

THANK YOU!

You have successfully downloaded your **FREE** PlansNOW.com woodworking plan.

► [Go to Page 1](#) of this plan.

► [Got to PlansNOW](#) and save 20% with coupon code **BOOKCASE**

Tips for Trouble-Free Printing

► **Clear printer memory.** If you are unable to print this document, turn off your printer for at least 15 seconds and try again.

► **Get advanced printer help.** Visit [Adobe Support](#) for instructions in troubleshooting common printer problems. www.adobe.com/support/techdocs/150d6.htm

SAVE 20%

As a PlansNOW member, you'll SAVE 20% on every downloadable plan we offer!



[Playhouses & Sheds](#)

Everything you'll need for a kid's summer entertainment.



[Outdoor Furniture](#)

Easy-to-build projects using a minimum of power tools.



[Gazebos & Arbors](#)

Make outdoor living more enjoyable this summer!



[Home Improvement](#)

Save hundreds of dollars in remodeling when you DIY.



[Bedroom Furniture](#)

Beds, dressers, armoires, cribs, cradles, and more!



[Shop Jigs & Techniques](#)

Get the most from your tools with easy-to-build shop jigs.



[Craftsman Furniture](#)

Build the same distinctive features from the early 1900s.



[Workbenches & Tool Stands](#)

Sound woodworking starts with a solid workbench.

20% OFF Coupon Code for Aug - Sept 2005: **BOOKCASE**



Need Hardware? [Woodsmith Project Supplies 1-800-444-7527](#)

For plans that require unique or hard-to-find hardware and accessories, we may have a kit available for purchase.

Contact Us. Have a question about PlansNOW? We want to hear from you!

E-mail: ► planman@augusthome.com Phone: ► 1-800-333-5441 (Mon-Fri 8-5 Central time)

getting the most from your **Belt Sander**

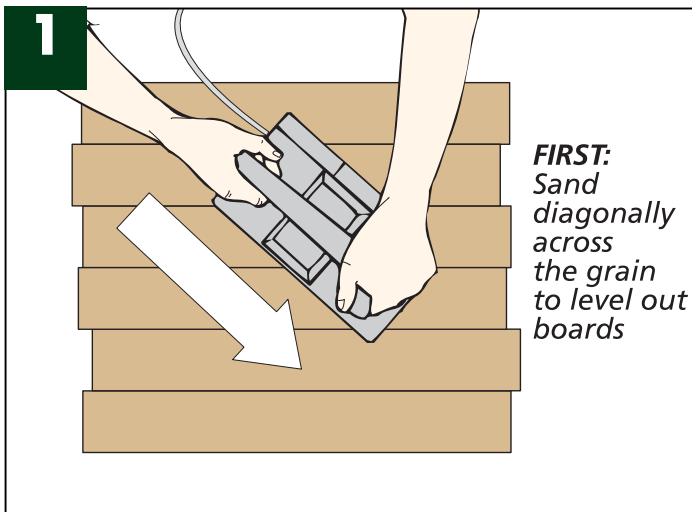


If you think belt sanders are only good for rough work, you might want to take a closer look at what they can really do.

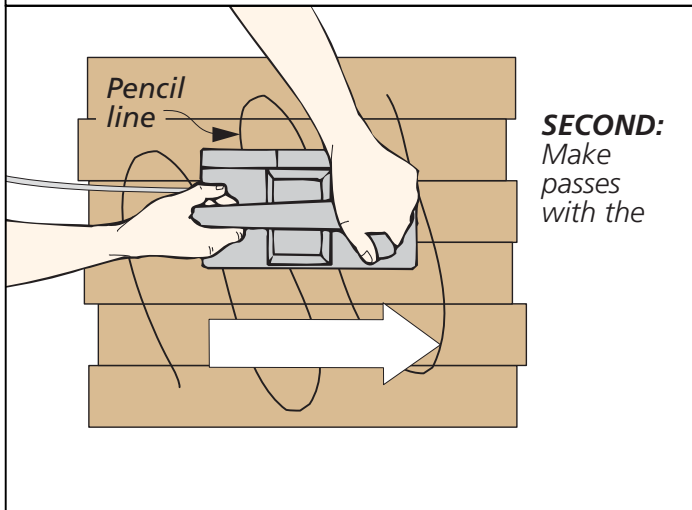
Years ago, I knew a trim carpenter who wielded a belt sander with the same skill that a sculptor might handle a chisel and a mallet. He used it to sand perfect-fitting miters, scribe the back edge of a countertop to an uneven wall, and trim down doors so they fit their openings perfectly. Watching him work made me realize what a useful tool a belt sander can be — not only on a jobsite, but in the shop as well.

