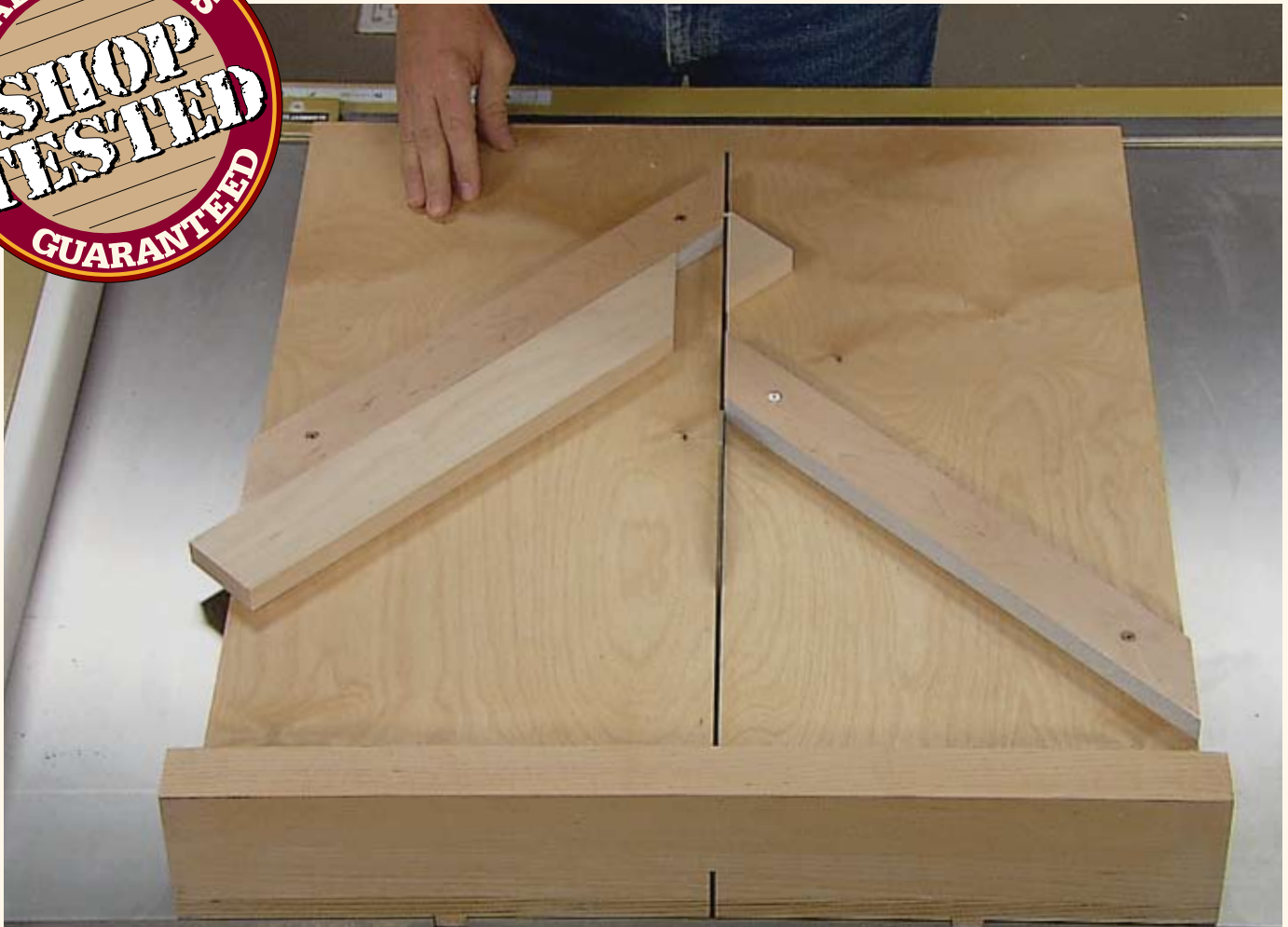




Woodsmith **PLANS**

Miter Jig



MITER JIG

If you're cutting a lot of miters, it might be worthwhile to build a special jig. Although this jig is used in place of the miter gauge, the basic idea is the same — cutting two complementary miters.

RUNNERS. Start by cutting two runners to fit the width, depth, and length of the miter gauge slots on your saw. The runners can be cut from a hardwood, such as maple, or plastic. Or you can purchase metal runners from woodworking stores or catalogs. The important thing is that they be a nice sliding fit in the slots.

BASE. Now cut a base from $\frac{3}{4}$ "-thick plywood to length to fit your table and 24" wide, see Fig. 1.

To attach the runners to the base, first put some washers as spacers into the miter gauge slots. Then place the runners on top of the washers and apply strips of double-sided carpet tape on top of the runners. Now center the base over the saw blade and press it down on top of the runners. (Shop Tip: Set your rip fence 12" from the blade to help keep the base aligned, see Fig. 1.) Next lift up the base, drill countersunk holes through the runners and screw them to the base, see Fig. 1a.

Note: Check the fit of the runners and base assembly in the slots. It may be necessary to slightly trim the edges of the runners to get a perfect sliding fit.

CLEAT. The jig is designed to carry a workpiece through the blade by pushing the base across the saw table. This requires cutting a kerf in the base for blade clearance. To connect the two halves after cutting the kerf, a $1\frac{1}{2}$ "-thick cleat is screwed at the front edge, see Fig. 2. Next, cut the kerf, stopping $1\frac{1}{2}$ " from the back edge.

FENCES. The final step is to add the $\frac{3}{4}$ "-thick by 2"-wide fences, see Fig. 3. Using a drafting triangle or combination square, set the first fence at

45° from the kerf and screw it to the base. Then use a framing square or large triangle to set the second fence exactly 90° from the first. To keep the ends of the workpieces from hitting the opposite fence, the two parts are offset. This offset determines the widest workpiece you can miter with the jig (as shown here, 3"), see Fig. 3a.

