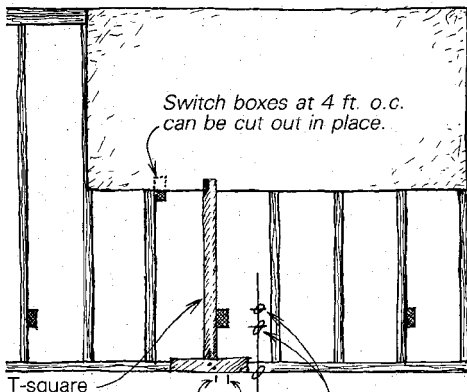


Tips and Techniques is a forum for readers to exchange the methods, tools and jigs they've devised. We'll pay for any we publish. Send details and sketches to Tips, Fine Homebuilding, Box 355, Newtown, Conn. 06470.

Rocking over receptacles

Whenever I have to install drywall I mark the location of electric receptacles with a 4-ft. gypboard T-square. I set the square on the floor, T down as shown in the drawing, and I mark the position of the receptacle sides on the subfloor. I also measure the top and bottom edges of the box and write these numbers down on the floor next to the side marks. I do



Mark outlet coordinates on subfloor.

this throughout the room before any wall-board goes up. The only exceptions are receptacles that will fall at joints between sheets of drywall, which can be cut out in place.

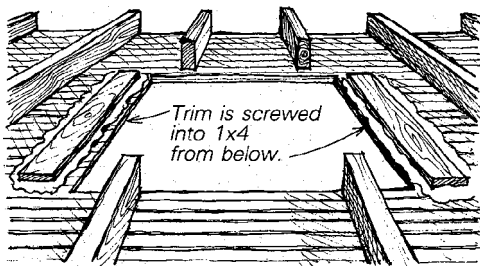
Then I put up my drywall right over the boxes and tack the sheets in place. Next, I transfer the coordinates I wrote on the floor earlier to the tacked-up drywall, cut out the receptacle openings with a utility knife, and nail off the panels completely.

—Ed Kroger, Cincinnati, Ohio

Backing up a cut

Recently I had to make a hole in a lath-and-plaster ceiling for an attic fan. Of course the location of the opening was determined by what looked good from below, rather than by the joist spacing. The existing ceiling was in good shape, and I wanted to keep it that way. Needless to say, cutting the hole involved sawing through a large swath of plaster—well away from the joists and without their solid backing. I'd rather spend a little effort in the beginning of a project to reduce a lot of time-consuming repairs later on in the job, so I tried this improvisation.

First I marked the placement of the fan hole on the ceiling, and then I drilled four small



holes at the corners. This let me clearly see from the attic what was going to need support for the upcoming cut.

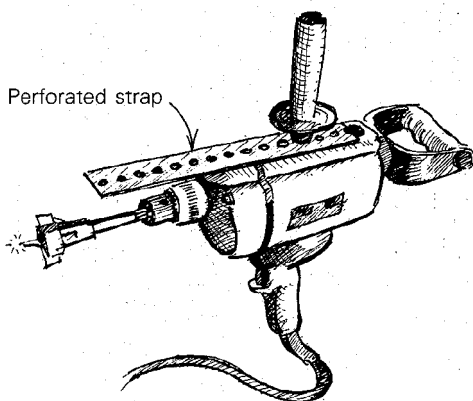
Next I mixed up a batch of molding plaster (plaster of Paris) and poured two lines of the mix along the crosscut path that the sawblade would have to take to get through the lath and plaster. While the plaster was still wet, I laid 1x4s flat on top of the mix, as shown in the sketch (bottom of previous column).

Since the hole would need some picture-molding trim on the face of the plaster below, I went ahead before I cut the hole and installed this trim with screws that went through the plaster into the 1x4s. This captured the plaster in a clamping action between the trim and the 1x4s. Then I cut the plaster, lath and joists with a reciprocating saw.

—James E. Power, Lawrence, Kans.

