

Installation Guide

Read this entire guide before starting installation. Failure to do so could result in serious injury or death

**PLEASE READ THE ENCLOSED THOROUGHLY.
DO NOT DISCARD. IMPORTANT INFORMATION INSIDE!**

Before You Start

Check your order

Make sure the product label on each carton matches the product numbers on your order and project plan. Contact your dealer if there are any damaged, missing, or incorrect cabinets. Do not install if damaged or parts are missing.

Read this Entire Guide

Before starting the installation, read this entire guide to familiarize yourself with the precautions for installing cabinetry. **⚠ WARNING!** If the installation is performed in an unsafe or incorrect manner, a cabinet could fall off the wall and result in serious injury or death. Any installation of any product not performed according to the methods presented in this guide could void the warranty of the product.

Tools Required

Safety glasses, drill, stud finder, measuring tape, level, pencil, phillips screwdriver, and a protractor compass.

Please note: Cabinets are not intended to be free-standing units, they must be attached to a wall stud or anchored to the floor to achieve sufficient stability. Failure to comply with these guidelines will void all warranties and claims.

Safety Practices

Utilities Safety: ⚠ WARNING!

Serious injury or even death may occur if you handle utility connections (gas, water, electric). Have qualified utilities professionals perform any utility connections or disconnections. Make sure you have shut off the power to electrical lines and outlets you may come into contact with while remodeling, or which may have to be moved. Do this by shutting off the circuit breaker/fuse at the electrical panel. Use a circuit tester to make sure the power is off. Check both receptacles in a duplex outlet because they could each be on a different circuit. Know where utility lines are located to avoid drilling into them.

Installation Safety

Because of the size and weight of cabinetry, DO NOT install by yourself. Installation should be done by at least two able-bodied people working together. Wear protective eyewear, gloves and boots. Always maintain a clean, organized work area.

California Consumer Proposition 65 warning

⚠ WARNING! Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. For more information go to www.P65Warnings.ca.gov/wood.

Things to Consider

Know Your Project

Take time to review your installation project; what cabinets you have and how they will fit together. This will determine where you should start your installation. At this time, consider the space requirements needed for your appliances.

Read through these instructions, noting any special requirements your cabinets may need for installation. Some of these special requirements may be found in the **Installation How-To** section of these instructions.

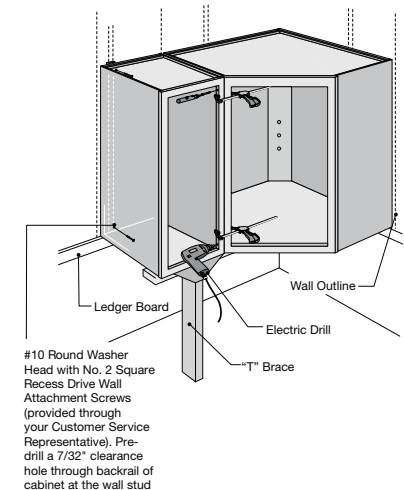
Cabinet Support Braces

Well-made braces make installation easier and more accurate.

Install a straight 1 x 2 ledger board on the Wall Cabinet Bottom Level Line, fastened into wall studs with 2-1/2" screws. This is the most stable support method, though it requires minor repairs to patch screw holes after the ledger board is removed.

Make a "T" brace from 2 x 4's. Pad the top with carpeting. Reinforce where the 2 x 4's join with a plywood gusset.

If the base cabinets are not yet installed, make the "T" brace long enough to reach the lowest spot on the floor (about 55" high).



Dry Fit

Perform the dry fit of cabinets after you have determined the high point of the floor (see **Installation Requirements**). With the cabinets in place, you can see how important the Base Cabinet Top Level Line is. When installed, all base cabinet tops should match this line exactly.

IMPORTANT: If any cabinet is above the Base Cabinet Top Level Line, then the high point is not correct. Don't install until you've found the high point and redrawn the Base Cabinet Top Level Line and Wall Cabinet Bottom Level Line. If any cabinets are 3/4" or more below the Base Cabinet Top Level Line, build up that area with 1 x 2 furring strips.

Dry fitting your base cabinets helps you “visualize” the layout. Check against the project layout to confirm you have all cabinets needed.

If your layout involves a Base Cabinet in the corner, this is a good time to measure for the length of Countertop Braces needed; these are described later.

This is also a good time to check to see how cabinets line up for square, in corner locations. Also check for drawer front clearances and any interference that might occur with drawer pull hardware, doorknobs, or appliances (reinstall drawers if necessary).

See illustration page 5.

Start in the Corner or at an End

If your project layout does not have any corner cabinets, then start your installation at an obstructed end that begins at a wall or appliance. Otherwise, start at the base or wall corner cabinet.

Installing Base Cabinets First

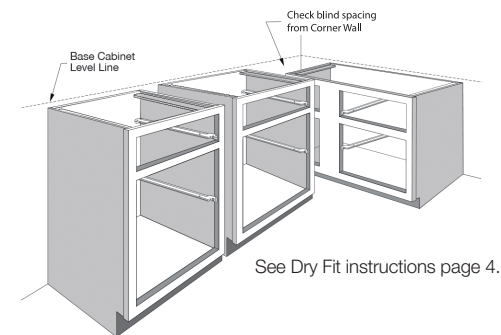
Whether you start at a corner or an end, the general approach with base cabinet installation is to:

1. Position the cabinet
2. Shim and level
3. Attach all the face frames together
4. Predrill the back rail at the wall stud locations
5. Attach all the cabinets to the wall (or floor for peninsulas)

If your project layout has wall cabinets that are to be placed directly on the countertop, you should install the base cabinets first. Once base cabinets are installed, you can place a sheet of plywood or particleboard on the base cabinets and use them as a work bench. You can lift wall cabinets onto the work surface and use a precise spacer to lift the wall cabinets to the proper height above the countertop.

Installing Base Cabinets to the Floor

Base cabinets that are not secured to a wall stud (such as a peninsula application) must be secured to the floor with wood blocks behind the toekick and on each side of the cabinet. See **Fastening Peninsula Cabinets to the Floor**, page 38.



