# **PRESSURE-TREATED WOOD** Common Misuses & Related Best Practices





Using the right pressure-treated wood for a project is key to ensuring wood maintains its beauty, vitality, durability and structural benefits. And when it comes to pressure-treated wood for decks, porches and other outdoor applications, there is a high standard of construction and maintenance best practices, along with a specific set of pressure-treated wood use categories (UC) to help ensure contractor and client satisfaction. Below are six common treated wood decking project mistakes. Familiarize yourself with these and how to avoid them.

### **1. LACK OF VENTILATION**

- Decks need proper ventilation to allow airflow to circulate underneath and for moisture to dry out over time.
- Without the ability for good airflow, moisture can build up under decks causing problems over time. If the underside of deck boards remains damp and the top is dried by the sun, it can lead to issues with warping and mold.



By allowing band joists (decking side boards that form "the box" of the deck) to be at least 18 inches off the ground, air will more easily circulate under the deck. For decks in contact with the ground, you may need to use several inches of gravel under the deck to allow water to drain away and moisture to escape.

• Remember to follow all building codes and adhere to product manufacturer installation requirements. Each deck location and project is unique and additional ventilation openings or greater clearance to grade may be needed.



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#### **2. IMPROPER DECK BOARD SPACING**

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- Wood is a beautiful and natural material. As such, lumber may shrink and swell as weather changes throughout the year.
- When buying treated wood at the lumberyard, ask if the lumber has been kiln dried, which means it should have less remaining moisture (the letters KDAT, which stand for Kiln Dried After Treatment, should be on the end tag or stamped on the product), or if the deck boards are air-dried or unseasoned (known as 'green' lumber) meaning they likely have more moisture.

Knowing this answer will help determinhow much the decking will shrink as remaining moisture evaporates.

Keep in mind that in colder seasons and climates, deck boards may retain more moisture in general.

Typically, kiln dried decking should be placed 1/8 inch apart – use a framing nail or "16-penny nail" to measure for even spacing between deck boards. Since unseasoned treated lumber will shrink more than kiln dried lumber, you should only need to allow spacing of 1/16 inch between deck boards, and in many cases contractors will align unseasoned deck boards right up against one another for a tight fit.







#### **3. INADEQUATE FASTENING AND CONNECTIONS**

- When it comes to decking, nails are not enough.
- A safe deck features the use of heavy-duty, corrosion resistant fasteners and metal connectors throughout the entire structure, spanning from the house to the posts in the ground.
- While metal connectors are typically nailed, structural screws have been developed to aid fastening without sacrificing strength.

Deck failures can occur due to improper deck connections, so be sure to use the correct corrosion resistant fasteners—screws, nails and other hardware in the correct application.



• There are many advances in deck fasteners and connectors that can help strengthen a deck, and help you meet and exceed building codes.

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#### **4. UNSEALED END CUTS**



• Pressure-treated lumber has undergone a wood preservative treatment process to help it guard against a variety of insects, weather elements and even fire depending on the application, requirement and manufacturer.

When you trim boards to fit your project, don't forget to seal the end cuts by using two percent copper Naphthenate or another wood preservative to ensure the newly cut board still maintains the exterior preservative treatment upon installation. The preservative can be applied with a paint or sponge brush to the cut end.

• The end cuts of a board are more than two times as porous as the edges and can absorb water much faster than the other board surfaces. Priming all cuts helps protect untreated, exposed surfaces against decay and insects, and helps ensure the project has a long service life.

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#### **5. INCORRECT PRODUCT SUBSTITUTIONS**

## **OAVOID** SUBSTITUTIONS

- There are multiple types of treated wood to help you do the project right.
- The type of treated wood used for deck joists and support posts will not be the same as what is used for decking boards or a deck railing. Furthermore, it's also important to take product use and project environmental factors like leaves and dirt into consideration when identifying not just required use categories (UC), but the optimal treated wood use levels for the project.
- For example, an outdoor structure in a shady area under deciduous trees can get leaves or tree

debris trapped between deck boards or in corners in a deck, a play structure or even in trellises and arbors. Leaves are organic materials and they will break down and decay over time.

• Give special consideration to the type of pressure-treated wood used for high-traffic areas like deck stairs where dirt, debris and moisture can build up. It may be worth an upgrade to get all wood materials in your project rated for ground-contact.

And remember to confirm with your supplier about what level of treated wood you are getting. End tags on the wood will help determine, for instance, whether the wood has been treated for above ground or ground contact use. For a quick reference list on treated wood use categories (UC), visit www.awpa.com/references.

Take product use and project environmental factors into consideration.



#### **6. MISUNDERSTANDING THE LIMITED WARRANTY**



• Many pressure-treated wood products come with a warranty, but the warranty is only helpful if it has been read and understood by contractor and homeowner, alike.

It's important to know what the warranty covers, and what it does not – such as routine maintenance. Pressure-treated wood warranties typically cover only the wood and only for decay and insect infestation for a select period of time. Warranties also vary by product manufacturer.

- Furthermore, a key part of maintaining the warranty starts before the very first deck post is installed. Understanding the construction best practices not only produces a more aesthetically pleasing, beautiful project, but it also leads to a safer structure.
- -̈́̈́̈́́-TIP
- Warranties require that the project comply with all applicable environmental and building codes, regulations and laws.
- No outdoor product is maintenance free. When it comes to decks, regular cleaning, periodic re-sealing and annual safety checks are key parts of keeping the deck in shape. So doing the job right and routine deck maintenance are an integral part of warranty compliance.

Warranties require the project comply with all applicable environmental and building codes.



Together we can foster the best use of pressure-treated wood. For more information visit: **ThinkWood.com** and www.coxwood.com