PAINTING THE EXTERIOR WOOD OF YOUR HOME

Charles L. Stayton*

Painted wood siding and trim adds color and beauty to the exterior home surface, preserving the charm, cleanliness and pleasing appearance.

Selecting the Paint

The quality of the paint is important in achieving a durable paint job. Since the paint cost for an average home is usually small compared to the total cost of labor and materials, it is economical to buy quality paints to lengthen the time between repaintings.

Linseed oil-based paints probably are the most frequently used. However, latex-type paints (emulsions of polymers or copolymers in water) are gaining popularity because of good tint retention, ease of application and cleanup with water. But these emulsion-type paints may not adhere well to heavily chalked old paint. The manufacturer’s directions must be followed. He may recommend a primer for emulsion-type paints to insure adhesion to a chalky surface.

No one paint satisfies all requirements under varying conditions. Thus, paints have been specialized to produce the best results for a particular use. For example, white paints are self cleaning, free chalking, for uses where chalk rundown will not mar brick or stone below wood siding, but chalk-resistant where brick or stone is present. Chalk rundown on masonry is unsightly and quite common. Fume-resistant white paints are available for use where industrial or other fumes may be present. For warm, humid conditions, mildew-resistant paints help prevent mildew discoloration. Specific paints are available to protect and enhance the beauty of houses sided with shingles or shakes. Exterior trim paints are used primarily for wood trim, screen frames, shutters and other small areas of the home. They are fast drying, have a high gloss, give good color and gloss retention, are durable and do not show brush marks easily. The homeowner should consult a local paint dealer to determine the paint that best fits his needs, and which performs best under local conditions.

How Much Paint?

The amount of paint required depends on whether the wood is new and how much surface area is to be painted. Wood that is new (never before painted) requires a primer. For repainting, a primer is needed only when the old paint is in bad condition—has blistered or peeled with bare wood exposed. The primer coat requires about 1 gallon per 450 square feet of surface area, and the finish coat about 1 gallon per 500 square feet. The amount of paint required can be calculated using these figures and the house dimensions as follows:

1. Average height of house = distance from foundation to eaves for flat roof types; add 2 feet for pitched roofs.
2. Average height × distance around foundation = surface area in square feet.
3. Surface area = Number of gallons of primer required.
4. Surface area = Number of gallons of finish paint required for each coat.

Preparing and Painting New Wood

Protecting new wood against rain, heavy dew or moisture arising within the house is highly recommended. A properly installed vapor barrier will protect exterior walls and paint from moisture arising within the house. This vapor barrier restricts movement of moisture through the walls. Vapor-resistant paper, plastic or metal foil is used for this purpose. The barrier should meet minimum requirements of the Federal Housing Administration. For protection against entrance of rain and heavy dew, apply a water-repellent preservative (WRP) before painting. This solution makes the wood capable of repelling water which can cause blistering, cracking and peeling of paint when it penetrates in excessive amounts.

Wood treated with WRP during manufacture is preferable. If WRP-treated wood is purchased, brush or dip-treat only the freshly cut pieces. Wood which has not been factory treated can be dipped, brushed or sprayed with WRP. Be sure to treat...

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the ends of boards and joints between boards. If the WRP is brushed or sprayed, allow 2 days of favorable drying weather before painting. If wood is dipped in WRP, allow 1 week of favorable drying weather before painting. If the WRP solvent has not dried sufficiently from the wood, paint may be slow to dry, discolor or dry with a rough surface.

WRP solutions are available in most paint and lumber stores. However, if not available locally, the following U. S. Forest Products Laboratory formula will serve effectively as a pre-treatment of wood before painting:

### Ingredients

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<th>5 gal.</th>
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<td>Penta concentrate, 10:1</td>
<td>1 1/4 c.</td>
<td>2 qt.</td>
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<tr>
<td>Boiled linseed oil</td>
<td>1 1/2 c.</td>
<td>1 1/4 qt.</td>
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<td>Paraffin wax</td>
<td>1 oz.</td>
<td>5 oz.</td>
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<td>Solvent (turpentine, mineral spirits or paint thinner)</td>
<td>3 qt.</td>
<td>4 gal.</td>
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Melt the paraffin wax in the top unit of a double boiler or some other container heated by hot water. (A direct flame will ignite the paraffin wax.) Slowly pour the melted paraffin into the room-temperature solvent, stirring vigorously while pouring. Then add linseed oil and penta concentrate. Stir until mixture is uniform.

The primer coat of paint can be applied once the WRP treatment has dried thoroughly. Two coats of finish paint, with proper drying time between applications, will complete the job. It is wrong to assume that if three coats of paint are desirable still more will provide better protection. This procedure for painting new wood provides up to 10 years of service before repainting is necessary, if quality paint is used.

### Preparing Painted Wood for Repainting

If the old paint is just faded, dirty and chalking, dust the surface before painting. If the wood surface is extremely dirty, apply a mild detergent and rinse thoroughly with water. Allow the surface to dry completely before painting. Remove rust marks around nail heads with sandpaper or a steel-wire brush and scraper. If the blistering, cracking or “alligating” of old paint is extensive, remove the old film down to the bare wood and sand the edges of the sound paint around the scraped area with medium sandpaper before priming and repainting. If the painting surface is in good condition with no flaking, blistering or bare wood exposed, one coat of new paint may suffice. However, when the old paint is very thin or has not been painted in a long while, two coats should be applied.

### When to Paint

Apply paint in clear, dry weather with temperatures above 40 degrees F., after morning dew has evaporated. The wood should be dry. If latex paint is used, some moisture can be left on the wood. When outside temperatures are high, begin painting on a side that has been exposed to sunlight, but is now shaded. Then follow the sun around the house, always working in the shade. Late spring and early fall are good times to paint because of fewer flying insects, which are often attracted to wet paint surfaces.

### Painting Tips

- Mix your paint according to manufacturer’s directions. Always stir the paint thoroughly before applying.
- Always begin painting at the high part of the house and work down, completing the trim work, such as windows, doors and shutters last.
- Apply the finish coat generously and brush out.
- Always paint with the grain of the wood, applying even brush pressure. Work completely across the width of the section being painted before starting a new area below. This helps eliminate lap marks in the paint.
- Apply the finish coat promptly after the primer has thoroughly dried. Label directions will give proper drying times for both primer and finish coats.