



Installing Stock Cabinets

Master these pro techniques for hanging cabinets to achieve a flawless new kitchen

BY RICK GEDNEY

My father started working in the kitchen industry in the early 1950s. I spent many of my high-school days making cabinet deliveries and installing appliances. In 1979, he and I opened a small business together, Kitchens by Gedney. In one way or another, I've spent nearly 35 years designing, installing, and managing the installation of high-end kitchens.

A lot has changed in the kitchen industry since those early days. (See "A Buyer's Guide to Kitchen Cabinets," *FHB* #191 or online at FineHomebuilding.com.) What hasn't changed is the demand for flawlessly installed cabinetry, a standard we've been committed to for nearly two generations.

Over the years, I—along with our skilled installation crews—have developed an approach to installing cabinets that ensures accuracy and quality. Here, I'll explain how to organize the job so that it keeps moving forward, how to prep the site properly, how to achieve an accurate layout, and how to install correctly the three most common types of kitchen cabinets: base cabinets, wall cabinets, and tall units that serve as pantries or that often house refrigerators or ovens.

Have a plan to stay organized

Whether in a remodel or a new home, the installation of kitchen cabinets involves high

STEP 1 LAY OUT THE BASE CABINETS

With plans in hand, draw the cabinetry layout on the wall. Layout lines not only serve as a template for the cabinet installation, but they also let you verify the plan. Be sure that vent, plumbing, and electrical locations are accurate. Mark stud locations during the layout phase to anticipate the need for extra blocking or additional cabinet support.



1 Find the high point in the floor. Measure the distance between the floor and a laser-level line about 4 ft. above the floor to find the high and low points in the floor. The high point dictates the height of the base cabinets; use shims to compensate for the low points in the floor.



2 Mark the height of the bases. Measure the height of the cabinets, usually 34½ in., from the high point in the floor, and mark the wall. Measure the distance between the cabinet height and the laser line. Mark off the cabinet height around the room by measuring down off the laser-level line. This takes the uneven floor out of the equation.



3 Draw a level line across the wall. Connect the marks on the wall with a level to establish a line to hold the base cabinets to during installation. This technique is more accurate than snapping chalklines or using a laser-level line.



4 Mark cabinet locations. Draw plumb lines on the wall to establish cabinet positions, taking care to be sure that cabinets such as the sink base align perfectly with the windows above.

levels of stress and activity. In a remodel, you're occupying the space that makes the home habitable. Getting the job done as quickly as possible is almost always the goal. In new construction, you're working amid a host of other subcontractors, all vying for space. In either environment, the room for error is significant. We keep our jobs accurate and in order with communication, a plan review, and a systems approach to installation.

Communication is critical. Create an installation calendar so that everyone involved in the project knows what's happening in the kitchen and when. Be sure to have established contacts with the cabinet supplier so that if a question or error arises, you can make a quick call to the person who can remedy the problem.

Before a single cabinet is uncrated, review the plan with your designer or cabinet supplier to be sure all cabinets are on site. Be sure you understand the supplier's terminology, because most cabinetmakers have their own codes and product numbers. Then be sure that all the labels actually match the cabinets in each package. Nobody wants to demolish a kitchen only to realize that the new corner base cabinet is the wrong size and that the correct unit is on back order for four weeks.

Establish a repetitive system, from site prep through installation, to be sure the job progresses as it should. Having a systematic approach makes cabinet installation more accurate, and it also saves time. With this system and two people on the job, expect to install the cabinetry for a typical kitchen in about three days. Another three days will likely be spent applying moldings, installing appliances, and completing ventilation work.

Protect finished surfaces

Install the cabinets when the kitchen is in a nearly finished state. The kitchen flooring should be installed before any cabinets are put in place. Wood floors should have one or two coats of finish on them. You can see the floor beneath many of today's professional-style appliances and furniturelike cabinets, so installing the floor first is smart. Also, the cabinets are finished, so it's foolish to try to maneuver a floor sander around the new units. The floor on this project is prefinished maple, so floor protection was critical. We've found success with products such as RamBoard and Coverguard. Be sure all the seams are taped. When connecting sheets of RamBoard, use RamBoard tape only. The

STEP 2 INSTALL THE BASE CABINETS

The first cabinet installed determines the placement of all the others. In most kitchens, it's important to start with a corner cabinet. If you save the corner cabinet for last and your layout is even the slightest bit off, it won't fit, and you'll be stuck waiting for a new, custom-built unit. Working away from a corner offers more flexibility. Instead of a cabinet, this kitchen has a sitting bench in the corner, so it offered some wiggle room. This project started with the next-most-critical cabinets in terms of layout: the sink base and the cabinet beneath the range hood that holds the cooktop.



