Deck Woods

Pressure Treated Wood

Pressure treated wood is pine or fir. It has little or no wood grain markings, so you do not have to try to worry about enhancing the wood grain when you clean or stain a pressure treated deck. Many different companies pressure treat woods with chromate copper arsenic. Some of the most common brand names for pressure treated wood are Wolmanized, Wolmanized Extra, Life Wood and Osmose.

Cedar and Redwood

Cedar and Redwood are known for their color and beautiful grain structure. If you have a cedar or redwood deck you paid a premium for these woods and will probably want to take extra care to keep the color and enhance the grain structure. Both cedar and redwood have tannin naturally. It is one of the ingredients that make these woods naturally insect resistant. It also makes unsightly marks in the wood and attacks iron. If high quality galvanized or stainless steel nails were not used in construction, the reaction between tannic acid and iron or steel creates black rust stains wherever there are nail heads. It is very important to remove the tannin and tannic acid stains before staining or sealing the deck.

Man Made Decking

Plastic and high-polymer decking materials, like E-Z Deck by ZCL Mfg. Canada, Inc., and Brock Deck by Brock Manufacturing are very durable and just about impervious to UV rays. They need no care other than cleaning. Trex by Trex Company and TimberTech by Crane Plastics Company are made from recycled or virgin plastic and hardwood. These composites need only cleaning. However, many gray rapidly. An oxalic acid bath will bring the decking back to its original condition. Once you stain the decking it becomes a high maintenance item, like regular deck woods. I'll describe cleaning, brightening, sealing and staining procedures in detail later on in this book.

Do I have to do anything to a new deck?

We used to say that you could leave a deck weather for 60 or 90 days before staining or sealing. I recommended an initial treatment with Seasonite by the Flood Company to relieve the stress and protect the
wood until the deck wood could be sealed or stained. Research by the
William C. Feist and R. Sam Williams(1) of the USDA Forest Service's
Forest Products Laboratory, demonstrated that wood begins to degrade
from the sun's rays within two weeks.

(1)"Why bother to paint wood before it weathers," William C. Feist
and R. Sam Williams, American Paint & Coating Journal, November

Don't I need to wait a few weeks for the wood to dry out?

Decks can be treated immediately. No drying out, or seasoning time, is
necessary. Several products are manufactured so that they can be put on
new wood. Among them are Seasonite by the Flood Company, Wolman
RainCoat Water Repellent, Wolman F&P Premium Wood Finish and
Preservative, Cabots PTW Stain, or Bio-Wash Natural Deck Oil. There are
probably more. If you can't find these, ask your retailer for a product that
specifies that it can be applied to new wood.

Do I have to do anything before applying sealer

Although a brand new deck may look clean, it has dirt, mildew, waxy
residues and mill glaze. I advise applying a product like Bio-Wash Mill
Glaze Away or Specialty Environmental Technologies Woodpal New Deck
Prep Mill Glaze Remover. These products are designed to clean the deck,
lower the pH, and help the wood to absorb the sealer or stain evenly to
assure maximum stain absorption a longer lasting job.

Some manufacturers recommend cleaning even new wood with a
wood brightener to strip away the mill glaze.

What does Mill Glaze Away do?

Bio-Wash Mill Glaze Away and Woodpal New Deck Prep counteract the
problem. Mill Glaze Away gets inside the crushed fibers and puffs them
back up to their natural condition, relieving surface tension and allowing the
wood surface to absorb the seal or stain coat evenly.
Deck Maintenance

What type of a maintenance schedule should I use

Regular maintenance is one of the keys to a good-looking deck with a long lasting finish. If you remember the pirate movies you probably saw as a youngster, the crew were constantly swabbing and sanding the deck of their ships. There is really very little difference between the deck of a ship and the deck behind your house. They are both wood and they are both exposed to the elements. The advantage you have is that the deck care field is exploding and many manufacturers are constantly developing new, easier to use, products.

How much maintenance is required?

A minimum maintenance schedule would be sweeping the deck two or three times a week, a thorough cleaning at the beginning of the season, then re-cleaning every month or two. In addition, you will have to brighten, strip, and seal or stain the walking surfaces of the deck every year or two.

What should I use to clean a deck?

If the deck is just dirty and soiled with a little bit of cooking grease and leaf stains, all you need is a good all-purpose cleaner. Follow label directions, but remember, you need a strong cleaning solution. I used to recommend a solution of Trisodium Phosphate (TSP) and water for general deck cleaning. The trouble is that the old TSP I knew and loved was heavy in phosphates and increased algae growth in lakes. Today, I recommend strong solutions of organic cleaners like Simple Green, Clean Away or Clear Magic, or specialized deck cleaners like Bio-Wash Simple Wash, Cabot Problem Solver Wood Cleaner or Specialty Environmental Woodpal Dirty Deck Cleaning Solution.

