

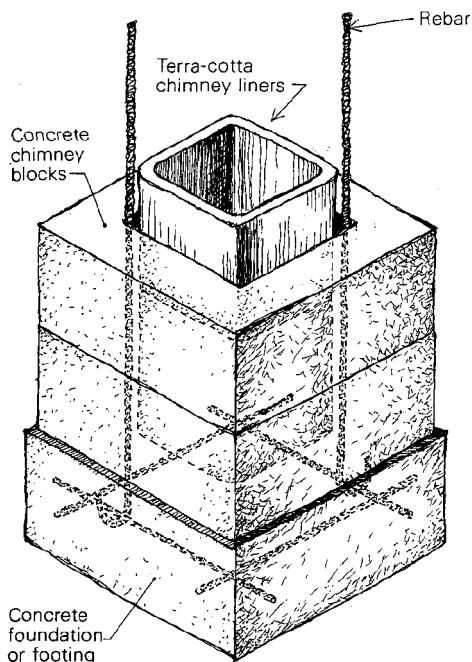
*Tips and Techniques is a forum for readers to exchange the methods, tools and jigs they've devised. We'll pay for any we publish. Send details, sketches and negatives with photographs to Tips and Techniques, Fine Homebuilding, Box 355, Newtown, Conn. 06470.*

### Blocked-up chimney

Prefabricated metal chimneys (whether insulated or not) have become almost universal for use with woodburning appliances. When we installed one, we thought, like most people, that our \$20-a-foot expenditure was a lifetime investment. It hasn't been for us—after two years we have already had to paint the exposed pipe, which was badly corroded (in an admittedly severe coastal environment). We have heard that metal chimneys can be badly damaged by undetected chimney fires. With many builders installing them in hard-to-reach places, it seems that the alternative of terra-cotta chimney liners set in standard 16-in. by 16-in. by 8-in. concrete chimney blocks is a safer and more permanent choice. The cost is comparable or less, the units self-aligning, and the blocks can be tied together with rebar for earthquake resistance.

Flue liners and chimney blocks vary in size from location to location, but the local sources probably make compatible blocks and liners. The blocks around here are as shown in the drawing below. Liners are usually started 4 in. above the bottom so they align each chimney block as it is laid.

Depending on local codes, earthquake and wind conditions, and the height of the chimney, it's usually wise to run ½-in. rebars up from the footings to the top of the chimney on opposite diagonal corners and grout them in place. Usually 4-ft. to 5-ft. rods are as long as is comfortable to work with. Be sure to overlap them 20 diameters (10 in.). It is also advisable to tie the chimney to



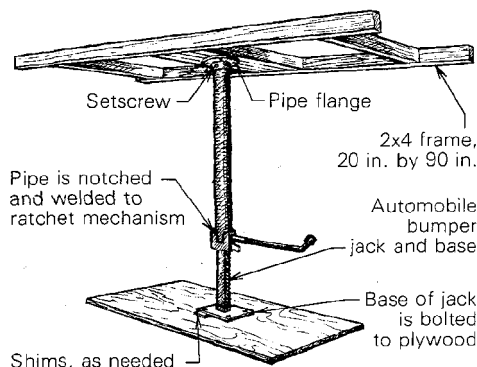
the ceiling and roof structure with steel straps, leaving at least a 2-in. clearance to combustible materials.

—Tom Bender, Nehalem, Ore.

### Drywall lift

My homemade drywall hanger, basically a frame that can be raised up with an automobile jack, takes a lot of the work out of putting drywall on a ceiling. The size can vary—mine has a 24-in. by 48-in. plywood base with a 20-in. by 90-in. top, which easily accommodates 4-ft. by 12-ft. sheets of drywall. The unit can be jacked up to a height of 8½ ft. The riser pipe should be of a large enough diameter to slide over the jack-stand. Notch and weld one end to the ratchet mechanism and screw the other end into a flange at the top. Many automobile jacks aren't made to stand plumb, so some shimming of the base may be necessary.

The completed unit is surprisingly stable and should be able to accept 4-ft. by 16-ft. drywall



sheets with no trouble at all. The jig is portable and easily disassembled into three pieces for storage by unscrewing the top and lifting the jack out of the base.

The lowered height of my unit is about 6 ft., so my wife and I can easily lift a sheet overhead and slide it on top of the carpet-padded lifter. Then it is simply a matter of jacking it up into place. Our old house has very few square corners, and the sheet can be trimmed to fit while up in the air. There is enough play in the jack to allow a back and forth movement of about 4 in., for fine tuning.

—John Bower, Lafayette, Ind.

