUR DOCTOR OR LOCAL HEALTH DEPARTMENT.

INTENDED USE

These laminate floors are designed to be used in interior, climate-controlled areas. Installation temperatures should be at a minimum of 64°F (18°C) and relative humidity should be between 50% and 60%. These laminate floors can be installed on grade, above grade or below grade. Laminate floors are designed as a floating floor system and are not to be nailed, screwed, glued or attached in any way to the subfloor.

TOOLS AND SUPPLIES

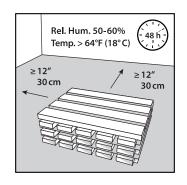
- Saw (power saw, hand saw or guillotine-type cutter)
- Measuring tape
- Carpenter's square
- · Utility knife
- Pencil/marker
- Pull bar
- Tap block
- Hammer/mallet
- 3/8" (10mm) spacers
- Laminate floor underlayment max. 3mm (1/9 in.) thick

- 6 mil (0.15mm) thick vapor barrier (concrete installation requirement)
- 2" (51mm) wide moisture-resistant adhesive tape Flexible 100% silicone caulking (wet area installation requirement)
- 1/2" (12mm) and 3/8" (10mm) compressible PE foam backer rod (wet area installation requirement)
- Safety glasses
- Dust mask (NIOSH-designated)
- Gloves

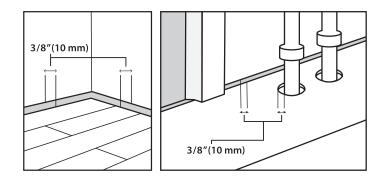
KEY INSTALLATION CRITERIA

Store unopened cartons in the installation area for 48 hours (96 hours in especially dry or humid conditions). Cross-stack cartons and store away from outside walls, heat sources and air conditioning vents.

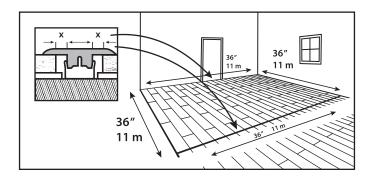
Acclimation temperature should be greater than 64°F (18°C) and relative humidity should be between 50-60%.



Leave a 3/8" (10mm) expansion space between the edge of the flooring and walls or other vertical objects (eg. plumbing, cabinets, etc.). This space will be covered by base boards or finishing trims once your installation is complete.



Installation length and width should not exceed 36' (11m). Use T-moldings if installation is over the allowable length/width. Installations through multiple rooms should be separated by T-moldings.



INSTALLATION DIRECTIONS

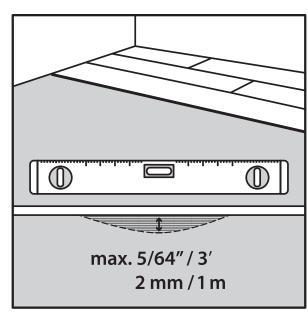
Best practices are to install laminate floors parallel to the room's main light source or parallel to the room's longest wall.

GENERAL SUBFLOOR REQUIREMENTS

- Subfloors must be clean, free of debris and structurally sound
- Subfloors must be level to 2mm per 1m (5/64" per 3')
- Carpet, carpet pad and carpet tack must be removed

WOOD SUBFLOORS

- Moisture content should not exceed 12%
- Subfloor panels must be screwed/nailed to supporting beams
- Subfloor squeaks and creaks should be remedied prior to installing the laminate floor
- Crawl spaces must be dry and meet all building codes
- Always install laminate flooring underlayment max.
 3mm (1/9 in.) thick over wood subfloors



2/5

KEY INSTALLATION CRITERIA CONTINUED

CONCRETE SUBFLOORS

- Subfloor must be cured and allow to dry for 60 days prior to installing laminate floors
- A moisture test must be performed prior to installing laminate floors
- Concrete or cement screed moisture content cannot exceed 1.8%. Calcium sulphate screed moisture content cannot exceed 0.5%
- Moisture vapor emissions should not exceed 5 lbs / 1,000 ft2 per 24 hours
- Always install a 6 mil (0.15mm) polyethylene vapor barrier and max. 3mm (1/9 in.) thick laminate flooring underlayment over concrete subfloors

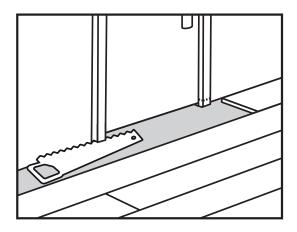
EXISTING FINISHED FLOORS AS SUBFLOORS (EG. VINYL SHEET, PLANK, TILE)

- Existing floor covering must be well bonded to subfloor and in good condition with no tears, cracks or other damage
- Heavily cushioned surfaces (eg. cushion vinyl) are not acceptable and should be removed
- Existing finished floor covering should not exceed one layer in thickness
- Ceramic tile grout should be made smooth by applying self-leveling compound
- Follow instructions pertaining to the underlying subfloor (Wood Subfloors or Concrete Subfloors)

PRE-INSTALLATION PREPARATION

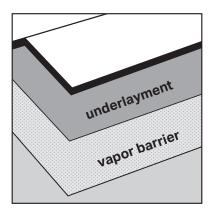
Undercut door jambs to fit laminate floors underneath them. Use a flooring off-cut and a piece of underlay as a height guide.

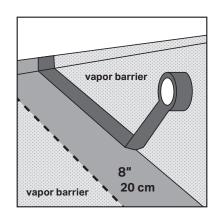
Leave the required 3/8" (10mm) expansion spacing under door jambs.