Installing Wall Cabinets First

Whether you start at a corner or an end, the general approach with wall cabinet installation is to:

1. Mark on the back of the cabinet where the cabinet will line up with the wall studs (see further instructions page 13).
2. Pre-drill the hang rails at the stud locations
3. Position the cabinet with a support
4. Loosely attach the cabinet to the wall (or ceiling for peninsulas)
5. Shim and level
6. Attach the face frames together
7. Tighten the cabinet to the wall (or ceiling for peninsulas)

By installing the wall cabinets first, you won't have to reach over the base cabinets to install the wall cabinets. This will lessen the likelihood of damage to base cabinets during the installation process.

Tall Cabinets

Double check the height of your tall cabinets against their intended location on your project layout. Be sure to consider soffits, and how the tall cabinets will line up with surrounding cabinets.

Installation Requirements

Important Note for Installer

As an installer, you have assumed the responsibilities of the contractor for your cabinet installation. This includes final adjustment of door hinges and drawer slides, as well as ensuring that the initial installation is done properly. Improper installation - primarily cabinets out of level, cabinets not properly shimmed, or cabinets not adequately supported - is the cause of most problems with door and drawer alignment and operation.

⚠ WARNING! Failure to follow these guidelines could result in a cabinet falling off the wall, possibly resulting in serious injury, and will void the product warranty.

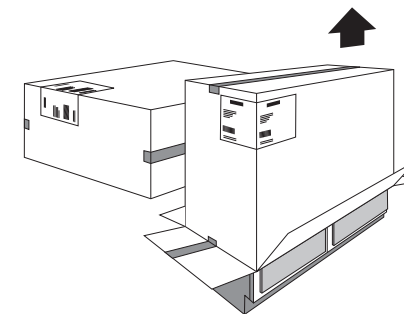
Carton Removal

Open only the cartons you will need as you progress through the installation. Leave other cabinets cartoned, out of your way and safe from damage.

The product label is located on the front, top, left-hand corner on each carton. This will assist in determining the top and front of each cabinet.

Lay cartons on the back, one at a time. Cut the bottom tape only; do not cut sides. Fold back bottom flaps or cut them off. Stand the cabinet upright and lift carton off from the top.

⚠ WARNING! DO NOT attempt to lift a cabinet out of the carton; this may result in damage to the cabinet or injury to yourself.

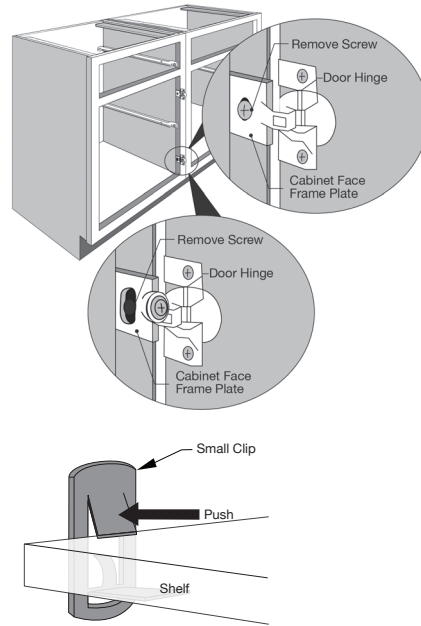


Door, Drawer, & Shelf Removal

Remove doors, drawers, and roll-out trays so they aren't in the way during installation. Removal also makes the cabinets lighter to move. Label each piece with masking tape so you know where to reinstall each piece. Store them face to face to avoid damage.

Remove the screws on the door hinges where they attach to the face frame. Pull drawers and roll-out trays out to the stop, lift the front, then pull straight out.

On drawers with full extension, concealed, undermount guides, pull out to the stop then squeeze both locking levers (one under each front corner) and lift drawer off. For shelves, push in the top of the shelf clip so you can lift the shelf up and out.



Screws Required

We make available the fasteners needed for wood stud construction. All other types of installation should be done by a professional.

The instructions in this booklet apply only to 16" on center wood stud construction. All other types of installation should be done by a professional.

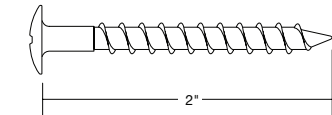
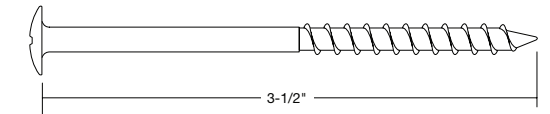
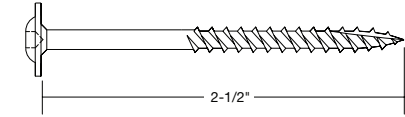
INSTALLER NOTE: Install cabinets using proper screws. See *Screws Required*, next page, for specifics on use.

Screws Required (continued)

#10 x 2-1/2" Round Washer Head with No. 2 Square Recess Drive (or Truss Head with Phillips Drive) screw for frame-to-frame attachment and hang-rail-to-wall attachment. Screws are available through your Customer Service Representative.

#10 x 3-1/2" Truss Head with Phillips Drive for attaching cabinets to ceiling joists or a soffit.

#10 x 2" Truss Head with Phillips Drive - for Base Lazy Susan cabinets. These are not provided.



No Nails or Drywall Screws

⚠ WARNING! DO NOT use nails or drywall screws to install base or wall cabinets. Use the recommended screws as shown in this guide. Using nails or drywall screws may result in cabinets falling from the wall. Cabinets installed with nails or drywall screws will void the product warranty.

High Point Level Line

Measure out 20-7/8" from the wall (where the base cabinets toekick line will be) and snap a line on the floor parallel to the wall.

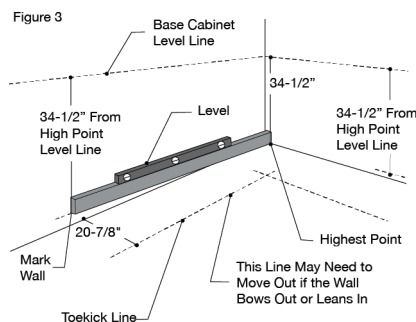
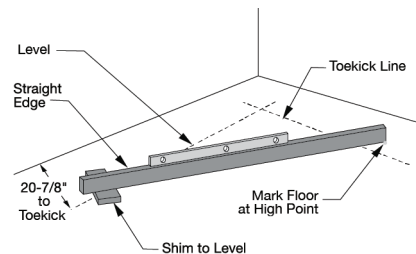
To find the highest point on the floor, place one end of a straight 2 x 4 at the end of the cabinet run. Place a carpenter's level on top and check the bubble. Raise either end of the 2 x 4 until it is level. Mark the floor at the end that makes contact with the floor. This is the high point.

