A-Tech Flooring Laminate Flooring Installation Guide

Tools and Materials Needed to Lay Laminate Flooring

Pencil, angle, folding rule
Circular saw, jigsaw or laminate cutter
Spacer
PE foil, insulation, Stanley knife or box cutter, possibly sticky tape
Laminate flooring, skirting boards, transition profiles

Laminate Flooring Installation

Basics:

- Inspect every plank for any shipping damage when removing from the carton.
- Lay the flooring at an ambient temperature of at least 18°C, a floor temperature of at least 15°C and relative humidity between 50% and 60%. These conditions should also persist during the first three days after installation. Keep windows and doors closed the room while laying.
- Laminate flooring looks best when laid with the panels parallel to the main light source.
- Before starting to lay, calculate the width that the last row of panels will have. It should not be less than 5cm. This may make it necessary to trim the first row accordingly.
- Remove any existing quarter round molding.
- Always remove carpet, pad and tack strips.
- A-Tech Flooring® laminate flooring is intended to float on the subfloor. In other words, it shouldn't be glued, nailed or otherwise fastened. As wood is a natural material, the laminate works and moves. The floating installation and wall gap ensure enough leeway for it to flex and expand slightly.
- Use foam underlayment to absorb sound and to make the floor more comfortable to walk and stand on.
- Fix skirting boards to the walls, not the floor!

Subfloor Preparation & Precautions:

- Subfloors must be clean and free of dirt and debris prior to installation.
- Subfloors must be structurally sound prior to installation.

- Subfloor moisture must be tested prior to installation and should not exceed 12% throughout the installation area.
- Carpet is not a suitable underlay for laminate floors. All carpet, carpet pad and carpet tack should be removed prior to installation.
- Variations in the subfloor flatness should not exceed 1/16" per 3ft (2mm/m). Floors must be leveled to meet this specification prior to installation. Level by filling depressed areas with floor leveling compounds and sanding or grinding down raised any areas.
- The subfloor must not slope more than 1 inch in 6 feet.
- Any existing wood flooring on concrete subfloors must be removed prior to A-Tech Flooring® installation.
- Creaking subfloors must be repaired before installation of the finished floor covering.
- Installations over radiant heated subfloors are acceptable but temperature should never exceed 72° F. Radiant heat systems must be operating for a minimum of 3 weeks prior to installation of A-Tech Flooring laminate floors.
- Concrete subfloors must be properly cured and allowed to dry for at least 60 days prior to installation. Test concrete subfloor for moisture prior to installation.
- Vapor barrier must be used when installing over concrete.
- Wood subfloors must be structurally sound and screwed or nailed to supporting beams.

Please follow the installation instructions precisely. If the flooring is improperly laid, the warranty will be voided. If any problems arise, stop work immediately and contact your sales representative.

Important:

Laminate flooring expands and contracts due to changes in temperature and humidity. That is why it is so important to leave a 3⁄8" expansion space around the perimeter of the floor and any fixed objects such as pipes or, columns to allow for movement. Doorjambs and casings must be undercut. A-Tech Flooring® laminate must be placed at least a 3⁄8" beneath the undercut jambs and casings. A 3⁄8" expansion space must also be included beneath the undercut jambs and casings. Areas greater than 40 feet in length or width must have a T-molding installed across the width of the room, archway or at the beginning of the hallway to provide additional expansion space. Doorways of less than 4 feet must always have a T-molding or other transition molding regardless of floor length or width. **Failure to meet these requirements can result in the floor buckling.**

Step-by-Step Instructions for Installing Laminate Flooring

Important: Always inspect each plank to make sure it is not damaged prior to installation. Do not install damaged planks.

It is recommended that planks be mixed from at least three cartons to achieve the most natural and varied results.

After making sure that the subfloor is suitable and letting the laminate flooring panels acclimate in the room for at least 48 hours, you can proceed with installation:

If you are laying the flooring on screed or concrete, put down a vapor barrier first. Either overlap the sheets of membrane by 20cm or glue them edge to edge. Make sure that they extend up the walls by about 3cm.

The next step is to apply an acoustic underlayment. Lay sheets of it at 90° angles to the direction that the laminate panels will run and use sticky tape to fix them to one another.

