

Cleaning and Sealing Wooden Decks
Tips and pointers on how to keep your deck looking great.

Deck sealers

- Applying a waterproofing deck sealer or deck stain will greatly extend the life of any wood deck. The finish prevents the wood from going through wetting and drying cycles. If left untreated, precipitation will enter the wood and expand. Once the lumber begins to dry, it contracts. This expansion and contraction leads to the degrading of wood. Sealing will prevent water from entering and thereby greatly reduce the wetting and drying cycles.

Benefits of using a deck finish

- Periodically applying an ultraviolet rated deck finish will help prevent the so-called "graying" of the wood.
- Treating a wood deck with periodic applications of a deck finish will also help prevent the lumber from splitting, warping, splintering and degrading.

Types and brands

- There are several good quality oil and latex based (water soluble) deck sealers on the market. We use brands like Benjamin Moore, Behr, Cabot and Thompson.
- There are basically three types of deck finishes available at paint and hardware stores.
 - Clear deck finishes - Some clear finishes are formulated to let the wood gray naturally while others will have the benefit of maintaining the woods natural colors and tones. Always check the product can label and directions. Clear finishes add the least amount of color when compared to semi-transparent and solid stains. They work great for woods such as Cedar and Redwood to bring out the natural beauty of the wood.
 - Semi-transparent - Offers better protection to the suns UV rays by having more pigment in the product. It adds a small amount of color to the wood while helping to protect it from graying and degrading. The finish comes in a variety of different tones such as cedar, redwood, gray and so on.
 - Solid color stain - Offers the best protection from damaging UV rays. However, solid stains will often cover up the natural beauty of the grain and color of the wood. Solid deck stains come in many colors and are perhaps best suited for wood that have been previously finished with a solid color and on vertical surfaces away from foot traffic and abrasion.

When to apply a finish

- Recent studies by the Forest Products Laboratory (FPL) of the USDA have shown that lumber can be coated soon after construction. As always, check the directions on the can because some products may recommend a wait period before applying.
- Periodic application of a deck finish is necessary to protect the wood from degrading. The duration between applications will vary depending on the type of finish and how your deck is exposed to the weather such as full sun or shade. Most decks should be cleaned and sealed every 1-5 years.

Cleaning decks

- Newly constructed wood decks and existing decks have to be cleaned prior to the application of a finishing product. The freshly cut or milling of wood planks produce a coating of sap and resins that can prevent the proper absorption of deck sealers. Using a deck cleaning solution will prepare the wood by removing the "mill finish" and help clean off any dirt and grime that's on the wood.
- There are a number of deck cleaners on the market. These products can be grouped into 3 basic types.
 - Cleaners - Will basically clean the wood and will not strip off any old finishes.
 - Brighteners - Used to remove bleed marks and lighten darkened wood.
 - Strippers - Can be used to remove some prior finishes.
- Most paint and hardware stores carry deck cleaners and sealers. Always read the directions to make sure that the product is adequate for the species of wood and how to properly apply it. Cleaners may turn lumber darker and will require an additional product such as a

brightener to bring back the natural wood color. This is particularly true with cedar and other soft woods.

- Basic recommendations when using a cleaner, brightener or stripper is to avoid having the product dry on the surface of the wood. This can leave residue and prevent proper adhesion or absorption of sealers. Also leaving chemicals on for longer than necessary may strip more wood cells than necessary. This is usually seen as raised wood grain. Most products will have to be rinsed off within 15 minutes.
- Misting with water may be necessary to prevent the rapid drying of some cleaners especially on hot summer days.
- If hand mixing a product, mix thoroughly to prevent uneven blotches (light and dark spots) that may occur from not adequately mixing a product.
- Before applying a deck cleaner, use a garden hose to wet surrounding landscaping and house. This will prevent the direct contact of any over-spray and help prevent plant die back and discoloring of surfaces that come into contact with the solution. Use a plastic disposable tarp when extra protection is needed.
- Take the proper precautions and use adequate protection when applying deck cleaners. Most products are harmful to plants and animals. Use rubber gloves, protective clothing and avoid breathing vapors and spray.
- Always read the product directions before use. Some products do not recommend the use of pump sprayers or power washers.

Tannin and bleed stains

- Certain wood species such as cedar and redwood may develop tannin and bleed stains. Oils in the wood seep to the top of the wood surface and will appear as blotches or darken entire boards. After cleaning the deck, you may have to use a deck brightener to remove stains and lighten darkened woods.
- If the deck brightener is not pre-mixed, mix according to directions, making sure to mix thoroughly. Any non-dissolved solution may cause areas to brighten more than others. Use a pump sprayer and apply an even coat. Two applications may be necessary, allowing the deck to dry between applications.

