



Woodsmith **PLANS**

# MITERING AND FITTING SMALL MOLDINGS



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Mitering small moldings on the table saw doesn't have to be a hassle. With a few tried-and-true techniques, a perfect fit is guaranteed.



**C**utting accurate miters on the table saw is always a challenge. But when you're mitering small, fragile pieces of molding that highlight a project, the difficulty factor increases.

**THE GOAL.** Due to the small size, the moldings can be difficult to hold on to safely. You need a way to maintain good control of the workpieces while keeping your hands and fingers safe. Second, the moldings can be flexible, so firm support while

making the cuts is essential. Finally, when fitting these small pieces, the margin for error is small. The miters need to be cut cleanly and accurately with the pieces sized correctly.

**FIRST, MAKE A SLED.** The solution to all these challenges starts with the small miter sled shown in the photo above. It gives you support below and behind the workpiece so positioning and control is easy and chipping is minimized. Plus, once a kerf is cut in the sled, you always

have a quick, precise way to align your mark with the blade. You'll find more details on making this simple sled on page 3.

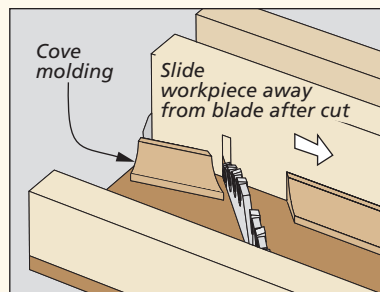
**A CLEAN CUT.** The drawings at left show how to make a miter cut with the sled. It's just a simple one, two, three. Line up your mark, push the sled through the blade, then slide the piece away from the blade.

But there are a few other considerations to keep in mind as well. You'll find yourself having to make two different kinds of miter joints when fitting small moldings — inside and outside. An inside miter fits into a corner, an outside miter wraps around a corner.

**ONE SETUP.** Whenever possible, I like to make both inside and outside miter cuts with the business end of the miter gauge and sled angled back toward me, as shown in the main photo. This gives you a much better view for fine control of the workpiece. It won't work for all cuts,



▲ Align your layout mark with the edge of the kerf in the sled and then make the cut.



▲ When the cut is complete, slide the workpiece away from the blade before retracting the sled.

but if you orient the piece in the right way, it often will.

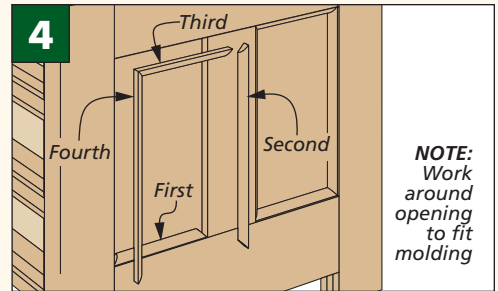
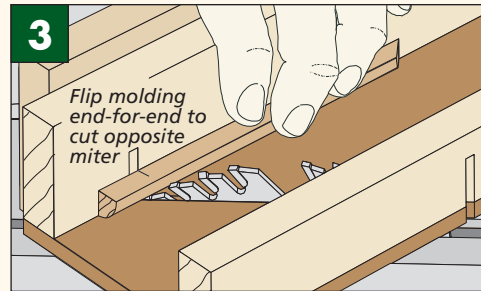
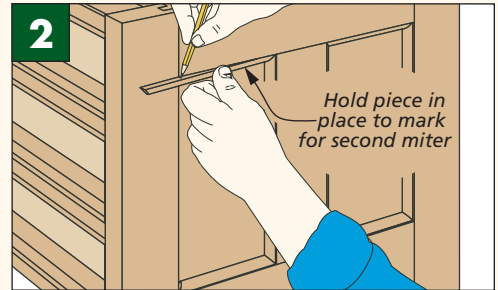
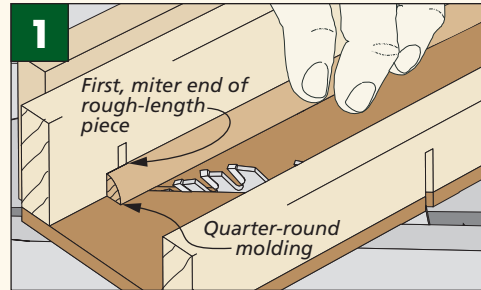
When making a miter cut, I always try to orient the molding to confine any minor chipping to the unseen surfaces. You'll have a molded or exposed side and a hidden side. If possible, make the cut so that the blade exits the unseen side and any minor chipout will be confined to this edge.

