

Cutting Multiples

A few tricks can save time when cutting studs, blocks and cripples

by Larry Haun

One thing that I've noticed in the years I've been a carpenter and teacher is that cutting multiple pieces can be a terrible time-waster. If, for instance, you asked beginning carpenters to cut 100 blocks and didn't give them any further instruction, it would take them about 100 minutes to do the job. That's because most people tend to cut one block at a time. And it takes about a minute to find a piece of wood, measure it for length, mark it and then make the cut.

That's fine if you have one or two blocks to cut, but not if you have 100.

On most any job there are numerous occasions when carpenters will need piles of blocks, cripples, headers, trimmers or studs all cut to the same length. Some builders make a cutting list that contains the size, the length and the number of these items and then submit the list to their lumber companies along with the rest of the order. Large lumber companies often have gang

saws, and with the press of a button, a saw operator can make a pallet of blocks in no time. The blocks can be shipped to the job site with the rest of the order.

Most of us, though, don't operate that way. When we need a rack of cripples, we set up right in our work area and cut them. There are several methods for cutting multiple pieces that are a lot faster than cutting them one at a time. The two keys are: cut more than one board at a time,

Pulling to a line.

When gang-cutting 2x4s on edge, the author starts by pulling the stock to a straightedge, in this case a straight 2x4, with the claws of his hammer.



Measure once, cut twice.

The author snaps a line between marks on the two outside 2x4s and then cuts on the line with the blade of his saw at full depth. After the first cut has been made, each 2x4 is picked up in turn, and the cut completed. The stock does not have to be marked again.



which is called gang-cutting, and don't measure each board individually.

Use a radial-arm saw and a stop block—For many builders, the radial-arm saw is the preferred tool for gang-cutting wood to length. Some carpenters mount their radial-arm saw right on the back of a pickup so that the tool is readily available. I have mine mounted on its own trailer so that the saw can be pulled from job to job.

To cut multiple pieces with the radial-arm saw, I build a simple table out of a 14-ft. or 16-ft. long 2x12 (or two 2x6s) and nail a 2x4 fence to the backside. To make repetitive cuts to the same length, all you have to do is attach a stop block to the table at the correct distance from the blade (bottom photo, p. 60). With a stop block in place, you can feed in several 2xs at a time on edge and turn out a pile of blocks or cripples in short order because you're not stopping to measure and mark each piece. If a radial-arm saw isn't available, you can do the same thing with a power miter saw. The stop may be screwed, nailed or clamped to the worktable. If you have many cuts to make, be sure the stop block is well secured so

that it isn't gradually forced out of position when you push the end of a 2x against it.

It pays to watch for sawdust that gets trapped between the stop block and the 2x you are cutting because your cuts can be thrown off by it. You can avoid the problem by cutting a chamfer, or bevel, on the bottom edge of the stop block so that sawdust is pushed out of the way.

Cut right on the lumber pile—For many builders the circular saw may be the only saw available on the job site, and it can be used to cut multiple pieces right on the lumber pile. Usually, 2x stock is delivered in bundles or lifts with pieces lying flat; the material can be cut before it's taken off the pile. Before cutting the pieces to length, you need to flush up one end so that all the blocks or studs will be the same length. This can be done easily by holding the edge of a straight stud against one end of the top layer and pushing all the 2xs to a straight line. If the material is too heavy to push, you can stick the claws of your hammer into them and pull the 2xs against the straightedge. Once the 2xs are even at one end, you can measure down the two out-

side pieces to the point where the cut should be made and snap a line across the pile. Then set the saw to cut 1½ in. deep and make the cut (top photo, p. 61).

Rack up blocks to cut all at once—Once a job is underway, there often is scrap material around that you will want to use up. Let's say you need 60 cripples, each cut 3 ft. long. Gather up pieces of 2x scrap and line them up, on edge, against a bottom sill or another straightedge on the job (top photo, facing page). Measure up 3 ft. from the flush end and snap a chalkline across the entire line of 2xs. You can cut the full depth of the blade along the line (bottom left photo, facing page) and then pick up each piece individually to finish the cut (bottom right photo, facing page). You won't have to mark the studs a second time. If you only have a few to cut, it is easier to lay them flat on the floor and make the cut in one pass.

This technique also works well when making a lot of short blocks (photo below). If the scrap pieces of 2x are long enough, you can snap a number of lines across them at the right spacing



Making small blocks.

If the blocks are short, many of them may be made from a small stack of 2x scrap. The author snaps a series of lines across the scrap and makes the cuts, keeping the blade to the same side of the line each time so that the blocks are the same length.

and then make a number of cuts with your saw without further measuring or marking. Just remember to keep your blade on the same side of the chalkline each time so that the blocks are the same length.

