In this plan you will be getting:

- Step by Step construction instruction.
- A complete bill of materials.
- Exploded view and elevation drawings.
- How-to photos with instructive captions.
- Tips to help you complete the project and become a better woodworker.

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Quick and Easy Band Saw Fence



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Quick and Easy Band Saw Fence

Your band-sawing results will always be on the straight and narrow when you use this helpful accessory. It fits in your saw table's miter slot and clamps in place.

A "single point" attachment makes it perfect for resawing or to compensate for blade drift during rip cuts. Plastic laminate makes the fence face durable and slippery smooth.





Figure 1: For ripping operations or resawing stock that's been milled four-square, the fence alone may be all the guidance you need.

Most bandsaws are equipped with decent standard features, but one of the typical weak links is the fence. Some stock fences don't adjust easily for blade drift, and most lack a point attachment for resawing. Our design addresses both issues. The jig has two parts: a base and the fence. Installing the base in the saw table's miter slot automatically squares the jig to the blade. The fence fits over a pair of guides on the base so it can slide back and forth to set the width of the cut. At 5" tall, you should have ample height for typical resawing tasks on a 14" saw, and the single-point attachment makes it easy to follow a line while making adjustments for blade drift. A couple clamps hold the assembly in place.

Baltic birch plywood is an ideal choice for this jig, since it is dimensionally stable, flat and strong. We used hard maple for the guides and glued plastic laminate to the fence to reduce friction and improve wear resistance.

Getting Started

Begin by cutting an extra-long piece of plywood 12" wide for the base and fence plate (pieces 1 and 2). By machining these two plates as one piece, you'll guarantee that they match perfectly. In addition, cut plywood to size for the fence and the braces (pieces 3 and 4).

Now install a 3/4" dado blade in your table saw, raise it 1/4" and plow the guide grooves in the plywood for the base and fence plate, as shown in the *Base and Fence Plate Groove Elevation* on the next page. Cut this plywood into the two pieces for the jig and plow a 1/8"-deep rabbet in the base for the band saw slot guide.

To cut a perfect groove in the back of the fence for the fence plate, match your dado blade width exactly to the thickness of your plywood (make two passes with a narrower blade if necessary) and be sure the distance from the groove to the bottom edge of the fence also equals the plywood's thickness (see *Fence Joint Detail*, next page). Getting these measurements dead-on is the key to keeping your completed fence plumb at any position on the band saw table.

After cutting the fence groove, trace the brace pattern (see page 11) onto your stock, then band-saw the pieces to shape and round the top corners of the fence. Next, drill all the countersunk pilot holes for screwing the pieces of the jig together, then join the fence, the fence plate and the braces with glue and screws (pieces 5).

Joint the edges of some 1/2"-thick maple and rip these edges off the boards a hair oversize for the guides (pieces 6 and 7). Next, plane the guides to fit the grooves in the base and the saw table. We recommend experimenting with this step, using your planer and your hand plane to find a method that works best for you.

Cover the front of the fence with white plastic laminate (piece 8); it's a good preventive measure against wear and tear as well as a nice way to brighten up the cutting area when sawing. Cut your laminate a little larger than the fence and bond it to the plywood with yellow glue. Spread the glue evenly and back up the laminate with a piece of scrap plywood



Figure 2: When working with a dull blade that tends to drift or when cutting along a scribed line, add the single point attachment so you can pivot your stock slightly for easier tracking.

Fence Exploded View (4) 9 8 (3) 2 3 9 22.5° Chamfers 6 **Single Point Fence Detail** 1 4 (2) 8 (1)**Base Detail** 7 MATERIAL LIST - Fence **Fence Joint Detail** TxWxL 3/4" x 12" x 3½" **1** Base (1) 2 Fence Plate (1) 3/4" x 12" x 61/4" 3 Fence (1) 3/4" x 12" x 5" 4 Braces (2) 3/4" x 31/4" x 5" 3/4" → 5 Screws (13) #8-1½" 6 Jig Guides (2) 1/2" x 3/4" x 3½" 7 Saw Slot Guide (1) 1/2" x 3/4" x 12" Base and Fence Plate Groove Elevation 8 Laminate (1) 1/16" x 5" x 12" 9 Single-Point Fence (1) 3/4" x 1½" x 5½"

Technical Drawings 4 Band Saw Fence Braces (Full Size) NOTE: Cut two braces for your band saw fence jig.

while clamping the assembly tight. Trim the laminate with a flush-cutting router bit after giving the glue a few hours to dry.

For the single-point fence attachment (piece 9), cut a piece of maple to size and chamfer one edge, as shown in the *Single Point Fence Detail*, previous page. Sand the chamfers to improve the tracking of your stock, then

clamp the attachment to the fence and fasten the parts together with screws.

Give the jig a quick sanding and apply a protective topcoat. Avoid finishing the guides as this may make sliding the fence more difficult. Instead, apply wax to the guides on a regular basis.

The fence works best when your saw blade is sharp and stock is flat and

square. When the blade is worn and no longer tracks accurately, or when you need to follow a line, the single-point attachment comes in handy (as long as its crown is 1/8" ahead of the blade). Either way, this jig is bound to improve your band saw's performance.

QuickTip

Sawing Straight—Consider All the Variables

It may seem counter-intuitive, but if your band saw doesn't follow a straight cutting line, tightening the blade isn't necessarily the solution. Experiment with different blade tensions on scrap stock to see how performance varies. The keys to good tracking are proper blade tension, correct blade guide adjustment and uniform blade position on the saw's flywheels. Of course, a fresh saw blade never hurts! When all of these factors harmonize, your saw should cut wood like butter.