

mortise and tenon

Bookshelf Option

I used biscuit joinery to assemble the sides of the Knock-Down Cherry Bookshelf, but the traditional mortise and tenon joinery shown at right will do the job just as well.

A FEW CHANGES. If you choose to go this route, you'll need to make a change to the order of things. On the "biscuit-joined" bookshelf I first completed all the rail-to-spindle joinery and then added the stiles at the tail end. Here, the stile to rail joinery comes first. The reason is simple. You're going to start with rails that are 2" longer than those for the biscuit-joined bookshelf. This allows you 1" on either end for a tenon. But until the tenons are cut and the shoulder-to-shoulder length of the rails is established, you can't accurately locate the notched filler strips that form the spindle mortises.

OFFSET MORTISES. The 1"-thick stiles and the 3/4"-thick rails are flush

across the inside face of the sides. To make this happen, either the mortises or the tenons need to be cut "off center." To me, it's easier to offset the mortises in the stiles as shown in detail 'b.' This way you can still cut centered tenons on the rails. Just take your time when laying out and cutting the mortises and you should end up with a perfectly flush inside face.

TENONS. Before cutting the tenons on the rails, you'll want to cut the centered grooves that hold the filler strips. Once the grooves are completed, the centered tenons can be cut to fit the mortises in the stiles (detail 'a'). When fitting the tenons, leave a little top-to-bottom play. This makes it easier to "snug up" the spindles and rails when you assemble the sides.

SPINDLES. Once the rail-to-stile joinery is completed, the spindles are fitted as shown in the article. **W**

