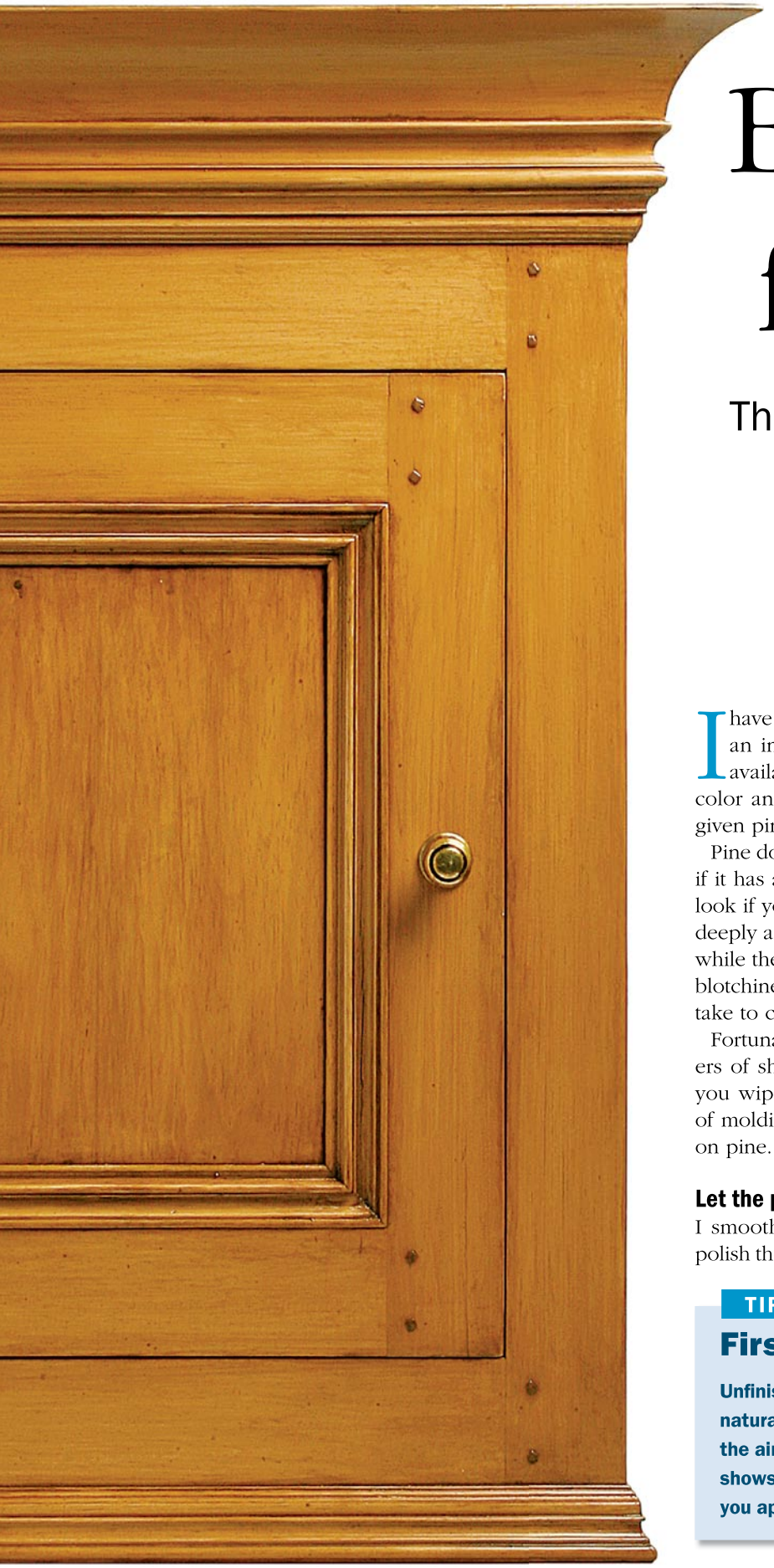


Best Finish for Pine

Thin layers of shellac and stain add age and warmth without blotching

BY TOM WISSHACK

I have never understood why so many woodworkers consider pine an inferior wood. I think it's one of the most beautiful woods available, and it only gets better with time, taking on a marvelous color and patina. But poor staining and finishing techniques have given pine a bad rap.

