



FACTORY DIRECT CABINETS

Frameless Kitchen Cabinet Installation Guidelines



Easy to follow step-by-step kitchen cabinet installation guidelines

TOOL AND MATERIAL LIST

- Hammer or nail gun
- Screwdriver – Standard, Phillips
- 2' Level & 6' Level
- Tape measure
- Pencil
- Drill
- Pry bar
- 6" C-clamps
- Stud finder
- 3/16" Drill bit
- #8 x 2 1/2" wood screws
- Wood shims
- Long straight edge
- Miter saw
- Table Saw
- Small finishing nails
- Wax

Important—Please Read Before Going Further!

Installation of Kitchen Cabinets is NOT a Do-It-Yourself project for those without extensive experience in carpentry finishing. If you are not a professional carpenter, please seek the help from a trained professional. This guide is meant to be used as a supplement to carpenters who are trained and familiar with cabinetry installation techniques, not a stand-alone guide.

PRE-INSTALLATION CHECKLIST

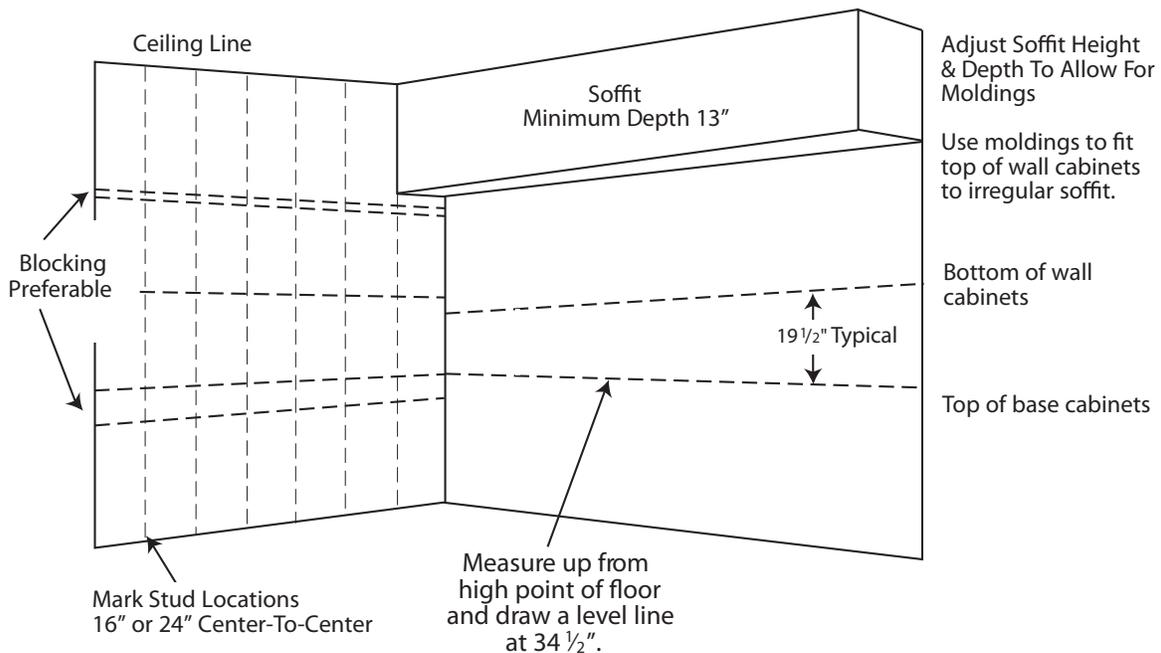
Understand how a frameless cabinet system is designed to go together. The goal is an aligned, plumb, level and square set of cabinets. Walk through the entire installation before proceeding. Every dimension must be reviewed to ensure that the set of cabinets going in will fit properly. Think ahead to the trades, like floor covering installation, that will follow cabinet installation.

All floor and wall sections need to be checked first for level and plumb, and second for any bowing or cupping. In order to make the installation plumb, level and square you may have to shim or scribe the cabinets.

- Carefully check all cabinetry before the start of installation. Confirm sizes, colors, finish and condition prior to removal of existing cabinetry.
- Remove and label all doors, drawers and shelving for their original location. Store them away from the work area and extremes in temperature and humidity. The cabinet will be lighter during installation and decorative surfaces will be less likely to be damaged.
- Assure the layout works, especially the vertical alignment of base and wall cabinets, and that appliances will fit in the designed openings.
- Turn off all water, gas and electricity to the work area.
- Remove all appliances from the kitchen.
- Remove old cabinets.

