

Wood Finishing Tips for Staircase Millwork

(stain grade hard and soft woods)

DISCLAIMER:

I have had great success with Daly's wood finishing products on my own personal projects. There are many similar products available but none that I am comfortable recommending due to my lack of experience with these other products. My experience with sprayed lacquer has not been good for railings, due to the constant handling. The staff at the downtown Bellevue Daly's store is very knowledgeable about many applications, and anything I tell you should be confirmed or negated by them. Remember, I am just a carpenter, not a painter. Those who CAN... DO!Those who CAN'T (or won't professionally) feel compelled to teach on subjects they *think* they know all about. Please don't use this instruction sheet to sue me if you don't get the great results I have achieved. This advice comes free of charge...and well....you get what you pay for.

I will always first recommend a licensed and bonded professional painter with experience in millwork finishing to do the work. If you are determined to attempt this task, at least seek the advice of those who do this work professionally. If you chicken out, call me...I know some great painters.

Notes:

- Some species of woods will react differently to chemicals. Denser, naturally oily exotic species are notorious for their reluctance to absorb the products and may need additional preparations or alternate methods for desired results. It never hurts to do a little research on the species before you buy any products, or start your project. Be sure to test the entire process on some scrap wood of the same species first.
- Some assumptions are made before you begin with Step 1. All of the pre-finish sandable wood filler and wood sanding are complete. Small pin holes can be filled after the finish is complete and cured with non-sandable colored "finishing putty". Oil based Color Putty® is my product of choice for this application. Any color can be achieved by mixing a combination of the 17 factory colors available.
- Always read the entire label on these products. Any chemicals can be deadly if used incorrectly. Some people experience allergic reactions to some chemicals and become dizzy or light headed not just from the fumes but also from absorption through the skin. Dizziness on a staircase could make for a real bad day. The odds are stacked against anyone that is not in an alert frame of mind. Most oil based chemicals are extremely flammable and the fumes can be explosive. Extinguish pilot lights and be aware of other automated electronic sources of ignition (like light switches, cell phones, thermostats...etc.). Keep the area well ventilated to cut down on fume build up and reduce brain cell loss.
- Oh...and make sure you're right with your God, your insurance is paid up, and that my final payment check has cleared the bank before you start.

-Chris

STEP 1:

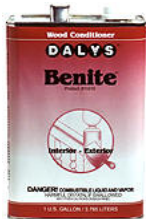
Clean everything within 100 miles. I do my best to clean up after myself, but to be honest; dust is your biggest enemy now that pigpen the stair builder has been there. When you get done vacuuming, do it again. It doesn't hurt to wipe everything down with a tack cloth. Although a small trace amount of dust in the finish will not be visible, the tape in the next step will not adhere to dusty surfaces. Dust can get in some really unexpected places. The use of water or chemicals for cleaning is not advised on any raw wood.

STEP 2:

Mask all surfaces you don't want to ruin within the reach of splatters and drips. I use the Blue (medium adhesion) 3M tape (cheaper at Home Depot) and plastic film (not paper) and drops cloths. These products will penetrate cloth drops so I back them with plastic so nothing bleeds through. Cloth also helps for traction, and works well to absorb all of the blood, sweat, and tears. (Just kidding) A good masking job is extremely important; it will make or break the job. Oils have a way of wicking behind the masking if not properly adhered. Be sure that any painted surfaces to be masked have completely cured. Uncured paint will bond to the tape and peel off with the tape!

STEP 3:

Benite Wood Conditioner



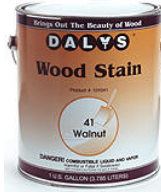
A deeply penetrating wood conditioner which becomes an integral part of the wood cell structure. It does not leave a surface film, and reduces the possibility of grain raising. Benite is excellent as a pre-conditioner to avoid "spotty" stain and finish penetration. Because it penetrates, it does not chalk, crack, peel, or blister. Gives added life to weather-worn exterior stained surfaces.

This product is a must to get the stain on evenly. Stains have a tendency to darken end grain and porous portions of the wood.

I will sand out the entire rail but if you wait a few days before applying the benite, the grain can raise and you can feel the rail joints when they were smooth to begin with. If this happens you will need to go over all of the railing with 180 or 220 grit sand paper or a fine sanding sponge PRIOR to step 1. I will show you some techniques for this when I install the rail.

STEP 4:

Daly's Wood Stain



Tung oil-based penetrating stain with oil pigment colorants. It combines the beauty of a hand rubbed oil finish with the added protection of synthetic resins. It resists fading and damage from sunlight, water, alcohol, scratches, and abrasions. Daly's Wood Stain can be wiped, brushed, or sprayed, and can be used as a finish itself. This product is compatible with all of Daly's wood finishing products as well as most varnishes, urethanes, and lacquers—both water and oil-based.

Follow the directions on the can and don't leave puddles for more than a few seconds. practicing on some scraps treated with benite is a good idea.

STEP 5:

ProFin



Exceptionally durable hard drying, quick set oil finish. Available in Satin or Gloss. Easy to apply, it produces a professional finish, and is often used where spraying is not practical. ProFin is recommended on furniture, cabinets, doors, millwork and paneling. Can be used on reasonably protected exterior surfaces such as doors. 2--3 coats suggested. Compatible with most stains.

ProFin is applied with a clean cloth (a small square from an old T-shirt) and rubbed in (wiped on) using three coats or even 4 for a real bullet proof finish. I buy a gallon and pour a small amount into a resealable quart size container and work from that so as not to contaminate the whole gallon if it starts to gel on the rag and leave little boogers of hardening oil. The only trick, is moving uniformly across from one end of the balustrade to the other leaving a fairly wet sheen. (spread drips and puddles quickly. Even coats are important.) After the 3rd coat has dried (at least 24 hrs) I rub all of the rail down with fine #000 or #0000 artificial steel wool (don't use the real stuff it will leave particles that rust) and wipe a light 4th coat. This should leave a real smooth finish when cured. If you find a rough spot or two, just rub them down again and apply a little more on the area. This process can be performed indefinitely. ProFin can be built up and only gets better....even years from now another coat will really fix any minor scratches in the finish without any heroic sanding or prep.

Final bits of advice:

I buy a package of disposable nitrile industrial (not medical) gloves and turn them inside out as I remove them. (Harbor Freight Tools is cheapest = about \$7.00 per 100) This stuff won't kill you if you get it on your hands a few times, but it takes a small nuclear reaction over a period of 20 years to get the stuff off. (Concentrated citrus oil cleaner works OK but be patient). The oil in the finishes will break down the gloves after a couple of hours, so you will want to change them after an hour or so. I change rags at the same time due to the product drying on the rag.

NEVER NEVER NEVER put oily rags in a heap or in a closed container. I know of a few painters who bought new homes for customers after the rags they used spontaneously combusted. Check with whatever the local law dictates for the safe disposal of chemicals and oily rags. The manufactures of these chemical products all have MSDS sheets available that should inform you of the best management practice. These hazardous waste laws seem to change daily and environmentally safe options are limited.

Finishing wood sounds fairly tough to do, but it's easy and relaxing when you get the hang of it.

Turn on the radio, and have fun with it. Your staircase will look beautiful!