Pine does present unique challenges. You want the wood to look as if it has aged naturally to its present color. You'll never achieve that look if you apply stain directly to pine, because the color penetrates deeply and unevenly. Softer portions of the wood become very dark, while the harder and more resinous areas resist the stain. Worse, this blotchiness is irreversible. That is, the drastic measures you'd have to take to correct the blotchiness could ruin the piece.

Fortunately, you can achieve superior results if you apply thin layers of shellac and stain with patience and a delicate touch. When you wipe away the excess stain, some will remain in the crevices of moldings and joints, giving the subtle feeling of age that I prefer on pine.

Let the pine age naturally

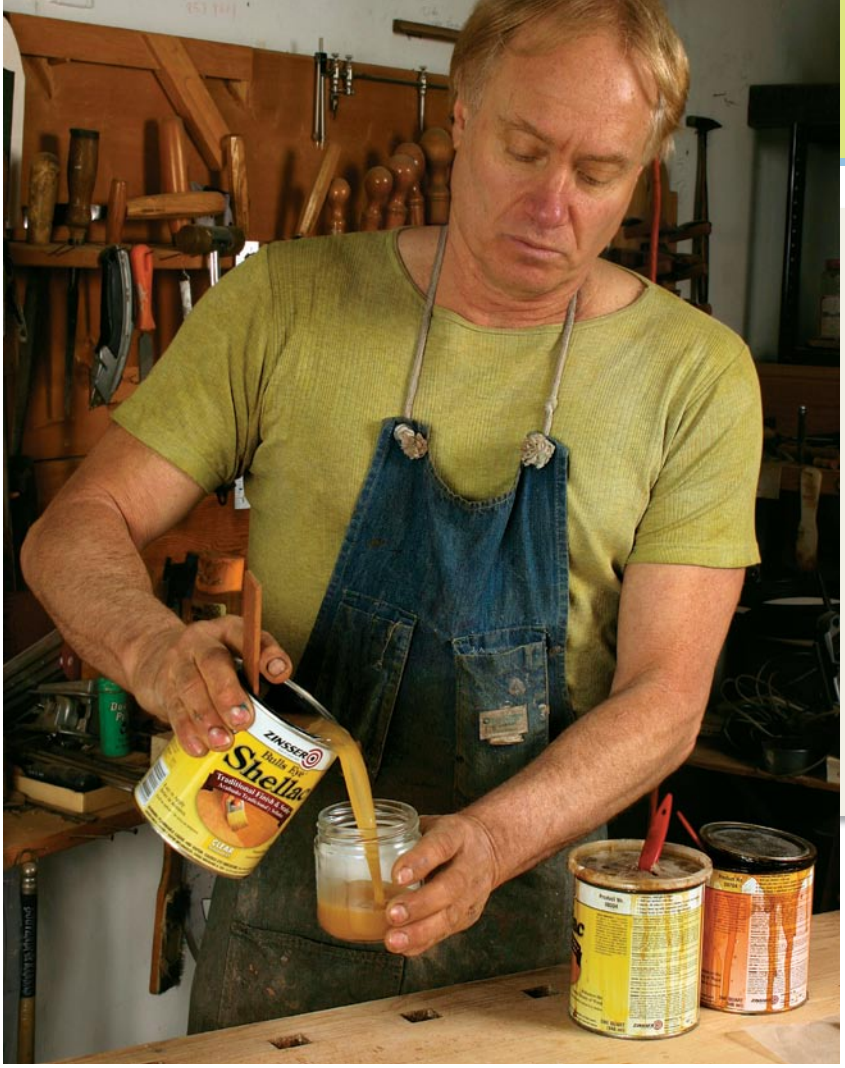
I smooth my pieces with a handplane and polish them by hand with P600-grit wet-or-dry