Deck Maintenance

What is the cleaning procedure?

For organic cleaners like Simple Green, Clean Away or Clear Magic, use 1/2 gallon of concentrate to one gallon of water. Bio-Wash Simple Wash is mixed one gallon of cleaner to one gallon of water. Cabot Problem Solver Wood Cleaner is mixed one quart of cleaner to four quarts of water.
Always follow label directions.

- Don’t skimp on cleaning solution. Don’t be surprised if you have to use twice as much cleaner as the label calls for. Remember, it’s better to let the cleaner do the majority of the work.
- Apply the cleaning solution and keep the area wet for ten or fifteen minutes. Agitate with a deck brush then rinse with a garden hose.
- Make sure you clean everything including the railings.

**What’s the best way to apply the cleaner?**

You can use a garden sprayer, roller or brush. I prefer a garden sprayer. It combines ease of use and speed and provides good coverage. A thick napped roller with a long push broom like extension handle is also very good.

**How do you clean off bird droppings?**

Try this first. Really soak down the area and give the cleaner extra time to work its magic. If it doesn’t do the job, move up to a deck brightener.

**Will cleaning solution work on mildew?**

Of the general cleaners, Bio-Wash SimpleWash and Cabot Problem Solver Wood Cleaner are effective against mildew. If you have a really major mildew problem, move up to a deck brightener.

**Should I add bleach to kill mildew?**

No! Even if a product label tells you to add household bleach to kill mildew, don’t do it. Chlorine is dangerous, bad for the environment, and mangles the wood making it very hard to seal or stain effectively.
Brightening

What is brightening?

Brightening is what we call the deep cleaning procedure used to remove gray, tannin, and rust marks from a wood surface.

Why does wood turn gray?

Gray/black is the natural color for the exterior of dead wood. If you don't believe me, take a walk through the woods. Any branch that has fallen to the ground and lost its protective bark turns gray/black within a matter of weeks. The gray is caused by ultra violet rays from the sun killing the top layer of cells. These destroyed cells turn gray. In fir or pine, the black is often caused by mold. In cedar, redwood, and Jarrah, the black is often tannin or the reaction of tannic acid on metal.

Does pressure treated pine need to be brightened?

No/Yes. Technically, since pressure treated pine has little or no markings that make it beautiful, there is nothing to enhance by brightening. From a practical point of view, older pressure treated pine has to be brightened before it can be stained or sealed. Like any other wood, pressure treated wood turns gray. The gray must be removed before you can seal or stain the wood. The only way to remove the gray is sanding or brightening.

Do cedar & redwood need to be brightened?

Let's take this one step at a time. There are some people in this world that love a "silvered" redwood deck. Other folks actually pay good money to turn it a gray or bluish gray driftwood color. People who want gray decks usually do not have to brighten their cedar or redwood decks. Sometimes they find that the deck is getting too dark, so they brighten it and quickly cover the freshly brightened wood with a driftwood stain. Most people want deck wood to stay as close to "like new" as possible. These people need their decks brightened every year or two.

Do hardwood and composite decks need to be brightened?

Your choice. Composites like Trex and TimberTech are at least 50% wood so they will turn gray. You can let them silver naturally or use a brightener to bring back their original color. If you brighten Jarrah, one of the great
hardwoods, be sure to use an oxalic acid based brightener. This wood is almost impervious to rot or insect infestation, but it turns gray very rapidly.

**Should I brighten a stained or sealed deck?**

That is a good question. Most manufacturers say "no," strip the deck immediately, and then restain. Here's how I see it. You do no harm brightening a deck that has to be stripped. You just add an extra step to the stripping process. There is a good chance that if you brighten a stained or sealed deck that is in fairly good shape, you may very well decide that the finish looks good enough to last another year. From my point of view if you can make it another year without stripping and staining, you are time, money, and muscle to the good. It's your call.

**How do I brighten a deck?**

For best results put your deck cleaner under a microscope. Unfortunately all deck cleaners are not created equal. The cheaper deck cleaner/brighteners usually include some form of chlorine (household) bleach as their brightening agent. Quite often the ingredient list does not say bleach, it uses the chemical term, sodium hypochlorite. Using a product with this ingredient on your deck can be a problem.

Years ago, I used to recommend cleaning and brightening decks with a solution of TSP and household bleach in water. I stopped doing this when I learned how hard the bleach was on the wood. The bleach took away the gray and killed the mold spores, but at the same time it mangled the wood fibers and left a residue which keeps stains and sealers from penetrating the wood properly.

