

Learn to trust your eye:

Fast and Accurate Framing Cuts Without Lines



"They didn't believe it, so I cut this one by eye and took out my square to see how close I came."

by Larry Haun

Have you ever watched a professional chef chop vegetables? A blur of motion, the staccato sound of a knife on a cutting board, and a mound of neatly sliced carrots appears almost instantly. I always look for a fingertip among the carrots.

Some people have that same reaction when they watch me cut framing lumber—impressed by the speed, worried about safety. Like knives, circular saws are dangerous tools, but in experienced hands, a saw can be safely pushed to its limit.

I bought my first circular saw in 1951—a used worm drive for \$85. I thought I'd died and gone to heaven. Suddenly, houses that used to take a week to frame could now be framed in a day.

But as the postwar demand for houses increased, so did the competition to build them. Surviving as a framing contractor meant more than just doing good work; it meant working fast, too. In the quest for efficiency, I began to depend less on my measuring tape and more on marking and cutting boards in place, less on my square and chalkline, more on my eye.

Just as ear training helps a musician to play an instrument, I trained my eye to help guide sawcuts. The saw became an extension of my arm, sort of like a bat in the hands of a professional baseball player.

The methods described here are not for beginners—they're for veteran carpenters, already comfortable with saws and ready to challenge themselves to work faster and more efficiently.



Cut wherever you're standing. With the length marked and the saw base aligned with the edge of the board, a 2x4 can be cut square in a second. Using your foot as a support saves having to move the lumber to a pair of sawhorses.

THE SAW BASE LINES UP THE CUT

It takes literally a second to cut through a 2x4. But if you have to pull out a square and a pencil to mark a line to guide the cut after measuring and marking the length of the cut, and then put these tools back in your nail bag, the same cut takes you many times longer. Cutting square without drawing a line depends on the basic and oft-overlooked premise that the saw base is a rectangle and that the side of the base is parallel to the blade.

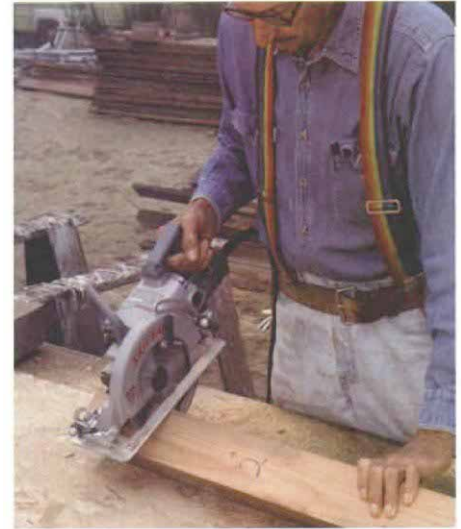
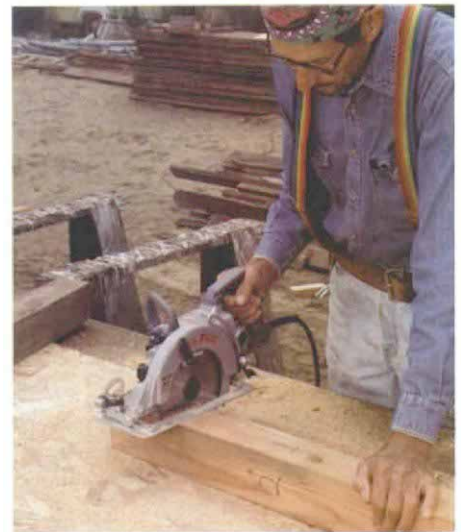
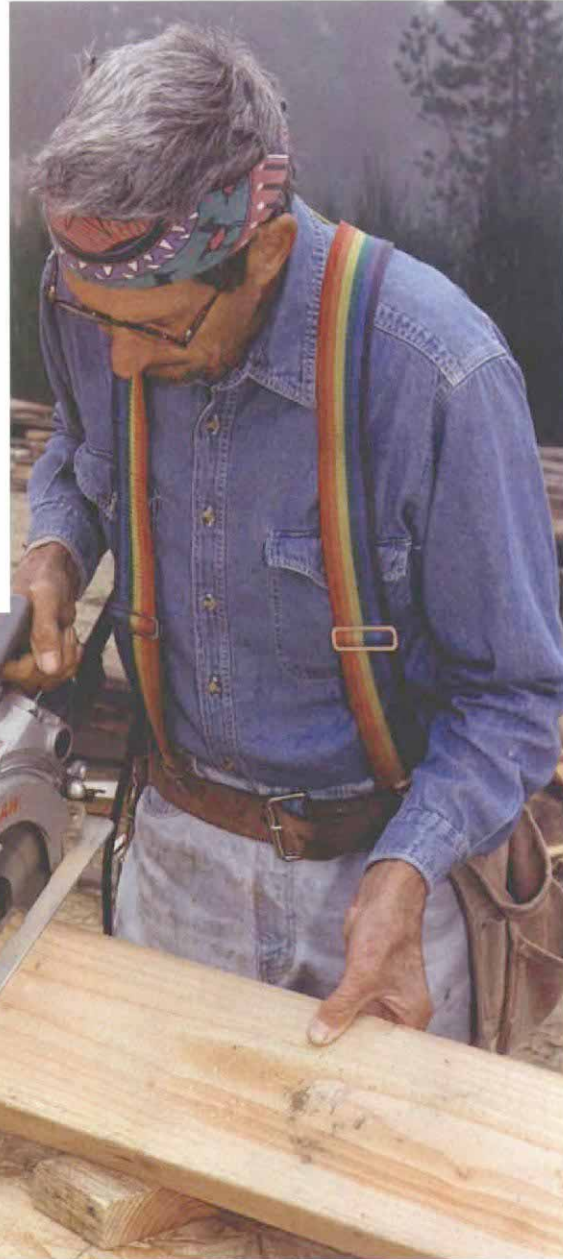
For a square cut on a 2x4, just line up the front edge of the saw base parallel with the far edge of the board. The blade should now be perpendicular or square to the board, and a cut in that position should also be square (photo right, facing page).