Check all around the room where base cabinets will be installed. Then check from high point to high point to determine the highest point.

When you are certain you have the highest point on the floor, place your straight edge on this point and the other end against the wall.

Level the straight edge and mark the wall at the bottom of the straight edge. Do this in all directions where cabinets will be located.

Measure 34-1/2" up from the high point level line. Use a level to strike a level line on the wall. This is the Base Cabinet Top Level Line (without countertop). Do this on all walls that will receive base cabinets.



Uneven Walls & Square Corners

Place a straight length of 2 x 4 against the wall to find any high or low spots in the area where the cabinets will be located. Scrape or sand high spots. Mark low spots that will need shimming when you install cabinets. The more you smooth out the walls, the less you will need to shim.

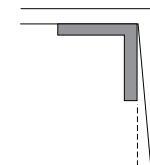
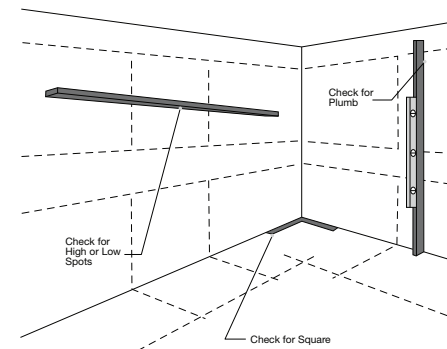
If walls have high spots that you cannot remove, you will need to have your Toekick Line measured out 20-7/8" out from the high spot.

Place a 2 x 4 vertically on the wall with the 4' level and check for plumb. This will tell you if you need shims at the top or bottom of cabinets.

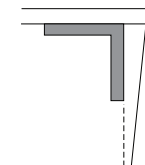
Check corners for "square." Place a framing square into the corner where cabinets are to be installed. If the framing square will not fit into the corner, you are 'in' square. You will need to come out from the corner and run a straight line to the wall at the end of your row of cabinets.

If your framing square fits into the corner and one wall angles away from the square, you are 'out' of square. To correct this, you will start tight in the corner and shim your cabinets to keep them in a straight line. If your cabinets are forming an "L" - shape, plan on spacing out the shortest length of the "L."

Mark these square lines on the floor. You will need to revise your 20-7/8" Toekick Line to be parallel with your square line.



Out of Square



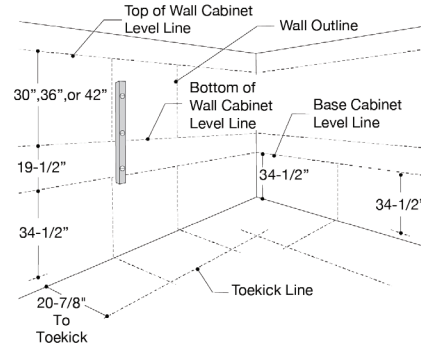
In Square

Outline on Floor and Walls

Measure 19-1/2" up from the Base Cabinet Top Level Line and snap a level line on the wall. This is the Bottom of Wall Cabinet Level Line.

Measure 30", 36" or 42" up from the Bottom of Wall Cabinet Level Line (depending on the height of your wall cabinets). Snap a level line on the wall. This is the Top of Wall Cabinet Level Line.

- 30" Wall Cabinets require 84" from the Wall Cabinet Top Level Line to the floor.
- 36" Wall Cabinets require 90" from the Wall Cabinet Top Level Line to the floor.
- 42" Wall Cabinets require 96" from the Wall Cabinet Top Level Line to the floor.



See **Mounting Under a Soffit or Ceiling** if there are cabinets to be mounted directly up to a soffit or ceiling.

If the installation involves a corner, layout the corner cabinet first. If there is no corner, start at an obstructed end that begins at a wall or appliance.

Mark the width of the first base on the floor and wall in this location. Use a level to draw a plumb line vertically between the floor and the Base Cabinet Top Level Line.

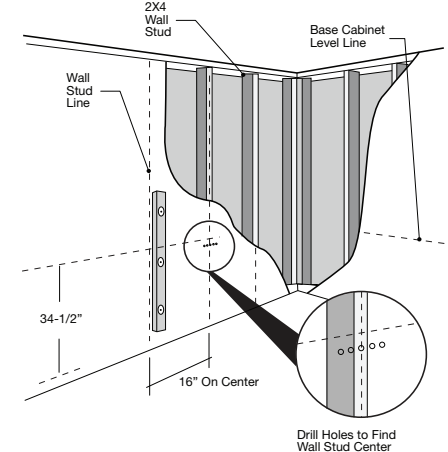
Repeat this process for all base cabinets and then for all wall cabinets. You should now have a Wall Outline for all cabinets to be installed.

Locate and Mark Wall Studs

Typical wall construction places wall studs on 16" centers. This means that every 16" you have the center of a 2 x 4 wall stud to support your cabinets.

To locate a wall stud, use a wall stud finder tool.

Once you have located a wall stud, drive a long, thin finish nail or use a power drill with a small bit to drill into an area just below the Base Cabinet Top Level Line that will be covered by the cabinets. It will require several holes spaced close together to find the outside edges on the wall stud to determine its center. Measure over 16" from this point and repeat the process to be certain that you have contacted the center of the wall stud. Mark the location. Continue this process to locate all wall studs behind your cabinets.



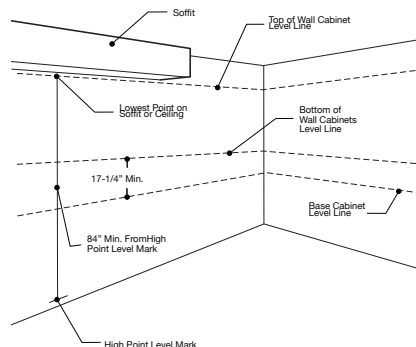
Once all wall studs are located, use a 4' level to draw vertical plumb lines at each wall stud from the floor to a few inches above the Top of Wall Cabinet Level Line.

Repeat this process to indicate the location of ceiling joists or soffit structure, if your cabinets require ceiling attachment.