VERSATILE. Belt sanders have a couple of things going for them. First, they remove stock very quickly, making them a great tool for leveling a surface or reducing the thickness of a workpiece. And second, belt sanders are portable, allowing you to use them freehand as a shaping tool.

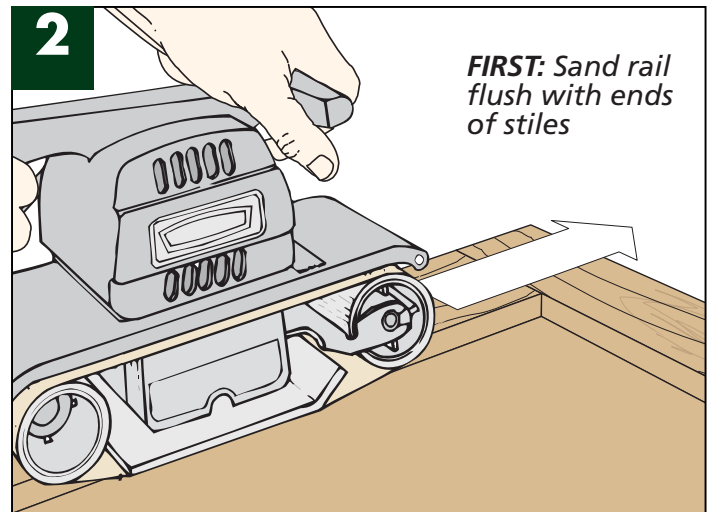
But these same qualities also make belt sanders a little intimidating to use. Because they remove stock so quickly



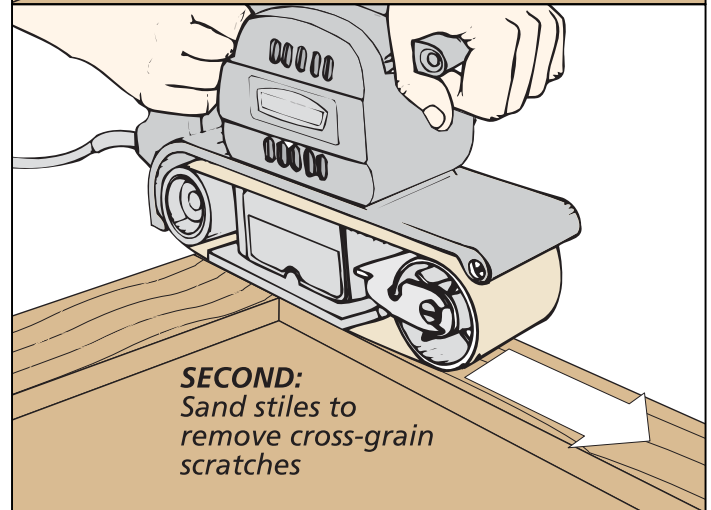
1
FIRST:
Sand diagonally across the grain to level out boards



Pencil line
SECOND:
Make passes with the



2
FIRST: Sand rail flush with ends of stiles



SECOND:
Sand stiles to remove cross-grain scratches

TECHNIQUES

Let's start with some basic belt sanding techniques. The first thing to do is relax and let the sander do the work. Instead of bearing down on the sander, I concentrate on guiding it, letting the weight and speed of the sander work to my advantage. (This is why I prefer a heavy sander when I'm sanding flat, horizontal surfaces.)

To avoid burning the workpiece or sanding too deep in one spot, be sure to keep the belt sander moving over the entire surface of the workpiece.

Starting and stopping the sander seem to be where most people get into trouble. That's because it's easy to tip the sander to one side or the other as you lower it down on or raise it up off the workpiece, creating a gouge in the surface of the wood. To avoid this, try to

set the sander down gently, as if you were bringing it in for a landing.