I first learned of this phenomenon when the owners of Bio-Wash Products, showed me photographs of microscopic blowups of cedar decking taken by an independent Canadian chemical testing company. The magnification was 43X.

![The first slide was of weathered cedar. You could see how a combination of dirt, mold and dead wood cells had turned the surface black/gray. This jumbled, blackened surface was not only unattractive, the cell structure was so clogged that not even penetrating stains could be absorbed by the wood properly.](image)
The second slide showed how a bleach based cleaner lightened the wood but destroyed the lignin, the natural glue that bonds wood fibers together. When the wood fibers were no longer bonded, they became a loose mass to which stains and sealers could not adhere properly.

This is the reason why so many hard-working homeowners only get a single season out of their deck stains and sealers. They do all the work, but the cheap cleaner/brightener used makes it impossible for the stain or sealer to stick. The stain walks or weathers off in just a few months.

The final slide showed weathered cedar brightened with Bio-Wash WoodWash restorer. The citric acid used in the cleaner gets rid of the dead wood fibers but does not effect the natural bonding agent in the wood. This is not a commercial for Bio-Wash WoodWash. It is very good, but it is only one of many different cleaner/brighteners that do a great job.

Common household bleach is a 3 to 6 percent solution of sodium hypochlorite in water. The same ingredient is in many deck cleaners including Cabot Problem Solver Wood Cleaner, Behr No. 62- Multi-Surface Deck-Prep & Mildew Stain Remover, Thompson’s Deck Wash and Armor-All EZ Deck Wash.

If you do not want to use a bleach-based product, use a mild acid such as oxalic, phosphate or citric acid, or disodium percarbonate (often advertised as oxygen bleach). Both cleaners are also good at removing tannin and rust stains.

Found naturally in asparagus, broccoli, cabbage and carrots, oxalic acid (wood bleach) is the most commonly used acid on deck wood. You will find it in BEHR Wood Brightener Conditioner No. 63, Flood Dekswood, Cabot Problem-Solver Wood Brightener No. 8003, and Wolman Deck & Fence Brightener for Cedar & Redwood. You can also buy it in granular form at many hardware stores or on the Web at www.chemistrystore.com.
Phosphoric acid is used as an antioxidant in food and as a flavor agent in jellies. Products based on this very gentle ingredient are Bio-Wash Simple Wash and Penofin Weatherblaster.

Citric acid was first isolated in lemon juice and is found in most plants. Probably the gentlest of the wood brighteners, it is used on fine cedar, redwood and hardwood decks. Coronado Maxum-Prep Wood Brightener contains citric acid. You also could buy it in concentrated form at www.chemistrystore.com.

Disodium percarbonate (oxygen bleach) is a very environmentally friendly cleaning/brightening agent. It comes as a powder and has to be mixed fresh each time it is used. Oxygen bleach is especially good on pressure-treated pine, hemlock and fir. It is also recommended for hardwoods such as oak, maple and poplar. Wolman Deck & Fence Brightener and Expert Cleaning Solutions, (800) 262-5710, and Wood Brightener Plus are based on disodium percarbonate.

According to Al Abruzzese, a home improvement contractor who hosts Al's home improvement center on the Web, you already might have disodium percarbonate. It is the active ingredient in laundry cleaners such as SC Johnson's Shout Oxy Power, OrangeGlow International Oxiclean, Clorox Oxygen Action, and Lever Brothers All Oxi-active.

If you wanted to make your deck cleaner, you could use the product you probably already have in the laundry room or buy disodium percarbonate on the web at Al's Home Improvement Center, http://alsnet.biz.com/homeimprovement/oxybleach.html or at www.chemistrystore.com.

After reading Abruzzese's article on oxygen bleach, my publisher used 3 ounces of TSP and 3 ounces of Oxiclean in a gallon of hot water to clean a heavily mildewed portion of our test deck on Memorial Day. It took some scrubbing, but the wood, which had turned green with mildew, went back to its natural color. I'm not willing to make this combination a deck cleaning recommendation, but it worked on our test deck. If you have the time, you might want to experiment, develop your own secret deck cleaning formula, and brag about the result.

**Will a brightener remove the finish?**

No. A deck brightener will not remove a well bonded sealer, toner, or stain from decking. You must use a stripper to remove these coatings.
What is the procedure for brightening?

Each of these cleaners has specific mixing instructions. Pay attention and follow the rules. Generally, however, the application directions are the same as for deck cleaners. Here are a few tips.

