

Finishes

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DOES A FINISH ON WOOD MAKE IT LAST LONGER?

Yes. A well-maintained finish maintains the appearance, helps keep water out of the wood, reduces cracking, and reduces the frequency with which wood needs to be replaced for aesthetic reasons.

DO FINISHES PROTECT WOOD AGAINST DECAY?

No. But a well-maintained coating helps keep moisture out of the wood, which in turn reduces the chance of decay. Unfortunately, painted wood is typically not well maintained, and this can lead to premature decay. Water that gets through cracks in a damaged paint layer will wet the wood, which can then have trouble drying out through the paint. If water vapour trying to escape can't easily get through the paint, it will break the bond between the paint and the wood, causing the paint to blister. Meanwhile, if the wood remains too wet for too long it can become an inviting environment for decay – decay may be hard to detect as the paint can effectively mask the damage. Bottom line: with or without a finish, you should use a durable wood product outdoors.

DO I HAVE TO APPLY A COATING TO TREATED OR NATURALLY DURABLE WOOD?

No. Not if you prefer the look of weathered wood. The purpose of a coating is primarily aesthetic. For most coatings, the effect is to stabilize the colour and to reduce surface cracking. But carefully consider if you are willing to regularly recoat the wood in order to maintain the desired look.

WHAT'S THE DIFFERENCE BETWEEN PAINTS AND STAINS?

Technically, the differences can be subtle – some products called stains are more like a thin paint ("solid stains"), so the line between the two labels isn't always clearcut. However, the term "stain" is typically used to indicate that the product will allow some of the wood's natural features to show through, while "paint" indicates a

completely opaque coating. "Stain" usually means the product will not form a thick film, therefore coating failure will not appear as blistered or peeled – it will simply wear away.

WHICH IS BEST, WATER-BORNE OR SOLVENT-BORNE?

Water-borne products perform as well as solvent-borne (except for blocking extractive-bleed), are more flexible (to accommodate dimensional changes in the wood), can be cleaned up with water, and have less odour.

WHAT ARE THE BEST BRANDS?

Sorry, we don't provide product recommendations. We suggest consulting sources like Consumer Reports when comparing and choosing brands. Most consumer and laboratory reviews of paints and other coatings suggest that "you get what you pay for" – higher-cost paints are often higher quality, will last longer and will have better hiding power.

WHAT'S THE BEST CHOICE OF FINISH IF I'M CONCERNED ABOUT VOCs?

Choose a water-borne product. Information on VOCs is usually found on the product label.

I WANT TO PAINT CEDAR BUT I'VE HEARD IT CAN "BLEED" – WHAT SHOULD I DO?

Apply a primer coat with a product specifically labeled as effective for blocking extractive stains.

I WANT AN EXTERIOR FINISH THAT PROTECTS THE WOOD BUT STILL LOOKS NATURAL – WHAT SHOULD I CHOOSE?

Depends on how you define "natural." To some people, natural means allowing the wood to weather, which will eventually turn it gray and rough. In that case, don't use any finish. One step up from that is to use a water repellent. This doesn't change the look of the wood (and won't prevent the natural graying process) but still provides some water protection. For some people, natural means maintaining a stable brownish colour with some of the wood grain still visible. To achieve that look, select a semi-transparent or transparent stain in a wood-coloured tone. But generally clear finishes (varnishes) don't perform very well against UV.

I WANT A DECK/FENCE/STAIRS WITH THE LEAST AMOUNT OF MAINTENANCE – WHAT SHOULD I CHOOSE?

If you don't mind the rustic look of weathered wood, don't use any finish at all. The weathered surface is superficial and unless it is regularly sanded away should not affect the bulk of the wood member. Note that even pressure-treated wood will slowly weather to a natural grey colour. Otherwise, for anything except a wear surface, choose the highest quality **water-borne paint**, strictly follow surface preparation rules, and use two coats over a primer coat. This system should last a long time. For a wear surface such as a deck or stairs, choose a **stain** or a **water repellent**. It will need to be reapplied often. If it's likely that a regular maintenance program will not be continued over time, the evidence of this will be least visible with a non-pigmented product like a water repellent. If a pigmented coating isn't maintained, bare patches of wood will contrast against the areas that still have coating adhering to them.

CAN I APPLY A WATER-BORNE PRODUCT OVER AN SOLVENT-BORNE ONE, OR VICE VERSA?

The answer is generally no but you should consult the manufacturer's recommendations for the specific brand of coating you are using.

I KNOW MANY FINISHES CONTAIN A FUNGICIDE – WON'T THIS PROTECT THE WOOD FROM DECAY?

No. The fungicide is there to **protect the coating**, not the wood.

WHAT IS THE REDDISH BROWN STAIN ON MY WOOD?

