

## **REFINISHING WESTERN RED CEDAR SIDING - PAINTS & SOLID-COLOR STAINS**

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Paints and solid-color stains are popular outdoor finishes for Western Red Cedar (call it “cedar” for short). These coatings usually need to be refinished when the surface deteriorates from sunlight and water. However, too frequent a refinishing can sometimes lead to a coating buildup and subsequent cracking and peeling, or other failure problems. Cracking and peeling can also occur from using low quality finishes; from poor surface preparation; and from poor application procedures. Under normal conditions, paints and solid-color stains deteriorate first by becoming discolored by dirt and mildew. The finish then gradually chalks and erodes away leading to a need for refinishing. In some cases, a dirty paint or solid-color stain coat can simply be freshened by washing with a mild detergent and water and refinishing postponed.

### **Some Cedar Problems That May Require Refinishing or Cleaning**

**Mildew** is probably the most common cause of the discoloration of house paints and solid-color stains. Mildew grows on the coating surface and does not normally degrade the wood as do wood-rotting fungi. A simple test for the presence of mildew on the coating can be made by applying a drop or two of a fresh solution of liquid household bleach (containing 5 percent sodium hypochlorite) to the stained area. The dark color of mildew will usually bleach out in 15 to 30 seconds. Discoloration that does not bleach out is probably dirt.

The oil-based (also called alkyd) paints and solid-color stains have more tendency to grow mildew than latex finishes because the resins and oils in these finishes are food sources for the mildew organisms. Mildew grows more readily on exterior flat house paint than on satin, semigloss, or gloss enamel. Mildew growth can be minimized by using topcoats of acrylic latex paints containing a mildewcide over a primer coat that also contains a mildewcide.

**Discoloration from water-soluble extractives** can occur on the heartwood of cedar. The extractives give cedar its attractive color, good stability, and natural decay resistance, but they can also discolor latex paints and latex solid-color stains. Some flat (low lustre) oil-based finishes are porous and are also susceptible to extractive staining.

**Peeling and cracking** are often caused by cedar becoming wet and then drying putting stress on the finish. Brittle paints and solid-color stains are more likely to have peeling and cracking problems than are the more flexible finishes like those based on acrylic latex resins. Many finish failure problems could be avoided by using one coat of primer paint to the back (sometimes called back priming), edges and ends of siding boards before the cedar was installed. Back priming helps reduce wetting up the back side of the siding. Coating the ends and edges of the boards helps prevent water penetration there.

**Intercoat peeling** is the separation of the new paint or solid-color stain coat from the old, which indicates that the bond between the two coats is weak. Intercoat peeling usually results from inadequate cleaning of the old weathered finish prior to refinishing and generally occurs within 1

year of finishing. This type of peeling can be prevented by good cleaning and finishing practices.

### **Removal of Old Finishes**

In refinishing old paint or solid-color stain, removal of the old coating is sometimes necessary. This is true if, for example, the old finish is severely cracked and is peeling. The complete removal of paint and solid-color stains is usually a time-consuming and often difficult process. These finishes can be removed by a variety of procedures. All of the procedures can be difficult, time-consuming and expensive processes. Some of them can damage the cedar. For example, **power washing should never be used** for removing coatings from cedar because this process can severely damage the wood surface fibers and make it difficult for the next finish to adhere properly.

### **Refinishing Cedar**

Cedar that has been finished with paints or solid-color stains is best refinished with the same type of finish originally used. These finishes are sometimes used interchangeably but old latex coatings should **always** be refinished with latex coatings and never with oil-based coatings. Old oil-based finishes can be refinished with latex finishes only when the old oil-based finish has been properly cleaned and a primer paint applied first. Remember that proper surface preparation and cleaning before refinishing are essential for optimal performance of the new coat or coats of finish.

To refinish the old surface, first scrape away **all** loose, cracked or peeling finish. Sand the bare wood and any remaining finish to "feather" the edges smooth with the bare wood. Mildew **must** be killed and removed before cedar is refinished, or the mildew will grow through the new paint coat or solid-color stain. Removal can be done with a commercial mildew remover or with dilute solutions of liquid household bleach containing sodium hypochlorite followed by thorough rinsing with clean water. After these preparations, scrub the surface with a stiff bristle (not wire) brush and water, and rinse with clean water. Allow the washed surface to dry before recoating and apply primer paint to areas of bare wood. After the primer has dried, apply one or two topcoats of paint or solid-color stain. Two topcoats are always better over bare wood that has been prime coated.

### **Finish Quality - Getting What You Pay For**

Remember, when buying paints and solid-color stains for cedar, it is always best to use the top-of-the-line of a supplier you know and trust. Since there are no standards, regulations or rating systems used to help you select commercial finishes, you should rely on your paint dealer and your painter for the best recommendations. **One last note --** things are changing in the world of wood finishes and many traditional oil-based finishes that use petroleum solvents (sometimes called solvent-borne) may not be available in some areas of the country. More and more exterior finishes for cedar are latex (water-borne).