

## table saw ripping:

# Tough Cuts

## made easy

Does the thought of ripping long stock on the table saw make you cringe? Some good outfeed support might be the answer.

Of all the tasks I do at the table saw, ripping long pieces of stock safely and accurately is one of the biggest challenges. The problem is that to get a good result, there are a number of things you have to pay attention to — all at the same time. You're trying to keep a large, bulky piece of stock tight against the rip fence while feeding it into the blade and keeping your hands safely out of the way. And if this isn't enough, how do you

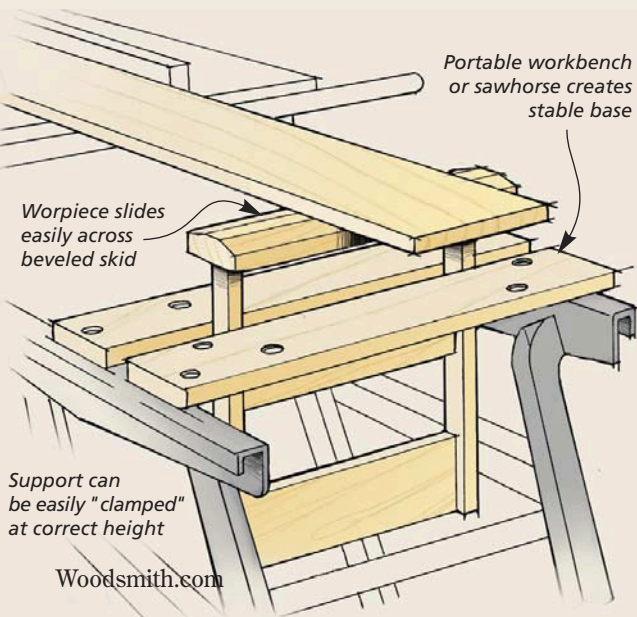
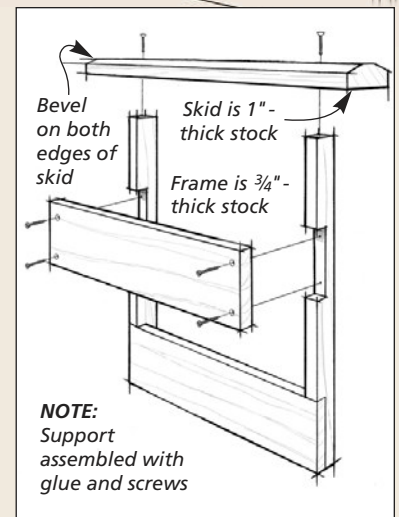
manage to keep the long board flat on the saw table all through the cut? Well, I've found that one way to making this tough job easier is with some well-placed outfeed support.

**THE PLUSSES.** Good outfeed support takes one big concern "off the table." It allows you to concentrate entirely on accurately feeding the stock. Your feed rate will be more consistent and the cut smoother and "burn-free." And there's less chance of the stock wandering away from the fence, so the cuts are more accurate.

But most important is the safety factor. When you have perfect control of the stock, there's much less chance of something going wrong.

**A SIMPLE SUPPORT.** Most of us don't have the space in our shop for a large, permanent outfeed table. Folding roller stands can be a good option. But if you don't have one, there's another easy solution. As you see in the drawings on this page, a simple, shop-built outfeed support can work just as well.

This support costs next to nothing to build and the finished product is



lightweight, compact, and easy to store. Just hang it on the wall. And here, a portable workbench or sturdy sawhorse gives the support a wide and very stable stance.

Instead of a roller, this support uses a wide, beveled hardwood skid to support the workpiece. The narrow support surface creates minimal resistance for a straight, easy feed. And the beveled edges ensure that the workpiece won't hang up.

## SET IT UP RIGHT

To make an easy job of hard-to-handle rip cuts, your outfeed support needs to be positioned where it will do the most good.

**WHAT HEIGHT?** The first thing to think about is setting the support to the correct height. The perfect support height depends on the type and thickness of stock you're ripping. You can be pretty sure that thick stock (1" plus) won't sag much as it comes off the saw table. So here, I generally set my support level to the table or just a hair below. But be sure to avoid setting the support so high that the workpiece catches on the skid. You can expect thin or narrow stock to droop a bit, as in the top drawing at right. Just drop the support slightly below the surface of the saw table to account for this.

**PROPERLY ALIGNED.** Next, the support stand needs to be properly aligned with the workpiece as it comes off the saw table *and* also set up so that it's parallel to the surface of the table.