For wider boards, hold the guard up out of the way, tip the saw forward, and line up the saw base with the edge of the board (inset photo). Now plunge through and lift the near edge of the board so that the weight of the saw helps you to finish the cut (photo below). The whole process still takes around a second and with practice becomes one fluid motion. While 2x4s or 2x6s can be cut safely with the board resting on your foot, the safest way to cut a wider board is to rest it on a 2x block.

The same process is used when cutting a 4x4 post or header that is too thick for the saw to cut in one pass, as seen in the photo sequence at right. Once the first cut is made square, the saw kerf guides the next two cuts.



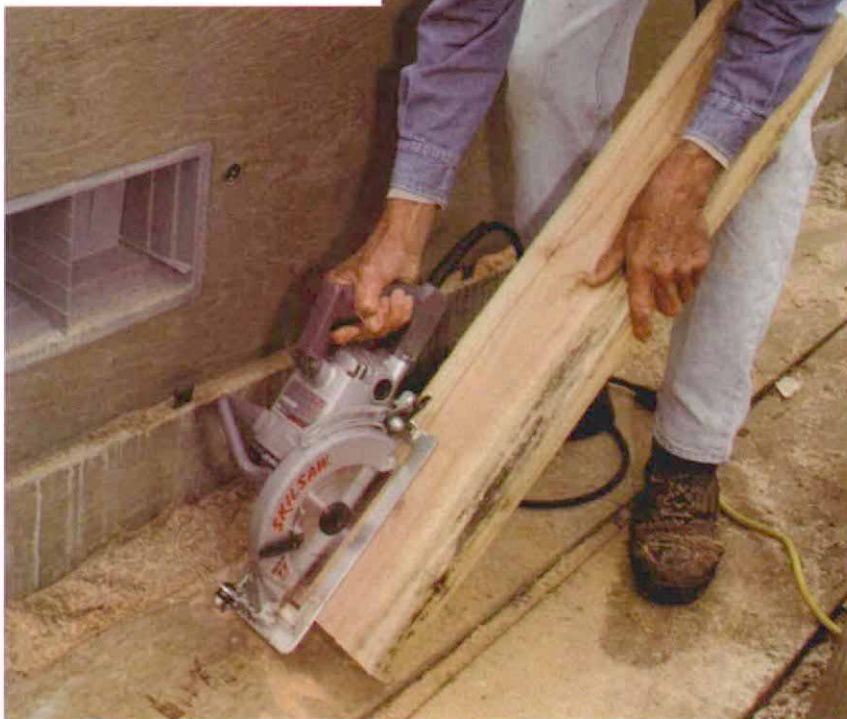
A 3-second crosscut. Make a plunge cut with your blade on the mark and the saw base square to the board (inset). With the saw running, lift the board so that the saw's weight helps to finish the cut (right).



