

Making Your Own BeadLOCK Tenons



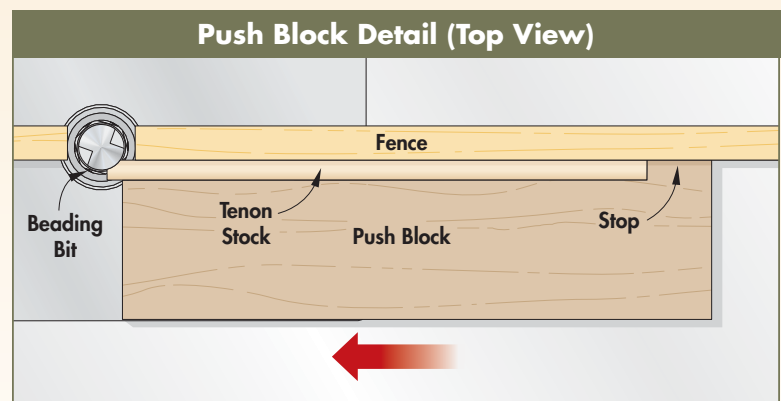
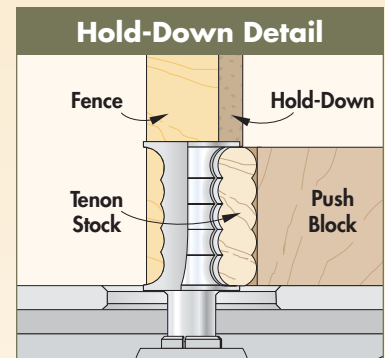
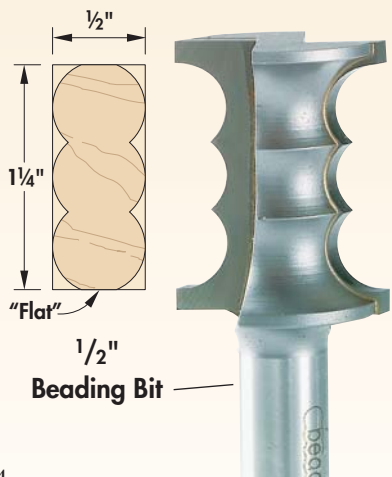
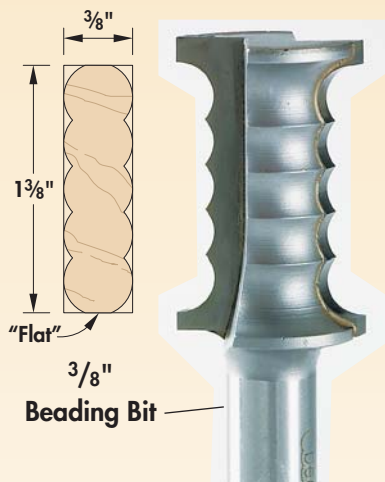
Though pre-milled BeadLOCK tenon stock is very affordable (around \$6 for a package of three foot-long pieces), you might find yourself using this joinery system so much that you want to make your own stock. It's easy to do using BeadLOCK's specialized router bits. They're available for either $\frac{3}{8}$ "- or $\frac{1}{2}$ "-wide stock sizes for around \$64 (both require a $\frac{1}{2}$ " collet).

Cut the Blanks — The first step to making tenon stock is to prepare wood blanks. Plane the blanks to the appropriate thickness, and then rip them to width, according to the dimensions shown at left. I made blanks 12" long because they were easier to handle on the router table.

Router Table Setup — A couple of simple shop-made accessories will make routing the tenon stock easier, safer, and more exact. A piece of $\frac{1}{4}$ " hardboard notched around the router bit and clamped to the fence will hold the blank down (*Hold-Down Detail*, right). And a push block cut with a "hooked" end will guide the stock past the router bit evenly and prevent kick-back (*Push Block Detail*, below).

Using a piece of factory-milled tenon stock as a guide when setting the bit height reduces the time and number of test pieces this adjustment might take. The router bit is the right height when slight "flats" form equally on both edges of the stock (*Beaded Tenon Illustrations*, left). Similarly, adjust the fence so that the depth of the cut just barely rounds the faces of the blank. You know you've got it right when the molded piece fits snugly in a mortise.

Rout the Stock — Now you're ready to rout. Mark one edge of each blank, and keep this edge facing up during both passes to ensure symmetrical beads.



A Joinery Method for Narrow Stock

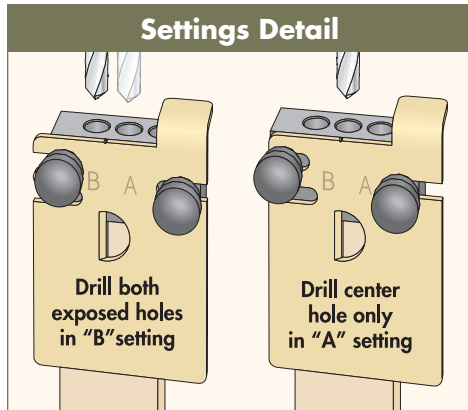
Just because BeadLOCK tenon stock comes in predetermined widths doesn't mean you have to always use the full width for a tenon. What about joining frame pieces that are too narrow to accommodate the tenon stock?

If you go with the joint-sizing dimensions I talked about on page 42, you'll see that it's

not possible to make a viable joint with full-width tenon stock in a workpiece that's much narrower than 2". But say you want to join narrower pieces — $1\frac{5}{8}$ " wide, for example. Your mortises would have to be $\frac{7}{8}$ " long.

No problem. To form $\frac{7}{8}$ "-long mortises, just drill only those guide-block holes that will result in a shorter, centered mortise. These holes are: *both* the exposed holes in the "B" setting, and then only the *center* hole in the "A" setting (*Settings Detail, left*). Note that you'll be starting with the "B" setting for this procedure, rather than the "A" setting. The reason for this is that it's best to drill out the bulk of the mortise first, to prevent the bit from drifting.

Then, to produce the corresponding tenon, simply rip one of the "beads" from a length of $\frac{3}{8}$ " tenon stock. Finally, round the cut edge with a sanding block so it fits the rounded end of the mortise.



▲ Adapt $\frac{3}{8}$ " tenon stock to fit $\frac{7}{8}$ "-long mortises by reducing it to three "beads."