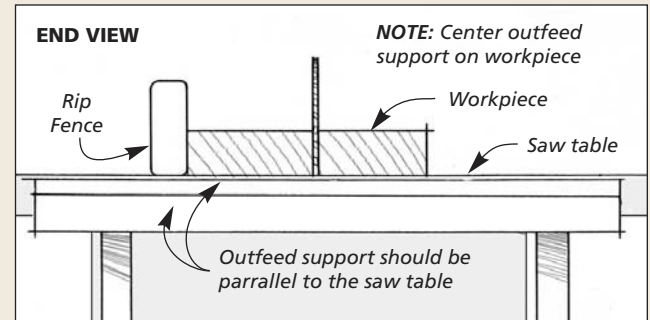
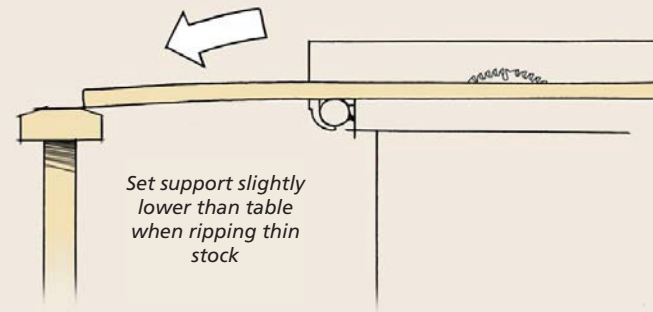
When I position the stand side to side for a cut, I don't think in terms of centering it on the blade. You need to think about supporting the entire board. Generally, this means centering the support (more or less) on the workpiece (lower right drawing). But the important thing is that the support stand carries both "halves" of the ripped board.

Next, you can squat down behind the support and sight across it to make sure it's parallel to the table. This can be pretty important to making a tough job easier. If one side is low (or high), it can cause the board to twist and bind against the saw blade or go off line.

**THE PERFECT DISTANCE.** The final question is, "How far from the saw table do you place the support?" And as you might expect, this depends on the length of your board.

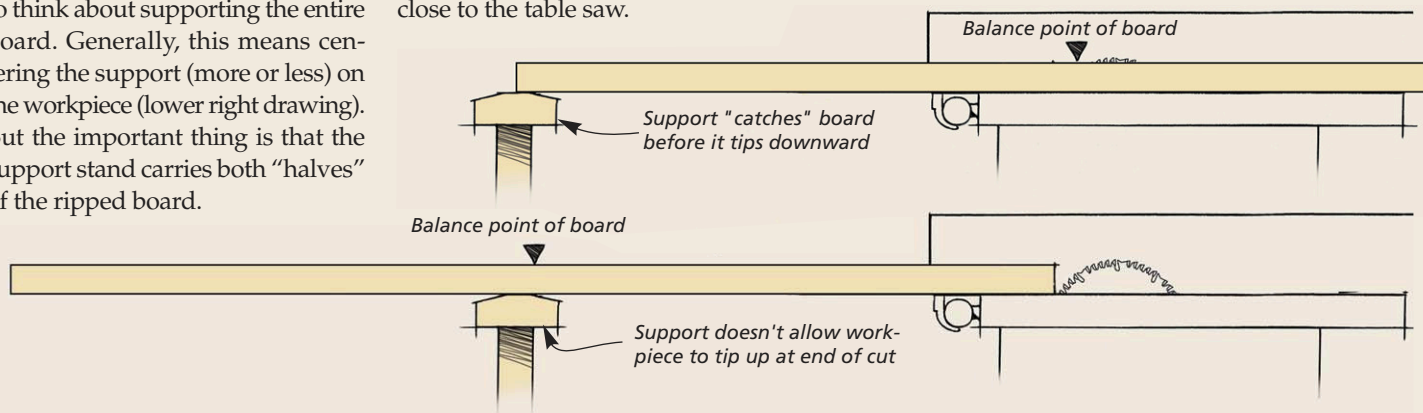
At the beginning of a rip cut, the saw table (and you) support the workpiece. But once more than half the length of the board is beyond the table, it starts to tip downward. This is when support is a must.

So, your first consideration is to place the support close enough to the table saw to catch the workpiece before it reaches this "tipping point" (top drawing below). But on the other hand, when you push the workpiece past the blade at the end of the cut, you don't want it to pivot up and off of the saw table. This means that you need to avoid placing your outfeed support too close to the table saw.



Positioning the support so that it does the job from the beginning to the end of the cut is actually pretty easy. It turns out that this perfect support position is just a little less than half the length of the board from the back edge of the saw. You can just make a rough guess on this position and it'll work out fine.

And now with the outfeed support carrying the load, tough rip cuts are a thing of the past. **W**



## Another Helper: Infeed Support

Good outfeed support is a must for safe, accurate ripping, but there are also times when a little help with infeed support can make a cut a lot easier. So when I have a large, awkward plywood panel or board that I need to accurately position for a cut, I install the simple in-feed support shown in the drawing at right.

The infeed support is simply a fence extension attached to the rip fence that holds a wide support board level with the saw table. You can use this helper along with an outfeed support stand to give you complete control — before, during, and after the cut.

