Simple Steps to More Environmentally Friendly Deck Protection

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by Joe Laur

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Spring is here. And, with mild temperatures, comes the chance to assess the damage inflicted on your deck and porches by winter snow, ice and freezing temperatures. Your old finish may be worn leaving the wood unprotected and open to rotting and splitting. The ultimate test is to apply a few drops of water to the wood. If it beads, your wood should be well protected for another season, but if it soaks into the wood, it's time for restoration.

For many years, staining wood meant working with toxic solvents and harmful fumes. But, to meet growing demand for more 'green' alternatives, environmentally friendly wood stains have become more prominent on the store shelves.

"We now see eco-friendly wood stains on the market that can match or outperform more toxic, film coatings on beauty, longevity and overall performance," according to Rob Mueller, Past President of the Paint & Decorating Retailers Association (PDRA). "While many stains simply coat the wood, these high-performing, high-quality eco-friendly stains actually penetrate it for protection from within."

For a 'green' deck that you can expect to last, here are some essential staining tips:

Select a water-borne stain that penetrates wood

Traditionally, wood stains used oil-based solvents to simply coat the wood. For water repellency, these oil-based solvents often contain paraffins, which quickly break down with exposure to sun light and heat.

The move to water-based stains combines the benefits of both oil and water-based coatings, using water as the vehicle to get oil penetration deep into the wood for deep down protection.

An added benefit of 'water-borne' alkyd wood stains is that they significantly reduce the level of volatile organic compounds (VOCs), which contribute to smog or ozone depletion. "Water-borne stains perform like a solvent-based formula but provide the inherent advantages of water, such as the ability to allow the wood to breathe and the stain to bond with the wood," says Sjoerd Bos, Vice President of Sansin. "These eco-stains don't just sit on top ready to be chipped or scraped away and harm the environment."

Clean and rinse the deck

Apply a biodegradable deck cleaner to remove any buildup or mold/mildew. Rinse the deck off with a hose (making sure plants surrounding the deck are covered), and let the deck dry thoroughly, making sure all signs of the previous coating are gone. For bare wood, use a minimum 3000 psi pressure washer with clean water.

Sanding is worth the time

This step may be time-consuming, but is worth the effort. An orbital sander with 60-80 grip paper should do the trick to create a level, consistently porous surface that will absorb more stain, resulting in a better wood finish.

Use less stain and apply with spray, then brush

Using less is always more for the environment. To reduce the need for multiple coats, wood stains now come in 'one-coat' formulations that penetrate deep into the wood to repel condensed water while allowing water vapor to escape.

"With water-borne wood stains, you can even protect wood with high moisture content with one coat, since the stain allows the wood to 'breathe,' preventing moisture from getting trapped inside the logs or wood and causing decay," says Sjoerd Bos, Vice President of Sansin.

It's best to apply the stain with a garden sprayer followed by 'back-brushing.'

Maintenance pays off

How long should your deck stain last? That's a common question, and it does depend on the stain and the preparation as described above, but two to five years is the average. To extend the life of your wood stain, apply a maintenance coat if the deck no longer repels water. Prior to the maintenance coat, best to use a deck cleaner or pressure washer.

Even for home owners with pressure-treated wood on their decks on porches, a good stain will inhibit the eventual fading, graying and cracking from outdoor exposure.

"No matter the wood or pre-treatment for your deck, it's important to protect your investment. Now,