

how to build a deck

user manual on deck building made easy

There are some critical things you can do to make your ipe deck installation easier. These tips will ensure that, when you're done building an ipe deck, you can rest easy knowing that it will remain strong and look great for many years to come.

1. Let your bundles of ipe decking acclimate to your immediate environment and humidity levels. We recommend that you allow for 3-5 days to pass before you start cutting the decking.
2. Even though ipe is naturally resistant to mold, if you're concerned about excess moisture or wet leaves covering your ipe wood, we recommend building a simple canopy over the wood. Why not just cover the wood with a tarp? Simply covering the wood in this manner will prohibit and extremely slow down the acclimation process. A canopy that covers, but allows for easy air circulation is a much better and time-saving solution.
3. Do NOT apply a deck oil finish until after:
 - a. The Ipe wood has acclimated and
 - b. You install the ipe decking. Applying a finish prior to installation will lead to more work later on since, during the installation process, the finished ipe can scratch. If that occurs, then you'll have to reapply your finish. Save yourself time and energy.
4. Apply an ipe end sealer immediately after you cut the decking. This is a critical step when it comes to ensuring the overall health of the ipe deck boards. If you wait over an hour to apply the end sealer, the ipe can end up with checks/split ends
5. Finally, since the next few months tends to be both rainy and, in certain areas, snowy, installing an ipe deck in the Fall means that your decking will have a higher moisture content. This is why you'll need to build as tight and as stiff of a deck as possible. During the Spring and Summer, the decking will naturally dry and start to contract. If your deck was not as strong as it could have been, you could end up with loose, or warped boards come the warmer months. How can you ensure that your ipe deck installation is as tight as possible?
6. Pre-drill, baby! Pre-drill! Seriously. Pre-drilling ipe with high-grade deck screws will help ensure a tight fit to the joist.
7. With pre-grooved ipe decking, always use deck fasteners that require installation at a 45° angle. Independent scientific studies prove that installing at an angle provides a much tighter fit. Installing ipe this way also ensures that each individual deck board does not act independently and that the decking, as a whole, moves as one solid structure.

Finally, be sure to buy premium grade ipe decking from Roque Valente SRL. Remember, we're running great decking sales that will help you save hundreds of dollars on your order. Contact now

Do not cover your ipe decking with a tarp. When wood is covered with a tarp, the result is a greenhouse effect. Moisture gets trapped under the tarp, the wood absorbs the moisture, and once the tarp is lifted, the grain in the wood naturally releases the excess moisture at a rapid pace. That is what leads to the checking and warping the wood is currently experiencing. Now, the wood we sold you did have the end grains covered, but that would not have prevented the moisture from being trapped under the tarp and that scientific process from occurring. It's important to remember that your deck will always be exposed to the elements. The best way to protect it is to use a deck oil, and seal fresh cuts with an end grain sealant."

This is what you should do instead:

- Cut off checks
- Re-apply end-seal as needed
- Use Hardwood Wrench™ deck tool to help with warped boards
- Measure the boards you just cut and order more decking
- When the new decking arrives, allow at least 4-5 days to pass before installing

Give Your Decking Room to Breathe. Building a deck is not as simple as laying out some boards and using a hammer, glue, and nails. You can't avoid the physical properties and nature of ALL decking materials. With that in mind, it's important to realize that even though decking materials are not living things, they still do "breathe."

All decking materials expand and contract during the course of the year. When it's hot and dry, wood contracts. When it's humid and/or rainy, wood expands. The way decking materials behave should not be lost on anyone. However, even

seasoned deck builders can sometimes forget, or be altogether unaware of just how important proper air ventilation is. Proper deck planning will ensure that air can flow freely through the deck and under the joists. Allowing for proper air ventilation will ensure that moisture can evaporate evenly and consistently. Why should you even bother planning for how air moves under a deck?

Decking “breathes” on all sides. Both the surface area and the underside of the decking MUST be exposed to the same levels of humidity. For decks that don’t allow proper ventilation and the underside of the deck gets “choked off” from the surrounding supply of air, the decking ends up getting exposed to two completely different levels of moisture.

And, because the decking will naturally try to balance itself out, you can predict two outcomes depending on the moisture variance. If the decking has too much moisture on the underside of the deck, the material will cup. Similarly, if the top side of the decking is exposed to more moisture than the underside, the material will buckle.

Create a slope of soil under the deck that starts away from the home. Many professionals will also cover the soil with a plastic sheet. Also, ensure even gap spacing between deck boards. Gap spacing between boards can range from 1/4” (6.35mm) to 3/32” (2.38mm). Ask your lumber supplier, whether your decking is air-dried, or kiln-dried as this will help you figure out how much space to put between each deck board. Proper fastening is also a must. Using deck fasteners over top screws will ensure a longer and healthier deck in the long run. Regardless of the deck fastening method you choose, you can expect the decking material to expand and contract.

Also, don’t forget to consult local building codes. it’s important that you know what parts of your deck building plan need to be up to your local building codes. Here are some critical parts of the deck construction process that you should pay close attention to.

- **Ledger:** When getting rid of an older deck, you should remove the ledger currently installed. Inspect for any decay, or wood rot. You should repair the rim joist, replace the sheathing, or anywhere else you see partial degradation due to moisture. Many professional deck builders will make sure that new sheathing stays as dry as possible by fastening it over the foundation. Many cities and towns have specific guidelines outlining approved ways to replace and repair this crucial part of your deck.
- **Flashing:** Decks that don’t use the right flashing, or apply it to code will have a higher risk of some kind of structural failure. Even if the chances are slim, why take the chance? Professional deck installers will recommend copper flashing, siding, and housewrap. In 2009, many local building codes were updated to require that you use additional hardware to increase the holding strength between the deck and the ledger. There are a lot of details to pay attention to especially since the connection of the deck to your home is as crucial to deck safety as wearing your seatbelt while driving.
- **Framing:** You drew up a beautiful deck design...but is the framing and your proposed joist spacing up to code? Usually you can space the joists at 16” on center. For decking as strong as ipe, here are our recommendations:

| Nominal Dimension | Finish Dimension | Joist Spacing |
|-------------------|------------------|---------------|
| 1×4 | 3/4” x 3 1/2” | 16” |
| 1×6 | 3/4” x 5 1/2” | 16” |
| 5/4×6 | 1” x 5 1/2” | 24” |
| 2×6 | 1 1/2” x 5 1/2” | 32” |

Note: Check your local building codes. The joist spacing shown is very conservative and designed to pass most area building codes and to have nearly zero deflection under standard loads. The joist spacing shown is also valid if the decking is laid in a diagonal pattern to the joist, or used even with heavy loads such as hot tubs. Railing: Does your design call for wood deck railing? Making sure your deck rail system is safe needs to be your primary concern. You must install guardrails at least 3 feet or higher on any deck that is at, or over 2 1/2 feet (30”) off of the ground.

Stairs: The International Residential Code says that you can install risers as high as 7 3/4 inches. Lower than that might be ok. Be sure to check with the building department.

Building codes are cursed by only those builders who think about speed, not efficiency. Lawsuits and even accidental deaths have occurred whenever people cut corners when building a deck that wasn’t to code. Contact the NADRA that has sobering pictures and helpful advice.

If there is more need on user manual on deck cleaning, painting and maintenance, please send us an email at info@roquevalente.com

Thank you,
Roque Valente SRL

© Roque Valente SRL – how to build a deck