Mounting Under a Soffit or Low Ceiling

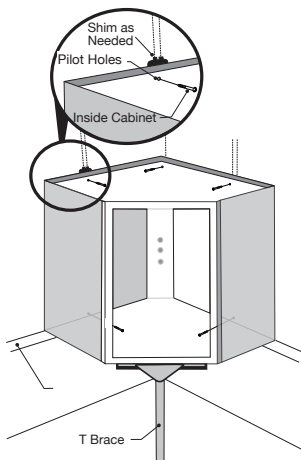
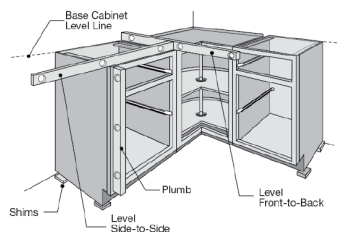
If wall cabinets are to be mounted directly under a soffit or ceiling, you should find the low spot of the soffit or ceiling using the same process as done for finding the high spot on the floor. Snap a level line. This will be the Wall Cabinet Top Level Line.

Measure down 30", 36" or 42" (the height of your wall cabinets) to confirm the distance between the Wall Cabinet Bottom Level Line and the Base Cabinet Top Level Line.



Shimming Cabinets for Level & Plumb; Clamping

Adjust and shim cabinets so they are level side-to-side, and front-to-back. Check plumb of the face frame and that it aligns perfectly with the adjacent cabinet. On peninsula cabinets, shims may be required between the cabinet and the ceiling.



Shimming Cabinets for Level & Plumb; Clamping

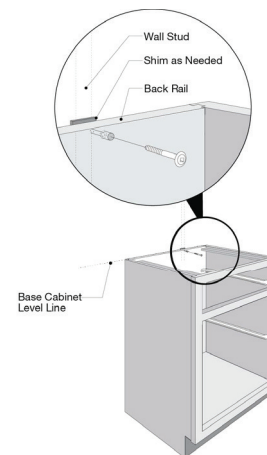
Shim cabinets so they align exactly with the Base Cabinet Top Level Line (base cabinets) or Wall Cabinet Bottom Level Line (wall cabinets). Place clamps just above drawer slide and just above bottom hinge. Clamp cabinets together loosely.

Adjust so Face Frames align perfectly at the top and front edges.

- If you need to tap cabinets for alignment, use a block or rubber mallet to avoid marring finish.

Tighten clamps.

⚠ WARNING! Tightening hang rails against a crooked wall without shims may cause the joint between the hang rail and the rest of the cabinet to break. This may result in the cabinet falling off the wall when loaded, which may cause personal injury and/or damage to the cabinet that will not be covered by the product warranty.



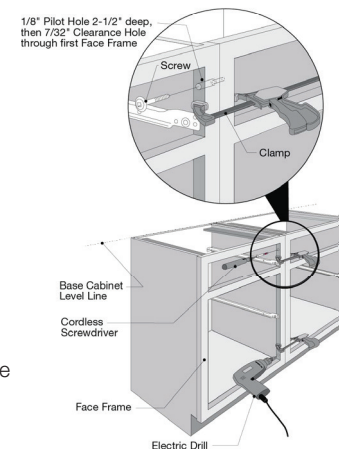
Frame-to-Frame Attachment

On a 1/8" drill bit, set tape or drill depth gauge at 2-1/2".

Before drilling face frames, recheck for level and that alignment between face frames is exact.

Drill a 1/8" pilot hole, 2-1/2" deep through the first face frame and into the second face frame. Drill bit must be 2-1/2" or less to avoid drilling completely through the second face frame.

Drill a 7/32" clearance hole, 1-1/2" deep through the pilot hole in the first face frame. To make screw driving easier, rub paraffin or bee's wax on the screws.

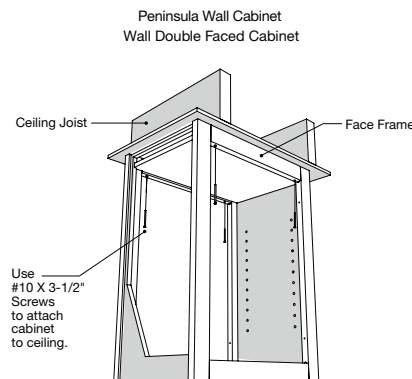


Attachment Minimum Requirements

All cabinet frames must be fastened to adjacent cabinet frame, fillers, side wall, or ceiling.

INSTALLER NOTE: If a cabinet is not bordered by cabinets on both sides, the face frame must be supported by the countertop or screwed into the soffit structure or ceiling joists using #10 x 3-1/2" Truss Head Screws. Use these screws as follows.

- For cabinets 24" or less, use (4) screws, or (2) screws per frame.
- For cabinets 27" or more, use (6) screws or (3) screws per frame.



Wall Cabinets up to 18" wide: Screw a top and bottom wall attachment screw into one wall stud and the face frame to at least one adjacent cabinet.

Wall Cabinets 21" to 39" wide: Screw top and bottom wall attachment screws into two wall studs and the face frame to at least one adjacent cabinet.

Wall Cabinets 42" to 48" wide: Screw top and bottom wall attachment screws into three wall studs and the face frame to at least one adjacent cabinet. If any three wall studs are not present, use wall anchors or toggle bolts for the third position. You must attach to at least two wall studs.

End wall cabinets, where a wall stud falls more than 6" from the exposed end of the cabinet, will require additional supports, such as wall anchors or toggle bolts within 6" of the end of the cabinet.

⚠ WARNING! Failure to follow these guidelines could result in a cabinet falling off the wall, possibly resulting in serious injury, and will void the product warranty.

Attachment to Wall

On base cabinets, don't attach cabinets to the wall until all cabinet Face Frames are fastened together. Re-check each cabinet for level front to back and side to side. Check each front for plumb. Add shims if there is any space between cabinet and wall to avoid pulling the cabinet out of square.

For base cabinets, use a 1/8" bit to drill through the cabinet back and hang rail, 1" down from the top of the cabinet. Predrill through the shims to each wall stud location.

