

# INSTALLING CABINETS SOLO

BY CARL HAGSTROM

With the right tools

and a good system

for organizing them,

single-handed cabinet

installation can

be a breeze

Next time you're hanging around a bunch of carpenters and the conversation starts to lag, ask whether it's more efficient to hang kitchen wall cabinets with one or two people. I've done it both ways, and have found that I can do the job more

efficiently alone. This may sound surprising. Without a helper, positioning overhead cabinets can be a real balancing act, with the installer struggling to brace a cabinet with one hand while reaching for a clamp with the other. Dropping the cabinet may mean ordering a costly replacement, and putting the job on hold while you wait.

But it doesn't have to be that way. Solo installation can be easy; all you need are a few simple brackets and clamps, the right kind of

fasteners, and a good organization system. If after reading this article you're still not ready to go it alone, these tools and techniques will still make the job go smoother for two people.

# Uppers First

Many cabinet installers put the base cabinets in first, then use them to support the uppers. This sounds good, but I find

it's inefficient. Not only must you reach over the base cabinets to hang the uppers — a position my back loudly complains about — but there's a real danger that you'll damage the base cabinets as you work over them. Installing the uppers first also

leaves plenty of room to get under them to make adjustments, and lets you stand next to the cabinet when working — a position that my back seldom complains about. The only problem is that you might forget about the uppers when installing the lowers. You would be surprised how easy it is to unthinkingly stand up and whack your head.

To temporarily support the upper cabinets, I use a set of easy-to-build wall-support brackets. No high-tech gimmickry here, just

some plain old 1x4 pine that can be screwed or nailed together in a few minutes (see Figure 1,). I make my brackets 52 inches long (a few inches shorter than the common 54-inch upper height) and fasten them to the wall with two screws each. I then place the cabinet on the brackets, shim it to the proper height, and clamp it to the adjacent cabinet. That leaves both hands free to screw the face frames



**Figure 1.** The author supports uppers with a pair of site-made brackets. He positions the top of the brackets a few inches below finish cabinet height, and uses shims and a T-Jak screw jack (shown leaning against the wall) to raise the cabinets to their final position.

together and to fasten the cabinet boxes to the wall.

I make my final height adjustment with a tool called the T-Jak (Patterson Avenue Tool Co., P.O. Box 127, Glenview, IL 60025; 800/662-3557), which I place between my brackets. The T-Jak consists of pipe with a threaded rod inside and a flat base and top. It works like a screw jack: A turnscrew lets you adjust it up and down to get the cabinet to its final position. It's particularly good with a heavy run of cabinets. The manufacturer's literature leads one to



believe that you can screw a row of cabinets together on the floor, and hoist them into place without any other support. When I tried it, however, the whole arrangement was too shaky for my liking, so I use the T-Jak only for fine-tuning.

### The One-Hand Band

There are probably more types of clamps than there are aspiring rock stars. But when you're steadying a cabinet in place and trying to keep its face flush with the adjacent cabinet, the choice of appropriate clamps is limited. The best clamps I've found for fastening cabinets together are Bessey bar clamps (available from American Clamping Corp., P.O. Box 399, Batavia, NY 14021; 800/828-1004). They've got a well-machined, smooth-acting lead screw, as well as protective pads on the pressure points (Figure 2). You need two hands to work them, but this is seldom a problem. With the cabinet supported on my wood brackets, I first lightly clamp it close to its final position. Then I tap on a block of wood to persuade the cabinet into alignment and tighten the clamp to lock the cabinet in place.

When I need to steady a cabinet in place with one hand, and clamp it with the other, I use a pair of Quick-Grip Mini Bar Clamps (Peterson Manufacturing Co., 415 Industrial Row, Beatrice, NE 68310; 402/223-7460). Quick-Grip clamps also have protective pads, but they require only one hand to operate. The down side is that, unlike the Bessey clamps, the Quick-Grips lack the pressure required to lock the cabinet in place. I use the



Figure 2. The author prefers Bessey bar clamps (left) for holding cabinets together. Quick-Grip Mini Bar Clamps (above) are useful where you must clamp one-handed. Because they lack the strength to lock the cabinets in place, however, the author uses them in combination with Bessey clamps.

Quick-Grip to hold the cabinet in its approximate position, then when both hands are freed up, I lock it in place with the Bessey.

# Keeping Tools Nearby

A major time-killer when working solo is hunting for tools and fasteners. Making a profit means keeping wasted time to a minimum. Here are some devices that will help.

Rolling cart. My movable cart is one of my most time-saving devices, since it keeps my tools close at hand during installation (Figure 3). Having tools and fasteners always within reach really helps keep the job rolling. The cart serves as a central location to which all tools are returned, and can be rolled out of the way as additional cabinets are brought in. It's especially handy when you must steady a cabinet with one hand while reaching for a tool with the other. I made my cart from a used overhead projector cart.