Unlike a lot of other tools, using a belt sander takes a little practice. But once you get the hang of it, you'll find all sorts of uses for it in your shop.

APPLICATIONS

I probably use my belt sander for flattening glued-up panels more than anything else. And the trick to doing this quickly and accurately is grain direction. To rapidly bring all the boards to the same height, I sand diagonally across the grain of the panel first (see top drawing in Fig. 1). This flattens out all the boards in the panel.

Then to level out the entire surface and make it perfectly flat, I sand with the grain (see lower drawing in Fig. 1). This time though, I draw a pencil line back and forth across the board. The

pencil line serves as a guide as you're sanding. It disappears from the high spots first, letting you know that these are the areas where you need to spend more time sanding. Once all the pencil marks are gone, the panel should be nice and flat.

RAIL & STILE. Another thing that I commonly use my belt sander for is creating flush rail and stile joints. The challenge here is to sand the rails and stiles flush with each other even though the grain is running in opposing directions.

To do this, I sand the rails first, sanding across the grain at the ends of the stiles. Then to remove the cross-grain scratches at the ends of the stiles, I come back and sand the stiles only, staying just shy of the jointline where the rail meets the stile (Fig. 2).

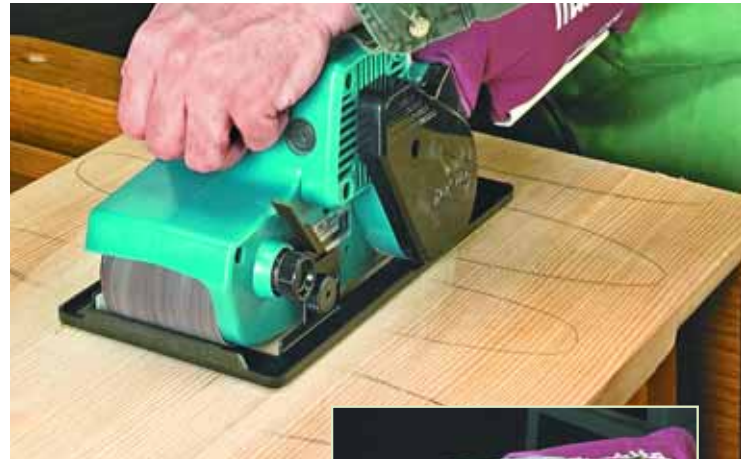
Belt Sander: Upgrades



▲ Replacing the metal platen of your belt sander with a graphite platen will keep your sanding belts running cooler and with less friction. The graphite platen material comes in rolls and is simply cut to length with a utility knife, as you see above. Then the original metal platen is used as a template to lay out the screw holes in the graphite platen. Finally, the graphite can be screwed in place. (Look below for sources.)

EDGING. I also like to use my belt sander to sand hardwood edging flush with a plywood panel. You have to be careful here since it's easy to sand through the face veneer of the plywood.

To avoid this, I scribble a pencil line on the plywood, an inch or two away from the edge. Then I place the belt sander directly over the edging and start to sand it flush. When the sander starts removing the pencil line on the panel, I stop sanding with the belt sander and switch to a hand sanding block.



▲ A sanding frame (also known as a sanding shoe) allows you to flatten panels effortlessly. The frame acts like a stabilizer, keeping the sander level with the surface and preventing it from removing too much material in any one spot. Most sanding frames have adjustments that allow you to control the sanding depth. Check with the manufacturer of your sander to see if a sanding frame is available for your model of belt sander.

ACCESSORIES

One way to improve the performance of your belt sander is through the use of accessories. Many belt sander manufacturers offer a selection of accessories for specific models of sanders to make them more versatile.

These range from dust collector hook-ups to stands that allow you to mount your belt sander upside-down on a bench, turning it into a mini-stationary sander. You can learn more about a couple of these accessories by taking a look at the box at right. **W**

SOURCES

BELT SANDER ACCESSORIES

When it comes to upgrading your beander, one thing to consider is covering your platen with a graphite pad. It will reduce friction and extend the life of the sanding belt and the sander itself. We ordered ours from *Klingspor*. You can find the contact information in the margin at right. The company also stocks a variety of sanding belts to fit most sanders.

As for the sanding frame, check with the manufacturer of your belt sander to see if there's one available for your model.