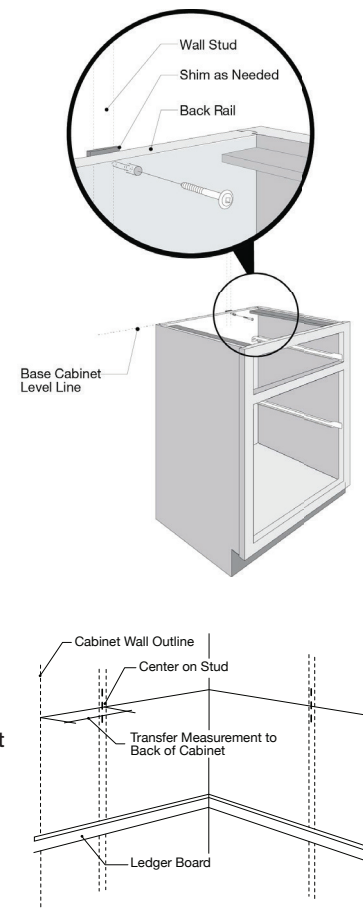
To avoid 'breakout' or 'splintering' of the cabinet back, don't press hard while drilling. Use a sharp bit and let the bit do the drilling gradually.

For wall cabinets, use the Wall Outline and measure the distance from the cabinet outline to the wall stud and transfer that dimension to the back of the cabinet.

TIP: When transferring this dimension, use a spacer to account for the difference between the width across the frame and the width across the back of the cabinet.

INSTALLER NOTE: Verify this offset dimension for the spacer, since it may vary based on the cabinet model. For wall cabinets, pre-drill a 7/32" clearance hole through the backrail of the cabinet at the wall stud locations while the cabinet is on the floor.

(continued on next page)

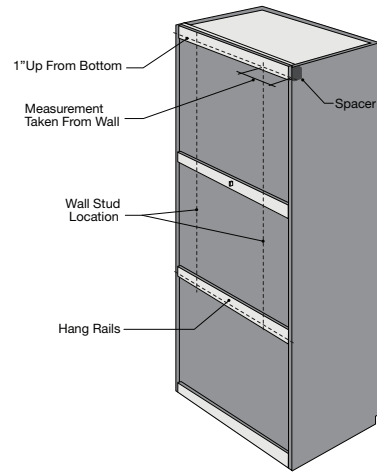
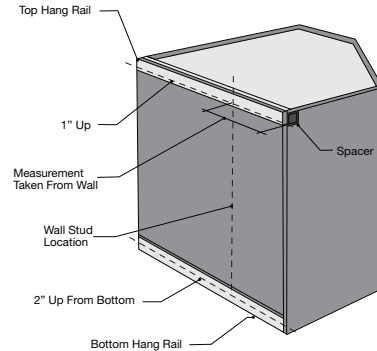


Attachment to Wall (continued)

INSTALLER NOTE (continued): For wall cabinets, drill 2" down from the top and 2" up from the bottom at the stud locations. For tall cabinets under 36" wide, drill 2" down from the top and through the center of the hang rail that is 1/4 of the way up from the bottom.

Tall cabinets 36" wide do not have hang rails. Drill directly through the back at the same locations as above. Firmly seat the head of the wall attachment screw against the back of 36" wide Tall cabinets so as to prevent the back joint from breaking.

To avoid "breakout" or "splintering" of cabinet back, don't press hard while drilling. Use a sharp bit and let the bit do the drilling gradually.

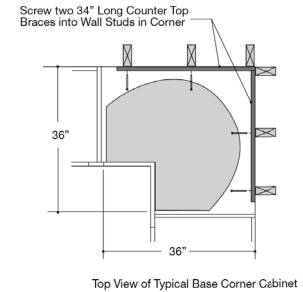
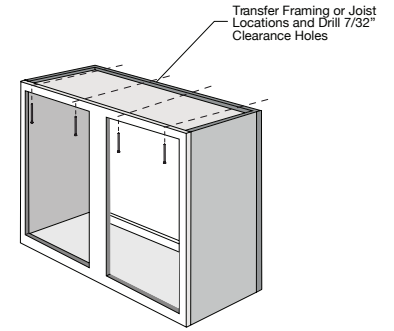


Attachment to Ceiling

Follow the **Attachment to Wall** requirement to attach the face frame to the ceiling joists; transferring ceiling joist and wall stud locations to the face frame(s) and cabinet back and predrilling clearance holes. Tack shims to the ceiling for alignment.

⚠ WARNING! Make sure that the 3-1/2" screws enter 1-1/2" of solid ceiling or soffit framing material. Failure to do so could result in the cabinet falling off the wall, causing possible injury and damage to the cabinet that will not be covered by the product warranty.

⚠ WARNING! Holes drilled in Face Frames must be no more than 2" from vertical sides of cabinet. Failure to do so could result in the cabinet falling off the wall, causing possible injury and damage to the cabinet that will not be covered by the product warranty.

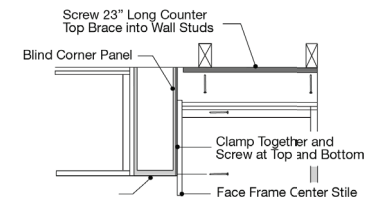


Countertop Braces

When installing cabinets or fillers that leave a void between the wall and cabinet/filler, you must install a 1 x 3 Brace to support the countertop.

Install the Brace so it exactly matches the Base Cabinet Top Level Line. Predrill the Brace as described for base cabinets in **Attachment to Wall** section. Use 2-1/2" screws and follow the **Attachment Minimum Requirements**, toggle bolts or drywall anchors elsewhere.

The length of the Countertop Brace should leave approximately 1" on each end between the Brace and the cabinet.

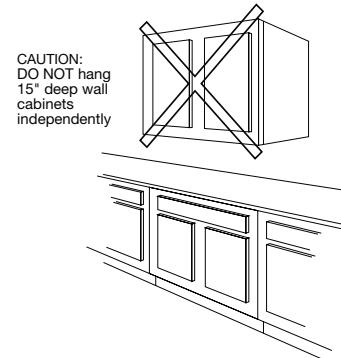


Deep Wall Cabinet

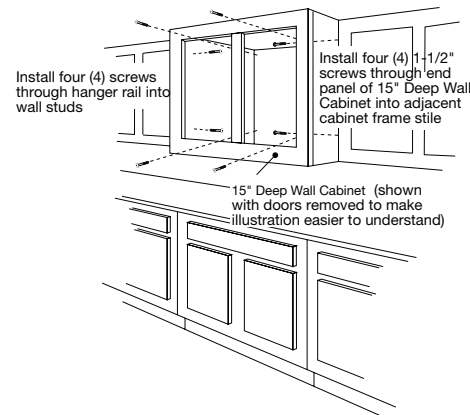
⚠ WARNING! DO NOT install a Deep Wall Cabinet independently. Failure to follow this warning may result in the cabinet falling off the wall, which may cause serious personal injury or property damage that will not be covered by the product warranty. Manufacturer assumes no responsibility for any product failure due to improper installation or installation inconsistent with these instructions.

