

REFINISHING WESTERN RED CEDAR DECKS

By William C. Feist.

When the surface of any wood deck, even Western Red Cedar decks (let's call it 'cedar'), is exposed outdoors, it will eventually deteriorate in appearance. This deterioration process, broadly called weathering, occurs fairly rapidly on uncoated wood and more slowly if a protective finish was originally used on the deck. But even the best finish will weather in several years and will need to be refinished. Proper cleaning and surface preparation is essential to the successful refinishing of cedar decks. If the old surface is not properly cleaned and prepared, the refinish job may have early failure problems, and more refinishing could be required in a relatively short time. Cedar decks should be inspected and cleaned annually, usually in the spring, using a commercial deck cleaner or a dilute solution of liquid household bleach and water. **Power washing should never be used** to clean cedar decks because this process can damage the wood surface fibers and make it difficult for the finish to penetrate.

So what can go wrong with a cedar deck? With normal exposure, dirt and other foreign materials such as tree sap, bird droppings and grease, etc. can accumulate on a deck. There can be discoloration from mildew and other staining organisms. In very humid, warm climates, mold, algae and moss can sometimes grow on the cedar surface. With the natural weathering process from sunlight and rain, graying of the cedar surface occurs. Lastly, with any deck, even a cedar one, there will usually be fading and deterioration of the finish from natural weathering.

How long should finishes last on cedar decks? As a general rule, a transparent coating like a water-repellent preservative needs to be refinished every 12-24 months; a penetrating solvent-borne semi-transparent stain every 18-24 months. Although not recommended for cedar decks because they form a film and are difficult to maintain, some people do use a solid-color or opaque stain, and these need to be reapplied every 24-36 months. The suggested times for refinishing cedar decks are estimates, and individual results may vary because of differences in weathering exposure, climate, deck usage, and so on. Also, whatever finish is used, it is most important to make sure that the finish is specifically formulated and recommended for use on cedar decks. Finally, cleaning, preparing and refinishing any cedar deck should always be done according to specific recommendations of the manufacturers of the cleaner and the finish.

Cleaning cedar decks

The bright color of cedar on weathered decks can usually be restored by applying commercial deck cleaners, brighteners, or restorers. Deck cleaners and restorers generally fall into one of three categories--chlorine bleaches, oxygen bleaches, or oxalic acid-based formulas.

Common types of chlorine bleach used in deck cleaning products are typically those used in laundry detergents. Mildew, a common cause of graying and discoloration, can be removed using a liquid household bleach containing 5 percent sodium hypochlorite. Normally the bleach is diluted with 3 parts of water. For especially dirty wood, a detergent safe for use with household bleach is sometimes added to the bleach solution. Just be sure that the detergent does not contain ammonia AND is recommended for use with liquid household bleach.

Oxygen-type bleaches are usually based on a chemical bleach commonly known as sodium percarbonate, an ingredient present in some color safe fabric bleaches. When sodium percarbonate is added to water it forms hydrogen peroxide--a common oxygen bleach. Hydrogen peroxide is effective in removing mildew stains and weathered gray residue from sunlight degraded cedar decks.

Oxalic acid products are useful brighteners for cedar decks. However, oxalic acid is not effective for removing mildew. Some homeowners and contractors will sometimes treat cedar decks with a sodium percarbonate or a chlorine-based cleaner first and follow it up with an oxalic acid-based product to brighten the cedar color. A warning: oxalic acid is toxic and should be handled and used with care. Always follow manufacturer's recommendations and instructions.

Since some of these deck cleaners may remove the weathered cedar surface, care should be taken to avoid damaging the surface. Also, aggressive scrubbing with a caustic cleaner can actually remove wood from the surface and these cleaners should be used with caution, if at all.

Mechanical cleaning methods are sometimes used for cleaning and restoring the surface of cedar decks. While sanding can be effective as a mechanical means for removing unwanted coats of previously applied finishes, it can seriously damage the surface of the cedar. Sanding should be considered as a last resort to be used only when other cleaning methods have failed and must be done with great care to minimize damaging the cedar surface.

Although power washing is the mechanical method for cleaning and restoring decks often favored by contractors, power washers can seriously damage cedar deck surfaces. As mentioned earlier, this type of cleaning is NOT recommended for cedar decks or any other cedar product.

Final Thoughts

Remember, cedar decks are best finished and refinished with transparent, penetrating water-repellent preservatives that contain ultraviolet light absorbers or blockers to protect against sunlight, and mildewcides to help prevent darkening or graying from mildew growth. The next best cedar deck finishes are the pigmented penetrating semi-transparent stains. These oil- or alkyd-based finishes may last longer than the transparent finishes but will often require more surface preparation when refinishing. Also remember that after cleaning a cedar deck for refinishing, the cleaning solution should be rinsed from the deck with water, and 1 or 2 days drying time allowed before refinishing.

Be forewarned that things are changing in the world of wood finishes and many traditional finishes based on petroleum based solvents (solvent-borne finishes such as semi-transparent stains and water-repellent preservatives) may not be available in some areas. However, newer water-borne products are being developed which may prove to be as effective as the older finishing systems so be sure and check with your local finish supplier for the newest products.