



*Common sense tips and suggestions  
for quality woodworkers,  
cabinet makers,  
furniture manufacturers, and  
anyone who uses hardwood plywood!*



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## **Solutions to Common Wood Finishing Problems**

**1. Water spots.** When wood gets wet, the grain will raise, open, or puff up in the area where the water touched the wood. This will cause the wood to absorb stain more readily in that area than the other areas of the wood. Thus, stains will become darker and natural finishes will puff up.

Solving this problem is very simple. The first method is to spot sand the area, then resand the entire surface. The second method is an old finisher's trick. Mix a 25/75 formula of lukewarm water with alcohol and apply this evenly to the entire wood surface. Let the wood dry, and then surface sand the entire piece. Make sure you double-check the moisture content before finishing.

**2. Blotchy finish or barber-pole.** I'm not a big fan of pre-sealers, except in special cases. Most plywood manufactured today is well made and has been precision cut and sanded. If the painter-finisher is experienced, they will know how the wood will accept their stain and finish and whether or not they should pre-seal. Stains can be adjusted and applied in ways to eliminate almost all pre-sealing situations. However, sometimes pre-sealing is the only option and should be done.

### **Situations that may require pre-sealers:**

**Blotchy finish.** If a blotchy finish is causing problems or rejection, a pre-sealer may be required. Always test first on sample wood.

**Barber-pole.** Some like this natural look; others dislike it and will reject it. The first thing to do is to make sure that architect, owner, or specifier fully understands what they should expect to see with book matched plywood. I strongly suggest explaining the book matched look to the decision-maker and showing them finished samples of the effect. If they approve the use of book matched plywood, have them sign off on the job. A wise man once told me, "Always get it in writing." Trust me, this will save many headaches later on in the project.

The barber-pole effect can be softened with pre-sealers, or the painter-finisher can perform a technique known as shading, air-brushing, toning, or dry brushing when the stain is applied. After the plywood has been stained and the light/dark effect is present, the painter-finisher turns up his air-pressure and lightly reshades only the lighter stripes. I have also done this onsite with the dry brushing technique. Expertise and talent is required and these steps will take a little longer, but this is what a professional painter-finisher is sometimes required to do.

**How and why pre-sealers work.** A pre-sealer, uni-forming sealer, or washcoat is a very thin form of finish that is applied uniformly to the wood via spray, brush, or roll. It works by flowing into the wood and filling the softer, more absorbent parts of the wood with sealer or finish. The harder, denser parts of the wood will not absorb the sealer as readily.

Once the sealer has dried, the surface should be finely sanded to facilitate uniform acceptance of the stain. The pre-sealer is sanded similar to the way you surface sand: using only a finer grit of sandpaper. I would recommend #150 to #180 grit sandpaper for sanding.

The wood will now absorb the stain more evenly, as the softer areas are now semi-filled with sealer. Note: the normal stain that the painter-finisher uses may need to be adjusted slightly as the wood will reject some of the stain color because it has been semi-filled with sealer.

**3. Glue or Splice lines.** The best way to eliminate splice lines is through prep-sanding, prep-sanding, prep-sanding! Because they are hard to detect before staining or applying finish, a good way to highlight any splice lines is to wipe a small amount of thinner over the face of the wood.

So you've just found a splice line. Do you really want to reject this piece of plywood just for a minor manufacturing characteristic? You're a professional, and it's your job to minimize imperfections in the wood. So what do you do?

**Simple fix.** Splice lines can be fixed fast and easy — it just takes a little expertise and a small amount of touchup. Every professional finishing plant or painter-finisher should carry a touchup kit. In the kit, they should have the basic products needed to hide such defects as glue lines, dents, dings, etc.

Finish staining the product, apply the first coat of sealer, sand the sealer, and wipe it down so the line is clearly visible. Next, draw over the line using the proper touchup products and a #1 through #6 camelhair brush. Now, complete the finishing. Simple, fast, and everyone wins!

If you do not have a touchup kit, mix a little of the stain and thinner you're using with a small amount of the sealer or topcoat, if compatible. Follow the same technique as above and lay a fine line of color over the seam or line. If you're not steady enough with a brush, your local art store sells colored drawing pencils and pens. Purchase several pencils or pens matching your color and follow the above directions using a colored pencil or pen.

This quick fix works well with all finishing systems. However, if you do not have a touchup kit I suggest you purchase one. No professional painter-finisher should be without one!

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I hope the information I have shared with you will help you achieve an attractive finish on your wood. If you have any other questions or run into a problem please call me on our toll free line (800) 847-5489.

**About the Author:** David R. Bailey is President of Numatic Finishing Corp. in Auburn, WA and has worked in the wood finishing business for more than 30 years. He would like to thank his father Bernard R. Bailey (Master Wood Finisher), the Architectural Woodwork Institute, Valspar Coatings Industry, and Radtech International UV/ED Curing publication.

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