

A man with glasses and a blue polo shirt is working in a workshop. He is wearing blue nitrile gloves and is using a white cloth to rub a finish onto a large, smooth wooden tabletop. The tabletop is resting on a workbench. In the background, there are various woodworking tools, including a red router and a blue sander. The scene is well-lit, showing the natural grain of the wood and the sheen of the finish.

Tabletop Finish With a Hand-Rubbed Feel

Brush on polyurethane
for protection, then
wipe on the final coats
for a silky surface

BY MARK SCHOFIELD



After my article “One Editor’s Foolproof Finish” appeared in *FWW* #196, several readers asked whether the wipe-on finish I described would be suitable for kitchen cabinets or dining tables. I replied that while you could build up the extra protection these surfaces need by wiping on many more coats of the gel polyurethane, it would be far quicker to brush on several coats of liquid polyurethane and then switch to the wipe-on gel for the final few coats. In this way, you get the rapid build of a brushed finish, without any brush marks or dust nibs in the final surface.

This approach to a durable yet smooth finish is so foolproof, we decided to share it with all of our readers in this step-by-

step article. By the way, because it starts with a quick washcoat of shellac, it is also a great finish for pieces made from blotch-prone woods, such as this cherry dining table by Gary Rogowski (see “The Versatile Trestle Table,” pp. 28-33). The table also demonstrates how this finish can be used in tandem with my original wipe-on-only Foolproof Finish: I used the durable finish on the tabletop, where food and liquids will be a hazard, and on the feet, which are likely to be rubbed by shoes. But I used the simpler finish on the rest of the piece.

Sand carefully, then seal

Although this won’t be a high-gloss finish that magnifies every ripple or void in the

START WITH A COAT OF SHELLAC

A thin washcoat of shellac reduces blotching. Use pre-mixed shellac or dissolve some flakes in denatured alcohol, but avoid waxy shellac, which will prevent the subsequent coat of polyurethane from adhering.



Wipe on a thin coat.

Make a couple of passes to seal the wood with shellac. Whether you use a French-polishing-style pad or folded-up cotton cloth, adding the shellac with a squeeze bottle is quick and controllable.



BRUSHED POLY BUILDS A BASE

Three or four coats of liquid polyurethane, sanded smooth between coats, are enough to give the wood real protection without a thick, plastic look.



A light touch. Lay on a coat of polyurethane starting a few inches from one edge and brushing off the opposite edge. Use a light touch, holding the brush at about 45° to the surface. After the first pass, land the brush just inside the far end and return, smoothing the strip of wet finish until you cover the small dry area and go lightly off the end. By brushing off the ends and not onto them, you avoid having finish run down the edges.



surface, we're still dealing with an eye-catching large, flat surface, so good preparation is essential.

To learn how to flatten and smooth a tabletop using handplanes and a scraper, see Bob Van Dyke's Fundamentals: "Creating an attractive tabletop" in *FWW* #210. If you are more comfortable with a random-orbit sander, start at P100 grit and work your way up to P220 grit, then hand-sand with the grain using the final grit. Remove the dust using a vacuum or compressed air to clean out the pores.

The next step is to apply a thin coat of shellac to the whole piece. As well as greatly reducing the likelihood of blotching, the shellac gives the wood a slightly warmer tone and lets you build a sheen faster with the gel finish. You may have heard that polyurethane will not adhere

to shellac. This is true if you use shellac containing wax, such as Zinsser's clear or amber Bulls Eye Shellac. Polyurethane will adhere perfectly to dewaxed shellac such as Zinsser's SealCoat or your own mixture using dewaxed shellac flakes.

Mix a 1-lb. to 1½-lb. cut (dilute the SealCoat by about a third with denatured alcohol). You can apply the shellac with a natural or synthetic filament brush, but I find it just as quick (and easier on vertical surfaces) to wipe on the shellac with a cotton cloth. It also requires less sanding afterward.

Let the shellac dry for two to four hours depending on the temperature and the humidity, and then lightly sand the surface with P320-grit paper wrapped around a cork or cork-faced block. All you are doing is removing any particles, dust nibs, etc. to

leave a smooth surface. Wipe and vacuum away the dust.

Brush polyurethane to add toughness

Because you won't be brushing on the final coats, you don't need a really expensive brush that leaves a perfect surface. A \$10 to \$20 natural-bristle brush, 2 in. or 2½ in. wide, works fine for most surfaces. If you have no experience brushing finishes, or if your attempts have been below par, this is a painless way to build your brushing skills and confidence.

