Redwood

Exterior Finishes

California redwood is one of nature's most maintenance-free building materials. It has a natural resistance to decay and insects. Redwood's natural stability means it shrinks, warps, and splits less than most other woods. In addition, no other wood takes and holds finishes better than redwood.

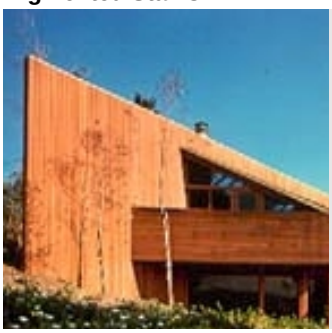
General Finishing Tips

- Apply finishes on windless days. Temperature should be between 50 and 70 degrees Fahrenheit.
- Surfaces should be clean and dry
- New structures built with unseasoned wood should air-dry one month before finishing.
- Back-priming is recommended for all exterior finishes, particularly paints.
- Don't use wire brushes or steel wool as metal particles may become embedded in the wood and can cause stains. Use stiff bristle brushes.
- Use finishes recommended for wood exteriors.
- Follow manufacturer's directions and read warnings on toxicity
- Don't mix incompatible materials. Finish failures may result from mixing incompatible products or applying them over one another.
- Moisture is the most common cause of finish failures, so use proper vapor barriers, air vents and flashing in new construction.
- Saw-textured redwood holds stains, water repellents and bleaches up to twice as long as smooth-surfaced wood.
- Redwood grade marked Certified Kiln Dried will provide the best finish retention available.
- To avoid nail stains, use stainless steel, aluminum or top quality hot-dipped galvanized nails.
- Periodic rinsing with a garden hose will remove dirt and grime from siding. Stubborn build-up can be removed by scrubbing with a bristle brush with a solution of warm water and a mild detergent. Rinse afterward.
- Splash lines can be minimized by an occasional hosing of the unaffected area, which will even the appearance of the wood.

Exterior Finishes Not Recommended

- Varnishes and polyurethanes crack and pool when used for exteriors. They are difficult and expensive to apply and deteriorate quickly Removal is expensive and difficult.
- Pure oil-treatments such as boiled linseed oil, are not recommended on exterior redwood as they tend to promote mildew growth. Quality *oil-based* finishes, including those based upon linseed oil, contain mildewcides, and are appropriate for use on exterior redwood.
- "Shake and shingle" type paints do not last well on redwood lumber siding.

Exterior Finishes

Natural Appearance Finishes	Description
	**Clear Water Repellents with Mildewcide** Clear finishes that modify weathering characteristics and let color and grain show through.
	**Bleaching or Weathering Stains** Low maintenance, natural appearance with a gray-toned finish.
Pigmented Stains	
	**Semitransparent Stains** Penetrating finishes available in a variety of semitransparent colors including several redwood hues. Oil-based stains are recommended.
	**Solid Body Stains** Film forming finishes available in a wide variety of opaque colors. Oil-based stains are recommended.
Paints	
	**Paints** Durable, attractive finishes for traditional exteriors. Quality paints are generally worth the extra cost.