Perfect post cuts in a snap. Cut side one as you would a 2x4 (top). Next, rotate the 4x on edge and cut side two (center). Keeping the blade in the kerf, roll the 4x forward and plunge through side three in chopsaw fashion (bottom). The saw kerf from the first square cut aligns the next two.



Flip the board for safe short rips. To rip short boards, plunge in about halfway down the board (above) and rip to the end. Flip the board and reinsert the blade into the kerf to finish the rip. Raise the board at the end of the cut to let the saw clear the material (right).



I've also learned to trust my eye when ripping boards. The blade on my saw is 1½ in. from the left edge of the saw base and 3½ in. from the right edge. So it is easy to rip 2x or 4x widths just by running the saw base along the edge of the board. The chalkline stays in my pouch.

Almost anyone can come pretty close to guessing at ½ in. So the next step is ripping 2 in. or 4 in. widths by leaving ½ in. of stock showing along the edge of the board (photo right). Next, try stepping in 1 in. for a 2½-in. cut and so on. The trick is to trust your eye.

I rip long lengths by elevating one end of the board and sawing downhill. When ripping short stock, like a 3-ft. section of 2x, I make the cut in two steps so that I can hold one end without putting my hand in danger (photos left, below). This process involves plunge-cutting, so watch out for kickback (sidebar right).



Saw base can help gauge ripping widths. Knowing the distance between the blade and the edge of the saw base lets you rip many widths without a line. Here, the author has estimated ½ in. beside the base for a 2-in. rip.

Kickback: the chief danger

Kickback is bound to happen to you if you use a circular saw. I have a nine-stitch scar in my left leg as a reminder of that fact. Kickback occurs when the sawblade gets pinched in the kerf and the power of the motor forces the saw backward. This can be scary, so here are some guidelines for avoiding kickback.

- Make sure the blade guard works smoothly.
- Use both hands to guide the saw when necessary.
- Keep your body, especially your hands, out of the path of any potential kickback.
- Use a sharp blade with enough set to cut a kerf wider than the blade.
- Set the blade ¼ in. deeper than the material to be cut.
- Cut in a straight line. Don't force or twist the saw as you cut.
- Let the cutoff end of 2x stock drop free.
- Support sheet goods and long stock on both sides of the cut to prevent sagging, which can pinch the blade.
- When kickback occurs, release the trigger and allow the saw to stop.

I find heavier saws, such as worm drives, less prone to kickback. I refuse to use some of the cheap, lightweight homeowner models. Saws with the handle in the back seem easier to control than those with the handle near the top. For a thorough discussion of circular-saw safety, see John Spier's article on circular-saw basics in *FHB* #115, pp. 58-63.—L. H.