- Remove baseboard moldings and other objects on the wall where cabinets are to be installed. If replacing the floor, remove old floor covering.
- Using a straight edge and level, find the high spot in the floor where base cabinets are to be installed. From the high spot, draw a level line 34 1/2" on each wall where cabinets will be fastened. The top of the base cabinets will be mounted flush with this line.
- From the 34 1/2" high level mark on the wall, measure up 19 1/2" and draw a level line for the bottom cabinets.
- Locate and mark studs with a stud finder. Draw plumb lines at each stud location.
- Determine size and location of fillers to assure proper alignment and hardware clearance. A filler or starter strip is recommended next to the wall. This will allow doors and drawers adequate clearance to open fully.
- Measure twice; cut once.
- For tall and wall cabinets, check for vertical clearance for ceiling, soffit and light fixtures.
- Check for overhang of moldings. Determine how far crown molding or counter tops will overhang cabinetry.
- Plumbing, electrical and heating systems, if affected, should be dealt with according to state and local building and safety codes.

Measure And Lay Out Entire Installation Before Beginning



INSTALLATION TIPS

SHIMMING

Good-quality wood shingles make the best shims. Screw through the cabinet, through the shim and into the wall or floor to insure a shim will be permanent. Should a shim slip or be knocked loose the cabinet will eventually sag or shift. Trim any exposed shim with a sharp utility knife blade or fine-toothed hand saw.

CUTTING

Be prepared to make professional cuts for fitting of cabinet finishing materials, like fillers. Cuts can be made on a table saw or miter saw with sharp finishing blades. Cut edges which will be visible in the room should be precisely scribed and trimmed with a sharp-bladed saw. Raw edges should be colored with touch-up kit, to not show white wood at final assembly.

BLIND CORNER CABINETS

Make sure a blind corner cabinet is pulled out from the corner the distance called for in your kitchen plan.

INSTALLING TO AN EXISTING CEILING OR SOFFIT

If wall cabinets are to be installed against an existing ceiling or soffit, use a straight edge and level to locate its low spot. Mark a level line at this low point. Tops of wall cabinets will be installed along this line. Be sure that this mark will allow opened and closed cabinet doors to clear lighting fixtures, and overhangs have equal reveals.

MOLDINGS

Before installing detail trim, like moldings, inspect the materials for any inconsistencies. Use a professional-quality mitre saw and make several trial cuts to test the fit of the joint. To nail the trim in place, use a professional air gun or pre-drill to avoid splitting.

Cuts in wood molding should be "colored" with a touch-up pen or stain in the same finish color as the cabinetry to minimize the effect of shrinkage should it occur.

MOLDINGS (cont.)

If lighting is to be installed behind moldings, run a bead of caulking at the seam between the molding and the cabinetry. This will prevent light from being seen through the joints.

DOORS AND DRAWERS

Before installing handles, knobs, pulls or other decorative hardware replace doors and drawers to their proper positions in your new cabinets. Adjust doors to alignment using the 6-way-adjustable hinges. Adjust drawer heads to align with adjacent doors

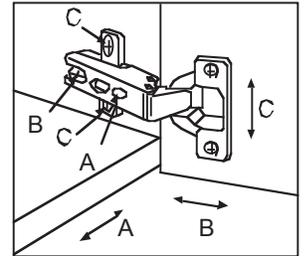
6-WAY ADJUSTABLE DOOR HINGE

Remove the cover cap if present.

Side Adjustments: Turn screw "A" in or out to adjust the door horizontally from left to right. Range: 4mm (5/32")

Depth Adjustments: Loosen screw "B" one turn, adjust door in or out to desired position, tighten screw. Range 4mm (5/32")

Height Adjustments: Loosen both screws "C" on mounting plate, adjust door up or down to desired position, tighten screws. Range 6mm (5/16")



FINISHING TOUCHES

Use a good-quality putty or caulking to fill nail holes and conceal joints. Using the proper touch-up materials and techniques will ensure a professional installation. Remember that quality of workmanship is judged by its smallest details.

Cabinets should be installed without shelves, doors, or drawers left in them- you should have an empty box. Be careful to set these parts on something soft as not to damage them, and returned them to their original cabinet. Remove all doors and drawers before installation. Number them for easy replacement by writing on a roll of blue painters tape and then sticking to cabinets. Write on the roll first before putting on the part to prevent imprinting your writing onto the parts.

Use connecting bolts or 1 1/4" Coarse Thread screws and a cup washer to connect the cabinets and sidewalls together.

You may find it to be an advantage to screw several boxes together at a time before attaching to the walls.

It is very common join to join the right and left cabinet to a corner cabinet and then install.

Line up the fronts- flush faces- then using hand squeeze clamps (usually two at a time) clamp in place.

After installing screws at the face, move the clamps to the next area to be screwed together. You may find it beneficial to have a long bar clamp to join certain area's. Trying to screw cabinets together without clamping is very frustrating as they tend to push apart during the screwing and you will find it hard to get the sides tight to each other. **NEVER USE NAILS** to install cabinets to walls- over time they will pull out.

