

Three ways to cut a rabbet

PICK YOUR APPROACH
TO THIS FUNDAMENTAL JOINT

BY VIC TESOLIN



Although not as glamorous as the dovetail nor as robust as the mortise-and-tenon, the rabbet joint is just as useful. It shows up in casework as a place to put a frame-and-panel back, and is a popular way to fit a drawer bottom into its grooves. So it's a good joint to learn. In my shop, where I depend on hand tools to cut all joinery, I've employed three approaches to cut rabbets. For through-

rabbets, I go with my rabbet plane; before I had it, I used a shoulder plane. For a stopped rabbet you can't use either plane, but a chisel and router plane get the job done. I'll show you all these methods.

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Rabbet plane

The rabbet plane originally looked a lot like a shoulder plane, but has evolved into a tool even better suited for cutting a rabbet. Rabbet planes now have fences to control the rabbet's width, and some have depth stops. Most rabbet planes also have a nicker in front of the blade that's used to sever fibers when cutting a rabbet across the grain. This allows the shavings to break away freely from the workpiece.

There are two things to keep in mind when setting up a rabbet plane. Make sure that the blade's cutting edge is parallel to the mouth; otherwise, the bottom of the rabbet (the cheek) won't be square to its side (the shoulder). Also, the blade should stick out just a whisper beyond the body on the side that cuts the shoulder. If not, you'll end



up with a stepped shoulder. One last note: Even though the fence and depth stop control the rabbet's dimensions, I still begin by laying out the joint with a marking gauge. This is helpful when I set the fence and stop, and ensures clean edges along the rabbet.

Lay out the joint.

Strike a line for both the width and depth, severing the fibers to create clean edges along the rabbet.



Set up the plane.

You can work directly from the workpiece, or use a small rule. Regardless, set the fence, measuring from the blade's edge and not the plane's body (right), and then set the depth stop (bottom).



Start at the end. Take short strokes at first, starting near the exit end of the workpiece, and taking longer and longer strokes until you are taking full-length shavings. Continue until the depth stop contacts the surface.

Shoulder plane

Early rabbet planes look a lot like what are known as shoulder planes today. Those early rabbet planes had a different bedding angle and often had a skewed blade, but their bodies were almost indistinct from those of modern shoulder planes. It's no surprise, then, that you can cut a through-rabbet with a shoulder plane. Set up the shoulder plane as you would a rabbet plane: blade parallel to the mouth, and sticking out just a bit beyond the body. Because shoulder planes do not have fences or depth stops, you must lay out the joint with a marking gauge. The line marking the rabbet's



depth tells you when to stop, and the one marking the width helps you to get the joint started. You'll also need to check that the rabbet's cheek is square to its shoulder, and tweak it if it's not.

Cut a shoulder.

After laying out the rabbet's width with a marking gauge, use a chisel to cut down toward the line at an angle. This creates a shoulder to guide the plane.



Angle the plane to start. Tilted inward and held tight to the shoulder you just cut, the plane will cut a narrow shaving, deepening the shoulder.

Finish up square.

As you work down through the rabbet, level out the plane with each stroke until it's cutting a surface square to the shoulder (left). When you've reached full depth, check that the shoulder and cheek are square to one another (below).

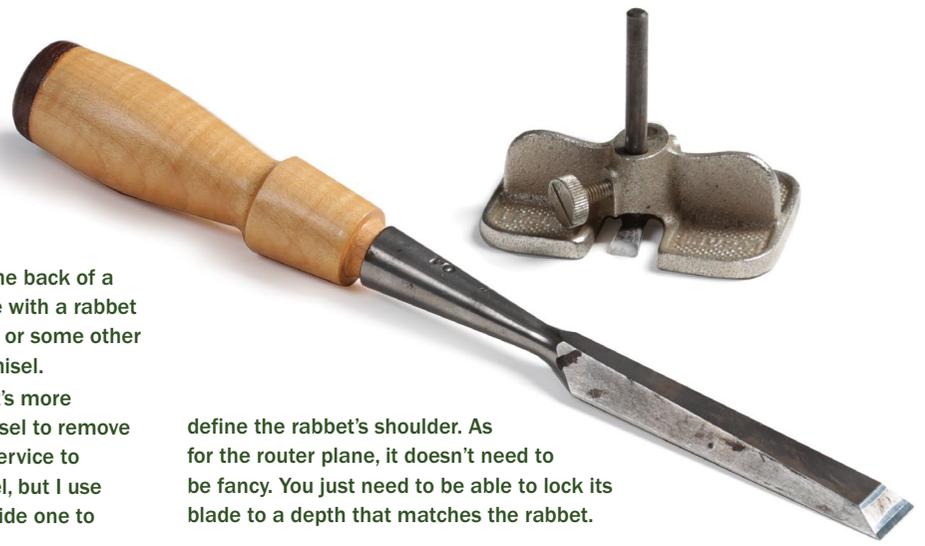


Chisel and router plane

There are times when you need a stopped rabbet—on the back of a dovetailed cabinet, for example—and you can't cut one with a rabbet plane or shoulder plane. You don't need to plug in a router or some other power tool to cut one. You could do it with nothing but a chisel.

I've done it, and it's a tedious and time-consuming job. It's more efficient to pair that chisel with a router plane. Use the chisel to remove the bulk of the waste, and then put the router plane into service to level the rabbet's cheek. You can get by with a single chisel, but I use two chisels—a narrow one to break up the waste, and a wide one to

define the rabbet's shoulder. As for the router plane, it doesn't need to be fancy. You just need to be able to lock its blade to a depth that matches the rabbet.



Break up the waste. After laying out the rabbet with a marking gauge, work your way along its length with a chisel, cutting across the grain.



Sever fibers at the back. Place a wide chisel (1 in. or wider) in the line cut by the marking gauge and give it a good whack.

Pop the chips. A 1/2-in. chisel offers more control here, and doesn't take much more time than a wide chisel would.



Online Extra

To learn how to sharpen a router plane, watch the video at FineWoodworking.com/269.

Clean up with a cordless router. Set the blade's depth by placing it into the marking-gauge line that marks the rabbet's depth, and lock it in place (top). Cut in from the open side, working along the rabbet's length to level the cheek (above).