TIP

First, do nothing

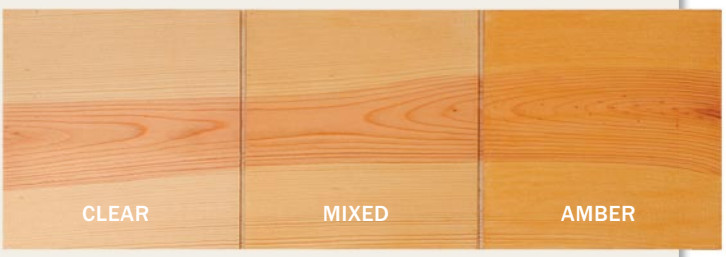
Unfinished pine will take on a golden color naturally after a few weeks' exposure to the air, as the top half of the sample board shows. This patina will enhance any color you apply.

Photos: David Heim



Shellac prevents blotching

COMBINE COLORS FOR SUBTLE WARMTH



A washcoat of thinned shellac partially seals the wood pores, ensuring that subsequent coats of stain will be absorbed evenly. The washcoat also can add a hint of color, as shown in the panel above. Mixing clear shellac (left panel) and amber (right) produces a nice intermediate shade (center).

paper. If you use sandpaper alone, begin with P120- or P180-grit, then work up to P320- or P400-grit.

Whenever I build a piece from pine, I sand it and then allow it to stand in the shop for at least a month before finishing. Pine will take on a natural patina, which I call shop aging. When I apply the finish, the resulting color is always deeper and richer than it would be if I finished the piece right away, so a very light stain normally is adequate. Waiting for the wood color to change is a luxury, but the results are worth it. Applying a finish too soon after constructing a piece of furniture is, in my opinion, a mistake.

Seal the grain

A washcoat of shellac comes first. This serves as a sealer; it's essential to close the pores of the pine and provide a foundation for the stain. Shellac dries very quickly and gives the wood absolute clarity. You can stain over it and—what's critical—remove most or all of the stain if you make a mistake or don't like the look.

I have had good luck with Zinsser shellac, which is widely available. I usually mix the clear and amber varieties, which gives the wood a warm, antique hue. Fill a quart glass jar about one-fourth full of clear shellac. Add small amounts of amber shellac until the mixture is about the color of honey. Note how much shellac you have, then add about half that amount of denatured alcohol. The result is close to a 2-lb. cut, but exact proportions aren't critical.

Brush the shellac onto one horizontal surface at a time, using long, even strokes. Rotate the piece as needed to coat all the

Two washcoats, light sanding. *Brush on the shellac with long, single strokes. Two coats are best. Wisshack left the door attached, an unorthodox technique, to ensure that he applied the stain uniformly. He allowed the finish to build up on the brass, giving it a patina similar to the wood. Lightly scuff-sand the dry shellac with P600-grit paper.*

Diluted stain adds color gradually

STAIN RECIPE FOR PINE

Mix well. *Fill a jar with the mineral spirits and linseed oil, then add the stains. You don't have to measure precisely. Let the color of the mixture tell you when you have the right amounts. Err on the side of making the stain too thin.*

This recipe makes about 1 qt. of stain. It uses three Olympic oil stains, which I've found to be very heavily pigmented. If you use another brand, it may not contain as much pigment, so you may have to adjust the amounts.

1 pt. mineral spirits

⅓ cup boiled linseed oil

⅔ cup Olympic Dark Walnut oil stain

⅔ cup Olympic Colonial Maple oil stain

⅓ cup Olympic American Cherry oil stain

Mix the ingredients and stir well.