Probably extractive bleed. Water-soluble substances called extractives are present in the heartwood of many species, especially ones with better natural durability like western red cedar, Alaska yellow cedar and redwood, but also in Douglas-fir and some of the pines. These extractives can leach out of wood in moist conditions and "bleed" through many finishes. If excessive, these stains can interfere with coating adhesion. Remove stains by gently scrubbing with soap and water. Don't use steel wool, as this can leave iron stains. Oxalic acid will remove these stains if soap and water isn't effective; handle carefully and rinse thoroughly with water. Other possible sources of this stain: pine pitch leaching from a knot, or rust from a corroding fastener.

WHAT IS THE BLuish BLACK STAIN ON MY FINISH?

Probably iron stain, caused by a reaction between iron (usually from ungalvanized fasteners) and wood extractives. Black staining associated with iron degrades wood; it is generally not a problem with nails but can be significant with large bolts. If removal of such stain is desired the stain can be scrubbed with a dilute solution of oxalic acid. Handle the cleanser carefully as it is toxic, and rinse thoroughly with water.

MY PINE SIDING IS OOZING SOMETHING – IS THERE A FINISH THAT CAN STOP THIS?

This is probably resin coming out of the pitch pockets or knots, a common occurrence with the pine species, spruces and Douglas-fir particularly in hot climate conditions. This is one reason why high temperature kiln-drying is recommended for this application, as the resin will be "set" by the heat of the kiln. You can try priming the knots with a product marketed as a knot sealer, although this may not work. Any resin on the boards can be removed with mineral spirits.

CAN I PAINT OR STAIN PRESSURE-TREATED WOOD?

Yes. In fact field tests have shown that coatings last longer on wood treated with a copper-based preservative as the copper helps to protect the wood surface from UV degradation. Note that coatings will not adhere to creosote-treated wood.

I'VE JUST INSTALLED SOME NEW WOOD – HOW LONG SHOULD I WAIT BEFORE COATING?

Apply coatings as soon as possible. Even two weeks of exposure to weather will degrade the bonding capability of the wood surface. For wood that was installed dry, you should try to coat within a few days. For wood that was installed wet, you have a more complicated situation. For example, pressure-treated wood is nearly always sold quite damp – too wet for most coatings to adhere well. For these cases, we recommend that you select a coating which is tolerant of wet wood ("damp-friendly"), and apply within two weeks of installing the wood. For other types of coatings, allow the wood to air dry but keep a careful eye on dirt and algae. If you don't want to see any stains through your coating, scrub away dirt and especially algae before they become too difficult to remove.

HOW DO I PREPARE THE SURFACE FOR COATING OR RECOATING?

Wood must be dry and free of anything that will interfere with adhesion of the coating. Please see our page on choosing and applying finishes.

WHAT IS THE BEST WAY TO CLEAN WOOD?

We recommend using a garden hose, with dish detergent and light scrubbing if the wood has stubborn dirt. Pressure-washing can damage softer wood surfaces, particularly western red cedar, so only use this method with light pressure and take care to keep the spray in motion rather than focusing too long on any one spot. For most stains, caustic soda (sodium hydroxide) is the recommended chemical cleaner when water isn't adequate. For difficult stains like extractives, wood cleaners containing oxalic acid, citric acid or phosphoric acid are effective, however, these need to be rinsed off thoroughly with water. We do not recommend the use of bleach, as this is more damaging to wood.

HOW DO I KNOW WHEN IT'S TIME TO REPAINT OR RESTAIN?

Wood is easier to recoat before the coating fails (i.e. cracks, peels, blisters, or wears away), otherwise, you will have to do far more surface preparation. Repaint when the primer layer is just starting to show. For wood with a water repellent or stain, reapply the product when water no longer beads on the wood.

WHAT HAPPENS IF I NEVER REPAINT OR RESTAIN?

If the finish is something "breathable" like a semi-transparent stain, then allowing it to simply wear away shouldn't be problematic for the wood. The wood will weather (change colour and perhaps crack), and it won't reject water as well, but more importantly it can dry out after wetting. For painted wood, it's more critical to either maintain a good paint coat or to remove the paint all together. Otherwise, as the paint fails over time, water will reach the wood through paint cracks but will have trouble drying out which may lead to decay.

IS IT POSSIBLE TO MAKE WEATHERED WOOD LOOK NEW AGAIN?

Yes. You can remove damaged wood fibres and any old coating material by sanding or by using chemical wood restorers such as dilute sodium hydroxide (1% - 2%). This process reveals fresh wood, which can either be left alone to naturally weather again, or can be coated with a finish. See our text on wood restoration.

WHAT SHOULD I DO ABOUT LEAD PAINT?

If you plan to remove paint that may date back to 1978 or earlier, chances are good that it contains dangerous amounts of lead and you will need to hire a professional to safely remove the paint. If in doubt as to whether or not you are dealing with lead paint, you can do a simple chemical test – ask for a kit at your paint store.