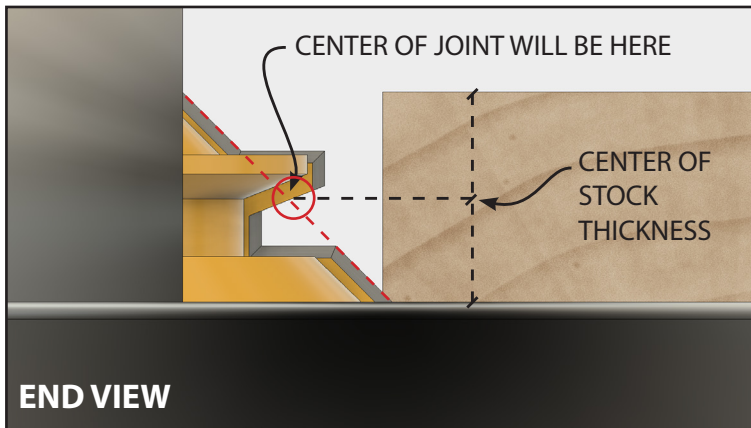




Produce strong 90-degree joints with the lock miter bit. Because lock-miters provide more glue surface with interlocking parts, they are much stronger than regular miters. Follow these instructions to use the bit in your router table.

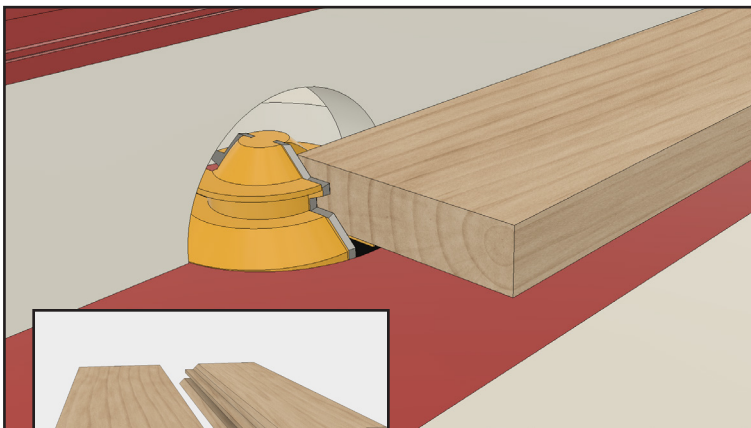
Note: A lock miter joint requires two cuts with the router table. The first cut should be made with the board face down. The second cut must be made in the edge of the mating board with its face against the fence.

Step 1: Set the bit height.



Install the bit in the router table and adjust the height so that the center of the joint aligns with the center of the stock's thickness.

Step 2: Run a test to ensure the height is correct.



Set the fence in place for a test cut. Run two pieces through the router and assemble them as shown at left.

Step 2 Continued:



You'll be able to see whether your bit is too low or too high by the way the joint fits together.



If the right piece is higher than the left, the bit needs to be lowered. If it's lower, the bit should be raised.

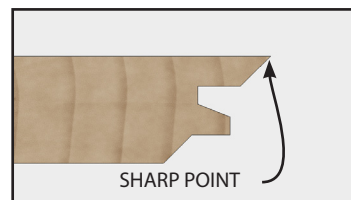


When the bit height is set correctly, the pieces will be flush.

Tip: If you're going to do a lot of lock miter joinery in the future with the same stock thickness, make a

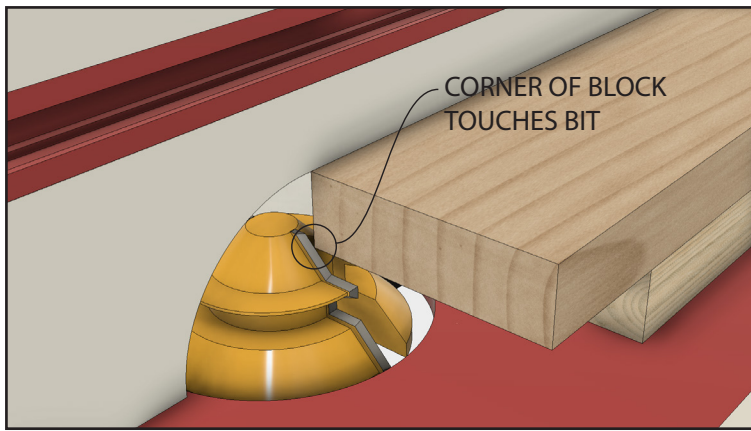
setup block with a piece of scrap to help you set the bit height and fence depth.

Step 3: Adjust the fence depth.