- Since most of these products are acids, work in the cool of the morning when there is not much wind.
- Wear goggles, gloves, long sleeved shirt, slacks, socks and shoes. Wet down the entire area around which you will be working, especially grass, flowers, and shrubs. If something is very delicate, move it or cover it with a cheap plastic drop cloth.
- Mix up the solution; apply with a garden pressure sprayer or a roller.
- Keep the decking wet for at least fifteen minutes, agitate with a deck brush and then rinse off with a garden hose.

Do I need to use a power washer?

The answer is the same as for deck cleaning. No. Your garden hose has all the power you need.

What's the best way to remove tannin and rust stains?

Use an oxalic acid brightener or Bio-Wash Woodwash.

What if the brightener did not remove mildew?

Sometimes oxalic acid does not do a complete job on mildew. If you have a bad mildew problem try a sodium percarbonate based product like Wolman Deck & Fence Brightener. If you are brightening cedar or redwood, you may find that you have to use an oxalic acid based brightener to remove the rust and tannin stains and a percarbonate based product for the mildew.

Can I coat over a stained but brightened deck?

We'll discuss this more in the staining chapter. The short answer is "no."
Stripping

How can I tell when wood needs to be stripped?

The best thing to do is what I call the orange juice glass test. After you have cleaned the deck and it has dried at least four hours, fill a 4-oz. glass with water and splash it on the decking. If the water breaks up into tiny beadlets and just sits there, too much sealer remains on the deck to proceed further without stripping. If the water lays around in a puddle, then disappears through a combination of evaporation and absorption into the wood, the sealer has worn off and the wood can be resealed, preferably with a seal coat that is a few shades darker than you used two or three years ago. There are three provisos to the above.

1. Throw the water on one of the lesser-used parts of the deck. If you throw it on a walkway, the finish may have worn off, while remaining on the lesser-used portions of the deck.
2. Make certain that the decking has not already turned gray. If it has, you must brighten the deck at a minimum.
3. Check the spindles carefully. Coatings on vertical surfaces last twice as long as the horizontal decking surface. It well may be that you do not have to restain or seal the rail system, or that only the top, horizontal deck board needs to be stripped and restained.

I can't see sealer anymore. Can I just restain it?

The reason for stripping deck wood is that the new coat of sealer, toner, or stain, should soak into the top layers of the wood for maximum adhesion and a uniform look. Even when it seems that the sealer coat has worn off, there may still be too much sealer in the outer layer of wood cells for proper absorption of the new coating.

When the sealer coat has completely worn off the wood, you do not have to strip the deck. If the wood has turned gray, you will have to brighten it anyway. If there is any doubt, strip the deck.
**What should I use to strip a deck?**

There are a large number of very good products out there. Most old deck stains are oil based. Some are latex or water reduceable. Some manufacturers make specialized strippers for oil and latex removal. Some do both, so they can be classified as general. Some are especially heavy duty for problem areas. If you don't know what kind of a finish is on your deck, a latex stripper can usually take off any product.

Many deck strippers are based on sodium hydroxide. This makes an excellent stripper, but it is really strong stuff. It can cause severe burns to the skin and eyes.

Some of the strippers that include sodium hydroxide among their ingredients are Behr No. 64 15-Minutes Quik-Fix Deck Finish Remover & Wood Resurfacer; Bio-Wash Stripex and Stripex-L; Wolman DeckStrip; Flood StainStrip; Coronado Maxum-Prep Deck & Wood Stripper; Powersolve Deck Stripper; and Saver Systems Defy Exterior Wood Stain Stripper.

Although all of these strippers are rated to remove oil and latex-based stains, don't imagine that they are all alike. Each has distinct strengths and weaknesses. For instance, Powersolve has a unique pressure washer grade product, DSI Powersolve Deck Stripper that is very concentrated and can be injected through a pressure washer.

Flood PowerLift is a milder alkaline-based stripper. It is made for removing old clear finishes and sealers, but is not strong enough for the heavier oil and latex-based stains.

Penofin Pro-Tech is a brand new phosphoric acid-based deck stripper from Performance Coatings. The new stripper will remove latex and oil-based stains and sounds like it will be one of the most environmentally friendly strippers on the market.

No matter which stripper you choose, read the label and follow directions. Many strippers can be applied with a pump sprayer as long as it has no metal parts. Other strippers, like Behr No. 64 5-Minute Quik-Fix, Bio-Wash Stripex and Stripex-L, and Coronado Maxum-Prep Deck & Wood Stripper, should be applied with a roller or nylon brush.
How fast do I need to work?
The active stripping period can vary from less than 15 to more than 45 minutes depending on the product used. Since all strippers have to be kept moist during the time they are working, if you are using a product applied by a pump sprayer you have to keep applying the product to drying areas. On a warm day, this could double the amount of stripper used.

