

# The **16 DUMBEST** Woodworking Mistakes

How to fix the problem at hand and never make the same mistake again.

**F**or the record, I want it known that I had everything clamped down tight when I turned on the drill press to mix a gallon of dark brown glaze. What happened next is somewhat of a legend in our woodworking shop.

The drill press was set to run too fast, and the quill was down too low. Within seconds, the wall of the shop, all the tools within 10 feet and most of my exterior surfaces looked like we had all been dipped in chocolate at the Snickers factory.

That was five years ago. We moved the shop six miles up the highway, replaced almost all the machinery and we still find little bits of the dried glaze clinging to things just about every week. (Want proof? Just see photo 12 on page 73.)

Ask any woodworker about the dumbest mistake he or she has made and a look of pain will pass over his or her face. In our shop you'll hear stories of entertainment centers not deep enough (the wall behind it had to be punched out to make room for the stereo components) or cabinets where the knob on the last drawer was in the worst place possible.

by Christopher Schwarz

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Photo by Tim Grondin

Some of these mistakes can be fixed after the fact. All of them are avoidable. The following is a list of the 16 dumbest wood-working mistakes common to the craft. If a problem can be fixed, we show you how. But most of all, we tell you how to keep out of trouble in the first place.

### 1. You Measure Carefully, but Everything is a Bit Off

**PROBLEM:** As you proceed through the project, small errors creep into the assemblies – errors you cannot explain. Things aren't lining up by  $\frac{1}{32}$ " or so.

**NEXT TIME:** Stop where you are and gather all the measuring devices you've used on a project. Your tape measure, your combination square, your table saw's fence scale and your steel rules should all measure the same.

Find the problem (it's usually the tape measure or the table saw's scale) and adjust the tab on the end of the tape measure or the scale on the saw until they match your other measuring tools. If a steel ruler and a combination square don't agree, one of them has to go. Before you start a proj-

ect, calibrate all your measuring tools. Plus, be aware that when ripping on your table saw, regular-kerf blades and thin-kerf blades have a different-sized kerf. Pick one blade for ripping and set your fence's scale to that blade.

### 2. Remember the Kerf

**PROBLEM:** When cutting a joint or trimming off some extra waste, you forget to include the kerf in your measurement so your final workpiece is off by  $\frac{1}{8}$ " or  $\frac{3}{32}$ ".

**NEXT TIME:** To avoid the problem, just remember what my grandfather always said: Never measure the waste piece; always measure your keeper piece. This keeps you out of trouble when the saw kerf is involved.

For additional insurance, when marking the face of a board for a cut, carry that mark onto the front edge of the board. Put the board in position on the saw and line up the mark with the blade.

### 3. Ending Up on the Wrong Side of the Line

**PROBLEM:** You mark your mortise or crosscut, but you bore or cut on the wrong side of the line.

When boring a hole for a through-mortise, we ended up on the wrong side of the line. Time to get the plug cutter.



**NEXT TIME:** To avoid the problem, get in the habit of marking your waste area with cross-hatches. It takes a few seconds, but it is faster than fixing this mistake.

**QUICK FIX:** There's little you can do to fix a board that's too short. To repair a round hole in face grain, never use a dowel if the area will show. You need to match the grain and color if you want to hide the repair. Purchase a set of plug cutters that cut a tapered plug. With a plug cutter you can make a bunch of plugs and compare them to the area you need to repair. Some glue and a few taps with a mallet will seat the plug firmly. Trim the excess with a flush-cut saw or sharp chisel.

### 4. Your Mitered Moulding is Too Short

**PROBLEM:** You're trying to sneak up on a miter by nibbling at it bit by bit. You cut too far.

**NEXT TIME:** To avoid the problem, you can make a miter shooting board. This simple hand-tool appliance allows you to sneak up on the right fit in a more controlled manner – about .002" at a time. See the "From the Bench" column on page 28 for details on building this accessory.

**QUICK FIX:** Before you throw away that too-short moulding, there is a way to stretch it a tad with a

sharp block plane. By planing a slight taper on the backside of the moulding (the part that attaches to the cabinet or wall), you can actually make the piece of moulding a little bit longer. If this is moulding that goes on the side of a cabinet, you want the taper to begin at the back and diminish to nothing at the miter.

There are limits to what you can squeeze out of one of these boards (usually about  $\frac{1}{32}$ " to  $\frac{1}{16}$ " depending on the size and profile of the moulding) before things don't look right.

### 5. Off by an Inch – Might as Well be a Yard

**PROBLEM:** You're measuring a board with your tape measure to cut it to length. You make the mark and the cut, but your board is exactly 1" too short. The culprit usually is one of two things: You were holding the beginning of the tape at the 1" mark for a more accurate measurement. Or you were looking at the wrong number when you made your pencil mark. This second mistake is common when you have the tape measure in your left hand (reading upside down) and the pencil in your right.

**NEXT TIME:** There are several ways to avoid the problem in the future. First, measure everything



To prevent errors from creeping into your projects, be sure to calibrate all your measuring tools against one another before you begin.



