

STOP WOOD ROT



#1

HomeClub
 AMERICA'S DO-IT-YOURSELF
WAREHOUSE

**IN SERVICE, SELECTION
 & SAVINGS!**

TOOL and MATERIAL CHECKLIST

CHECK

- Asphalt --Creosote (if not banned by local laws)
--Paint/Stain --Pentachlorophenol (for pro use only)
--Copper Naphthenate --Copper-8-quinolinolate
Paintbrush Bucket Mixing Paddles Gloves
Safety Glasses Paint Roller Outfit Stain Pad Painters

Stopping wood from rotting or decaying is, simply, impossible if the wood is exposed to most forms of moisture. If the wood is redwood, cedar, or cypress, it will not rot as such but it will someday weather away. For example, there are cedar fence posts in Iowa, Kansas, Nebraska, and other states that have been in the ground for more than 100 years. The outer ring of wood will be damp or weathered. A knife inserted below this point will indicate that the wood is still as good as the day the post went into the ground.

Pressure-treated lumber that you can buy at most home center and building material stores is chemically treated against rot and insect damage and will last for as long as 20 years in a moist environment. Pressure-treating of wood is by far the best technique. The penetration of chemicals by brushing, dipping, spraying, soaking, etc., is shallow, although it gives the wood some protection. When applied under high pressure (not a do-it-yourself project!), the chemicals actually penetrate the cells of the wood. Coatings you apply yourself will work, but the wood has to be re-coated every 5 to 10 years. In some cases, such as buried fence posts or foundation sills, this becomes almost impossible to do.

Types of Preservatives

There are several types of wood preservatives available, and this Booklet will point out some of the advantages and disadvantages of each type.

CAUTION: Many wood preservatives are toxic and flammable. Be sure to wear waterproof gloves and safety glasses when

applying these products, and have plenty of ventilation. Further product restrictions are printed on the containers. Heed the manufacturer's warnings.

Most wood preservatives are inexpensive to moderate in cost. All may be applied to the wood with a paint brush, paint roller, or by dipping the wood into a vat of preservative. The vat technique is best used when you must treat a lot of wood. It costs a lot of money to fill a vat with preservative that you may not need for a few fence posts and/or boards. Plan your project.

Asphalt roofing compound. The liquid type may be used for any wood that will be buried underneath the ground.

Creosote. It is in liquid form. Use it for wood that will be buried underground, if local laws don't prohibit it.

Copper naphthenate. Also liquid, it may be used on wood that will be buried or exposed to weather above the ground.

Copper-8-quinolinolate. It is an insecticide and fungicide. An effective preservative, it is paintable and tintable.

Paint. Use paint for wood that will be exposed to weather aboveground. Do not use paint for wood that will be buried unless you can't buy another type of preservative for the project.

Stain. Same use as paint.

Linseed oil. Same as paint. Use boiled.

Old auto motor oil; grease. Okay for buried wood, but almost worthless as even a short-term wood preservative.

Varnish. Same as paint. Spar varnish and polyurethane varnish are best for exterior use, as is deck/porch enamel.

Water-repellent. Same as paint. Can be used on wood that will be buried with

some protection. Also may be used over other materials such as concrete, stone, leather and some metal products.

Bare Wood Only

Consider wood preservatives as a primer for bare wood. Preservatives are not "paint" primers as such, but they are similar in performance.

Wood preservatives almost always must be applied to wood that has not been sealed in any other way: with paint, stain, varnish, water-repellent, and so on.

Most wood preservatives may be painted over. However, most of them require a "conditioning" period of 6 weeks or more before paint can be satisfactorily applied. For example, pressure-treated lumber that is exposed to the elements should weather about 6 weeks before any paint is applied to it. Wait longer--six months or so--if you can. The paint will adhere better.

If the preservative is creosote, the creosote must be primed before a finish coat of paint can be applied. The best primer for creosote is aluminum paint. Use at least two coats of aluminum paint; three coats are better; the job will last longer.

Water repellents such as Thompson's Water Seal are clear liquids and may be used as primers on woods. Usually, repellents are formulated with silicone, so any surface covered with a repellent can't be painted until the silicone has worn down or off of the surface to which it was applied.