Which would you recommend for particularly tough jobs?
Bio-Wash Stripex L and Specialty Environmental Technologies WoodpalDeck Stain & Finish Stripper were made especially thick and cling to vertical surfaces and problem areas. The Woodpal and Bio-Wash products did the best overall job on our test deck.

We have not personally tested Penofin Pro-Tech by Performance Coatings but have gotten such rave reviews on the product that it sounds like it would be a good choice for a problem deck.

What procedure should I use to strip a deck?
Every company's stripper is different. Following the manufacturer's recommendations is critical. Don't take short cuts. If you don't follow instructions to the letter the product may not work and you will have to do the job all over again.

Here are a few hints.
- Wear protective clothing. No matter how earth friendly the product is, it does not belong in your eyes or on your skin. You know the drill: wear protective goggles, refinisher's gloves, old long sleeved shirt and slacks, socks and old shoes.
- Enlist the aid of a buddy if at all possible. The work will go faster if you have some one to fetch, carry and share the pain (glory).
- Soak down the surrounding area before you start and after you have finished. Put drop cloths over delicate plants. I know that most of the stripper labels say the product turns into fertilizer. But you wouldn't drop an entire bag of fertilizer of a bed of petunias would you?
- Do the job early in the cool of the morning or at twilight. Keep out of the direct rays of the sun. The more direct sunlight you
have the faster the stripper will dry, the less time it will have to do its work.

- The best temperatures to do this kind of work is between 60* and 80*F. Fifty degree is the absolute minimum but most strippers will be very slow acting at this temperature. When the air temperature gets over 80*F deck surface temperatures can easily be 90* to 100*F. These high temperatures are bad conditions for you and the stripper.
- Spread the stripper on lavishly. The least expensive ingredient is the stripper. The most expensive ingredients are your time and elbow grease. The more stripper you use in the first application, the less need there will be to redo the job.
- Don’t expect the stripper to go very far. A 500 square foot deck can easily require six or more gallons of stripper.
- Keep the stripper moist for the specified time period. Some manufacturers specify a light water misting. Some say add more product. Follow package directions.
- Pay special attention to the spindles and rail system. This is the area that will most likely give you a problem.
- Do the complete job. If you are stripping, strip the coating off everything that you plan to recoat, including joists and posts.
- Make sure you rinse away all the gunk that hides in cracks, corners and crevices.

Any advice on stripping spindles?

The easiest way to apply stripper to spindles is with a special purpose narrow roller, like a Whizz roller. It is small enough to get in between the spindles and up in all the corners.

Do I need a pressure washer for this job?

Most manufacturers’ specifications say that you do not need to use a pressure washer with their product. You may find a pressure washer will help you get the job done faster. It is especially useful while working on the rail system. If you do use a pressure washer, use the lowest possible setting. Start at 400 or 500 psi (pounds per square inch) and work your way up. Never use more than 1200 psi.
The stain is still not off, what do I do?

Most deck strippers cannot lift the new 100 percent acrylic deck stains. If you have to remove one of these stains, sand or use a stripper recommended by the stain manufacturer.

Conventional clear coats and oil and latex semitransparent stains can be removed with one or two applications of deck stripper. However, the professionals tell me that some solid and semisolid stains may not be not totally removed after seven applications. In all cases, sanding of the stripper is the last resort.

If sanding is necessary check with your local equipment companies and see if they rent the Clark EZ 8 floor sander. I prefer the EZ8 because it gives you excellent control. The necessity to sand is not a failure on the part of the deck finishes or their manufacturers. What you want, and pay for, is something as strong as cast iron. You can’t complain when the manufacturer gives it to you.
Sealing and Staining

You're not done preparing your deck yet.

If you have followed my directions so far you have cleaned the deck and stripped off the old finish. You are not yet ready to seal or stain the deck. The very process of cleaning or stripping the wood has affected the deck surface.

Read the labels carefully and you will probably see that the company suggests a few extra steps.

Bio-Wash, for instance, attaches plastic packages of Natural Wood Brightener to each gallon of Woodwash, Stripex and Stripex-L. If you are preparing cedar or redwood, they want you to use Natural Wood Brightener to condition the deck before staining.

Bio-Wash also suggests treating the wood with Mill Glaze Away to balance the pH before applying a water based seal or stain coat.

Behr calls for brightening the deck after stripping it to assure proper penetration of the stain or seal coat.

The senior chemist at Wolman, on the other hand, says that nothing has to be done after stripping with DeckStrip Stain & Finish Remover, so you can apply any Wolman product as soon as the surface has dried.

What all this means is don't just glance at product labels. Study them intently. What you don't read can ruin the looks of your job.