Drill-bit depth gauge

I'm a timber framer, and often need to drill large-diameter holes of various depths in big beams. I keep several lengths of perforated steel strap (purchased at a local hardware store) to use as depth gauges on my drill. As the drawing shows, the auxiliary handle holds



the strap in place. The numerous, regularly spaced perforations allow a wide range of adjustability. One caution: Put a longer bolt in the auxiliary handle—I stripped the threads in my drill because not enough of the bolt was engaged during operation.

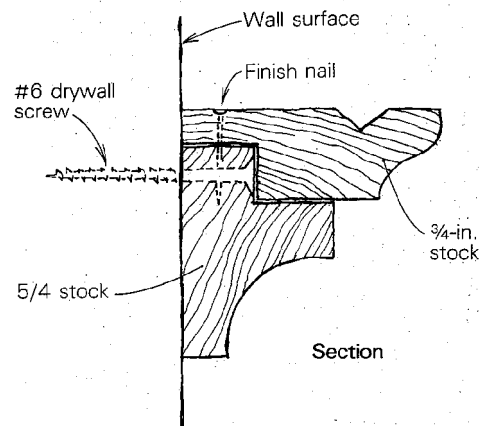
—Jack Winegar, Worth, Ill.

Chalk talk

I had just snapped a chalkline across the face of some very expensive western red cedar paneling when I realized I had measured incorrectly. To lift the chalk out of the very porous veneer without smearing or rubbing it in, I mixed up a glob of stiff flour-and-water dough and just dabbed at the chalk. Followed up with light sanding, this made the goof virtually disappear. —James Bolker, Lyle, Wash.

Self-scribing plate rail

I have clients who collect fancy plates, and they needed more room to display them. Plate rails were the obvious answer, but the only available walls for the rails were already painted, wallpapered and very uneven. I could pre-finish each rail to cut down on the risk of making a mess after installation, but the texture of the wallpaper made it difficult to scribe



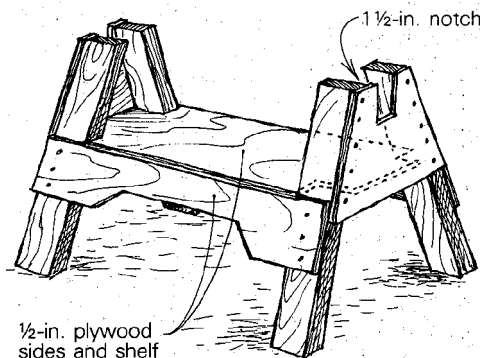
a rail for a good fit. My solution to this problem was to make up a two-piece rail that didn't require scribing.

I attached the coved section to the wall with drywall screws, as shown in the drawing. The screws pulled the molding up to the wall tight enough to eliminate any gaps. Then I nailed the plate-rail molding to the coving from above. The nail holes are hidden from view, and variations in the wall are taken up by the joint between the coving and the plate rail.

—Rod Goettelmann, Vincentown, N.J.

Another sawhorse

I made the sawhorse shown in the drawing out of scraps, and I like it better than any I've used in the past. Its main feature is a 1½-in. notch at each end, which accepts a 2x cross-piece of any width. This allows me to replace this member easily when it gets abused. I can put in the exact height I need to match the



level of a work table or bench. The notches also hold narrow pieces when I'm working on an edge. Two-by stock drops right in, and 1x material can be wedged tightly with shims.

To make the horse, I started with two ¾-in. plywood gussets on the ends screwed and glued to 2x4 legs. Then I let in a ½-in. plywood shelf notched around the legs/The shelf bears on the ½-in. plywood side pieces, which go on last. By making one horse a little longer than its brother, I can tuck the shorter one into it for easier transport.

—Sam Yoder, Cambridge, Mass.

Survey savvy

I build custom homes in the mountains, and laying out a foundation when none of the points are at the same elevation (sometimes

differing up to 20 ft.) is a time-consuming, frustrating job without an expensive transit or an elaborate system of stepped batter boards.

