

band saw Resawing

A simple technique is all it takes to quickly turn thick boards into thin ones.

■ What do you do when you need thin wood for a project and don't want to pay an arm and a leg for it? One of the best solutions I can think of is to take some thick stock over to the band saw for resawing. In short order, you can come away with accurately cut, thin boards and almost no waste. And the best part is the technique is quick, easy, and won't require any fancy equipment.

Getting Ready. My goal when resawing is a perfectly straight cut, both through the width of the board *and* along its length. You'll

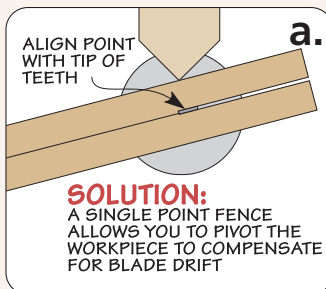
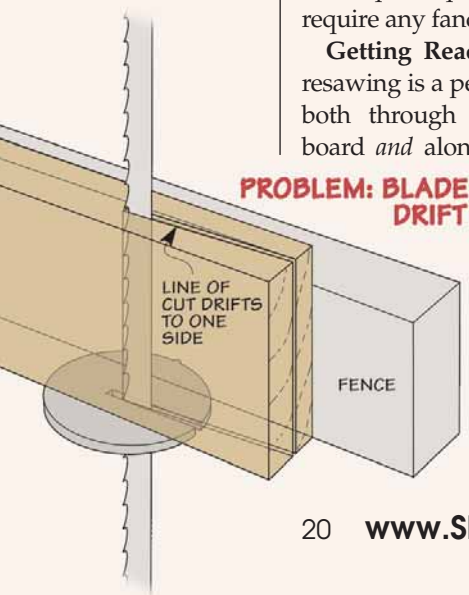
find that proper setup of the band saw for resawing goes a long way toward making this happen.

The Blade. The best place to start is by installing the right blade on the band saw. For top-notch results, you'll want to use a blade that's a little wider than your usual "all-purpose" blade. A 1/2"-wide hook-tooth blade, like the one shown in the upper corner of the opposite page, is my first choice. The hook-tooth pattern makes the blade cut aggressively, while the width adds stiffness for a straighter cut.

Blade Drift. But you'll find that even a wide band saw blade won't always track straight in a resaw cut. This is called "blade drift" and is caused by the teeth on one side of the blade cutting



▲ **Complete Control.** A shop-made push block allows you to safely feed the workpiece through the end of the cut.



more aggressively than the teeth on the other side. The blade follows the path of least resistance and pulls to one side (far left drawing). And with a straight fence, you don't have a way to deal with a wandering blade.

Pivot Fence. So the second part to my setup is a simple pivot fence, like you see in the photo above and in the drawing on the following page. This type of fence allows you to easily overcome the problem of

blade drift. As you can see, the guiding edge of the fence is simply a sharp point. This gives you the freedom to simply steer the workpiece through the cut, adjusting for any drift as you go.

The only trick to installing a pivot fence is positioning it correctly on the band saw table. The distance from the teeth to the point of the fence equals the thickness of the workpiece. And the guide point should be aligned with the very tip of the teeth on the blade.

The Stock. With the pivot fence firmly clamped to the band saw table, all you need to do is prepare your stock and you're ready to cut.

I always make certain that the "guide" face of the stock is smooth and flat and the edges are square to the face. And before you can make the cut, you'll need a pencil line on the top edge of the workpiece to follow. I like to draw this line right where I want the blade to cut. This way you can simply guide the workpiece to "split" the line.

The Cut. At this point, making the cut is pretty straightforward. Start by feeding the stock into the blade directly on the line. The workpiece will contact the blade and the pivot fence simultaneously. To get a consistent thickness, you'll need to keep the workpiece snug

against the point of the fence. And as you can see in the main photo, one hand pushes while the other applies steady pressure against the fence.

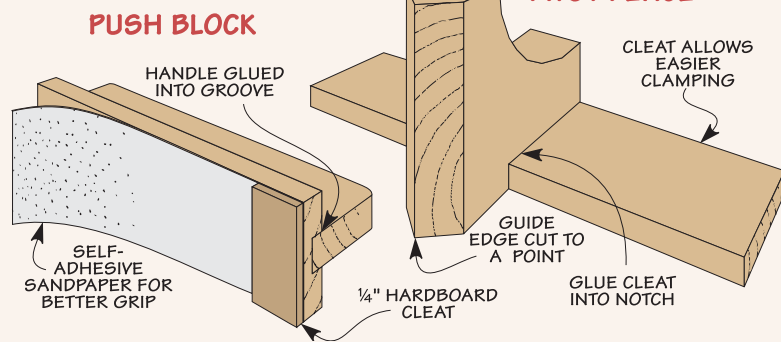
Guiding the cut along the layout line is pretty easy. Just keep your eye on the top edge of the workpiece to see how the blade is tracking. If necessary, pivot the trailing end of the workpiece slightly to correct for any drift.

You'll find that a slow, steady feed will give you the smoothest cut. Listen to the saw for cues on the correct rate. You want to hear a light, rasping sound as you cut.

As I near the end, I pick up a simple, shop-made push block to feed the workpiece through the final few inches of the cut (inset photo and drawing at left). This lets me keep my focus on finishing the cut accurately. When the blade exits the board, you should see a straight cut from top to bottom and from end to end. But if the result isn't quite perfect, the problem is usually pretty easy to fix. Just check the box below. 🛠️

▲ **The Right Blade.** For quick resaw cuts, I like to use a 1/2"-wide blade with three or four teeth per inch.

ACCESSORIES



Problems and Solutions

There are a couple of common problems you might encounter when resawing, but both have easy fixes.

A Barrel Cut. When you end up with a cut that's rounded from top to bottom, you've experienced "barreling." There are two easy solutions for a barrel cut. First, make sure the blade is properly tensioned and increase the tension if necessary. Next, the upper guide assembly should be positioned as close to the workpiece as possible (detail 'a'). These steps will keep the blade from flexing in the cut.

An Angled Cut. Sometimes the cut is perfectly straight, but the workpiece tapers from top to bottom (lower far right drawing). This angled cut has a couple of

possible causes. The first could be that the blade or fence is not perpendicular to the table (detail 'b'). If this isn't the problem, take a look at the guide blocks. If not adjusted properly, they can force the blade out of alignment (detail 'c').

