



Make Shellac Your Go-To Finish

My first experience with shellac, at age 14, was a disaster. I almost ruined a bookcase I'd built, and I swore off shellac altogether. But in time I learned how to use it correctly, and today shellac is one of my favorite finishes.

It's a cinch to apply, and because it dries so fast, you can apply multiple coats in a day and repair mistakes with ease.

It doesn't take an expert to get great results with shellac. Follow a few simple steps, and you can create a lustrous, satiny finish that

A simple brushed finish produces stunning results

BY MARIO RODRIGUEZ

makes grain and figure pop, no matter the species.

Fresh, dewaxed shellac is plenty durable

Shellac gets a bad rap for durability, in part because of confusion between waxy and dewaxed versions. Stick with dewaxed shellac; it dries to a hard, impermeable film that protects against heat and moisture and is compatible with all finishes. True, shellac won't hold up against spilled alcohol. But since dewaxed shellac bonds beautifully with every other finish, you can always follow it up with a wipe-on varnish to protect vulnerable surfaces.

Shellac's freshness affects its performance and durability. That's where I went wrong with my bookshelf: I used old shellac and



Choosing the right version

Shellac is widely used as a sealer coat under other finishes, but it can produce a striking, low-luster finish on its own. For maximum durability, use dewaxed shellac, whether pre-mixed or flakes. Shellac is most durable when it's fresh, so try to buy only what you'll use in the next few months.

Flakes offer safe, subtle tones

Dewaxed flakes range in color from clear to amber (orange) to deep reddish browns, like garnet. Unlike dyes and stains, shellac flakes offer a foolproof way to impart warm, subtle tones without any blotching. Color differences are more apparent on lighter woods like maple and cherry than they are on darker woods like walnut (below). Dewaxed flakes are available from online retailers.



Pre-mixed is convenient

If you want a clear finish that adds just a hint of warmth, Zinsser's SealCoat (below, right), is the right choice. It's the only dewaxed shellac that's available premixed at home centers and hardware stores. Keep in mind when buying any shellac that if the packaging doesn't specify "dewaxed" or "wax-free," it probably isn't.



Skip the wax. Wax is an ingredient in some shellacs, including Zinsser's "clear" (above) and "amber" products. When waxy shellac dries, the wax allows moisture to permeate the finish, making it less durable.

Use dewaxed instead. Without the wax, shellac dries to a hard film that's impervious to moisture. For premixed, you have one choice: Zinsser's SealCoat.

How to mix your own



Grind for speed. Ground flakes dissolve completely in a few hours. If you don't grind them, it's best to give them a full day.



Mix with denatured alcohol. Give the mixture an occasional shake to keep the shellac from congealing at the bottom of the jar.



Strain solution before brushing. When the flakes are fully dissolved, pour the solution through a medium-mesh paint strainer to remove any impurities.

Denatured alcohol	1-lb. cut	1½-lb. cut	2-lb. cut
1 cup (8 fluid oz.)	1 oz. flakes (by volume)	1½ oz. flakes (by volume)	2 oz. flakes (by volume)

Easy finish, step by step

PREPARATION

Beautiful finishes start with careful prep. All surfaces should be sanded thoroughly, to remove machine and mill marks.

Prep surfaces with sandpaper. To ensure uniformity, sand all surfaces, starting at P120 grit and finishing with P220.



Flush between grits. Before moving to a finer grit, flush surfaces with alcohol and wipe them down with a rag to remove any loose abrasive particles, which can leave scratches.

THE FIRST COAT ACTS AS A SEALER

Brush on a coat of 1-lb. cut shellac to raise the grain and seal the surface, creating a level foundation for subsequent coats.



Tack strips elevate the workpiece. Rodriguez uses scraps of plywood with protruding drywall screws to hold the workpiece, allowing him to flip it as needed without marring the finish.



Coat brush in alcohol first. Whether you're softening an old brush or using a new one, work alcohol into the bristles to help the brush flow smoothly and keep shellac from drying in the reservoir (the hollow area where the bristles meet the metal ferrule).

Wipe-on alternative

Where brushing would cause excessive drips, like on a chair splat (right), shellac can be applied with a pad.



