

Tip #20 Finishing Tools

Tips On the Selection And Use of Finishing Tools and Materials

The beauty of a woodworking project depends on three things: good design, good craftsmanship, and a good finish. In the long run, the finish is the most important. A good finish will preserve a well-conceived, well-constructed project for generations.

Like all woodworking arts, to properly finish a project, you must have the right tools and a working knowledge of the available materials. But the most essential prerequisite is something you can't buy or read—**patience**. Putting a fine finish on a project may take as long or longer than building it. But if you take the time, the results will be well worth your efforts.

Preparing the Surface

Finish sand your project with 3/0 - 6/0 garnet paper. The finer the grit you finish up with, the more prominent the grain pattern and glossier the final finish will be. Check for any rough areas that may need further sanding by running a nylon stocking over the project. If it snags, you've got some more sanding to do.

Remove most of the sawdust from the project with a bench brush or shop vacuum. Then give it a thorough rub-down with a tack cloth to remove any dirt, dust, or abrasive particles and leave a perfectly clean, smooth surface.

Staining

Stains will enrich the tone and bring out the grains of otherwise ordinary wood. There are two types to choose from – **water stain** and **oil stain**. Water stains are more permanent and penetrate deeper than oil stains, but oil stains are easier to apply and will not raise the grain of the wood.

Apply stain with a brush or a sponge, then wipe off the excess with a rag. Brush a little water or linseed oil on end grains before staining to keep them from absorbing too much stain and appearing darker than the rest of the project.

After the stain is dry, apply a wash coat of one part shellac, seven parts alcohol. This will keep the stain from bleeding into the finish. If you use lacquer as your final finish, use **lacquer sealer** for a wash coat. Sand the dry coat with 6/0 - 7/0 sandpaper and wipe clean.

Filling

If you build from open-grained wood (such as oak, walnut, mahogany, ash, etc.), you should fill the grains before finishing to level the surface of the wood and odd color to the project.

Mix your **wood filler** with stain or tints to make it lighter, darker, or the same color as the wood. Brush the filler on with the grain, then brush a second time across the grain. Work the filler into the wood with the palm of your hand. After it's dried for 30 minutes, wipe off the excess with a coarse cloth (burlap) and follow with a fine cloth. Be careful to remove all the residue, but don't rub too hard.

Final Finish

There are three types of protective coatings you can put on your project – an oil finish, a natural finish, or a synthetic finish.

Oil finishes will emphasize the grain and leave a flat, natural appearance. They darken slightly with age and take on a rich glow. They save time by priming, sealing, and preserving the wood in a single application.

There are several oil finishes available, each with a different purpose: **Danish oil** is the best all-round and can be used on a wide variety of interior projects. You can apply it over a stain, but there are also tinted Danish oils that will stain and finish the wood in one step. You can use it under a natural or synthetic finish to enhance the grain or tone, but you need to put a wash coat of one part shellac and one part alcohol over the hardened oil to keep it from blending with the final finish.

Tung oil was developed in the Orient in the 14th century to waterproof ships. It penetrates deep into the wood and forms a lasting moisture barrier.

Some woods, like teak and rosewood, bleed off a finish and never seem to dry. **Teak oil** has special drying agents to solve this problem. It can also be used as a sealer before applying a natural or synthetic finish to resinous woods.

Eating utensils are commonly coated with vegetable oil, but this goes rancid and can affect the taste of your food. A good **salad bowl finish** is odorless, tasteless, and will not spoil. Use it on children's toys or whenever a nontoxic finish is desired.

To apply an oil finish, wipe it liberally with a brush, saturating the surface. After 15 minutes, sand with 6/0 silicon carbide paper, lubricating the paper with more finishing oil. After a few minutes, remove all surplus oil with a soft, clean cloth. Allow to dry at least 12 hours.

Once hardened, wipe with an oil dampened rag and buff with a soft cloth. If you want, a liquid caruba **satin wax** can be applied over oil finishes and rubbed to a soft lustre.

Natural finishes, such as shellac, varnish, and lacquer, require a **very** good brush. Nylon and horsehair will not do; look for **hog and badger brushes**. The bristles of these brushes are naturally flogged (split), allowing you to load up more finish at a time and letting the finish flow evenly onto the wood surface.

However, to use these fine brushes most effectively, they need special preparation and care. Soak your new brush in solvent for an hour or so, then wrap it in paper and leave it wrapped for awhile before using it. When you first dip it into the finish, spin it rapidly to dislodge loose bristles – all new brushes have them. Dip to only one third the bristle length, and remove the excess finish by tapping against the side of the can. Never wipe it on the rim; this loosens the bristles.

If you use your brushes often, keep them suspended in solvent. To clean and store them, slosh them in this solvent, press out and repeat. Wipe the bristles dry; then using a good detergent, wash the brush; rinse; wrap the bristles in paper and hang it up, bristles down.

To apply a natural finish, brush with the grain in long, sweeping strokes, lopping each stroke. The exception to this rule is varnish, which is brushed on first across the grain, followed immediately by light

strokes with the grain. Don't apply these finishes in temperatures below 65° or in extreme humidity. Lightly, wet-sand with 7/0 - 10/0 paper between each coat and wipe clean. If you want a high gloss finish, rub and polish the final coat with pumice or rotten-stone, then apply a good carnauba wax and buff.

Synthetic finishes, like polyurethane and acrylic, also benefit from a good brush and are applied in much the same way as natural finishes. The main advantage in using synthetics is that they are often more durable and designed to serve a wider range of special purposes than natural finishes.

Some synthetic finishes can also be poured onto a wood surface and left to harden, making your project look as if it were enclosed in glass. This is an extremely attractive effect, especially for: table tops, counters, and plaques. **Fiberglass resin finishes** work best for this type of application.

To use, mix the resin with the hardener as directed by the manufacturer. Pour this mixture over your project (one surface at a time), then tilt it this way and that until the finish is distributed evenly. Keep the surface level while the resin cures. To remove bubbles, blow gently across the resin while it is still liquid.

These resins can also be used to adhere and imbed dried flowers, coins, decals, news clippings – almost anything – on a wooden surface. The only requirement is that the imbedded object be completely free of moisture.

Caring for a Finish

Periodically, wood finishes need to be cleaned, refurbished, and polished. There are several products that will do this all at once.

Lemon oil is an excellent cleaning agent and keeps both the wood and the finish from drying out. Carnauba **satin wax** (mentioned earlier) also helps preserve the finish and will fill tiny scratches to restore the lustre. When used in combination with an oil finish it forms a hard, protective surface coat. Avoid commercial "furniture polishes" that have additives that react with and ruin finishes.

Apply cleaning and polishing agents with a soft, loosely woven cloth – an old terrycloth towel works nicely. Rub vigorously to loosen the dirt, wipe, then rub again to work the oil or wax into the wood. Let dry, then buff with lamb's wool.