Starting your tape measure at 1" can make you more accurate. But it also can cause you to burn an inch if you're not careful. Measure things twice.

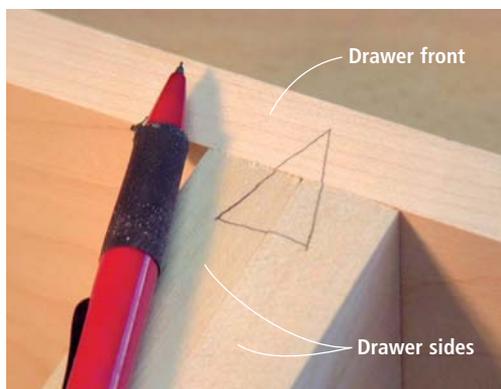
twice (we had to say it). Second, use your combination square or (even better) a 24"-long metal hook rule to mark out small cuts instead of your tape measure.

## 6. Gappy Joints

**PROBLEM:** You glue up your case or assembly and there are ugly gaps between the joints.

**NEXT TIME:** There are several causes, but usually it's because you didn't clamp up the project without glue first. Joints should close with minimal clamp pressure. If you have to really twist the clamps down hard, you've got some ill-fitting joints to correct first.

The cabinetmaker's triangle will save your bacon. The point of the triangle always faces front (or to the top). Mark all your assemblies with it before cutting your joints.



Always perform a dry-assembly and closely inspect your joints. **QUICK FIX:** This error is why they make wood putty.

## 7. Things are Not as They are Supposed to be

**PROBLEM:** You're gluing up a cabinet, a drawer or any assembly and you get one of the parts placed wrong – it could be upside down, on the wrong side or the wrong face of the board is showing.

**NEXT TIME:** Here's how to avoid it: Use a cabinetmaker's triangle to distinguish left, right, front, back, inside and outside at a glance. Here's how: Say you're building a drawer. Once you get your parts cut out, put the sides together and then place the drawer front on the end so it makes a "T." Draw a triangle that spans the three parts and points to the front of the drawer. Put the back piece against the sides in a "T" formation and draw another triangle that spans the three pieces and points to the front of the drawer. Now you'll always know how the pieces should be oriented without labeling each joint.

The same triangle works with doors, too. Always mark the triangle on the outside face of the board and always have it point up to the top of the case.

**QUICK FIX:** If you use a slow-setting glue or hide glue (which is reversible with hot water), the

obvious solution is to take the thing apart and try again. But these problems usually are discovered when it's too late.

## 8. Two Left Feet

**PROBLEM:** You're milling the dados and rabbets in a case side, drawer or other box and you forget that you have left- and right-sided pieces. So you make two left-handed or right-handed parts.

**NEXT TIME:** Again, the cabinetmaker's triangle can help avoid this problem. And you should stack your left and right pieces in different piles as you work.

## 9. You Drill a Large Hole that is too Small

**PROBLEM:** You bore a hole with a Forstner or hole saw that is too small, and locating the center for the next size up is difficult because there's a hole there.

**NEXT TIME:** You're working too fast; slow down.

**QUICK FIX:** It's easy. Cut a square plug you can pound into the round hole. Mark the center on the plug and cut your new hole.

## 10. Your Doors Don't Fit

**PROBLEM:** Your doors are too small or crooked to fit in their opening.

**NEXT TIME:** To avoid this problem, rip your stiles and rails  $\frac{1}{8}$ " wider than your cut list calls for. Then you can square and trim the door easily to size.

**QUICK FIX:** To repair your immediate problem, trim the doors so they are square – even if this results in gaps between your case and doors that are too big. Now you can fix your problem with moulding. Mill some  $\frac{5}{16}$ "-thick x  $\frac{3}{4}$ "-wide flat moulding and cut a profile on one edge that matches the style of your project (a bead goes well with traditional furniture; a bevel looks good with more contemporary pieces).

If you're building a face-frame



A smaller hole is easily made bigger by pounding a temporary plug in place before drilling the new hole.

cabinet, miter and nail the moulding to the inside edges of the face frame. Voilá. The hole for your doors just got smaller. If you have a frameless cabinet, miter and nail the moulding to the doors. Voilá again. Your doors are bigger.

## 11. Pencil Line Too Fine to See or Too Dark to Remove

**PROBLEM:** We all hate erasing and sanding off the pencil marks on a project, and some of us mark really fine lines to make that part of the job easier. Unfortunately, it's easy to overlook a fine pencil line and miscut. So we make the lines darker, which dents the wood and is difficult to remove.

**NEXT TIME:** Hold your pencil at a low angle and don't keep it too sharp when marking parts (see the photo at right). This makes lines that are easy to read but don't dent the wood.

**QUICK FIX:** Remove all pencil lines using a rag soaked with denatured alcohol before sanding.

## 12. You Ruin One of the Critical Parts to Your Project

**PROBLEM:** This is painful for woodworkers to discuss. After machining a part so it's almost

done, something unspeakably bad happens. The part is ruined.