Charge the pad. Fold up a piece of wool (or other absorbent cloth) and place it at the center of a lint-free cotton rag. Use a squeeze bottle to fill the wool until it's soaked but not dripping.



Slow, but safe. Wrap the pad so its surface is wrinkle-free. The wool releases a thin coat of shellac through the cotton onto the surface, so it takes more coats to achieve the same look as parts that have been brushed. Seal the pad in a glass jar to keep it supple between coats.



Hit the edges first. When brushing narrow edges with a big brush, drips are likely to form on adjacent surfaces. If you brush the edges first, drips will form on the large, flat, dry surfaces, where they can be cleaned up quickly and easily.

it never fully dried. To be sure it's fresh, buy and mix shellac only as needed. Store it in a cool, dry place, like a basement or refrigerator. If its freshness is in doubt, brush some onto a scrap. If it's still tacky in two hours, it's not fresh.

Thin shellac to suit the project

Whether you're using flakes or pre-mixed shellac, adjust the thickness to suit the job. The "cut" refers to the ratio of flakes to alcohol: Add 1 oz. of flakes to a cup (8 oz.) of alcohol to make a 1-lb. cut, 2 oz. of flakes to a cup for a 2-lb. cut, and so on. If you don't have a scale, you can measure flakes by volume with standard kitchen measuring cups. One oz. by weight is roughly equal to 1 oz. by volume, or $\frac{1}{8}$ cup.

For a small project like this end table, mix about a pint of shellac, half at a 1-lb. cut and half at a $1\frac{1}{2}$ -lb. cut. Start with a 1-lb. cut as a sealer, to raise the grain and ensure that successive coats build uniformly. Follow with two coats at a $1\frac{1}{2}$ -lb. cut to build the finish. I use a 1-lb. cut for the final coat because, with more

alcohol, it flows and levels better, which minimizes brush marks.

Zinsser's SealCoat comes in a 2-lb. cut; for a 1-lb. cut, combine one part SealCoat to one part alcohol. For a $1\frac{1}{2}$ -lb. cut, mix two parts SealCoat with one part alcohol.