Attach side cabinets to corner base cabinets and slide into place. Use shims as necessary next to walls- do not pull cabinets out of square by forcing the cabinets to the walls without shims!

INSTALLATION STEPS

**#1 mistake is forgetting to use shims!
You can pull the cabinets out of square!**

WALL CABINETS

Install wall cabinets before installing base cabinets.

It may be desirable to build a T-Brace from scrap or have a support mechanism to assist in hanging the wall units.

Cabinets must be installed with a minimum of two screws (one top, one bottom) through the hanging rails - into each stud or every 16" on center.

Step 1: Measure from the corner of the room to the first stud mark and transfer this measurement to the inside of the cabinet to be installed in the corner.

Step 2: Mark the next studs and repeat as necessary.

Step 3: Before raising cabinets in place, drill holes through the hanging rail from the inside of the cabinet at each stud, top and bottom. Drill from inside the cabinet to prevent visible chipout from the drill bit.

Step 4: Raise the cabinet in place aligning bottom of cabinet with the line previously drawn on the wall. Place any necessary shims. Drill pilot holes (through shims) into the wall through the holes made on the inside of the cabinet. Using cabinet installation screws, fasten the cabinet to the wall. Do not thoroughly tighten the cabinet to the wall until the adjacent cabinet is fastened and properly shimmed. Trim any exposed shims.

Step 5: When two cabinets are mounted to the wall, use clamps to hold the end panels tightly together aligning tops, bottoms and/or face edges. Connect the two cabinets with either a connecting bolt or a joining screw. To use a connecting bolt, drill a pilot hole from inside first cabinet through both cabinet walls into the next cabinet. Insert and tighten the bolt. To use a joining screw, drill a pilot hole from inside the first cabinet through one cabinet wall and partially into the second wall. Do not penetrate through the second wall into the next cabinet. Insert joining screw.

Step 6: Continue installing wall cabinets next to one another in a similar fashion. After all cabinets are loosely secured to the wall and connected together, tighten the entire run to the wall. Check for level, plumb and square as you go.

BASE CABINETS

Step 1: Set the sink cabinet first if it is to be centered under a window. If not, begin with the base corner cabinet.

Step 2: Set next cabinet in place and use a clamp to align and join together. Drill pilot holes and join using connecting bolts or joining screws. Cabinets may be joined together before installing to the wall. Do not join more cabinets together than can be safely lifted.

Step 3: After all base cabinets have been joined together, use shims to bring the cabinets level with the 34 1/2" mark on the wall.

Step 4: Predrill through the inside of the cabinet, through shims, into wall studs. Install each base cabinet with a minimum of two installation screws through the back of the cabinets into the wall studs. More screws may be used for larger cabinets.

Step 5: Before all base cabinets are securely fastened to the wall, check each cabinet for proper alignment. Tighten the entire run of base cabinets to the wall. Adjust doors and drawer.

Step 6: Predrill a hole through the top stretchers (horizontal members) of the base cabinets to attach countertop (watch drill depth and screw length). If setting a solid surface top, use manufacturer's recommended setting material.

MOLDING TIPS

Always plan all your molding cuts first- know how much stock you have. Check your wood grains and match pieces for longer runs so they look good together. Because each piece of molding can have a slighter tone color due to base wood color- pair pieces on color too.

5 1/2" Architectural moldings need to be cut with a 12" compound mitre saw. Standard splay angles don't work when trying to cut the molding laying flat.

Always cut into the face of the molding with the saw.

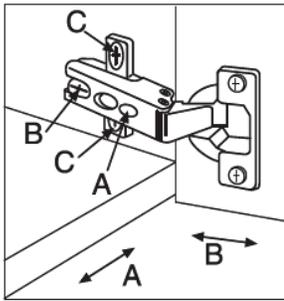
On dark finishes- sometimes you get a better looking joint when using the touch up pen on the back-sides of the mitre cuts at the face before joining.

FINAL FINISHING TIPS

Drawer adjustment – be sure all drawer heads are adjusted ***before installing Deco hardware!***
Loosen the two screws at the back of the drawer heads and re-align if necessary.
Deco hardware should go *through the drawer box.*

Cabinet Construction : Precision Alignment

HINGE



Three-way independent adjustment

Cover Cap

Remove cover cap if present.

Side Adjustments

Turn screw **A** in or out to adjust the door horizontally from left to right. Range: 4mm (5/32")

Depth Adjustments

Loosen screw **B** on turn, adjust door in or out to desired position, tighten screw. Range: 4 mm (5/32")

Height Adjustments

Loosen both screws **C** on mounting plate, adjust door up or down to desired position, tighten screws. Range 6 mm (15/16")

WOOD DOVETAIL DRAWER with SOFT CLOSE

