

Flawless Wiped Finish

For great results with wipe-on polyurethane, you have to go beyond the instructions on the back of the can

BY RODNEY DIAZ

The stairwell in our new home, a 1940s cape, turned out to be a little too tight for our 1990s bedroom furniture. As a result, our 14-drawer chest and a tall wardrobe were relegated to the basement for storage. Rather than shopping for smaller furniture, my wife and I agreed that this was my chance to design and build the Shaker-style built-in I've dreamt of for years.

In keeping with the Shaker aesthetic, I chose cherry for the face frame, doors, and drawer fronts. I wanted a durable, low-luster clear finish that would be easy to apply without having to worry about brush strokes or overspray and would bring the cherry's grain pattern to life.

Over the past thirty years, I've built lots of cabinets and furniture and applied almost as many different finishes. Paint, shellac, varnish, urethane. You name it, I've probably tried it—brushed, wiped, or sprayed. And while each project turned out OK, I was never satisfied with my results until developing this method for applying polyurethane. The secret is in the sanding. □

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Photos by Matthew Millham, except where noted.



FLATTEN FIRST

Sanding will get you smooth, but planing will get you flat—and a flat surface is the best place to start sanding.

The first step to a great finish is to remove mill marks and low spots left by machines. The fastest way to do this is with a high-quality jack plane fitted with a razor-sharp blade. Pencil marks across the surface will reveal low spots as high spots are removed. Take as many light passes as needed to get the surface flat; the wood shavings should be paper thin and soft to the touch. If there's any tearout, try a lighter cut, change the direction you're planing, or brush up on handplane dos and don'ts. (For our favorite advice on sharpening and using a handplane, visit FineHomebuilding.com/Magazine).



SAND SECOND

Most instructions for applying wipe-on poly call for sanding to 220 grit. Start there, but don't stop until you get to 1500 grit.



POWER-SANDING

With the surface planed flat, a random-orbit sander outfitted with 220-grit sandpaper will make quick work of smoothing most parts of the wood. This is also a good way to level surfaces where two boards meet, such as glued-up panels or cross-grain joints in face frames and doors. Narrow and profiled surfaces should be done by hand.



HAND-SANDING

Hand-sanding may sound daunting, but because the wood is already dead flat, you can actually move through the grits very quickly. Sand in the direction of the grain, and work through each grit until you have removed the marks left by the previous grit. By the time you have sanded to 1500 grit, the surface should feel almost glass-smooth.



Random-orbit sanding discs are available in very fine grits, but for everything above 220 grit I prefer to hand-sand. My sequence is 320, 400, 500, 800, and finally 1500. Sandpaper wrapped around a cork block works fine, but sanding sponges are even nicer for the ultrafine grits; they seem to glide over the surface.

FINISH LAST

From dull to low-luster to satin, the sheen of the finished surface is controlled by the number of coats.

After vacuuming off the dust, it's time to wipe on the poly. A wadded-up T-shirt rag is the perfect applicator. Decant the finish into a plastic bottle with a flip-top cap, then use it to charge the pad with a small amount at a time. Don't soak the pad, just wet the bottom of it.



To see a video demonstrating this finishing process, visit FineHomebuilding.com/magazine.



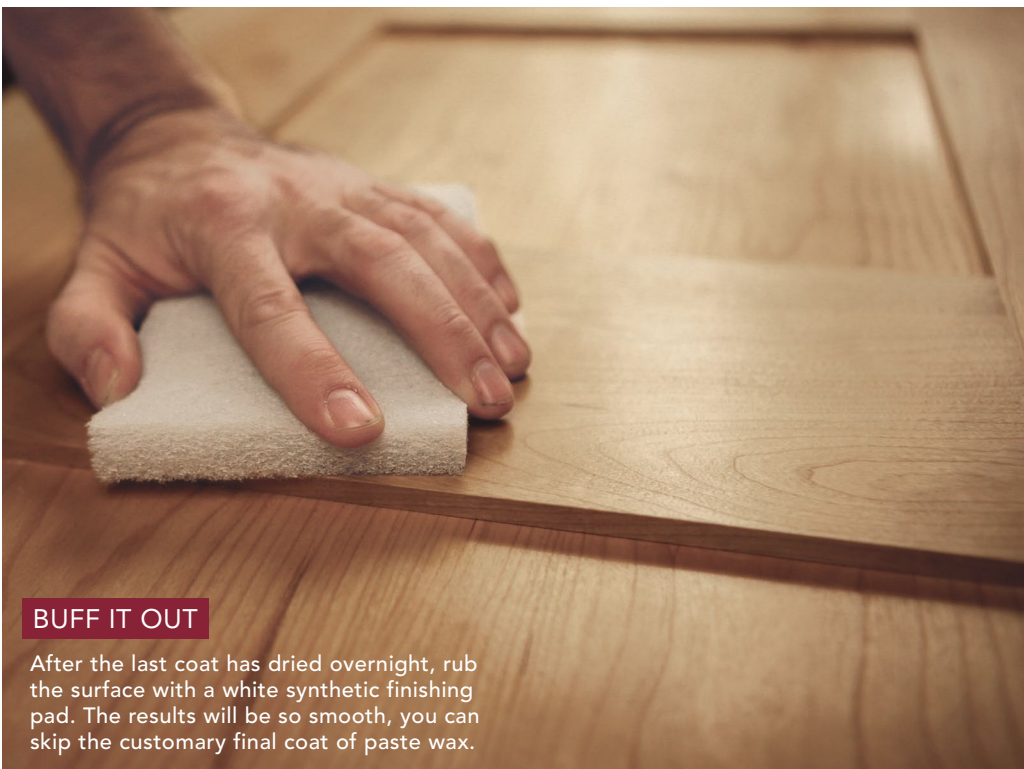
WIPE IT ON

With a gentle swiping motion following the grain, wipe the finish across the surface without pushing it over the edges. Keep wiping until the entire surface has thoroughly absorbed the finish. The first coat will be dry to the touch in just a few minutes, but a two-hour wait between coats is a good rule of thumb to follow.



BUILD IT UP

Because the surface has been sanded to such a high level, there's no need to sand between coats. After a couple of coats of satin poly, the surface should look and feel like a flat, oil-rubbed finish. For the backside of doors and drawer fronts, stop here. For more protection and a true satin sheen, add at least two more coats.



BUFF IT OUT

After the last coat has dried overnight, rub the surface with a white synthetic finishing pad. The results will be so smooth, you can skip the customary final coat of paste wax.



The oil-based version of Minwax's Wipe-On Poly imparts a slight amber tint to the wood, which is great for cherry. The water-based version dries clear, which is better suited for light-colored woods like maple. Both 3M and Norton make a white synthetic finishing pad equivalent to 0000 steel wool, but without the dust or the rust.