

Q The flooring article (“Installing Prefinished Strip Flooring”) in the November 2015 issue showed the boards being installed tight to the baseboards. Shouldn’t there be an expansion space around the perimeter?

A Howard Brickman, a wood-flooring contractor and consultant based in Norwood, Mass., responds: Over many decades of installing wood flooring as well as studying the science of building materials and wood technology, I have come to realize that many of the “rules” regarding wood flooring are based on a deeply ingrained (pun intended) mythology and not necessarily on fact.

The first myth is that wood is a “living and breathing” thing, so wood flooring needs plenty of expansion space. The underlying truth to this myth is that wood shrinks and swells when it loses or gains moisture. But this movement does not define life.

The second myth, which builds on the first one, is that wood and water don’t play nicely together. But water is an integral part of all wood. (And once the use of water-based finishes became widespread, this myth lost a lot of its mojo.) Here’s a fun fact: A 10-foot-square oak floor at 8% moisture content (MC) contains 2.7 gallons of water. For a more robust explanation of the relationship between wood and moisture, read *The Wood Hand-*

book (free online at fpl.fs.fed.us from the Forest Products Laboratory) or Bruce Hoadley’s book, *Understanding Wood* (not free, but more fun to read).

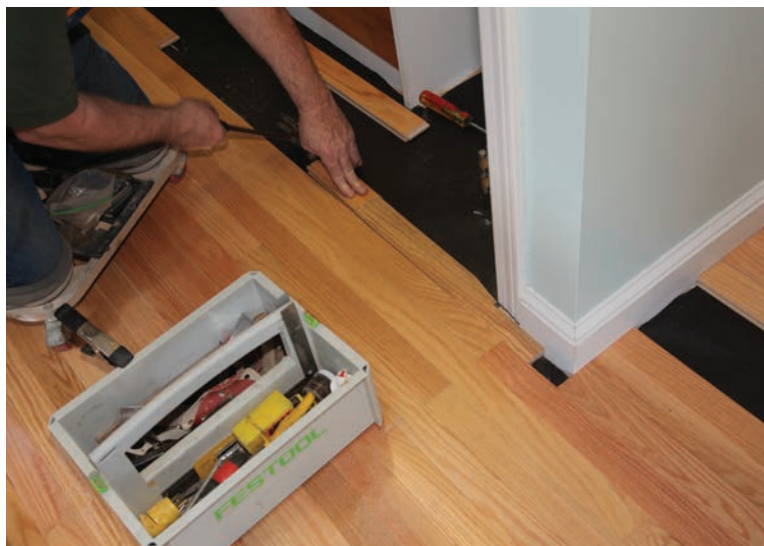
PREVENTING MOVEMENT IN WOOD FLOORING

Setting the myths aside, there are three things we can do to prevent solid tongue-and-groove wood flooring from moving.

The first is to control the moisture in the house. In the U.S., most single-family residences are wood-frame construction with plywood or OSB structural subflooring fastened to solid-wood or engineered joists. The wood flooring is then blind nailed with cleats or staples directly to the structural subfloor. Because flooring can swell if exposed to excessive moisture, it’s critical not only that the building interior is dry when the flooring is installed, but also that the subfloor is dry. In a perfect world, wood flooring with an 8% MC performs best when installed on a subfloor that also has an 8% MC. If there is a difference in MC, the bottom of the flooring and the top of the subfloor will start to swap moisture as soon as the flooring is nailed down. The solution is not to stop the swap, but rather to dry out the subfloor before the installation. Every percentage of difference in MC increases the risk that the floor will not stay flat over time.

The next strategy involves fasteners. The blind nails that you drive into T&G flooring stay in place by the friction between the nail surface and the surrounding subfloor material. As you know from experience, pulling a nail out gets easier once it starts to move. Any lateral movement of the wood flooring will loosen the nails, resulting in a loose and noisy floor. So the second way to prevent lateral movement is to use lots of fasteners. I recommend driving nails every 4 to 6 inches.

OK, we’ve dried out the subfloor and nailed the heck out of the flooring, but dang, the surface of the new floor still became cupped and wavy—not smooth and flat—even though no visible water had gotten on the floor. This is because water exists as a gas suspended in the atmosphere, described with the term “relative humidity” (RH). If you expose wood to a higher RH, given enough time, its MC will increase and the floor-



Proper moisture content in wood flooring and in the subfloor, along with adequate nailing, lets the flooring be installed without an expansion space.

Photo by Roe Osborn

ing will swell. Conversely, if you expose wood to a lower RH, the MC will decrease, and the flooring will shrink. But there is a “Goldilocks” MC for your climate zone: halfway between the winter low and the summer high. In the Northeast, that’s 7.5%. It’s a bit higher in the South and a bit lower in the arid, high-altitude regions of the West. So the third factor is to make sure the flooring is at the right MC for your part of the country.

EXPANSION SPACE OR NOT?

So what about the expansion space? The angle of the nails keeps the flooring from pushing back toward the starting wall, so no space is needed there. Wood doesn’t shrink or swell much along the longitudinal axis, so no space is needed at the ends where they butt up against the wall. And if you use enough fasteners to prevent lateral movement, then little or no expansion space is needed along the finishing wall. A dry subfloor plus correct flooring MC plus a lot of fasteners equals the best wood-floor performance. The simple fact is that when wood flooring is exposed to excessive moisture, the floor will cup—even if left with a quarter of a mile of expansion space.

Q When cutting trim, guys I work with always add a “skosh” for a tight fit at the corners. How much should I add?

A Gary Katz, owner of Katz Road Show, editor of ThisIsCarpentry, and a presenter at JLC Live, responds: Until I saw your question, I never knew how to spell the word “skosh,” probably because I’ve only used the word on jobsites and never in an article.

Most carpenters I know also add a “hair” or a “skosh” to their measurements. I do, too, but it needs to be said that I don’t cut my material long just to make it long—if that were the case, I’d have to re-cut almost every piece. I start by measuring and cutting as precisely as possible and then add a “skosh” to those precise measurements. This is something I learned from watching a finish crew install baseboard for \$.15 a foot. How big a “skosh” depends on how long the molding is. For example, if I’m installing a piece of baseboard or crown molding that’s more than 8 feet long, I add as much as ½ inch. I install the board by springing the middle away from the wall and letting it snap in tight against the wall, closing up the corner joinery watertight.

For boards shorter than 8 feet, I add about ¼ inch. For some shorter boards, it’s just a matter of “leaving the line”—cutting to the side of the pencil mark instead of in the middle. And for really short or small pieces, like a 1-inch piece of baseboard, I subtract a “skosh,” just to be sure the piece will fit the first time. Over time, you’ll get a feel for how much to add to each board you’re installing.

NEW: Keep Beautiful Home Exteriors Beautiful

Venting Never Looked So Good



The people who brought you the Dryerbox® are taking that quality commitment outdoors. Today, exterior terminations get the attention they deserve as components that actually enhance aesthetics. Built in the USA of powder coated 22 gauge galvanized steel, they stand the test of time. Clean lines and superior performance make Dryer Wall Vents™ worth a closer look.

Get an in-depth view online today, and see for yourself how the Dryer Wall Vent can contribute to every home’s beauty.



DWV4
Powder Coated
22 Ga. Galvanized Steel

In-O-Vate
Technologies Inc

The Dryerbox® People

888-443-7937
www.DryerWallVent.com