Lay the first row of laminate flooring. Start in the right-hand corner of the room and lay the panels so they run parallel to the window or other light source. Lay the panels lengthwise along the wall leaving a gap 10mm wide and snap their short sides together. Wood wedges are excellent spacers. You will almost certainly have to shorten the last panel in the row. To do so, use a circular saw, a jigsaw or a special-purpose laminate cutter. The last piece shouldn't be shorter than 40cm. It may be necessary to shorten the first panel as well to prevent this (making sure that it is also at least 40cm long).

Always place panels with the décor side facing down for cutting. Make your marks on the back. Use a circular saw, jigsaw or laminate cutter.

You can start the next row with the piece left over from cutting the first, provided that it is at least 40cm long. This will result in an attractive stepped pattern. The tongue-and-groove joints in adjacent rows should be staggered by at least 40cm to stabilize them. Insert each new panel at a sharp angle into the edge of the already-laid panel and press it down until you hear it audibly click into place. It's very easy to do by lifting both up them up a bit at the joint and then pushing down on it until it clicks. The angle is right if you can easily connect the panels without exerting any force. You'll get the hang of it fast!

The last row of laminate flooring will almost certainly be too long, making it necessary to trim it. Remember to leave a sufficient gap along the wall. If the panels there are also too wide, they must be made narrower. Remove the blue springs at their ends and join the panels using a water-free glue.

Before attaching the skirting boards, first use a Stanley knife or cutter to trim excess membrane so it won't protrude above them. It's best to cut the skirting boards to size with a mitre saw.

Transition rails must be mounted between different floor coverings in adjacent rooms. Depending on the type, they have to be glued, screwed or snapped into place.

PLANK REMOVAL:

To remove planks, simply reverse the installation process. If you plan to re-install them, care should be taken so as not to damage the installation mechanism.

- Uninstall the last installed row all at once by lifting the long edge of the row to approximately 30° in order to disconnect the long edge installation mechanism.
- Then, disconnect each individual plank from one another by starting at the right-most plank and lifting its right end approximately 30° to disconnect the short edge installation mechanism.

Installing Laminate Flooring on Stairs

Components of a typical stair:

1. The Tread: This is where you walk on.
2. The Riser: The part from the tread to the stair noise is called the riser. It is vertical in shape.
3. The Stringer: It is what is on the wall along the stair.
4. The Stair Nose: This is where the riser meets the tread.

Note: Don't attempt to install laminate flooring on stairs unless you're at the upper end of the skill level or you're a professional installer.

Basics:

- The depth of most stair treads is 11 inches. Because the width of most laminate-flooring planks is a little over 7 inches, you'll have to piece two planks together to cover the entire tread surface. To make the process easier, we recommend gluing two planks together the night before (while engaging the locking system, of course), doing enough to cover all the treads of the staircase. That way you're making one cut per tread — not attempting to match up two separately cut plank pieces precisely.

- If you have carpet on the stairs, you need to remove it before installing the laminate flooring. You also have to remove the numerous staples and tack strips holding it. Make sure to wear gloves while you are removing carpet, the staples can be very sharp and may cause injuries.

- Even if the stairs were not covered in carpeting, you can prepare them by removing any old paint or adhesive and repairing any loose or creaking steps by nailing them securely in place. You will also need to make sure each of the steps is level, so the laminate boards will sit properly. If they are uneven, you can use a belt sander to level them out, or simply use a scraper to get rid of any debris or high spots.

- If you already have an overhang, it is better to remove it prior to installation. It will give the stair a better finish and it is better to replace the current one with a laminate overhang.

- Start your installation at the top of the stairs, for the simple reason that you can avoid standing on freshly installed flooring that way.

Note: Do NOT use underlayment while installing laminate flooring on stairs. You will need to glue and screw (or nail) the laminate down to the stairs themselves. The glue should be a liquid nails or construction-type glue dispensed from a glue gun. To ensure a stronger grip by the adhesive to the back of the laminate-flooring plank, we recommend scratching the back surface of the plank with either a knife, screwdriver or scoring tool normally used to help remove wallpaper.

Don't use glue alone, though — once glue is in place, we recommend drilling pilot holes and using screws, then using filler to hide the screws. Some people will recommend using a nail gun. Just make sure the nails you use are ribbed for better holding power.

Steps-by-Step Instruction for Installing Laminate Flooring on Stairs

1. **Install the Tread Pieces**

Measure the exposed edge of the tread and cut a piece of laminate to fit. Apply a bead of construction adhesive to the back of the piece, then press it into place and hold it for a few minutes to let it bond.