The resulting mixture should have a medium golden-brown look and the consistency of 2% milk. Test the stain on a sample board. If the stain looks too dark, add more Colonial Maple; too light, more Dark Walnut; too brownish, more American Cherry.

surfaces with this thin washcoat. When covering a wide surface, work quickly, overlapping strokes only slightly. Seal a piece of scrap, too, so you can dial in the stain color before tackling the workpiece.

For best results, apply two washcoats. Wait about an hour between coats and two hours after the second coat. Then scuff-sand with worn P600-grit wet-or-dry paper.

Mix and apply the stain

Oil-based stain is the best type for pine. It can be brushed or wiped on, and it dries relatively slowly. Regardless of the brand, thin it with mineral spirits. That not only gives you more working time, it also keeps the addition of color subtle. A small amount of boiled linseed oil makes the stain more translucent.

Off-the-shelf stains vary considerably in the amount of pigment they contain. The Olympic stains I usually use are very heavy-bodied and require considerable thinning. Stain/sealer products that contain some tung-oil varnish are watery and weaker.

Don't be afraid to experiment with color, intermixing stains and trying different dilutions to get just the shade you want. The box at left gives a good basic stain recipe to use as a starting point. The amount of thinner required depends on the opacity and thickness of the stain you choose. Start with a mixture that's roughly 30% mineral spirits to 70% stain. If that's too intense or opaque, add more spirits. Very often, I end up with 60% thinner to 40% stain.

When the color is right, brush a liberal amount of stain onto the wood, let it stand about five minutes, then

TIP

Test the stain on a sample board

Test the color on a sample board that's been given a washcoat of shellac. This lets you tweak the proportions of the stain recipe before finishing the real piece.

Apply stain generously. *Brush on a thick coat of stain, working in a defined area such as this door panel. Use the brush to work the stain into corners and the recesses of moldings.*

Wait, then wipe lightly. *Let the stain dry for 15 to 20 minutes (temperature and humidity will affect drying times). Then wipe away the excess. Work in a circular motion at first, then with straight strokes. Use a very light touch—no pressure on the wood at all.*

Additional coats provide depth

Subsequent coats of stain give the wood a warm, amber tone. The layers of finish also add uniformity, minimizing differences in color from one area or board to the next. A coat of thinned shellac seals in the color.

More stain if needed. *Brush on a second coat of stain (above), then wipe carefully (right) to avoid hitting an area you've already wiped. If you slip, dab on more stain, then wipe again.*

Brush on more shellac. *Let the initial coats of stain dry thoroughly, which can take as long as a week. Then brush on another washcoat of shellac. Rotate the piece as needed so you're always working on a horizontal surface.*

remove the excess very lightly. A soft cotton cloth works well; quilted bathroom tissue, even better.

The stain mixture normally will stay workable for 15 to 20 minutes. If it begins to set up, lay down another coat of stain before continuing to wipe. A single coat of stain may have a minimal effect on the wood's color. But if you layer three or more coats of stain, you will steadily achieve a rich and increasingly aged look. Let the individual coats of stain dry for at least a week.

Add another coat of shellac, then the topcoats

Once you are happy with the color of your pine, protect the stain with another coat of shellac. If you don't, the stain may dissolve when you apply a topcoat. Use a somewhat thicker mixture this time, say 70% shellac to 30% denatured alcohol.

Don't overbrush or overwork the barrier coat because the alcohol can dissolve the stain beneath. Allow the barrier coat to dry several hours or overnight.

I've found that varnish makes the best topcoat because it adheres well to shellac and gives the wood an additional amber tint. Avoid polyurethane varnish, though; it won't adhere well to the waxy shellac.

Lightly scuff-sand the piece with P400- or P600-grit paper, dilute the varnish by 30% to 40% with mineral spirits, and brush on three thin coats. Smooth the final coat with P600-grit wet-or-dry paper and rub the surface with 0000 steel wool and mineral oil for a satin sheen. □

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Add protection with a topcoat. *Use a mixture of varnish and mineral spirits, brushing it on with long, smooth strokes.*