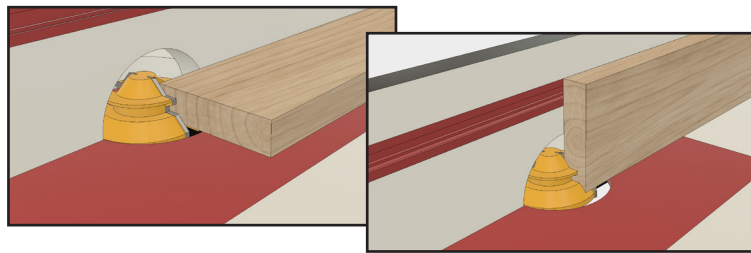
Now that the bit height is set, position the fence so that the bit leaves a sharp point at the top of the joint but does not reduce the width of your stock. If you

prefer, you can leave a small "shoulder" instead, which will make guiding the piece along the fence easier.



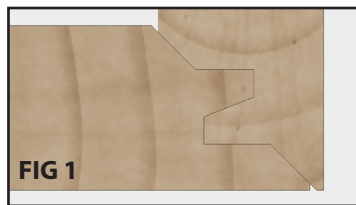
To get the fence depth just right, place a piece of stock on the router table with a scrap block on top. Extend the scrap slightly past the end of the stock. Butt the stock and scrap block against the fence. Adjust the fence until the corner of the scrap block just touches the bit.

Step 4: Test the fence depth.

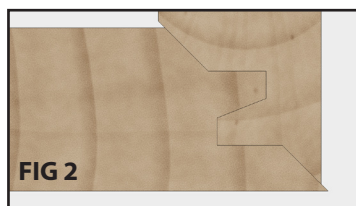


Run two pieces of scrap material through the router and test the lock-miter's fit.

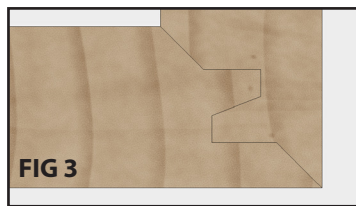
If the joint does not line up properly, move the fence in or out to correct the problem.



Push the fence back to expose more of the router bit if the joint looks like Figure 1.

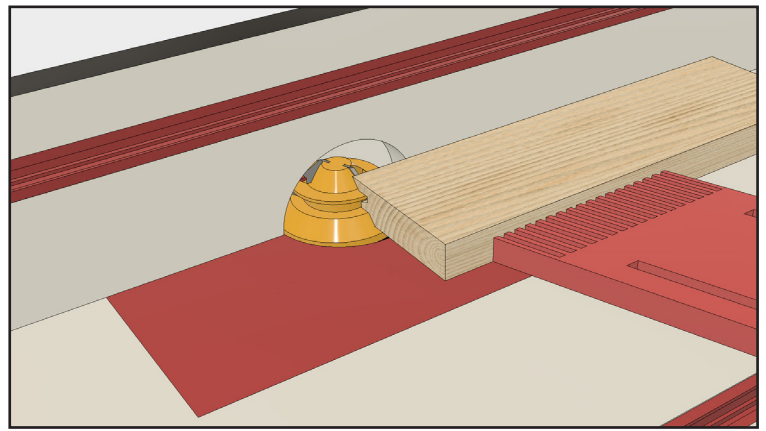


Pull it forward to expose less of the bit if the joint looks more like Figure 2.

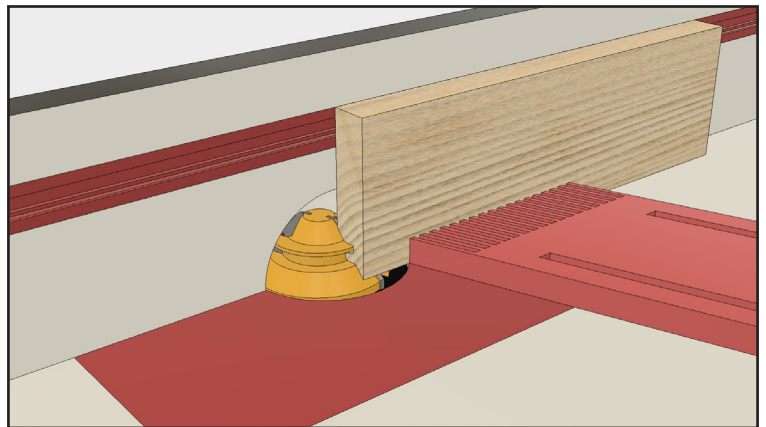


A proper lock-miter joint should look like Figure 3.

Step 5: Route the stock.



With the bit height and fence depth set correctly, route your stock. To make a four-sided column, route both edges of the front and back pieces face down. Then route both edges of the sides with their faces against the fence.



Use a featherboard for maximum control and clean cuts.