Product As Preservative

What product to use where; how the

product should be applied; how the product can be expected to perform - the answers are detailed below:

ASPHALT ROOFING COMPOUND

This tar-like material is probably better known as a sealer for roofs and foundations. It is available in nearly all home center and building material outlets; it is inexpensive.

For a wood preservative, buy asphalt roofing compound in its liquid form--sold in 1 and 5 gallon buckets. The material may be applied with a paint brush, a broom, or even a mop. It should be "worked" into or smoothed onto the wood; dipping is wasteful and can be very costly.

The product is ideal for that part of a fence post that will be buried underground. Give the part at least 2 coats of compound, letting the first coat dry before the second goes on. A third coat is better than two if time and budget permits. Asphalt roofing compound is not recommended for above-ground application on wood, although it may be used with good preservation results. Many farm fences, for example, are coated with asphalt roofing compound.

As a preservative, expect asphalt to last about 10 years underground. The same time can be expected above ground, although it is advisable to recoat the surfaces after about 8 years. If you use asphalt and then decide to paint over it, you will have to seal the asphalt with at least two coats of aluminum paint. Even so, wood treated with asphalt should "weather" a year or more before it is primed and painted.

CREOSOTE

To be used **ONLY** on wood, creosote

makes an excellent preservative for posts and lumber that will touch the ground. It may be banned by law and code in your area.

One coat is good; two coats are better, but if your budget and time allows, give the wood 3 coats of creosote letting each coat set a day or two before the next coat. Use a brush to apply creosote, and have plenty of ventilation. It is suggested that you apply this material outdoors if possible.

Unlike asphalt, creosote is recommended for above ground use, but expect a blackish finish (sometimes greenish) on the wood. Like asphalt, the coating must be primed with aluminum paint (at least 2 coats) before a paint finish is applied. Otherwise, the creosote will "bleed" through the paint finish, producing big, black blotches.

You can expect a 10- to 12-year life expectancy for creosote-coated wood buried underground (fence posts, for example). The coating will last about 8 to 10 years on wood exposed to the elements. Recoating should take place in the 10- to 12-year period before the weather starts to rot the wood. You get about a 2-year grace period--sometimes a bit longer.

COPPER NAPHTHENATE

An excellent preservative, this chemical probably will be part of a preservative formula. Look on the label of the container for percentages. Copper naphthenate is used to pressure-treat wood and it has a greenish-brown cast to it after it has been applied.

The product may be used on wood that will be buried or exposed to weather. Apply with a mop or brush and be sure to have plenty of ventilation (ie., outdoors).

After weathering, the wood to which copper naphthenate has been applied can be painted without special primers, although you probably will have to give the surfaces 2 coats. Let dry between coats.

PENTACHLOROPHENOL

Often called "penta," this chemical has been banned for consumer use, but it may still be used by licensed professional applicators.

COPPER-8-QUINOLINOLATE

This chemical is very low in toxicity. It acts as both an insecticide and fungicide, and may be regarded as an effective preservative. Some of the preservatives that feature this chemical may discolor the wood for a time. However, other brands of copper-8 dry clear. You can paint over copper 8, and it is tintable.

Paints & Stains

Although they are not thought of as such, paints and stains are the most widely used wood preservatives. Above ground they offer adequate protection that lasts from about 5 to as long as 12 to 15 years, depending upon the surface and the weather conditions in your area. Paints and stains, of course, can be used over other materials, not just wood, so below we're detailing the name of the finish along with its basic use and what's needed to apply it to the surface.

OIL PAINT

It can be used on almost any type material, and is especially outstanding on wood that is bone-dry. Oil paint is solvent-based, i.e., it is thinned with turpentine and/or linseed oil

or mineral spirits, and this solvent is used to clean up painting tools.

A disadvantage could be that oil paint is slow-drying, although outside it usually sets up enough so that it can't be rain damaged after being on the surface for 30 to 60 minutes. Oil paint may be brushed, rolled, or sprayed on a surface. If sprayed, some brushing will be necessary.

LATEX PAINT

Latex paint can be used on almost any surface, the exception being bare wood.

Contrary to popular belief, it may be applied over oil paint, and oil paint may be applied over it PROVIDED that the undersurface is clean, dry, and firmly bonded to the surface.