Both sides of the face frame must be supported through both left and right frame stiles by another cabinet, a wall, or an End Filler.

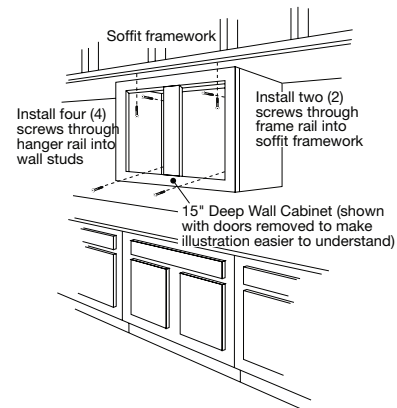
⚠ IMPROPER INSTALLATION ⚠



Supported Through Back and
Adjacent 12" Deep Wall Cabinets



Supported Through Back and Framework in Ceiling Soffit



Double Door Cabinet Shelves

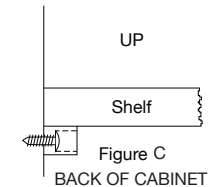
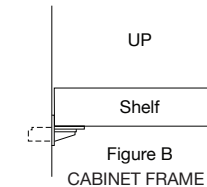
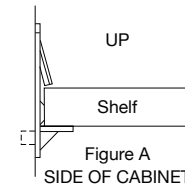
Remove drawer(s) and install shelf (shipped separately in carton) through open top of cabinet. Shelf cannot be installed through the door opening.

Double-door wall cabinet shelves require additional support. Shelf support kits will be packaged with each respective cabinet.

Shelf supports must be installed into the back of the frame below each shelf with the support ledge under the shelf.

A cylindrical shelf support must be screwed into the middle of the cabinet back under each shelf once the final adjustment is made.

INSTALLER NOTE: Install shelves before installing the countertop.



Installation How-to's

Base Blind Corner Cabinets

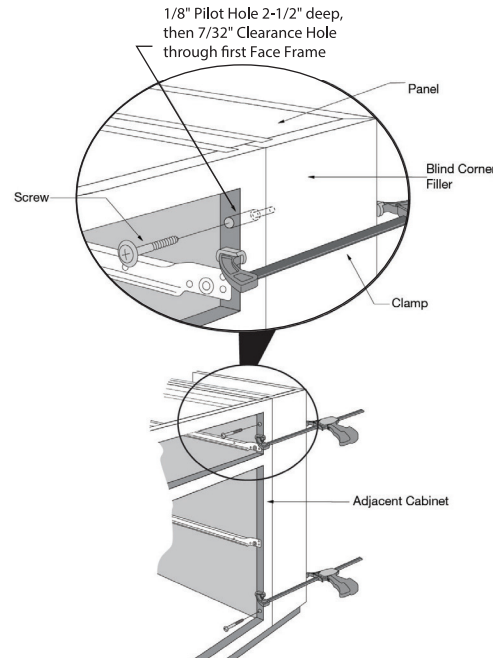
During the “dry fit” step, it is a good time to check the blind corner cabinet spacing from the corner wall.

Dry fit the cabinets tightly together, starting at the end of the row of cabinets and butt against the Blind Corner Cabinet. Mark the position where the end of the Blind Corner Cabinet is spaced away from the corner wall.

The Blind Corner Filler (provided with some products) provides clearance between 90° cabinets for drawer and door pull hardware. This filler may come with a panel attached, depending on product.

Before moving the Base Blind Corner Cabinet attach the Filler to the adjacent cabinet frame with the method described in the **Frame-to-Frame Attachment** section.

Attach a 23" countertop brace on the wall as described previously.



Base Blind Corner Cabinets (continued)

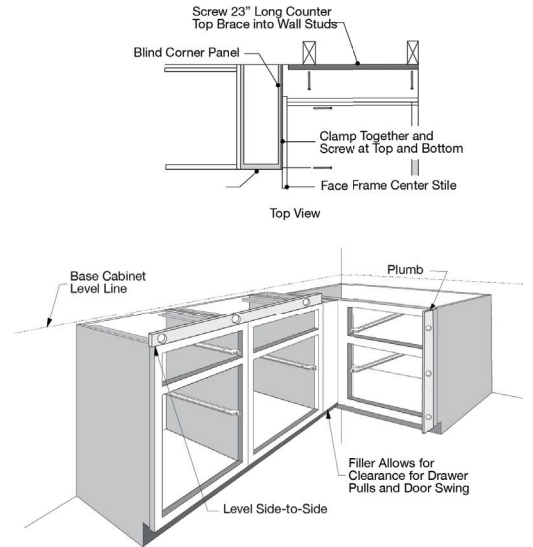
Position the hidden end of the Base Blind Corner cabinet at the proper spacing from the wall. The spacing is determined by the opposite end of the row of cabinets; this dimension should be noted on the your project layout.

Push the adjacent cabinet (with Filler attached) against the Base Blind Corner cabinet.

Attach clamps between the center stile of the Base Blind Corner cabinet and the face frame of the adjacent cabinet.

Follow the **Frame-to-Frame Attachment** requirement to align and join the center stile of the Base Blind Corner cabinet and the Filler attached to the adjacent cabinet. Be sure to drill as close to center of the Filler as possible.

If your Filler has a panel attached, drill 2 more pilot holes through the frame into the panel and fasten with 1-1/4" screws (purchase separately).



Peninsula Base Cabinets

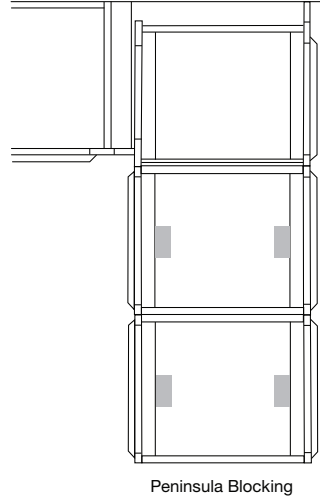
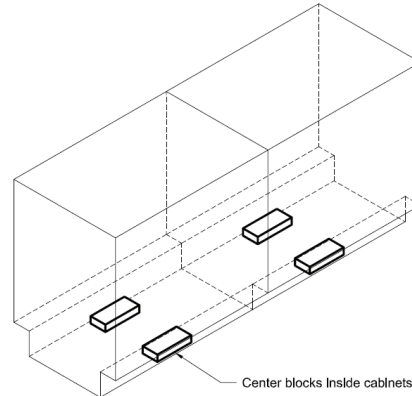
Peninsula base cabinets must be secured to the floor. Peninsula Cabinets are secured to the floor with wood blocks behind the toekicks, on each side of the cabinet.

