

# Choosing and Installing a Laminate Floor

Technical essentials for a fabulous floor

*The process is safe enough that even your kids can help.*



Laminate flooring floats - it isn't fastened to the underlying subfloor. And that's one reason no other flooring option empowers do-it-yourselfers as much as click-together laminate. The best versions

are also tough, look surprisingly like real wood, and can even be used in bathrooms, kitchens, finished basements and other potentially damp locations. Today's glueless versions also go down very fast.

## What You Get

This report shows exactly how to choose laminate flooring wisely and save substantial money by installing it yourself.

The cost of having laminate professionally installed adds as much as 50 percent to the price of materials. This is money that could easily stay in your pocket.

I've been monitoring the advancement of laminate flooring since it came to North America in 1993, and I've also been testing, recommending and using laminates this whole time. The information you'll gain here comes from 15 years of experience in the field.

As with all my *Best Practices* guides, I offer a personal guarantee. If you're not completely satisfied, please let me know. I'd rather cheerfully refund your money than have you anything less than delighted.

*-Steve Maxwell*

## DIY LAMINATES: THE FIVE-STEP PROCESS IN A NUTSHELL

**Step#1:** Make sure your subfloor is flat, solid and clean. Most laminates require a floor surface that's within 1/8" to 3/32" of being perfectly flat over a 24" radius. Laminates can be installed over vinyl, hardwood and some kinds of ceramic tiles.

**Step#2:** If you're working over a wooden floor, secure the surface with screws to reduce squeaks.

**Step#3:** Allow bundles of new flooring to adjust to the moisture content of your room.

**Step#4:** Unroll foam underlay.

**Step#5:** Install flooring parallel to longest dimensions of room, with 1/4" to 1/2" expansion spaces along sides and ends.

## DON'T BUY YOUR LAMINATE FLOORING YET!

Haven't bought flooring yet? That's good. There are three not-so-obvious issues you need to understand to choose optimally:

### **Issue #1: There's a huge difference in laminate appearance.**

Some laminates look like solid wood (even at close range), and others are obviously fake. Aside from surface appearance, consider the overall effect of visual grain patterns. Many brands of laminates include the outline of separate pieces of wood on each piece of laminate. This looks fine in isolation, but the effect can be busy and distracting when you're looking at it repeated across an entire floor.



applications only; AC-5 withstands years of use in a store or restaurant. For residential applications, choose AC-3 or higher. It's much tougher than urethane and stain applied to wood. The photo shows the effects of a sander held against a piece of site-finished, solid wood flooring for 60 seconds (bottom), and a piece of AC-3 laminate after the same treatment.

### **Issue #3: There's a huge difference in laminate warranties.**

All laminate warranties sound good at first, but don't be fooled. The real issue is exactly what's covered.

### **Issue #2: There's a huge difference in laminate durability.**

Some laminates are very resistant to damage, while others are easily scratched, chipped and dented. To know what you're buying, ask about the Abrasion Class rating. AC-2 is light-duty stuff for gentle

Many only address staining, fading and wear (though not scratches or chips). The best warranties also cover water issues and other mechanical damage. Also, don't assume that laminate thickness matters. It's the durability of the top layer that really counts. ↓

## SUBFLOOR SURFACE IS CRITICAL

Before you unroll underlay and start putting down laminate, get down on your knees and feel the floor -- every last square inch of it. Your finger tips tell you better than your eyes when something about the subfloor surface is too rough, dished or otherwise unacceptable. Use floor-leveling compound to fill low spots and a power planer to skim off high

areas. If you're working over a wooden subfloor, make sure it's screwed down. Rent an auto-feed screw gun (right). It drives screws as fast as you can jab the nose onto the floor - no need to reload manually. As a final step before unrolling underlay, check that each screw is driven down fully, with its head safely below the surface.



### WHAT ABOUT WATER?

The core of first-generation laminates puffed up badly when they came in contact with water, but improvements to new laminates have improved the flooring's performance. Last summer I saw what happens to a good quality laminate floor that was completely submerged in water for a couple of days. A misunderstanding at a homebuilding site I inspected led to a minor flood situation. About 10 per cent of the flooring planks had to be replaced because edges were swollen slightly, but it was an easy job. The wet floor was simply taken apart to dry, then reassembled later.