Power washing

- Pressure washing also referred to as "power washing" can help with rinsing the cleaners and brighteners from the wood.
- Power washers come with several tips or adjustable spray nozzles. Be careful, using the wrong spray tip or nozzle adjustment can direct a stream of water so powerful that it may splinter and damage the wood.

Drying time

- Make sure the deck had several days to dry before applying a sealer. If in doubt, check with a wood moisture content meter. Apply the finish when the wood moisture content is below 20%.
- Wait for upcoming good dry weather before proceeding with the application of finishes. Once applied, most sealers will require 24-48 hours of drying time. A humid day will prolong the drying time and rain can cause mishaps on a freshly sealed deck. Check your local forecast to plan when it will be best to seal your deck.

Tips

- Check the particular sealer or stain for application recommendations.
- Colored stains will usually require a drying period for the wood prior to application.
- Some clear sealers and clear stains may darken wood.
- Semi-transparent stains will add color to the wood.
- When using several cans of the same stain it's a good practice to intermix the cans. This will prevent any noticeable differences between different batches of stains. Use 1/2 gallon at a time while mixing half of the next gallon with the one you're using.
- Always test spot the product in an inconspicuous area of the deck and let dry to determine the actual color.

Application

- Applying a finish is similar to painting. It's always a good idea to use a drop cloth. Also, it's helpful to have some rags handy and disposable surgeon gloves for your hands. And don't forget old clothes. Trying to remove an oil based stain from clothing is practically impossible.
- When applying a sealer to deck boards, use a good quality lint free 1/2 inch nap roller with a disposable tray liner for easy clean up. After applying the sealer with a roller, use a lambs wool applicator to spread out the sealer evenly. Let stand for 15 minutes and then wipe up any excess with a lint free rag or mop.
- We do not recommend using a pump sprayer for the applications of sealers. The pump sprayers tend to get clogged and most of the products on the market have to be diluted to work properly. Also, the over-spray of a finish can make more of a mess than it's worth.

Do not over apply the product

- Most manufactures of deck finishes do not recommend more than one coat. The problem with additional applications is that once the wood is saturated any extra sealer that didn't penetrate may dry into a film and peel. Usually only one coat is called for or perhaps a "wet on wet" application in which a second coat is applied while the first is still wet and then immediately wipe up. The directions on the can of deck finish will usually indicate the best methods for applying the product.
- Never apply a second coat after the first coat is dry. The wood pores will be filled with the dried finish and a second coat will not penetrate. This will make the finish susceptible to peeling

Painting wood decks

- This can be the greatest mistake of all. All too often homeowners believe that painting their deck is a good idea. Owners who paint a deck are just asking for trouble. The sun bakes it and foot traffic abrades it. But even more important, paint is a film that clings to the top of the wood. When water gets under the paint it can begin to blister and peel off. A few manufacturers also make a solid color stain for decks, but experts see these as thinned paints. Though they may not peel as easily as regular paint, they can peel and they readily show scuff marks from traffic.
- A deck never has to be painted unless it's already covered with a coating that can't be penetrated.
- Semi-transparent stains and clear deck finishes do not peel, they are by far the best choice when finishing a deck.

Removing stains

- Several types of cleaners can help get out the most stubborn stains. As with any chemical cleaner, test spot an inconspicuous area of the deck and check final results before attempting to clean the stain.
 - Candle wax - use a rag with mineral spirits and place it on the wax. Let stand until the wax begins to dissolve then wipe up with a dry cloth or paper towel.
 - Rust spots - oxalic or phosphoric acid, available at hardware stores will remove rust stains. Several applications may be necessary to remove all of the stain.
 - Mildew - removing mildew and mold, use 3/4 cups of water, 1/4 cup bleach. Be careful when using it on decks that have been finished, especially with a colored stain. Bleach can remove the color as well as lighten the wood that's being cleaned. You may have to re-apply the color/stain to the cleaned boards.
 - Barbecue drippings - use a water-solvable automotive grease remover or parts cleaner to removed stains left behind by grills.
 - Leaves - accumulated leaves can eventually stain a deck. Try using a mixture of 1/2 bleach and 1/2 water.
 - Berry stains - use a conventional deck wash containing detergent and sodium hypochlorite.