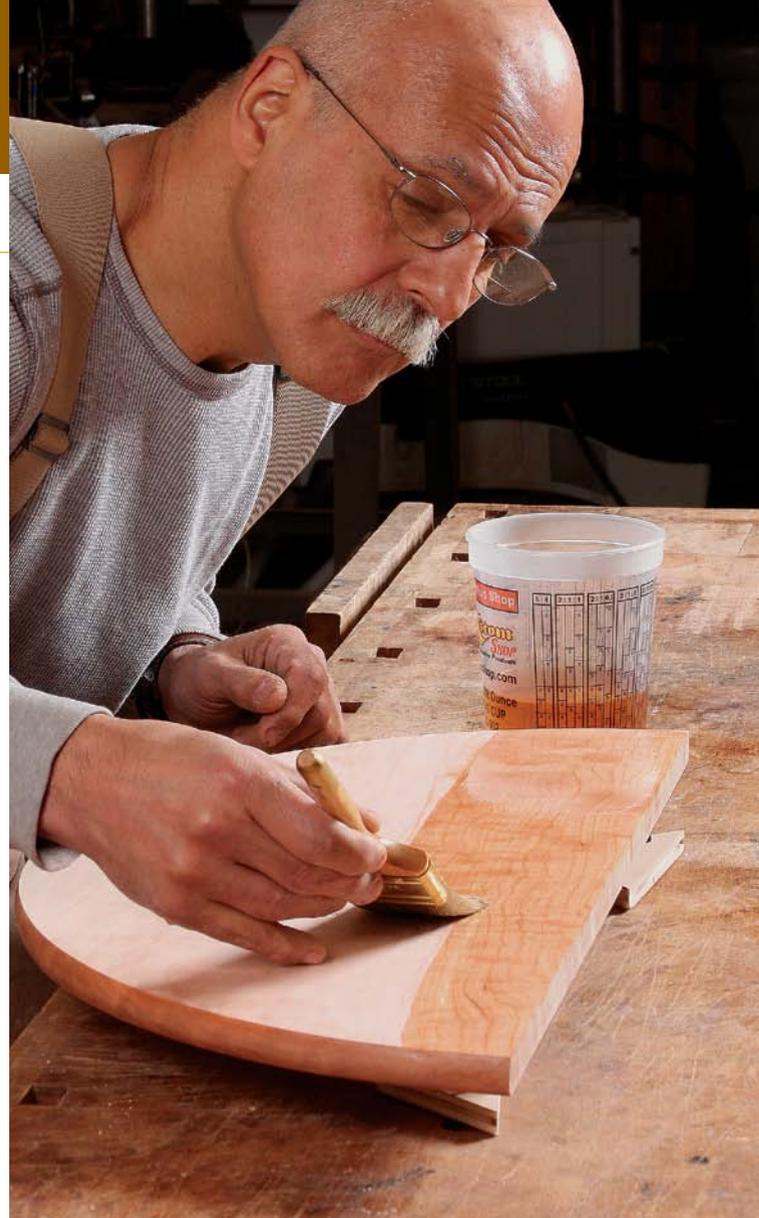
Prep surfaces and seal

Sand all surfaces, working from P120 grit to P150, then P220. Between grits, flush the surface with alcohol to remove lingering abrasive particles and reveal any surface flaws that might need fixing.

I apply shellac with a brush because it builds the finish in fewer coats than a rag. I use a 2-in. Chinex brush, but natural China bristle or Taklon work well, too.

To help avoid drips and detect brush marks and other imperfections, lay parts flat if possible.

To start, apply one coat of 1-lb. cut shellac as a sealer. Hit the edges first. Then, for flat surfaces, load the brush and tap the tips of the bristles on the inside of the container so that it's full, but not dripping. To avoid reaching over



Brush on a sealer coat. A thin 1-lb. cut raises the grain and dries quickly. In two hours, it can be sanded with P320-grit paper.



Don't look back. Apply shellac in long, continuous strokes with little overlap. If you miss a spot, don't go back. "Backbrushing" into drying finish will leave deep brush marks. Subsequent coats will cover small missed spots without any problem.

BUILD THE FINISH

Sand the first coat smooth, then apply two coats of shellac at a 1½-lb. cut to build a uniform protective film.

Sand between coats. When the surface is completely dry, sand with P320 grit. Use a stearated paper, like Norton's 3X, which has a soapy coating that resists clumping and clogging.



Dry finish won't clog sandpaper. Sanding dry shellac will produce a fine powder (right). If the finish isn't quite dry, the sandpaper will clog almost immediately.



A heavier cut builds faster. For the second and third coats, brush with a 1½-lb. cut. Heavier cuts get tacky soon after they're applied, so work quickly.

TIP **Brush care is easy**



To store your brush, give it a few dips in alcohol and wrap it in a paper sleeve to keep the bristles straight and clean. The shellac that remains in the bristles will harden, further protecting the brush's shape during storage. When you're ready to use it again, just soak it in alcohol to soften it up.

drying finish, start at a far corner and work toward your body. Use long, continuous strokes, overlapping them by ¼ in.

If you miss a spot or leave a drip, don't go back and touch it up—overworking it will leave deep brush marks that have to be sanded out. In two hours, sand with P320-grit to knock down the raised grain. Don't use alcohol to remove dust after sanding shellac, because it will reactivate the finish. Use a tack cloth or compressed air instead.

Heavier coats build faster

The second and third coats—at a 1½-lb. cut—can be applied generously, in the same fashion as the first. Heavier cuts get tacky almost as soon as they're applied, so work quickly to avoid brush marks.

You can apply your third coat two hours after the second coat,

then let everything dry overnight. The finish will appear very glossy, but don't sweat—you're not done.

Finish the finish

Before the final coat, it's time to address any drips or imperfections. Use a fresh razor like a card scraper to knock down drips, then rub out all surfaces with a maroon abrasive pad for an even matte sheen. Use the 1-lb. cut for the final coat, and let everything dry overnight.

For the final rubout, use super fine (0000) steel wool to knock down the sheen. If you want to add a coat of oil-based varnish for extra durability, now's the time. Apply paste wax with a soft cotton T-shirt rag, then buff it off for a deep, satiny finish. □

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A FINAL THIN COAT

Repair drips and brush marks, then brush on a coat of 1-lb. cut.