## A WORD ABOUT UNDERLAY

Laminate flooring needs to be installed over a thin layer of foam underlay. This creates a resilient support surface that compensates for tiny irregularities in the subfloor while also eliminating wood-to-wood contact that would lead to noise underfoot.

There's another feature of some kinds of underlay that you should look for. The best has a built-in vapor barrier that prevents moisture from being drawn up through a concrete floor. This layer is made of shiny plastic and must be installed face down. A vapor barrier won't do any good in the event of an actual flood, but it will prevent moisture from wicking up into the laminate, causing it to swell.

The easiest underlay to use includes a built-in, self-adhesive strip. Lay a neighbouring length of underlay down next to the first, peel off the backing strip, then press the joint together.



## STAIR-TO-FLOORING TRANSITION



A flush, smooth joint is my favorite way to make the transition between a laminate floor and the top tread of a staircase. To make this happen, install a temporary plywood strip where you want the laminate to end, then butt the laminate up against this strip as you secure each piece. Make smooth end cuts on the laminate using a chopsaw, using a special carbide blade, then sand a slight bevel along the top edge of

each cut. Use a small blob of construction adhesive about 1" away from the end of each piece of laminate as it's installed. This prevents the flooring from moving and pulling away from the top tread, after it's installed. When you're done installing the floor, remove the plywood strip and inset a piece of wooden stair tread so it overhangs the edge of the top stair and butts tight against the crisp ends of the laminate.

## JIGSAW: THE IDEAL TOOL FOR ROUGH CUTTING

While it's true that some professionals use a chopsaw to make all laminate cuts, a jigsaw is an option when you don't need smooth cuts. First of all, it operates more cleanly - it doesn't kick up a plume of fine sawdust. Jigsaws are also quieter and safer to use, plus they're less expensive to operate in this application. Laminate flooring is hard, and it wears out ordinary carbide saw blades fast. A good jigsaw blade works for hundreds of cuts, yet it only costs a few dollars to replace. And since many cut ends are hidden behind baseboard and quarter round, the less accurate cut made by a jigsaw won't be visible.



## MARKING AND TRIMMING DOORS



Most laminate installations involve areas covered by the arc of a swinging door, and even though laminates are relatively thin, you'll probably still need to trim the bottom of your doors to accommodate the raised floor.

The best time to begin is before you even lay any flooring down permanently. Place a piece of laminate tight to the door when it's positioned at that point in its arc when it's closest to the floor. (The amount of clearance between the floor and door typically varies depending on where the door is positioned. Open and close your door a few times to find the closest spot.)

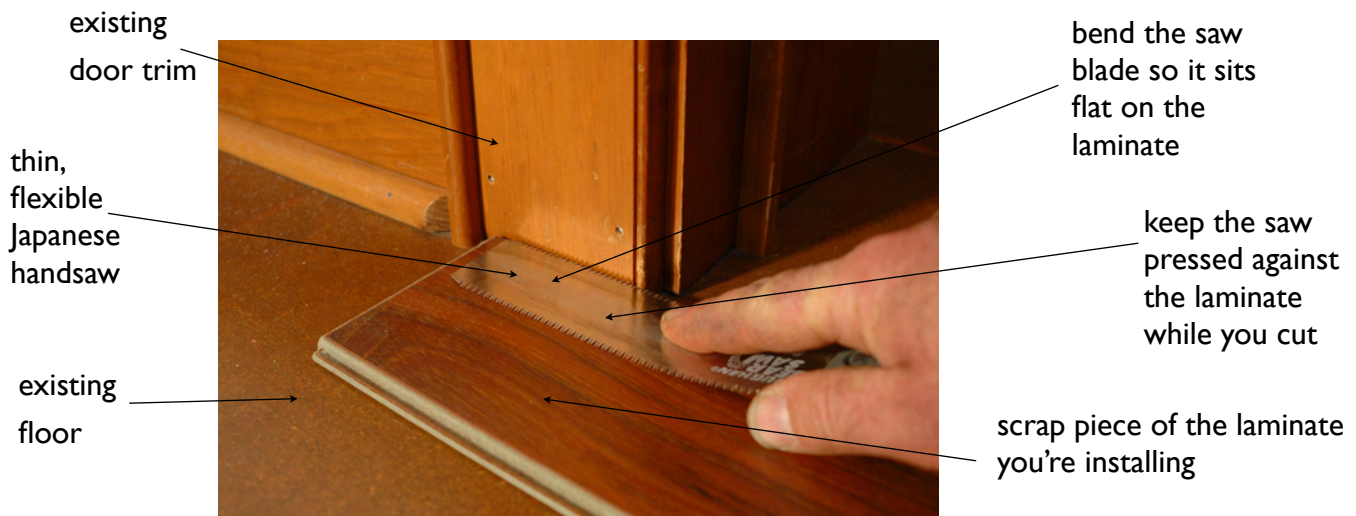
Now it's time to mark the door - an operation called "scribing". Place a full-length piece