What should I do if the labels aren't clear?

Most uneven or short lived stain and sealing jobs are not the coating manufacturer's fault. Most were caused through improper preparation and application.

I know the most precious thing I have is my time. The most expensive ingredient in my toolbox is the grease in my elbow. I would rather take an extra step in preparing a deck, than see a bad result,
or have to redo a major project.

If you are unsure, if you have to do anything after stripping, before staining, play it safe. Apply Bio-Wash Mill Glaze Away or use a brightener on the deck before staining or sealing.

**How long should a deck dry before staining?**

With most seal and stain coats, it is necessary to let the deck dry three rainless days before sealing or staining. That is three dry days in a row. If it rains on day two, the count down starts all over again the next day. Don't cheat.

**How can I tell what to use on my deck?**

What you use depends on the look you want to have and the age of your deck. Here’s a brief explanation of coatings and recommended uses.

**DECK FINISH GUIDE**
Always make sure the word "Deck" is on the label.

**Clear Wood Sealer**
Seals wood but does not protect against UV.
**Use:** Why bother?

**Clear Wood Sealer with UV**
Seals wood and has a little UV protection.
**Use:** New decks

**Sealer Toner**
Includes a little pigment for protection. A little lighter than Semi Transparent.
**Use:** 2 years & older

**Semi-Transparent Stains**
This stain has enough pigment to make a color statement, yet is especially made to enhance cedar and redwood markings. Comes in a wide selection of colors.

**Use:** 4 years & older

**Solid Color Stains**

Color trim. Excellent way to make the rail system match the house. Can also be put on older decks.

**Use:** 6 years & older

**Varnished Look**

Sikkens Cetol DEK is especially formulated for people who want a furniture finish deck.

**Use:** Designer look

**What should I choose?**

The clearer the seal coat, the less protection it gives wood from Ultra Violet (UV) Rays. The more pigment in the stain or sealer, the more uniform the final look will be. What you choose depends upon the condition of the wood.

If you have a new deck, most people choose a clear sealer. After a couple of years, they progress to a sealer/toner that adds a little pigment for more protection, yet highlights the wood's grain and texture. It gives the wood a honey nut look.

When a few more years go by, a semi-transparent stain is an excellent choice. Still later, decks that have proved the test of time have earned the right to the extra UV protection of a solid colored stain. Every major stain company makes all or most of these. If you want your deck to look like furniture, choose Sikken's Cetol Dek.

**Which companies make which products?**

Most of the major companies make sealers, toners, semi-transparent and solid color stains. With some companies it is the same basic product.
More and more pigment is added as the years go by. Still others make especially tough Acrylic or Teflon for extra protection and wearing ability.

**Which products are best?**

That is a very subjective question. It is sort of like I say about windows and furnaces. The best sealer and/or stain is the one that is applied the best. I know this sounds like a cop out. Surface preparation and application are vital. If a sealer or stain fails, the problem is usually with the person who prepared the surface and applied the product. I have read supposedly definitive, independent, test results that show the same manufacturer's coatings to be among the best and the worst, judged by the same criteria. Obviously both studies could not be right. Deck care products are among the hottest categories in the paint industry. No manufacturer is going to set out to make a poor product. They do, however, create products made to conform to specific criteria. Decide what is important to you, then go to the store and choose the product which best fills your needs. You also have to use common sense. There is no way that you can compare a gallon of $19.95, $29.95, and $59.95 stain. The only thing they have in common is the metal can in which they are held.

**Any tips you can give me on product selection?**

Almost all major stain and sealant companies have their own lines of brighteners and strippers. You might want all the products you buy to be in the same "family". Bio-Wash has designed their entire line to work as an integrated "system" that works best when used together. Wolman has done the same thing. So have Behr, Cabot, Flood, Osmose, Penofin, Olympic, Pittsburgh, Superdeck, Thompsons, as well as smaller or regional companies such as Silvertown Products' Rhinoguard, American Building Restoration Products (ABR), and Menco's Men-Wood brand. I've talked to many of the chemical engineers that formulate these products. Every company's sealers and stains are a little bit different. If a company also makes a cleaner, brightener, and stripper, it makes sense to formulate those products to do the best possible job preparing the wood for the company's products.

**What's the best way to seal or stain a deck?**

Every product has its own specifications. Many clear sealers and sealer/toners can be applied with a garden sprayer, then evened out with a roller. Many stains require a brush, or bush/roller application.
What's the best way to do spindles?

You have three choices: a brush, a task roller, like one of those thin Whizz rollers, or a painter's mitt. The painters' mitt is quickest, but a little bit messy. If you use one, be careful not to get splinters.

Is there any way to speed things up?