**NEXT TIME:** Making replacement parts is easier if you plan for the problem in advance. First, always run out extra stock in all the thicknesses you're using (thickness is the most difficult dimension to reproduce). For the critical parts in a project, always make an extra one. For a table, make an extra leg. For a set of doors, make an extra stile and a couple extra rails.

### 13. Fasteners Too Long

**PROBLEM:** One of us (who shall remain nameless) once nailed a project to his father's bench with a pneumatic nailer. The nails were too long. Nails and screws that emerge where they are not supposed to emerge is sadly common. With screws this happens when you countersink too deep or the clutch is set too high on your cordless drill.

**NEXT TIME:** You can measure your fasteners and keep them organized to avoid this problem, but we have a better solution. Before you fire a nail or drive a screw,

hold it up to the work. Fasteners should be twice as long (or a hair less) as the material they're passing through. For example, when joining  $\frac{3}{4}$ " material, use  $1\frac{1}{4}$ "- to  $1\frac{1}{2}$ "-long screws.

When driving screws, always measure your countersinks and start with a low clutch setting.

### 14. The Color of Your Finish Isn't What You Expected

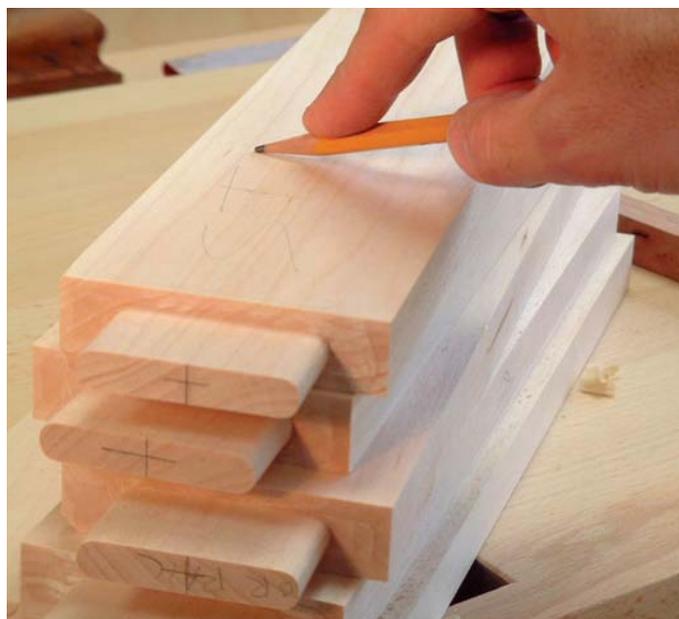
**PROBLEM:** Surprise surprise, the stain color on your project looks nothing like the stain color on the can (or in your head).

**NEXT TIME:** Good finishing requires making a sample board beforehand. As you are sanding or planing the parts of your project, take one of your extra boards and sand or plane them the same way. This means sanding them using the same equipment, the same amount of pressure and for the same amount of time. Use this as your sample board.

Stain the board and add your topcoat finish of choice. Then take your sample board into the room where the project will be



When we added the glaze to this cherry table it started to look like red oak. A sample board would have saved us the time spent removing the glaze.



Hold your pencil at this low angle and use a light touch when marking pieces (not joinery). This will keep you from denting the wood.

located. Daylight, florescent and lamp light all make stain colors look different.

**QUICK FIX:** Get out the can of stripper or the appropriate solvent. You'll never be happy with a bad-looking finish.

### 15. When You Glue Up a Panel the Edges Don't Close

**PROBLEM:** You joint the edges of the boards you are planning to glue into a panel but there are gaps between the boards' edges. You check the jointer's fence and it reads  $90^\circ$  to the bed.

**NEXT TIME:** Even if your square says the fence is at  $90^\circ$ , it might be a little off at other places on the fence. Or your square is off. Either way, there's an easy way to fix the problem: geometry. Use the power of complementary angles to make perfect tabletops.

For every joint in the tabletop, mark one board to edge-joint with its face against the fence, then joint its mate with the face facing away from the jointer's fence. Even if your jointer is off by some whopping degree, the two angles will cancel each other out and result in a tight fit.

**QUICK FIX:** If you glued up the panel, rip it apart along the joint lines and start over.

### 16. More Panel Problems: The Boards Slip at Glue-up

**PROBLEM:** You're gluing up a tabletop. As you apply clamping pressure, the boards slip up and down and refuse to line up.

**NEXT TIME:** To avoid the problem in the future, consider using dowels, splines or biscuits to line up the boards during critical glue-ups (though they will not add any strength to the joint).

Clamp only until the joint closes – no further. Most woodworkers use far too much pressure when clamping. And the pipe in pipe clamps tends to bend under pressure, which also can push the boards out of alignment.

**QUICK FIX:** If you're in the middle of a glue-up, grab handscrew clamps and clamp them across the joints at each end of the panel. Then apply pressure with your bar clamps. **PW**

*Have we missed some of the dumbest mistakes? E-mail your mistakes to [chris.schwarz@fwpubs.com](mailto:chris.schwarz@fwpubs.com) and it might appear in a future issue.*