2. **Install the Risers**

The installation is similar to the tread pieces, the only difference being the installation would be vertical here. Also, after placing the wood plank, do not let the glue fall on the installed tread pieces. If you want to secure the riser piece further, you can use a nail gun to nail the very top of the plank in place, as the nails will be concealed by the thread edge.

3. **Install the Stair Nose**

Allow sufficient time for the tread and riser to fit in. Then, apply some glue to the sub floor and press the nosing firmly on to it. You will also need to screw the top nosing into place, in order to properly secure it. To do this, cover the nosing with a strip of clear plastic tape, to protect the laminate. Mark out where each of the screws should be placed with a pencil - they should be spaced about 9 inches (22.9 cm) apart, and should be centered in the middle of the nosing. Then drill a countersink hole for each of the screws, using a combination bit. Insert the wood screws, leaving the plastic tape in place until after you've covered the screws with putty.

Note: It is up to you whether you wish to put all of the riser pieces and tread pieces in place first, before installing the nosing, or if you want to complete each step fully before moving on to the next one. Whichever method you use, make sure you take your time and install your laminate flooring carefully.

4. **Finishing Touch**

Start at the top of the stair.

Fill all the screw holes with matching putty. Use a plastic putty knife to smoothly and carefully fill in the screw holes. Once you've filled in every hole on the nosing strip, remove the plastic tape covering the nosing. Leave it for 30 minutes and then wipe off the extra putty with a damp cloth.

Sweep away any sawdust and make sure there is no putty left on the stairs. Once it dries, it can be extremely tough to get rid of.

Once all this is done, it is recommended to leave it for at least a day so that everything fits in perfectly. Make sure no one uses the stairs during this time.

After the 24-hour setting time, you may use your newly installed laminate flooring on your stairs.

Installing Laminate Flooring in Kitchen

Kitchen cabinets should be installed before the floor is installed.

Install the planks up to the kick plate of the cabinet, leaving a 3⁄8" expansion space. Cover the expansion space with a quarter round molding.

Place sealant only in the specific expansion spaces listed:

- Cabinet with kitchen sink: The 3⁄8" expansion space in front of the cabinets that house the dishwasher and kitchen sink MUST be filled with 100% silicone sealant.
- Dishwashers: When installing A-Tech Flooring® laminate flooring in the dishwasher space beneath cabinets, 100% silicone sealant MUST be used in the perimeter expansion spaces where the dishwasher is sitting. When flooring abuts the dishwasher, place a full bead of sealant beginning at the top edge of the floor down to the subfloor in front of the dishwasher.
- Refrigerators: When installing A-Tech Flooring® laminate flooring in the refrigerator space, 100% silicone sealant MUST be used in the perimeter expansion spaces where the refrigerator is sitting. Be sure to place sealant around openings for water supply lines to the icemaker of the refrigerator.

  NOTE: For built-in refrigerators, follow instructions for sealing as for dishwashers.
- Exterior doors: The expansion space in front of any exterior door MUST be filled with 100% silicone sealant.
- A-Tech Flooring® laminate flooring must not be installed in rooms with a floor drain.

Installing Laminate Flooring on Wall

The installation process is very similar to installing laminate on your subfloor, however, the planks must be permanently attached to the wall so they stay in their place.

It is important to remember that you still need an expansion gap when installing on your walls, as the material will still expand and contract with changes in temperature and moisture levels.

Laminate Flooring can be installed horizontal or vertical.

Basics:

- Acclimate unopened product lying flat in the room where it is to be installed for at least 48 hours.
- Measure the height and width of your wall in order to determine the amount of flooring you need. As with floor installations, you will need to purchase 5-10% extra flooring to allow for errors as well as cutting pieces to fit.
- Laminate is suitable for an accent wall when used in climate controlled (35-65% RH and 60-85°F) indoor installations only. It's not appropriate for sloping walls, ceiling or soffits.
- The desired installation wall should be primed or painted drywall only. Do not install directly over wallpaper or paneling.
- Use a stud finder to determine where the studs are. Mark them both horizontally and vertically with a pencil, making a reference grid on your wall.
- Turn off power while working around wall outlets and light switches. Pay special attention to avoid contact with electrical wiring.
- Inspect each plank for damage before installing. Do not install damaged planks.
- You will need to make sure you have a 1/4" expansion gap around the entire perimeter of the wall. You may want to purchase 1/4" shims in order to assure you have a proper expansion gap.