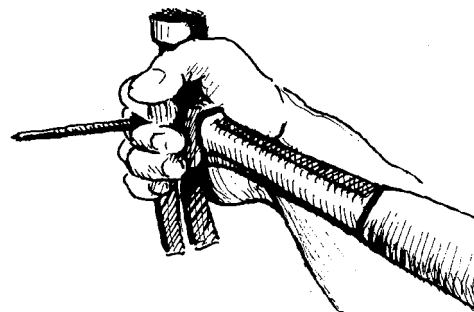
### Patching plaster

In the course of restoring several old homes I've come across a solution for filling cracks in sound plaster in lieu of removing for complete replacement. First, correct any structural problems that may have led to cracks or separations. Second, channel out the cracks with a church key or similar tool to a depth of at least ⅛ in., then fill the cracks with a quick-setting, non-shrinking drywall compound (i.e., Durabond by U.S.G.) or a lime putty. After it dries, tape the cracks with plasterer's fiberglass mesh and all-purpose drywall compound. Then float the entire surface with one or two coats of drywall compound, using a trowel or wide knife. Sand out when dry and prep for finish. Large areas of new plaster can be blended with old in the same manner.

—Alan Berkowitz, Kansas City, Mo.

### Starting a nail

Ever find yourself perched at the end of a scaffold or ladder when you needed to start a nail in a piece of framing or siding? If you're like me, chances are you'll be hanging onto the ladder with one hand, leaving you one short to hold the



nail. Here's a trick that a veteran carpenter showed me for just such circumstances. Hold the head of the nail against the side of your hammer between the index finger and middle finger as shown in the drawing. Take aim at the spot you want to start your nail and hit it hard enough to make the nail stick. With a little practice you'll have an accurate method of one-handing it.

—Jim Miller, St. Louis, Mo.

### Grout gun

We bought a house with a nicely remodeled bathroom. All it lacked to make it look really finished was a tile baseboard.

With the sink, toilet and other fixtures still in place, I was able to spread the mastic to hold the tiles to the bathroom wall with a fair amount of contortion but no real trouble. The only problem I foresaw was with the unwieldy rubber grout trowel—there simply wasn't enough room to maneuver it in some of the tight places.

Casting about for an alternative grouting method led me to the kitchen drawer and the seldom-used cake-decorating device. It looks like a caulking gun, with several interchangeable metal tips and a piston plunger at one end to control the flow of icing, or whatever. The cap unscrews for loading. I filled the thing with grout and went to work.

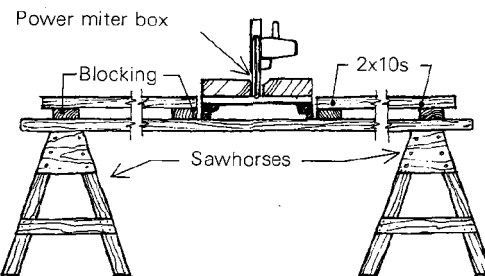
The device worked remarkably well for this application. I was able to reach remote crevices with ease and fill them with a high degree of accuracy. The only problem came when I failed to screw the cap completely on after reloading; it popped off, firing a messy blob onto the floor.

My new tool was easy to clean when I was done with it, and I returned it to its kitchen duties none the worse for wear.

—Chuck Gomez, Ponca City, Okla.

### Power miter-box jig

On a construction site, a convenient setup for a power miter box saw is essential if the tool is to earn its keep. A good setup must combine easy removal of the saw for secure lock-up, long supports on each side of the saw, easy storage, and a waist-high saw table. My jig, shown in the drawing below, allows for lift-off removal of the saw,



which means it can be brought to a construction site before the building is enclosed and taken away each night.

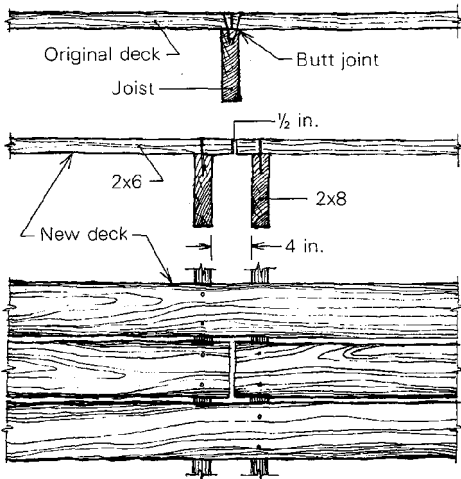
Because accurate cuts are so easy to make with one of these saws, inexperienced workers can get excellent results for such tasks as rough framing. If the jig has sufficiently long side boards, a stop for identical-length studs may be fastened to them. I haven't found it necessary to fasten my saw to this jig, but if you want you could insert dowels through the bolt holes in the box into the 2x10.

My 10-in. saw will not quite cut through 2x6 material unless I use one of these two tricks: On 90° cuts, I first bring the saw down through the wood as far as it can go, leaving the last ½ in. or so uncut. Then I lift up the front edge of the board to complete the cut. If I am making numerous cuts, or cuts at an angle other than 90°, I fasten a suitable length of ½-in. plywood along the side boards and across the saw table in order to jack up the bottom of the lumber up the saw's range. —Phillip Zimmerman, Berkeley, Calif.