Latex paint is an excellent finish for aluminum siding, and some latex paint is especially formulated for aluminum siding and says so on the label. It also is an excellent finish for masonry surfaces such as stucco, brick, and concrete block.

Application tools include brushes, rollers, pad painters, and spray guns.

ACRYLIC PAINT

Acrylic paints are first cousins to latex paint and the application is identical. The big feature of acrylic paint is that it dries fast--faster than latex. Expect to pay more money for acrylic than latex, for the drying feature, although cost is not prohibitive.

ALKYD PAINT

Alkyd is a solvent-based paint: you need mineral spirits as a thinner and tool clean-up.

It may be used on almost any surface except unprimed masonry (brick, block,

stone, placed concrete) and metal (steel, copper, aluminum, brass).

MASONRY PAINT

One doesn't think of masonry "rotting." It does, however, in the form of crumbling. Kept painted, it will last longer--especially concrete block and placed concrete, and mortar joints in brick, stone, and concrete.

Latex paint is an excellent masonry paint. So are Portland cement mixtures and mixtures that are included in concrete bonding formulas. You also can use epoxy, alkyd, and oil, although oil tends to peel.

Since masonry is a porous material, expect to use about 50 percent more paint than for wood and other surfaces. Masonry paint may be applied with a brush or roller; a brush is recommended, however.

Paint as a masonry waterproofing is doubtful, although there are formulas that are fairly good for "dampproofing." To waterproof masonry with paint that is subject to continual open water is impossible. The water pressure builds up in back of the paint on masonry (such as a foundation) and pops the paint off the surface. To keep paint on the surface, you must find the water source and stop it first.

If the surface is subject to dampness, the masonry type paints will adhere, but don't expect good results from other type paints, until the dampness is resolved.

TRIM PAINT

This material is formulated especially for trim such as windows, doors, moldings, shutters, etc. It is available in latex, oil, and acrylics and you can expect about the same wood preservative performance as these paints. It is usually applied with a brush,

although a spray gun is best for shutters.

STAIN

In the "family" of paints, stain probably is the best wood preservative--especially the penetrating stains--of the lot. A penetrating stain on new wood will outlast paint by several years, although colors tend to fade more rapidly than paint colors.

There are two types of exterior stains: semi-transparent and pigmented. It is recommended that you use pigmented to hide most wood grain and semi-transparent to highlight wood grain.

Stain is excellent also for outdoor furniture, wood shingles and shakes, plywood siding, decks, deck railings and deck steps. If you use stain on plywood siding it is recommended that you buy a pigmented stain. Plywood siding usually is patched with synthetic (non-wood) patches. If a non-pigmented stain is used, the patches will show through the stain. A pigmented stain will cover these patches.

Application is with a brush, pad painter, or roller. Do not spray stain.

PORCH & DECK PAINT

All types--latex, enamel, oil, rubber, polyurethane, etc.--are recommended, and the lasting qualities are good mainly because most porches and decks are covered or sheltered somewhat from the elements.

Application is best with a brush, although the finish may be applied with a roller.

LINSEED OIL

As a preservative, linseed oil has about the same quality as oil-based paint, although the pigment in paint will add to the life of the application. Linseed oil often is the vehicle

in oil-based paint. Use boiled linseed oil.

Linseed oil is excellent to protect wooden ladders from wood rot. Linseed oil does not hide defects--as paint--and therefore should be used on wooden ladder equipment. Application is best with a brush.

Primers Do Help

Primers are often overlooked or considered a waste of money. Why not just thin the finish paint and use it as a primer? Primers are very important--especially to bare wood--since they are formulated to seal the surface and give it "tooth" to accept finish coats of paint. If a finish paint is thinned and used as a primer, the necessary pigment is missing since it has been thinned.

Specialty Wood Finishes

We've included these finishes in the wood preservative category. Regular wood preservatives also may be used, as detailed elsewhere in this How-To Booklet.

WOODEN ROOFS

Use a water-repellent--not paint--on wooden roof shingles and shakes. Paint, which has a pigment, will hold water and cause the shingles to rot faster than without any preservative at all. Paint also will peel from the moisture (rain, snow, sleet, etc.).

To change the color of a wooden shingle roof, use either a semi-transparent or solid exterior wood stain. The stain can be applied with a brush or roller; a combination of both works very well. You do not need a topcoat of water repellent or preservative.