Uses	Effect	Application	Maintenance
Certified Kiln Dried or air seasoned siding, fascia, trim, decks, fences, garden structures, commercial and industrial buildings. *Finishes containing toxic mildewcides are not recommended for seating, tables or interiors.*	Minimize weather and mildew attack. Stabilize redwood's color at buckskin tan. Helps eliminate redwood's natural darkening period. Areas exposed to direct sun and rain may eventually bleach to gray.	Apply with brush or roller. Lap marks and brushstrokes will not show through. Two coats recommended for new wood. For best results, coat sawn ends, backs and edges before nailing in place. *Read Labels: Mildewcides may be toxic.*	Reapplication is required after old finish has lost its effectiveness. In humid or harsher climates, reapplication may be required every 12–18 months. Before applying, wood may be restored to its natural color as described on back page.
Certified Kiln Dried or air seasoned siding, fascia trim, decks, fences, garden structures, commercial and industrial buildings. *Finishes containing toxic mildewcides are not recommended for seating, tables, or interiors.*	Provide for low maintenance and give redwood a uniformly gray or naturally weathered look.	Apply with brush or roller. Lap marks and brushstrokes may show through as many include gray pigment. Use one or two coats according to manufacturer's directions. Bleaching is aided by sunlight and moisture, so it may speed the process to periodically dampen surfaces with a fine spray from a garden hose.	Bleaching oils and stains provide nearly maintenance-free performance. Reapply finish only if wood begins to darken or bleaching is uneven. One refinish coat should be enough.
Certified Kiln Dried or air seasoned siding, fascia, trim, decks, fences, garden structures and furniture, commercial and industrial buildings. Most semitransparent stains contain mildewcides.	Provide color in a finish that lets wood breathe naturally Semi-transparent stains let the grain show through but present a uniform single color. The amount of pigment contained in stains will vary according to brand.	Apply with brush for best results, next best is a roller. Avoid drips and lap marks. Two coats usually required for new wood—follow manufacturer's directions.	Refinishing may be necessary every 3–5 years. Color in pigmented stains may wear away gradually after weathering. Light brushing with a bristle brush will help remove old finish in some spots. One refinish coat is usually enough.
Certified Kiln Dried or air seasoned siding, fascia, trim, decks, fences, garden structures and furniture, commercial and industrial buildings.	Provide color in a finish that lets wood breathe naturally. Opaque stains will obscure the grain but highlight the texture and have an appearance more like paint.	For best results use a brush. The next best applicator is a roller. Avoid drips and lap marks. Two coats usually required for new wood—follow manufacturer's directions.	Refinishing may be necessary every 3–5 years. Color in pigmented stains may wear away gradually after weathering. Light brushing with a bristle brush will help remove old finish in some spots. One refinish coat is usually enough.
Certified Kiln Dried siding, fascia, trim, some garden structures and furniture, commercial and industrial buildings. Not recommended for decks and walking or seating surfaces. *Note: For air-seasoned or unseasoned siding use a stainblocking latex primer formulated for redwood.*	Provide attractive colorful finishes which obscure grain and texture of the wood.	Apply with brush for best results, roller is next best applicator. One prime coat and two top coats are recommended for new wood. Back-priming is highly recommended. Use oil- or alkyd based stain-blocking primer. Acrylic latex top coat is recommended.	Refinishing may be necessary every 7 to 10 years. Paint films that are too thick tend to pool and crack. Sand or scrub with stiff bristle brush. Paint and varnish removers may also be used. If sanding, countersink galvanized nail heads to protect their coating.

Finish Restoration

Dirt and Dust may build up to the point that a mere rinsing with water from a hose will not remove them. A mild detergent and warm water will generally remove stubborn dirt and grime.

Mildew appears as dark spots or gray, fan shaped spots on the wood surface. Severely infested areas may appear uniformly gray or black. To remove a mild case of mildew, scrub with a mild cleanser or detergent. Next rinse with a household bleach to kill surviving spores. Lastly rinse with water. When applying a new finish, be sure it contains a mildewcide. *Note: Household bleach should never be mixed with detergent containing ammonia. Fumes can be fatal.*

For severe mildew infestations, scrub with a stiff bristle brush using a solution of one cup of trisodium phosphate, one cup of liquid household bleach and one gallon of warm water. Rinse thoroughly. If necessary, follow with an application of 4 ounces of oxalic acid crystals dissolved in one gallon of warm water in a non-metallic container. Apply evenly with a soft brush. When wood dries, rinse with water. *Caution: Oxalic acid is poisonous, but not dangerous if precautions are taken. Wear rubber gloves. Avoid contact with skin or eye.*

Nail Stains are an unsightly problem that can be avoided by using stainless steel, aluminum or top quality, hot-dipped galvanized nails. The cleaning method described above for removing heavy mildew stains is suggested for nail stains. To help prevent recurrence, countersink the nails and swab the holes with a water repellent. When dry, fill the nail holes with a non-oily wood filler for natural finishes, or putty if the wood is to be painted.

Paint Peeling, blistering and flaking occurs when moisture under a non-breathing film finish destroys the film's adhesion to the wood. A properly installed vapor barrier is the recommended way to control this problem. Vapor barriers should be on the warm side of the wall. Problems also may be caused by faulty surface preparation, or the use of incompatible materials.

Restoring Redwood's Color

Discoloration of paints and finishes may occur when extractives are dissolved in water and leach from the wood. This discoloration can also result from moisture migrating to the surface of unseasoned lumber. To remove extractive stains and to restore the new appearance to weathered wood, follow these steps. Scrub wood with a bristle brush and a solution of one cup trisodium phosphate (TSP) and one cup of household bleach to a gallon of water. Then apply a solution of 4 ounces oxalic acid crystals dissolved in one gallon of warm water. When wood dries, rinse thoroughly with water.

Removing Finishes

When a finish has deteriorated to the point of cracking and peeling or some other finish ailment, it may be desirable to remove it before refinishing.

Sanding effectively removes pigmented stain finishes. Galvanized nail heads should be set below the surface before sanding to protect the coating and prevent nail stains.

Water blasting is an effective way of removing old finish and grime and preparing for a new finish. A fine, high-powered spray effectively removes loose materials without damaging the wood.

The use of a paint and varnish remover is another way to remove a finish. Several kinds are available. Before using, test the preparation on a piece of new, clean redwood to make sure it will not discolor the wood—particularly if a natural finish is to be used. Film-forming finishes can be removed with a paint and varnish remover. Heat is another method of paint removal.

California Redwood Association

Redwood—our renewable resource