The folks at Bio-Wash heard your pain and developed a procedure they call the “One Day Deck”. If you do everything right you will be delighted with the result. If you do it wrong – even if you don’t know what you did wrong – you will be an unhappy camper. Here’s the technique:

8 a.m. Apply Stripex-L liberally to the deck with a roller first thing in the morning. After covering the entire surface, keep it moist for up to a half-hour by misting the stripper with a garden hose.

8:45 a.m. Adjust the pressure nozzle on your garden hose to maximum pressure and wash the stripper off the wood. If any sealer or stain remains, agitate with a stiff bristle brush.

9:45 Should you want to make the deck lighter, mix up the Bio-Wash packet of Natural Wood Brightener as soon as the standing water has dried from the deck (about a half-hour). Apply the Natural Wood Brightener to the entire deck with a garden sprayer, then rinse off immediately with a garden hose. Let the deck dry for an hour.

10:45 To make sure the wood on your deck is in perfect condition to accept the stain treat it with Mill Glaze Away. Mix the packet with water and apply to the deck with a garden sprayer. Let the deck alone until you can no longer see standing water on the deck.

12:45 Apply Bio-Wash Natural Deck Oil and take a break.

4:00 It's done. It's dry. Clean up your tools with cold water. Brag about it!

Bio-Wash Natural Deck Oil has another advantage when it comes to moisture. Since it is a true waterborne finish, it can be applied 30 or
40 minutes after a rain or a couple of hours before a rain and the finish will be perfectly fine.

**What are extra tough finishes?**

Cabot has a Teflon based deck stain. Sikkens makes Rubbol DEK a very strong, solid color deck finish. Silvertown Products, Inc. makes a very tough transparent and semi transparent finish called Rhinoguard Wood Defense. The product contains Gilsonite for extra strength and UV protection.

**How long should deck stain last?**

Good question. How long a coating lasts depends upon the quality of application, the product quality, temperature, exposure, and climatic conditions. Is that enough gobblety gook for one day? Seriously, whether your deck is exposed to long periods of scorching sunlight or has shade during the hottest parts of the day has a very great deal to say about how long the coating will last. Also is the deck on the West, South, East, or North side of the house?

A Southern exposure is the worst for sunlight. A Western exposure is the worst for wind and bad weather. If you were lucky enough to build your deck with a Southwestern exposure, congratulations, you have the worst of all possible worlds.

That said, the average finish lasts eighteen to twenty-four months. Vertical finishes, like railings, last double that. One thing we noticed on our test deck is that two coat finishes last twice as long as single coat finishes.

**What about products with 5, 10, 20 year or even lifetime guaranties?**

There is usually a cop out somewhere on the label. The coating may last but the wood may change color because of UV rays. I have yet to see a deck coating on a horizontal surface, exposed to the elements and a family’s wear and tear that looked good for more than 2-years. The rule is 18 months. Expecting anything more is unrealistic.

**Is there any way to stop mildew?**
The only real solution is constant cleaning, but you can add a mildew additive to the stain or sealer such as Stay-Clean I/E by Enviro-Chem or Super Mildex by Guardsman Products. You'll find this, or one of several different products at any good paint store.

**How about insects?**

You can add products like Bugg Stuff by Guardsman Products or CPF 2D Contact Insecticide by Enviro-Chem. Any store that specializes in deck sealers and stains should carry one of these products.

**Can I use deck stain on lawn furniture?**

Usually not. If you are going to stain a picnic table, bench, or lawn chair, you want to make certain that it says "For Outdoor Furniture" on the can. Otherwise you could get chalking stains all over some guests shorts or skirt. You will usually find an exterior, non-chalking stain that matches your deck stain made by the same manufacturer. If you want the lawn furniture to have a varnished, furniture look, choose Sikkens Cetol DEK or Supernatural by Bio-Wash.

If you have a hardwood bench or chair Performance Coatings Exotic Hardwood Penofin will do a beautiful job. Be sure to prepare the surface with Penofin First Step Prep for Hardwoods