Eliminate drips. Use a fresh razor like a miniature card scraper to level drips and other imperfections. Don't bear down; instead, take multiple light passes until the drip is flush with the rest of the surface.



Follow up with a rubdown. After making repairs, rub everything down thoroughly with a maroon abrasive pad (equivalent to 000 "extrafine" steel wool).



Finish with a 1-lb. cut. For the final coat, go back to the thinner, 1-lb. cut. It has longer open time, so it flows and "self-levels" a little better, minimizing brush marks.

FINISH THE FINISH

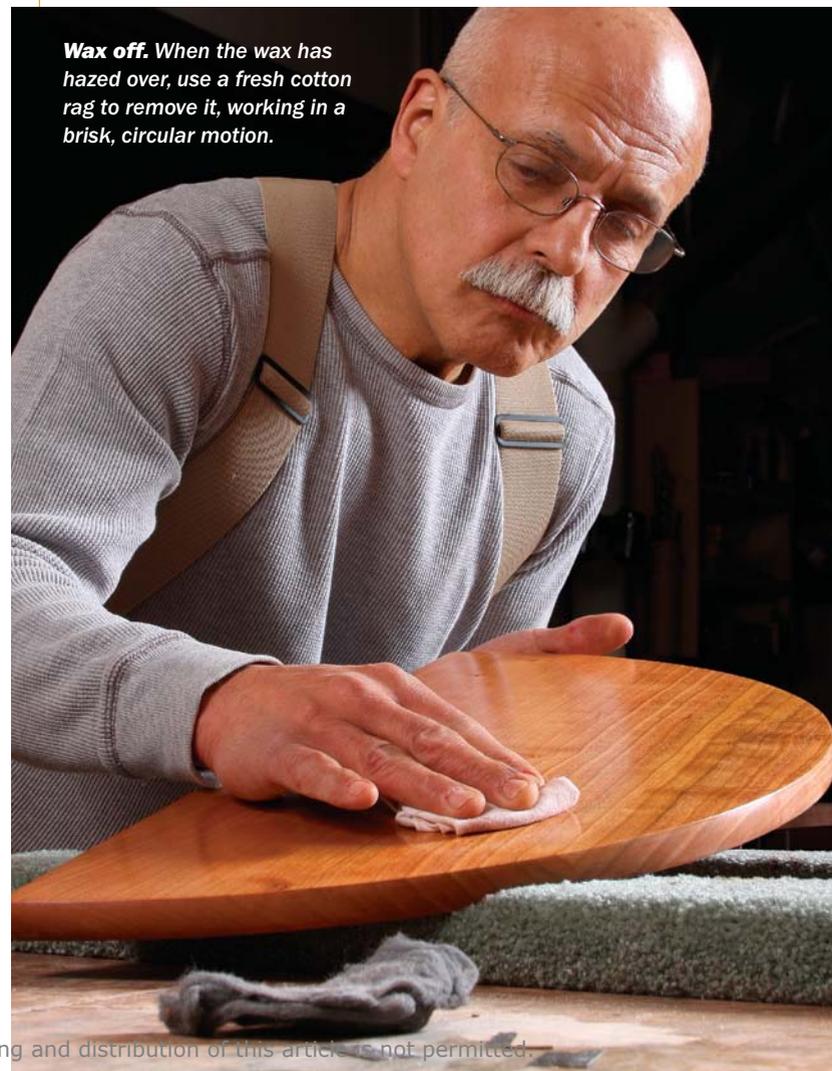
Use steel wool to get a level, matte surface. Then, apply paste wax to create a lustrous, satiny finish that's soft to the touch.



Knock off the gloss. For the final rubout, use 0000 "super fine" steel wool to transform shellac's naturally glossy sheen into a uniform matte surface.



Wax on. Paste wax is the key to this satiny finish; use a soft T-shirt rag to distribute a very thin layer of wax across the surface.



Wax off. When the wax has hazed over, use a fresh cotton rag to remove it, working in a brisk, circular motion.