Of course, having tools nearby is one thing; keeping them organized is another. For this task, few job-site containers are as valuable as five-gallon joint compound buckets. Here are a few of the ways I use these gems of the drywall trade:

Tool organizer. I used to drag two good-sized toolboxes to each job, then use about 10% of the tools in them. Now I can fit most of the tools I need in my Bucket Boss (Portable Products, 58 E. Plato Blvd., St. Paul, MN 55107; 612/221-0308), and set it on top of my rolling cart where I can reach it whenever I need to. The bucket also serves as a great cradle for storing charged battery drills. I dedicate one of these buckets for cabinet installation, load it up with the tools I need, and pass it off to anyone on the crew heading out for an installation job.

Bucket screw organizer. This is a must for cabinet installers. I use a product called Drop-in-the-Bucket (Journeyman Products, 303 Najoles Rd., Millersville, MD 21108; 800/248-8707), which consists of four round trays that stack inside a bucket, with each tray divided into four compartments. I use it to store screws, finish nails, and drill bits. I keep the trays I need on the lower shelf of my cart so the proper fasteners are always within reach. Be sure to fill it up before you head out to the job.



**Figure 3.** A rolling metal cart keeps supplies nearby during a kitchen installation. A Bucket Boss holds tools in a drywall bucket, while a set of round Drop-in-the-Bucket trays keeps fasteners neatly organized.

Finish gun belt hook. Few things are as frustrating as struggling with a piece of trim on a ladder, getting it in the proper position, then realizing that your finish nailer is out of reach. To keep my finish gun close by, I made a belt hook using the handle from a five-gallon bucket (Figure 4). To protect nearby surfaces, I dipped it in Plasti-Dip (PDI, 3760 Flowerfield Rd., Circle Pines, MN 55014; 612/785-2156), a liquid coating applied to tool handles that dries to a soft, no-scratch coating.

### **Work Surfaces**

I've seen lots of advertisements for fancy miter saw stands. But I've yet to see one that could top my quick-and-dirty homemade miter-saw table. All it requires is a pair of sawhorses, a sheet of 1/2-inch plywood, and about two hours'



**Figure 4.** The handle from a drywall bucket makes a good belt hook for a finish nailer. Dipping the hook in a liquid plastic coating keeps it from scratching cabinet faces and other surfaces.

labor (Figure 5). It provides support for the occasional long piece of trim (important when working solo), and when turned upside down during transport can hold a lot of tools. Letting the top of the table overhang an inch or so on all sides makes it easy to clamp work pieces, jigs, and stop blocks to it. I wish I could take credit for the design, but I discovered it in the shop of a cabinet-maker I know.

Another useful device is a hand truck. Every once in a while, the cabinets end up being unloaded at the wrong end of the house. A hand truck eases the potentially nightmarish task of moving them to the kitchen.

# **Drilling and Driving**

Nearly everyone has a cordless drill. If you're serious about solo cabinet installation, get two of them. Even with a keyless chuck, switching from drill bits to driver bits wastes time. I've seen interchangeable devices that let you slip a driver bit over a drill bit, but these won't help you when you're working one-handed. If you have one of those early cordless drills that lack gumption, take it with you anyway; it's still useful for removing and installing hinges and pulls.

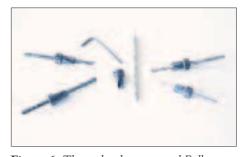
Drilling pilot holes. I drill pilot holes with Fuller countersink bits. They're inexpensive, use standard twist drill bits, can be quickly sharpened with a flat file after you hit that hidden staple, and are easy to adjust for length. Rather than making constant adjustments, I keep three or four countersinks on the job and set them up for individual tasks, like drilling face frames, hanging rails, and



**Figure 5.** A homemade miter saw table is handy for solo trim cuts. The tabletop overhang provides a convenient surface for clamping jigs and stop blocks.

so on (Figure 6). When bouncing between tasks, I just unchuck one bit and rechuck another.

Square-drive screws. I remember when Phillips-head drywall screws became popular on the residential construction scene. But while Phillips-head screws have many advantages over slotted-head screws, square-drive screws are even better. For one thing, the shank on a square-drive screw is thicker than the



**Figure 6.** The author keeps several Fuller countersinks on the job, each set at the depth needed for a specific task. Switching between bits is much faster than repeatedly resetting the pilot depth.

shank on a Phillips drywall screw, so you don't have to worry about snapping it off when drawing face frames tightly together. And the square recess holds the screw firmly on the end of the driver bit. This makes a big difference when you're steadying a cabinet with one hand and positioning the drill to drive the first screw with the other.

The square drive also reduces cam-out, which is what happens when a driver bit slips out of the recess and grinds away at the screw head. With Phillips-head screws, the only way to overcome camout is to hold your breath and apply as much in-line force on the drill as possible. If everything goes right, you'll drive the screw home; if things go wrong, the drill can slip off the screw and punch a nasty hole in the cabinet. Brass square drives can be lifesavers when working with soft brass screws, which are usually required on brass hinges and are notorious for cam-out. Combination screws are also available; these have the thicker shank of a square-drive screw, but allow you to use either a square-drive or Phillips-head bit.

Carl Hagstrom runs Hagstrom Contracting in Montrose, Pa., and is a contributing editor to the Journal of Light Construction.