**What about my hot tub?**

You need a stain that says right on the can that it is very water friendly. Superdeck makes a special hot tub kit that contains everything you need to redo the hot tub wood. Bio-Wash Supernatural Protective Wood Finish is also a very good product for this purpose.
<table>
<thead>
<tr>
<th>Company</th>
<th>Best Known Products</th>
<th>Phone Numbers</th>
<th>Websites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABR Products, Inc.</td>
<td>X-100 Natural Seal</td>
<td>800-346-7532</td>
<td><a href="http://www.abrp.com">www.abrp.com</a></td>
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<tr>
<td></td>
<td>Cetol DEK, Cetol SRD, Rubbol</td>
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<tr>
<td>Akzo Nobel Sikkens</td>
<td>DEK</td>
<td>800-833-7288</td>
<td><a href="http://www.nam.sikkens.com">www.nam.sikkens.com</a></td>
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<tr>
<td>Arago Products</td>
<td>Arago Super Seal</td>
<td>541-888-2469</td>
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<tr>
<td>Behr</td>
<td>Quick Fix, Deck &amp; Siding Stain</td>
<td>714-545-7101</td>
<td><a href="http://www.behr.com">www.behr.com</a></td>
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<tr>
<td></td>
<td>Mill Glaze Away, WoodWash</td>
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<tr>
<td>Bio- Wash</td>
<td>Stripex, Natural Deck Oil</td>
<td>800-858-5011</td>
<td><a href="http://www.biowash.com">www.biowash.com</a></td>
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<tr>
<td>Boodge Co.</td>
<td>WoodCare Oil</td>
<td>303-642-7680</td>
<td><a href="http://www.boodge.com">www.boodge.com</a></td>
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<tr>
<td>Cabot, Samuel</td>
<td>Problem Solver &amp; Teflon Stain</td>
<td>800-877-8246</td>
<td><a href="http://www.cabotstain.com">www.cabotstain.com</a></td>
</tr>
<tr>
<td>Dutch Boy</td>
<td>Classic Clear &amp; Deck Stains</td>
<td>800-828-5669</td>
<td><a href="http://www.dutchboy.com">www.dutchboy.com</a></td>
</tr>
<tr>
<td>Enviro-Chem</td>
<td>Stay-Clean, CPF 2D</td>
<td>800-247-9011</td>
<td><a href="http://www.wwenvironmentalinc.com">www.wwenvironmentalinc.com</a></td>
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<td></td>
<td>Deckswood, Powerlift, CWF UV</td>
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<td>Flood</td>
<td>Superdeck Decktergent, Deckdocktor</td>
<td>800-825-5382</td>
<td><a href="http://www.superdeck.com">www.superdeck.com</a></td>
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<tr>
<td>Menco Products</td>
<td>Wood</td>
<td>800-972-7693</td>
<td><a href="http://www.menco.com">www.menco.com</a></td>
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<td></td>
<td>WoodBrite, House &amp; Deck Stain</td>
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<tr>
<td>Osmose</td>
<td>Stain</td>
<td>800-241-0240</td>
<td><a href="http://www.osmose.com">www.osmose.com</a></td>
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<tr>
<td>Performance Coatings</td>
<td>Weatherblaster, Penofin</td>
<td>800-736-6346</td>
<td><a href="http://www.penofin.com">www.penofin.com</a></td>
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<tr>
<td>PPG Industries</td>
<td>Sealer</td>
<td>800-441-9695</td>
<td><a href="http://www.olympic.com">www.olympic.com</a></td>
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<td></td>
<td>Wood Defense Deck &amp; Siding</td>
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<tr>
<td>Rhinoguard</td>
<td>Finish</td>
<td>800-574-4662</td>
<td><a href="http://www.rhinoguard.com">www.rhinoguard.com</a></td>
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<tr>
<td>Sherwin Williams</td>
<td>Professional</td>
<td>800-424-5837</td>
<td><a href="http://www.cuprinol.com">www.cuprinol.com</a></td>
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<tr>
<td>W.M. Barr &amp; Co.</td>
<td>Citristrip</td>
<td>800-235-3546</td>
<td><a href="http://www.citristrip.com">www.citristrip.com</a></td>
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<td></td>
<td>Thermo-Shield Wood &amp; Deck</td>
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<td>SPM</td>
<td>Coat</td>
<td>800-538-2955</td>
<td><a href="http://www.thermosheild.com">www.thermosheild.com</a></td>
</tr>
<tr>
<td>Sunshine Makers</td>
<td>Simple Green</td>
<td>800-228-0709</td>
<td><a href="http://www.simplegreen.com">www.simplegreen.com</a></td>
</tr>
<tr>
<td>Thompsons</td>
<td>Water Seal Ultra</td>
<td>800-367-6297</td>
<td><a href="http://www.thompsonsonline.com">www.thompsonsonline.com</a></td>
</tr>
<tr>
<td>Wolman</td>
<td>RainCoat, F&amp;P Premium</td>
<td>800-556-7737</td>
<td><a href="http://www.wolman.com">www.wolman.com</a></td>
</tr>
</tbody>
</table>

**Composite Deck Woods**

- Crane Plastic Co.  
  Timbertech  
  800-307-7780  www.timbertech.com

- Trex Co.  
  Trex  
  800-289-8739  www.trex.com