**A PRACTICAL JOB.** Cutting the miters on the small moldings is only part of the job. Accurately fitting the pieces and installing them in the right order is just as important. The drawings at right show how to tackle a practical job — framing a panel opening with molding.

**CUT-TO-FIT.** When I'm mitering and fitting small moldings, my measuring tape and rule are only used for rough measurements. Since the tolerances are too small to measure with enough precision, I rely on a "cut-to-fit" process.

Start by cutting a miter on one end of a rough-length piece of molding, as you see in Figure 1. Then simply hold the piece in position on the project to mark for the second cut, as shown in Figure 2.

The miter cut on the opposite end is the reverse of the first. But you can use the same miter gauge setup. Just flip the piece end for end so that the top side is now down. Take a look at Figure 3 and you'll see how this works. Then make the cut and check the fit.



**A FINE TRIM.** If you need to make a "hairline" trim on a piece, just snug it up to the teeth of the blade using moderate pressure. Then pull the miter gauge back, turn on the saw and make the cut. This will result in a very fine trim cut.

**WORK AROUND.** The order in which you install the pieces makes a difference, as shown in Figure 4. I start with a short piece of molding and then work around the opening, finishing with one of the long pieces. This way, the final long piece has more give and can be sprung into place more easily.

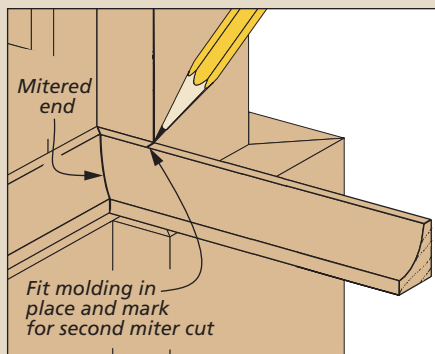
Each piece is cut to fit and then installed. It's more reliable to fit the following piece to an already firmly

placed molding. This "one piece at a time" routine allows you to discover and correct any problems.

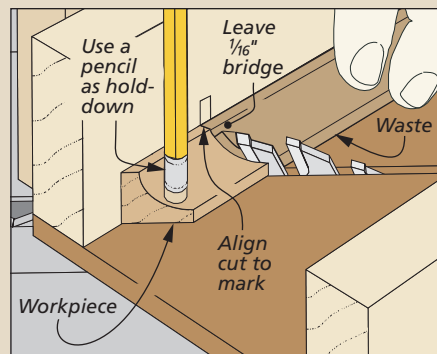
**SHORT PIECES.** Figuring out a way to miter very short pieces safely can have you scratching your head. Above all else, you want to keep your fingers a safe distance from the blade. But then how do you hold on to the finished piece? The box below shows one good solution that will give you an accurately cut piece without any risk.

The keys to success when mitering small moldings are really no different than any other woodworking task. If you adapt your technique to the job, you're guaranteed perfect-fitting moldings with a minimum of stress.

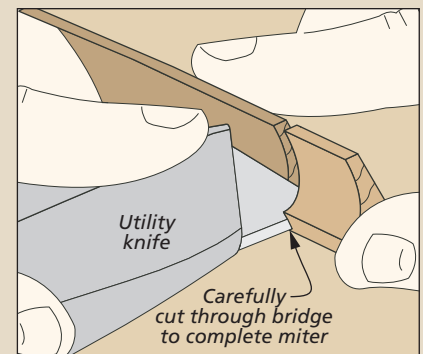
## HOW-TO: MITER A SHORT PIECE



▲ Start by mitering one end of a rough-length piece. Place the piece in position and mark it for the second cut.



▲ With the blade lowered slightly, align the workpiece and make a partial cut, leaving a narrow bridge.



▲ After checking the fit, use a utility knife to carefully cut through the bridge and complete the piece.

## Small Molding Sled

When mitering small moldings, maintaining control of the workpiece is half the battle. The simple miter sled, shown in the drawing at right, eliminates this problem.

The sled consists of a pair of hardwood cleats and a  $\frac{1}{4}$ " hardboard platform. The front cleat helps stiffen the sled, while the taller back cleat serves as the fence. Both cleats are glued to the platform.

I like to clamp the sled to the miter gauge, but screwing it in place works too. Once the  $45^\circ$  kerfs are established, you can align the jig with these cuts.