To prepare blocking, square the Peninsula Cabinet with the adjacent Base Cabinet and mark the floor at the toekick locations, front and back.

Cut 2 x 4 wood blocks 8-12" long to fit the underside of the cabinet. Measure the thickness of the toekick and position the blocks inside of the toekick line so the cabinets can be positioned over them. Fasten the blocks to the floor.

Attach the cabinets together following the applicable attachment procedures for shimming, leveling and attaching face frames then use finish nails to attach the cabinets to the blocks on the floor.

⚠ WARNING! Peninsula Base cabinets are NOT for Island applications. Failure to follow this limitation could cause serious injury and damages to the cabinet that will not be covered by the product warranty.



Base Corner Cabinets

The approach to install Base Corner cabinets is to attach the adjacent cabinets on each side and install the group of cabinets as a unit.

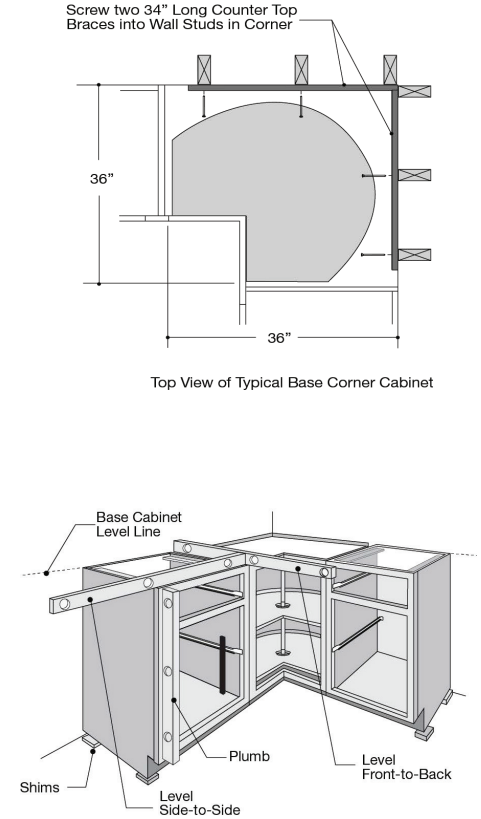
Dry fit the Base Corner cabinet into the corner with both adjacent cabinets in place on each side. Align the face frames on the top and front surfaces, and clamp the cabinets together; do not drill. **When installed, the back of the Base Corner cabinet will not touch the wall.**

Measure for Countertop Braces and install per the requirements found earlier. Brace length varies based on cabinet model.

With the cabinets in final position, shim so they match the Base Cabinet Top Level Line, and all frames are flush and plumb.

Predrill through the adjacent cabinet face frames into the Base Corner cabinet and fasten with 2-1/2" screws, per the **Frame-to-Frame Attachment** requirements.

INSTALLER NOTE: For Base Lazy Susan cabinets, use 2" screws per Screw Requirements.



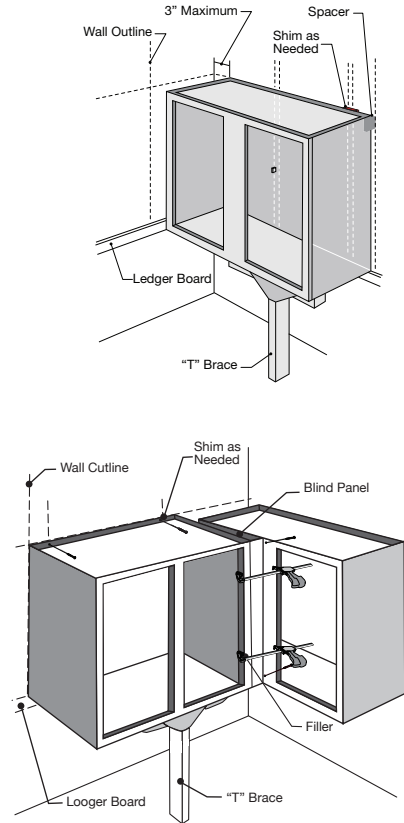
Wall Blind Corner Cabinets (continued)

Check the Wall Outline for the distance the Blind Corner cabinet is pulled away from the corner. The maximum distance is 2-7/8". Transfer measurements, predrill, and fasten cabinet to wall per **Attachment to Wall** requirements.

Before lifting adjacent cabinet to the Blind Corner cabinet, attach the Filler to the adjacent cabinet in the same manner as described for **Base Blind Corner Cabinets**.

Lift the adjacent cabinet (with Filler attached) and push against the Blind Corner cabinet. Depending on your product, your Filler may have a panel attached.

Clamp, align, shim, predrill, and fasten in the same manner as described for **Base Blind Corner Cabinets** and **Face-to-Face Attachment**.



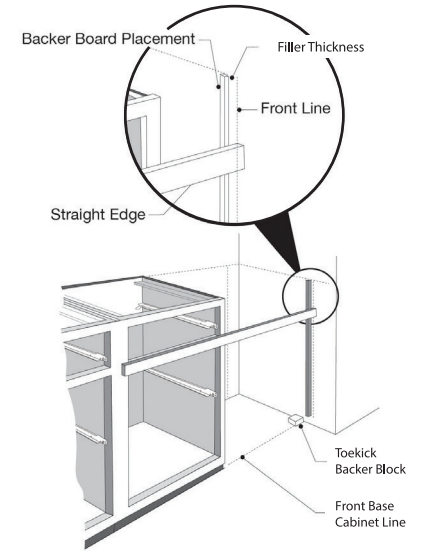
Wall Filler; Base, Wall

Wall Fillers are available to fill gaps between the end of a row of cabinets and a 90° wall.