MEASURE TWICE, CUT ONCE, OR DON'T MEASURE AT ALL



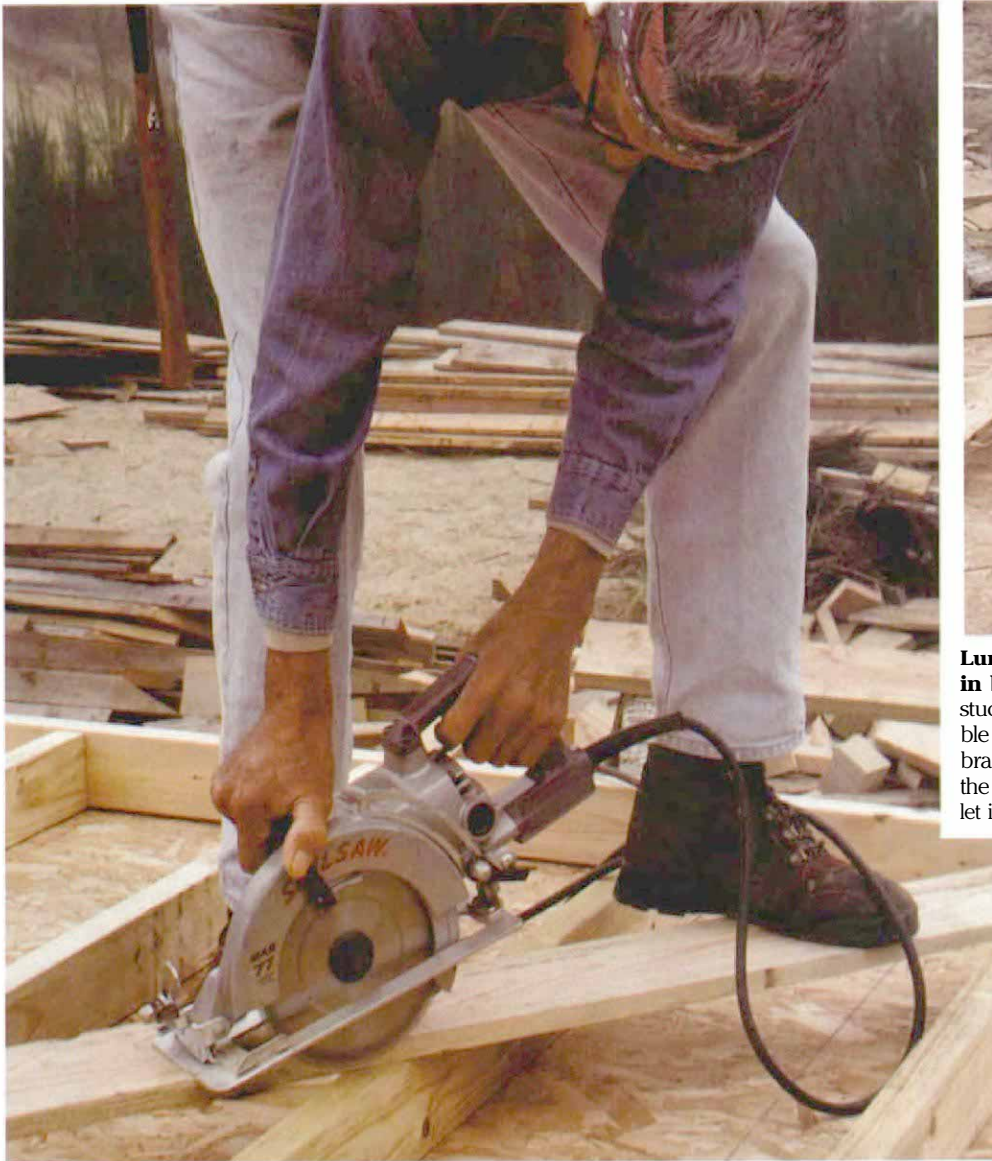
Skip the tape, and cut the lumber in place. Here, the rim joist determines the length of the joist stock. After the saw is aligned with the rim joist, each joist is cut and falls on the sill, ready for installation.

If you're eliminating the step of drawing or snapping lines to save yourself some time, imagine how quickly framing would go if you didn't have to measure. It may be unthinkable to some, but there are many times when I skip the step of measuring.

One such time is cutting floor joists in place (photo left). Here, the cut joist falls neatly down onto the sill plate ready to be installed while the saw rides safely on the waste that rests on the rim joist. Simply keep the saw square to the stock and aim the blade to pass just inside the edge of the rim. Once the floor sheathing is nailed down, I snap lines on the floor locating all the walls. Now I can cut the wall plates just by laying them on top of the lines and cutting them in place. The walls are all cut, assembled and raised—and I don't have to take my measuring tape out of its pouch.

Another occasion when you can cut without measuring first is when you are letting in a wooden brace. In these cases, the 1x brace acts as a template for the cut (photos below). First, lay the brace across the stud wall at 45°. Make the plunge cuts beside the brace into each stud and plate. Then remove the wood between the two cuts by turning the saw over on its side and plunging through. The weight of the saw as it is on its side will make the blade want to bind in its kerf. So hold the saw carefully as you plunge in, and make sure you brace your elbows against your knees to resist any kickback. □

Larry Haun is the author of The Very Efficient Carpenter, a book and video series published by The Taunton Press. He lives in Coos Bay, Oregon. Photos by Roe A. Osborn.



Lumber acts as a template for a let-in brace. With the brace laid across the studs, the author braces the saw for possible kickback and plunges down beside the brace at each stud (left). A plunge from the side of the stud removes the wood to let in the brace (above).