of flooring on the old floor, tight to the door. Grab a sharp pencil, lay it on the flooring as shown in the top photo, with its point touching the door.

Draw the pencil tip across the face of the door several times to mark it. The bottom photo shows how this works.

With your door marked, take it off its hinges, lay it on a bench, then cut along the line. To avoid chipping place masking tape on both sides of the door in the cutting zone. I find that a fine-tooth jigsaw blade of Japanese handsaw produces a smooth cut. Avoid using a circular saw for this job. On most doors it causes a lot of tear out along the top surface, where the blade moves upward through the wood.

## UNDER CUTTING DOOR TRIM TO FIT LAMINATE



### TIPS FOR A TIGHT FIT

The trick to achieving a good-looking fit between laminate and trim is to overlap the trim, moulding or baseboard over top of the laminate. Since you're looking down on the joint from above it'll look perfect, even if there's a gap present. This is why it's best to under cut door trim and slip laminate underneath. Remove quarter round before laminate installation, then replace it after the new flooring is down.

## LAMINATE INSTALLATION: A CLOSER LOOK

Each laminate installation needs to include a 1/4" to 1/2" gap around its entire perimeter. This is necessary to allow the material to expand and contract freely with changes in seasonal humidity. Leave insufficient gaps and your flooring could buckle upward during humid weather.

Cut 1/4" to 1/2"-wide scraps of plywood to act as spacers to offset laminates away from your walls, or buy plastic spacers. Remove these spacers when the installation is done, then cover the gaps with baseboard and quarter-round moulding.

Begin the first row of laminate running along the edge of the longest wall. Place spacers against the wall to create the all-important expansion gaps, orienting the tongue of the first row of boards against these spacers. You could leave this first board uncut, but that might not be the best approach. Roughly lay down the entire first row of boards and see where the last joint lands at the far end. If it requires just a tiny piece of laminate to complete the course, consider cutting the first board shorter so you end up leaving room for a more substantial and stable piece at the other end.

As you assemble this first row, push together the tongue and groove edges on the ends of each board



using gentle blows with a rubber mallet driving a tapping block (see below, left). Keep the force of each blow light, and stop pounding as soon as the end joints are tight. Over-driving boards can cause joints to open up in other parts of the floor.

Measure the last board, fit it into place at the end of the row, then use a metal hook tool to pull it into place (see below, right).

As you work, save the offcuts from the end of each row for use starting the next new row. Also, pay attention to where joints between board ends land relative to those in neighboring rows. For best appearance these joints should be offset at least 6".



### TWO ESSENTIAL TOOLS

A tapping block (left) prevents damage to tongue and groove edges as you tap end joints together with a mallet.

The hook tool (right) grips the end of the last board in a row, where it

meets the wall. The other end of the tool is also bent into a hook shape, allowing it to be tapped with a mallet, so you can pull the last board in a row tight. These specialty tools are available where laminates are sold.



### LET ME KNOW HOW IT GOES!

I'd love to hear your comments on this "Best Practices" guide, and how your laminate flooring job went. Please send comments to me directly at [steve@stevemaxwell.ca](mailto:steve@stevemaxwell.ca). I care about your success!