1 Modify for services. Measure the distance from the cabinet layout lines on the wall to the services coming through the wall or floor. Transfer the vertical and horizontal measurements to the back or bottom of the cabinet, and cut a hole with a hole saw that's slightly larger than the size of the service line being accommodated.



2 Plumb and level the cabinet. With the cabinet in position, use a 4-ft. level to check if it's plumb. Place another level across the top of the cabinet to determine if it's level. Make adjustments with cedar shims. An applied toe kick scribed to the floor will hide any shims and gaps.



3 Three places to fasten. The first cabinet is screwed to the wall, but all other cabinets are flushed to their adjacent units, screwed together with 1¼-in. #8 Twin Fast screws, and then screwed to the wall. Exposed fasteners are covered with Fastcaps. Screw cabinets to the wall through pilot holes in the hanging rail with 2½-in. #8 Twin Fast screws or a product with similar shear strength, but never with drywall screws. Shims prevent the cabinet from being pulled out of alignment. On end cabinets where a toe kick is present, toenail a screw into the bottom plate.



STEP 3 SCRIBE AND SECURE TALL CABINETS

Pantry and tall cabinets that typically house ovens or refrigerators demand extra work to install correctly. Their long side panels will expose every bump and dip in the wall if not scribed and cut to fit perfectly. Order these cabinets with end panels that are 3 in. to 4 in. wider than necessary to accommodate scribing. Having excess material offers a solid base for the saw to rest against when cutting to the scribe line, and it ensures plenty of play when fitting a cabinet against the most out-of-whack walls. These units typically stand proud of the other base cabinets so that countertops can die into their side panels.

1 Strengthen the attachment to the wall. With the layout established on the wall, span studs with plywood reinforcement strips at the top of the unit. Screwing the unit to studs will be enough, but sinking a few more screws into the plywood offers insurance, especially when the cabinet is intended to house an oven that may have heavy doors.



2 Calculate how much to trim. With the cabinet in place, use a level to represent the overhang of the counter on the adjacent base cabinet. The distance between the front edge of the level and the front edge of the cabinet determines how much material can be taken off the back of the cabinet's panels.



3 Scribe. With a compass and a sharp pencil, draw a continuous scribe line on each side panel of the cabinet.



4 Cut the waste. Bulk material can be removed with a track-guided circular saw or a jigsaw. Follow the scribe line closely, but leave the pencil line.



5 Bevel the edge. With a belt sander, remove the rest of the waste while giving the edge a bevel. Beveling the back of the panel ensures that the cabinet's outside edges will fit tight to the wall.

adhesive is strong and nearly impossible to remove from tile, wood, and other finished materials. Use painter's tape to secure the edges of each sheet to the floor.

Ideally, the ceiling in the kitchen should be primed and painted. The walls should be primed and have one finish coat, if possible. You'll have to do some touching up, but at least you won't risk paint splatter on the new cabinets and appliances while cutting in or painting large wall and ceiling areas.

Working in a fairly finished environment demands substantial care and dust control, especially during a remodel. Lose the tool belt to prevent scratches, and ensure all saws and sanders are connected to vacuums. Zip-Walls or other dust barriers should cordon off the kitchen. We place a dust collector outside the house and install a 12-in. flex duct in an open window. This creates negative pressure in the room and collects airborne dust. The unit is positioned far from the house, so everyone can talk or listen to music.

Work smart

In the old days, it was common practice to start a kitchen installation with the wall cabinets so that you didn't have to lean over the bases. In today's complex kitchens, we start with the base cabinets for several reasons.

Many kitchen designs call for wall cabinets to sit atop the counter. Establishing the height of the base cabinets is critical to getting boxes to fit properly. The height of most wall cabinets can be adjusted easily, while the height of bases and tall cabinets can't.

The base corner unit, if there is one, helps to establish the layout and determines how the upper and lower cabinets align. On this project, we started with the sink cabinet as our control. For the sink to line up perfectly with the middle stile of the window, the cabinet had to be dead center.

To expedite the project, countertop installers can come in as soon as the bases are put into place to make their templates. They can be working on the countertops while you're busy finishing the rest of the kitchen.

Finally, there isn't always an extra set of hands to help install the cabinets. Being able to prop a wall cabinet on a base unit to maneuver it into position is an easy, safe, and accurate way to work. □

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STEP 4 HANG WALL CABINETS SAFELY

Some kitchen installers gang wall cabinets together on the ground and raise them in place with a lift or lots of helping hands. Installing wall cabinets one by one is also fine and is much more manageable when working alone or with one helper.

1 Use a box as a prop. With the cabinet's layout on the wall, position the cabinet atop a sturdy plywood box and plywood strips. Shim the box until it's level before setting a screw through the top and bottom hanging rails and into studs.



2 Check for plumb. Before completely securing the cabinet to the wall, make sure it's plumb so that the doors will work properly.