Lay out multiples with a framing square—

You can also use your framing square to speed the cutting of blocks. I frequently need a number of lap or eaves blocks to fit between joists or

rafters. When scrap pieces are not available, it is easier to lay out and cut the blocks from full-length stock right on the deck than it is trying to muscle 2x10s or 2x12s onto a saw table. If you are cutting 14½-in. blocks (the length that fits between rafters or joists 16 in. o. c.), align the 14½-in. mark on the inside of the blade of the square with the end of the 2x. Then draw a line across the 2x using the inside of the tongue of the square as your guide. Now move the 14½-in.

mark to the line and repeat the process (bottom photo, facing page). Using this method, you can work your way down a 2x quickly. When it's time to cut the blocks, hold the sawblade to the same side of the line each time to ensure that each block is the same length.

Get a bigger saw—A beam saw can cut through a 2x6 on edge and can also be used to make the ridge cut when gang-cutting common

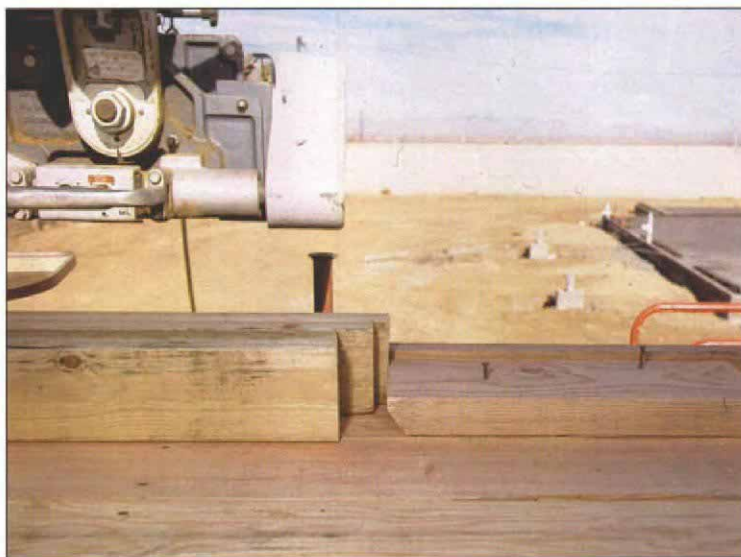


Big saw, big cut.

A large-capacity beam saw is capable of cutting 2x4s or 2x6s on edge. The author just lines up a stack of 2xs, snaps a line and makes the cut. No second cut is needed. A 2x4 spacer prevents the saw from cutting the plywood floor.

Cutting blocks on the radial-arm saw.

Using a radial-arm saw is a fast way to cut multiple pieces on a job site. Several 2xs can be cut at the same time, and an adjustable stop block makes it unnecessary to measure stock for each cut. A bevel on the bottom edge of the wooden stop block helps prevent a buildup of sawdust, which will throw off the accuracy of the cut.



rafters. A beam saw is just an oversized circular saw; my Makita has a 16-in. blade. So if I'm cutting blocks from 2x4 or 2x6 stock on edge, the entire cut can be made in a single pass. In this case, I place a flat 2x under the stock near the chalkline to hold the 2x material away from the deck (top photo, facing page). A little parafin on the blade makes the cut go easier.

If you don't have a beam saw and don't want to invest in one, a chainsaw attachment will in-

crease the capacity of your circular saw. One kind is the Prazi Beam Cutter (Prazi USA, 118 Long Pond Road, Unit G, Plymouth, Mass. 02360; 800-262-0211), which the manufacturer says can be put on and taken off in a few minutes. The company makes models that fit either a worm-drive circular saw or a sidewinder. Another brand is the Linear Link VCS-12 (Muskegon PowerTools, 2357 Whitehall Road, North Muskegon, Mich. 49445; 800-635-5465). The Linear Link

can be purchased either as a complete saw or as a kit to convert your worm-drive, although it's not sold as a quick-change accessory. Both the Linear Link and the Prazi increase the cutting capacity of your saw to 1 ft. at 90°. This type of saw is especially useful when gang-cutting the ridge cut on wide rafters. □

Larry Haun is a carpenter in Los Angeles, Calif. Photos by Larry Hammerness.

Why move the pile?

Studs, blocks and cripples also can be cut right on the lumber pile. The author starts by flushing up the ends of the top layer of 2xs. He snaps a line across the pile at the right length, sets his saw to 1½ in. deep and makes the cut.



Skip the tape.

When cutting short lengths of blocking from a long 2x, there's no need to measure and square each block separately. Instead, the author uses his framing square to mark off blocks quickly. He aligns the end of the 2x with the correct measurement on the inside of the square's blade, uses the tongue to mark a square line across the 2x and then moves the square along the 2x to repeat the process.