You can use any brand of oil-based gloss polyurethane, even those recommended for floors, but the viscosity between different brands varies greatly. The Minwax Fast-Drying Polyurethane I used is about the consistency of 1% or 2% milk and can be used straight from the can. If your finish



How to sand efficiently. Fine P320-grit sandpaper has a short life span, so move to a fresh piece as soon as it stops cutting. A quick way to unclog the sandpaper is to wipe it on a remnant of carpet. Stiff and coarse weaves work best. Don't try to sand out every small depression in the surface.

is closer to heavy cream, then thin it with mineral spirits.

You need to apply a roughly equal thickness of finish to both sides of the top to prevent uneven moisture changes, which cause cupping and warping. Start with the underside of the table, a good place to practice your brushing technique where the appearance is less important. Brush on three coats. You don't need to sand between coats as long as you apply the next coat within 24 hours.

As soon as the underside is finished, start on the top. Let the first coat cure overnight, then sand the surface with P320-grit paper. Use stearted paper, which is designed to resist becoming clogged with finish. Most sandpaper is stearted (it has a slightly white, opaque look) but avoid garnet paper designed for bare



Layers of protection. The subsequent coats of polyurethane are applied in the same way. Moving the brush slowly (above left) minimizes bubbles in the finish. You are not looking for a perfectly flat surface, but high points and depressions should be well covered with finish (below left).



WIPE ON A FEW TOPCOATS

Thin coats of quick-drying, wipe-on gel poly give the top surface a medium sheen devoid of dust nibs and brush marks.

SANDPAPER AND STEEL WOOL SMOOTH THE TRANSITION

Final sanding.

Use P400-grit sandpaper to smooth the final coat of brushed-on poly. Don't try to sand down to a perfectly flat surface. To dull the small, shiny depressions and leave the surface with an even sheen, rub the surface with good-quality 0000 steel wool.



wood. Even steared paper clogs fairly quickly, so follow finishing expert Jeff Jewitt's advice and wipe the paper frequently on a carpet remnant.

Don't overuse the sandpaper. It is meant to be disposable, and you'll get much better results if you switch to a new piece as soon as the paper no longer feels rough or becomes clogged almost instantly.

When the whole surface feels smooth to the touch, including the edges, remove the dust with a vacuum. You should apply a minimum of three coats. Sand intermediate coats with P320-grit paper, but sand the last one with P400-grit.

Unlike a high-gloss, rubbed-out finish, you don't need to make the surface dead-flat before applying the satin gel poly, so don't try to sand away all the small, shiny depressions. However, the shininess will show

through, so after sanding rub the surface with the grain using Liberon 0000 steel wool to dull these spots and to give the whole surface an even scratch pattern. Use raking light to check your progress. It is worth ordering the Liberon steel wool (highland-hardware.com) because it lasts longer, produces better results, and sheds less than the product found in hardware stores.

Gel poly removes topcoat terror

After you carefully vacuum away all the remnants of steel wool, the surface should look pretty good—smooth, with a fairly even sheen. Normally, you would brush on the final coat of polyurethane and leave it, risking dust nibs and brush marks. With my approach, you'll top off the surface by wiping on and buffing off several coats of gel finish. These super-thin coats dry so

quickly, dust doesn't have time to settle on them. Again, the brand doesn't matter: I've had good results with Bartley's Gel Varnish, Petri's Gel Poly Finish, and the one I'm using here, General Finishes' Gel Topcoat. They are all satin polyurethane turned into a gel.

Take a piece of cotton cloth about 4 in. square and dab some gel varnish onto it with a small stick. Wipe the gel onto the surface in a circular motion. Don't try to cover more than 2 or 3 sq. ft. before immediately coming back with a larger piece of clean cotton cloth and buffing the surface in quick strokes with the grain. If you wait too long and the surface becomes sticky, wipe on a little more gel to reactivate the finish and then immediately buff the surface. What you are doing is obscuring the fine scratches left by the steel wool.



However, you are applying an extremely thin coat of finish, so be prepared to apply at least three coats. The directions on the can will probably say to wait overnight between coats, but in warm, dry conditions, eight hours is plenty.

For the areas of the table that don't need the extra protection of the brushed-on polyurethane, just wipe on the gel finish as described above. Four or five coats should be sufficient to get a sheen that matches the brushed areas.

Adding a coat of wax is optional. On pieces likely to be handled regularly, I use it as much for the feel as any extra protection. But on a dining table likely to be wiped frequently with a damp cloth, wax is a waste of time. □

Mark Schofield is the managing editor.



Tips for gel poly. Use a stirring stick to place some of the thick finish on a small piece of cotton cloth (above left). Dipping the cloth is too messy. Apply the gel in a circular motion until you've covered a few square feet in an even layer (below left). Buff off the surplus finish right away using quick, firm strokes and turning frequently to a fresh section of cotton cloth. Repeat until the whole tabletop is done. Look at how happy you'll be with your flawless finish (bottom).