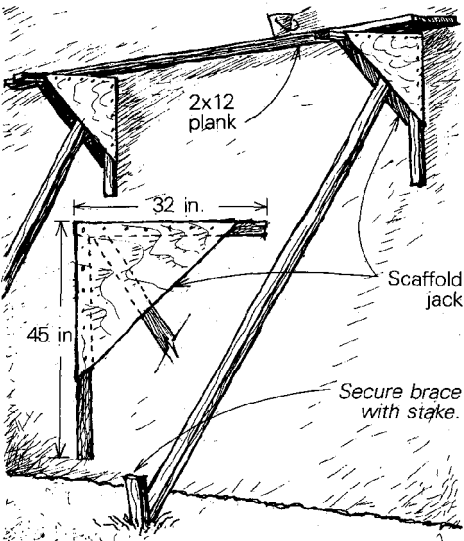
The tip here is to have the surveyor, with his \$20,000 laser transit, set the corners of the house at the same time he locates the initial property lines. The surveyor I use charges only \$20 for this extra service, and it saves me what can amount to an entire day's work.

—Eric Carter, Green Valley Lake, Calif.

Scaffold jacks

Whenever I need a scaffold of modest height, I use the jacks shown in the drawing below. They're easy to construct, don't cost much and they've never failed me.

The jacks are held in place by clear 2x4 braces that angle up from grade. Braces to the



ground should be staked. If you're working off a subfloor, a nailed-down cleat will securely hold a brace.

The jacks are made from 2x4s and ½-in. plywood. The horizontal leg should be about 32 in. long, while the vertical one should be about 45 in. long. For added safety, I glue and nail the gussets to the legs. I use a 2 x 12 plank on top of the jacks, and I've used them in series with lots of jacks and planks to handle long runs.

—Dave Blom, Bellingham, Wash.

Cork patch

Holes in drywall can be patched using corks. Excavate the hole until it's slightly smaller than the cork, and tap in the cork until it's tightly compressed against the drywall. Tapered corks work best. Now trim it back with a knife so that the cork is slightly below the drywall surface, and fill the dimple with drywall compound or Spackle.

—Frank Bonadio, Rochester, N. Y.

Squeaky hinges

Like anyone else, I used to squirt a drop of oil on squeaky door hinges to quiet them. I would put the oil at the top of the pin, hoping it would creep around the hinge barrel until it soothed the squeaky spot. This works for a while, but inevitably the lubricant wears off, and the squeak comes back.

I've discovered a better way to get the oil to stay where it will do some good, by creating a little oil reservoir at the top of each hinge. I use felt donuts that fit over the hinge pins for this purpose. The donuts go above the top knuckle of the hinge, and they get a squirt of sewing-machine oil or WD-40. If you don't have any felt on hand, try a few twists of cotton string instead.

—W. J. Hutchins, West Hartford, Conn.

Built-up beam

The house I recently worked on has a balcony that spans 23 ft. over the living room. The plans called for a 6-in. by 22-in. by 24-ft. beam to carry the balcony, but such a beam proved hard to find—even a laminated version. We considered using a steel I-beam, but the rough framing was nearly complete, and a soggy site suggested a difficult delivery. So builder Charlie Callahan and I worked out this simple site-built plywood box beam as an alternative.

First we set the balcony floor joists on a temporary partition, as shown in the drawing below. Then we spiked together three 2x 12s on top of the joists, forming a balcony curb. Three 2x4s were spiked together under the joists for the bottom chord of the beam. Since our clear span was 23 ft. and we needed 6 in. of bearing at both ends, we cast about for 24-ft. framing lumber. We were fortunate to find some locally, so we didn't need to splice any chords. However, splices are permissible in this kind of beam if they are staggered, and glued as well as nailed.

To connect the top and bottom chords of the beam, we covered both sides with ½-in. plywood, nailed and glued. We used sheets 22½ in. by 8 ft. on the outside face of the beam. On the inside face, we covered the spaces between the joists with pieces that were 22½ in. square. The beam is wrapped with T&G oak as a finish.

This beam is exceptionally strong, and it acts as one with the balcony joists to resist twisting. It was also fast and easy to build in place. We engineered the beam with the help of American Plywood Association's "Plywood Design Specification," Supplement #2. Single copies are available free from APA, 7011 S. 19th St., Tacoma, Wash., 98466.

—Frank Lee, Baltimore, Md.