- 1. Sort planks from multiple boxes to avoid repetition
- Inspect every plank for defects and/or damage before installing it
- 3. The first and last row of your installation must be wider than 3.5" (9cm)
- 4. The first and last plank of each row must be a minimum of 12" (30cm) long
- 5. Planks should be staggered from row to row by at least 12" (30cm)
- 6. Use spacers to maintain the required 3/8" (10mm) expansion space
- 7. Choose a corner to start from and work from left to right

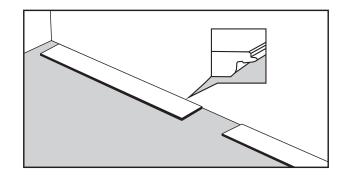
- 8. Lay vapor barrier (if applicable) and underlay in the following manner:
 - a. Vapor barrier: overlap edges by 8" (20cm) and seal with moisture resistant adhesive tape
 - b. Underlay: butt-end edges and seal with adhesive tape (do not overlap edges)





INSTALLATION PROCEDURE

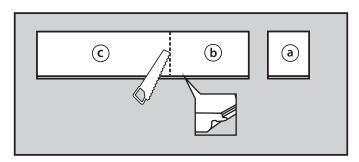
1. Lay full planks against the wall with long edge tongue facing the wall. These planks are not to be connected to each other as they will act as guides to assist in properly installing the first three rows and will be removed once these rows are connected.



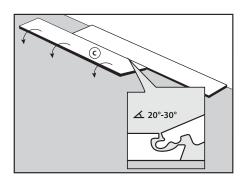
2. Cut a plank into three sections as follows: **Cut Plank Section A:** 8" (20 cm) to be used to tap against

Cut Plank Section B: 16" (40 cm) to be used as a "bridge plank" when connecting short edges

Cut Plank Section C: remainder of plank to be used as first plank of the first row.

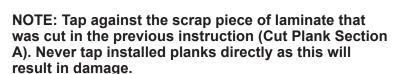


3. Connect the first plank (section C from the cut plank) to the guide plank by inserting its long edge tongue into the guide plank's long edge groove at an angle of between 20°-30°, then slowly lower it to engage it.



4. Install remaining planks of the first row by first inserting their long edge tongue to the guide plank's long edge groove, but before lowering it ensure it is approximately 3/16" (5mm) away from the previous installed plank.

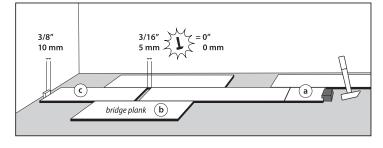
To connect the planks, lightly tap the new plank's short end groove until it is fully connected the previous plank.



Connect the "bridge plank" (Cut Plank Section B) to help align planks during tapping.

Once connected, joints will be tight and there will not be a gap between planks.

Ensure 3/8" (10mm) expansion space is left between first plank of each row and the wall.

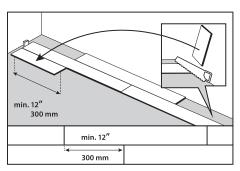


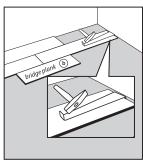
INSTALLATION PROCEDURE CONTINUED

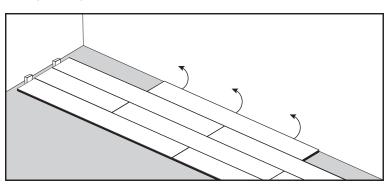
5. Continue in this manner until the row is complete. Cut the last plank to fit and ensure the 3/8" (10mm) expansion space is left between the end of the row and the wall. Use the remainder of the last plank of each row to start the next row provided it is at least 12" (30cm) long and short edges are staggered by a minimum of 12" (30cm) from row to row. If this is not possible use a new plank and cut it accordingly.

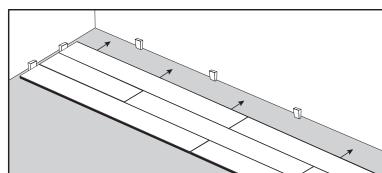
Use a pull-bar instead of tap block on the last plank of each row.

6. Once the first three rows are complete remove guide planks and slide installed rows towards wall, ensuring 3/8" (10mm) expansion space is maintained.

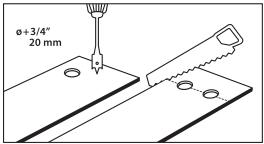


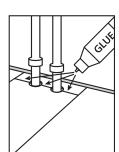






7. A 3/8" (10mm) expansion space must also be maintained around plumbing, pipes and any vertical objects. If fitting planks around plumbing, cut holes approximately 3/4" (20mm) larger than the diameter of the pipe. Cut through the center of the holes and use glue to hold pieces in place.



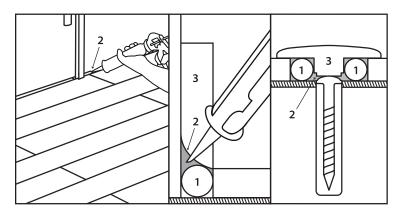


To complete the installation remove all spacers and cover the expansion space with wall base or quarter rounds.

• Ensure wall base or quarter rounds are fastened to the wall and not through the laminate floor or expansion space.

WET AREA INSTALLATION INSTRUCTIONS

If installing laminate floors in moisture prone areas such as bathrooms, kitchens and entry ways, the expansion space must be sealed with 100% flexible silicone caulking. If desired, to reduce the amount of silicone caulking used, expansion spaces can be filled with 3/8" (10mm) Polyethylene backer rod and then covered with silicone caulking.



1: PE foam baker rod / Tapajuntas de PE, 2: Silicone / Silicon, 3: Molding / Moldura