## Double decking

When our house was built in 1958, the plan included large decks on two sides. They were built conventionally: 2x8 joists set on 4-ft. centers covered with 2x6 planks set on 6-in. centers. By 1980 I had to replace the decking, primarily because of rot that started wherever two 2x6s butted each other over a joist.

My design involved doubling up the joists at each station, as shown in the drawing. This simple change accomplishes the following: no tight butts in planking, no butts over joists, no



split 2x6s from nailing them at their ends, and the entire structure can now "breathe."

The deck has a width of 15 2x6s. With careful layout using lengths up to 20 ft., I have no more than four joints at any station, minimizing waste. I used pressure-treated southern yellow pine. All the lumber cost about \$1,000, and only \$64 was added by doubling up on the 2x8s.

—James B. French, Portsmouth, R. J.

## Removing window glass

Extracting the glass from discarded windows for re-use is a sensible idea; many times the glass can be cut to fill a gap somewhere around the house. The only real drawback to window recycling is getting the glass out of its old frame in one

piece. Rock-hard putty can sometimes make it nearly impossible. Here's how to do it:

Lay your window down on a flat surface and paint the old putty with lacquer thinner. Then wait five or ten minutes, and go after it with a scraper. The thinner penetrates underneath the putty, allowing it to be lifted away in large chunks. I've never seen putty that wouldn't succumb to this treatment.

—Ron Davis, Novato, Calif.

## Chalkless nailing gauges

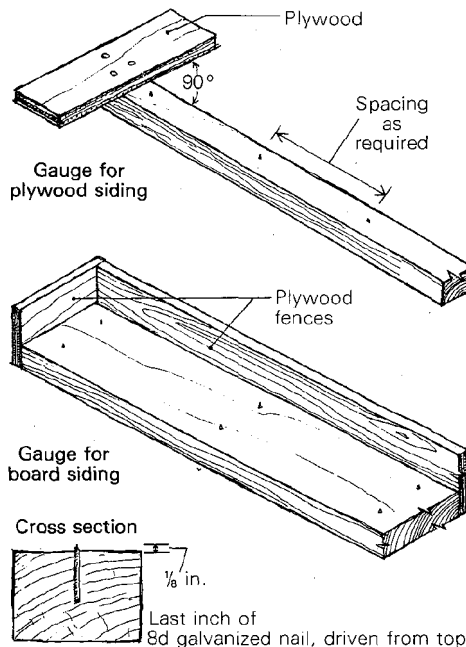
These two site-built gauges for marking plywood and board siding for nailing come in handy where nail lines and spacing have to be uniform, or where visible chalk lines cannot be left on the siding.

The nailing gauge for plywood (drawing, top of next column) is like a very long T-square. The blade of the square has nail points on its centerline at the specified nailing schedule. We found that the last inch of an 8d galvanized nail, driven blunt end first, worked best when the point was left to protrude about ⅛ in.

Allowing for the offset between the nail points and the edge of the gauge, lay out stud centers on the plywood top and bottom, hook the marker over the top edge of the plywood (plywood should be face up) and along the layout marks, and strike the device with a hammer along its length. The perforations that will be left represent the nail holes to be used in attaching the siding.

The gauge for board siding is made from 2x framing lumber (as wide as the boards to be marked) with plywood fences nailed to one edge and to one end. The nail points in the 2x are spaced on stud centers along its length, and as desired across its width.

The siding is marked by positioning a precut

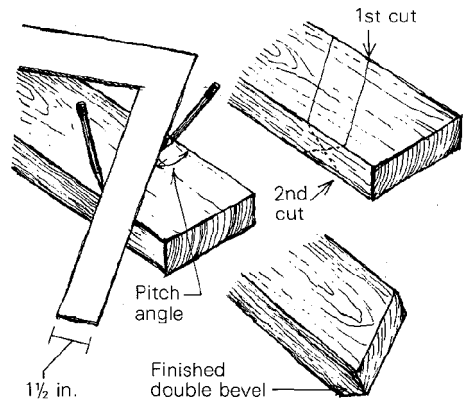


board against both fences face down and applying pressure; once again, the perforations indicate nail locations. Boards can be positioned and marked at various points along the gauge to allow for joints in the siding, or openings such as windows and doors. Nail temporary stops on the gauge to locate these positions. These easily made jigs enable you to produce accurate, evenly spaced nailing lines at production speed.

—Malcolm McDaniel, Berkeley, Calif., and Paul Spring, Oakland, Calif.

## Double-beveled rafters

Carpenters in central California use this technique for cutting double bevels on hip or valley rafters fashioned from conventional 2x framing lumber. Set the tongue of the framing square on one end of the rafter as shown and draw two



parallel pitch lines (they will be 1½ in. apart). Then adjust the foot of the circular saw to cut a 45° bevel, and make the first cut in the direction indicated in the drawing. The second cut starts from the opposite side of the board. The resulting double bevel allows the carpenter to tuck the rafter between two perpendicular common rafters.

—Andrew Kujawa, Santa Cruz, Calif.