Steps-by-Step Instruction for Installing Laminate Flooring on Wall

Preparation:

Lay boards out on the floor to plan which will fit and which will need to be cut to fit, setting aside boards that will need to be cut. Make sure the end joints of adjacent rows are staggered at least 6" apart. You will also want to avoid allowing plank ends to align. You may need to rip your first row of planks to assure everything fits nicely. Ripping a plank means making a straight cut lengthwise.

Once you have your planks laid out how you want, it's time to begin your install. Prepare to do this by loading your nail gun and by cutting off the tip of your construction adhesive and placing it in the caulk gun.

Horizontal Installation:

1. Assemble the short ends of the planks together and measure length to fit the first row (bottom).

2. Cut the last piece as needed leaving a 3/16" gap against any adjoining walls, if applicable, and click it into place.
3. Carefully flip the connected row of planks over so the décor side is now face down and the tongue side is toward the wall. You may need assistance to flip the connected row of planks over, depending on the length of your installation. Make sure that the first row is perfectly straight and the aligned joints remain square and tight. Apply a bead of 100% silicone adhesive caulk to the back side of each laminate plank in the first row.
4. Carefully tilt the row of connected planks against the wall with the tongue side toward the floor, re-level and press to the wall.
5. Drive a brad nail into each plank at each wall stud through the shallow area of the extended groove. Take care that the brad nail heads are not raised, but also don't force them all the way through the groove. This will allow easy connection of the next row of planks. You must also place drywall screws every 16" into the wall studs or sill plate along the bottom edge of the first row of planks where they will be covered by the wall base.
6. Start the second row from the right side. Cut and glue with silicone adhesive caulk the first plank. Fit plank by angling tongue into groove and wiggle into place. Use tapping block as needed. Drive a brad nail into each plank through the shallow area of the extended groove at each wall stud. Avoid allowing plank ends to align.
7. Plank 2 of row 2 (and each plank thereafter in row 2) will be modified by removing the short end tongue. Score the tongue with a utility knife 3 – 4 times to remove. You will now have a square end.
8. Apply silicone adhesive caulk in an "S" pattern and install modified boards by tilting into place. Tighten joints as needed with a tapping block or pull bar. Drive a brad nail into each plank through the shallow area of the extended groove at each wall stud.
9. Repeat this process for each plank working your way up to the last row.
10. For the last row of the installation, use painters tape to mark the stud location for brad nailing. Cut all planks in the last row to the required width to complete the installation. Complete the installation as you have the earlier rows. Do not forget to leave that expansion gap at the top.
11. Lastly, add trim work to create a finished look.

Vertical Installation:

1. Apply silicone adhesive to the back side of the plank in an "S" pattern.
2. Adhere the plank to the wall leaving a 3/16" gap from the corners of the wall and a 1" gap at bottom. Drive brad nails ½" from the top and bottom of each plank to secure to wall. Place nails where the trim will cover. Continue with the installation for each subsequent plank by first applying silicone adhesive to the back side of the plank in an "S" pattern. Then angle the groove over the tongue of the previous plank and wiggle into place. Tighten joints as needed with a tapping block or pull bar. Finally, drive brad nails ½" from the top and bottom of each plank to secure to wall. Place nails where the trim will cover. Be sure to drive the brad nails into a stud whenever possible.
3. Finish wainscot accent to ending wall.
4. Install trim over the top edge. Install quarter round in the corners. Finish by installing the baseboard of your choice.

Special Installation Situations

1. **Heating Pipes**
Where heating pipes etc. stick out of the floor, first cut the panel to the right length, then lay it next to where it will go and use a folding rule to measure and mark where the openings are needed. Here too, remember to leave a 10mm gap round them. Now you can use a drill to remove the marked areas. Next, use a saw to bevel the edges of the hole at a 45° angle. This increases the surface area for gluing. Apply D3 glue to the sawed-off piece, place it behind the heating pipe and tightly join it to the other piece of panel.

2. Door Frames
Wooden doorframes should be shortened. Lay a panel next to the frame with the décor side down. Use a suitable saw to sufficiently shorten the frame, then slide the panel under it with the décor side up. With steel doorframes that can't be shortened, make an appropriately shaped cut-out in the panel instead.

3. Expansion Elements for Large Rooms
In rooms that are more than 12 meters long and/or eight meters wide, an expansion element is also needed in the middle. This also applies to doorways, archways (doorless openings between rooms), protruding masonry and rooms with complex shapes.