INSTALLER NOTE: A Backer Board is required behind the Wall Filler if the Filler is wider than 3". Attach the Backer Board to the wall before installing the final cabinet.

To mark the Wall Filler and Backer Board positions, run a straight edge across the space between the wall and the closest cabinet. On the wall, mark behind the straight edge. Draw a straight, vertical line from this mark using a level. Align the front of the Filler on this mark. Mark behind the Filler for the front position of the Backer Board.

Attach the Backer Board to the wall so it is plumb. **Be sure that the Backer Board is wide enough to be fastened to the nearest wall stud.**



Wall Filler; Base, Wall (continued)

Place, shim, level, and install the final cabinet. With the final cabinet in place, measure the gap between the wall and the top of the cabinet.

If the wall contour is even, use this dimension to mark and cut the Filler.

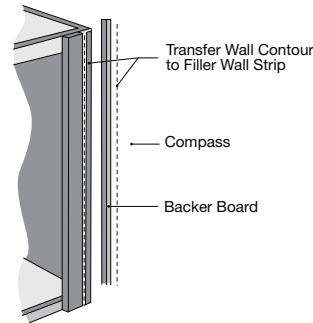
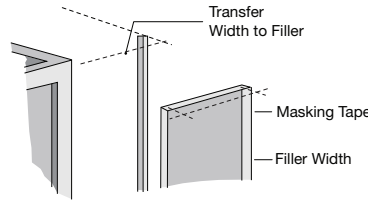
If the wall contour is irregular, you'll need to scribe the surface of the Filler.

Clamp the Filler to the adjacent cabinet so the edges are exactly aligned. Set a protractor compass to the exact width of the filler.

Before scribing, put masking tape down the Filler where the scribe mark will be. This tape will show the mark better and will protect the Wall Filler surface when cutting.

Use the protractor compass to scribe the wall contour onto the Wall Filler.

Cut the Wall Filler, following the scribe mark. Put the Filler in position. Fasten the Filler to the cabinet frame using the **Frame-to-Frame Attachment** requirements. Use finishing nails to tack the Wall Filler to the Backer Board, if necessary.

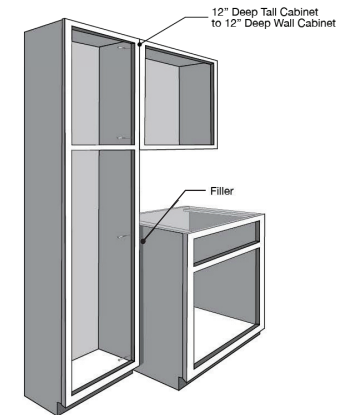
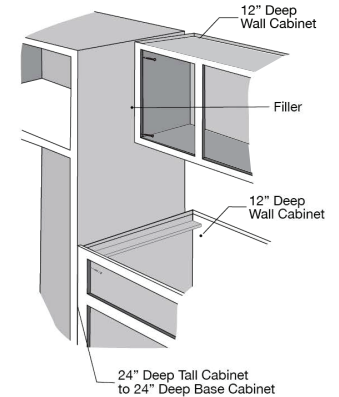


Fillers for Various Depth

When installing cabinets next to each other that are different depths (i.e. 12" deep next to 24" deep), a Filler or Full Height Panel will be required to maintain the spacing of the cabinets.

If a Filler is used, cut the Filler equal to the height of the Wall or Base cabinet Face Frame. The Filler width should match the space from the cabinet side to the edge of the Face Frame.

Before positioning the cabinets, attach the Filler to the Face Frame edge of the cabinet already in place using the **Frame-to-Frame Attachment** requirements.



Tall End Filler & 24" Deep Wall Cabinet Installation

The Tall End Filler conceals the side of a refrigerator and supports a 24" Deep Wall Cabinet above. Tall End Fillers are shipped without a Toespace Cutout and must be inverted for left- or right- hand use before marking and cutting the Toespace.

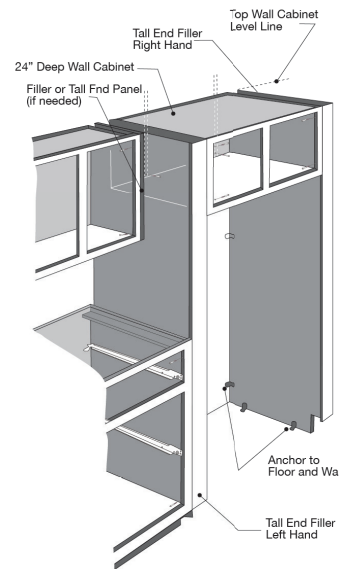
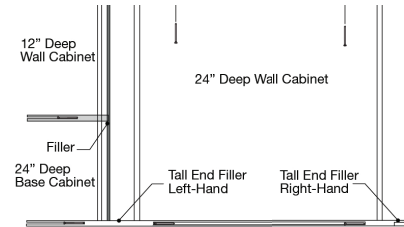
Determine whether the application is Left- or Right- Hand. Measure the Toekick height and depth from an adjacent Base Cabinet and transfer these dimensions to the proper end of the Tall End Filler. Follow dimensions to cut out the Toespace.

Put Tall End Filler in place. Align the top of the Tall End Filler either to the Wall Cabinet Top Level Line or to the top of an adjacent Wall Cabinet.

If needed, shim the Tall End Filler so the Face Frame is plumb and lined up with the bottom of the Base Cabinet. Attach the Filler to the adjacent cabinet according to the **Frame-to-Frame Attachment** requirements.

Use angle brackets or Backer Board (not provided) to attach the back edge of the Tall End Filler to the wall and floor. If needed, install Filler between a Wall Cabinet and the Tall End Filler. After one Tall End Filler is installed, install the 24" Deep Wall Cabinet according to the **Deep Wall Cabinet** requirements.

Install the Tall End Filler for the opposite side, if applicable.



Toekick Platform with 96" Tall Cabinets

The Toekick Platform is shipped unattached on 96" Tall cabinets. If the ceiling height is enough so the 96" high Tall cabinet can be tipped up with the Toekick Platform installed, then you should install the Toekick Platform before attaching the cabinet to the wall.

The Platform is narrower than the cabinet and can be mounted at the center, right, or left. This provides for Toekick space on the sides when the cabinets are end-mounted. Lay the cabinet on its back. Position the Toekick Platform to the back of the cabinet and to the left, right, or center of the cabinet width.

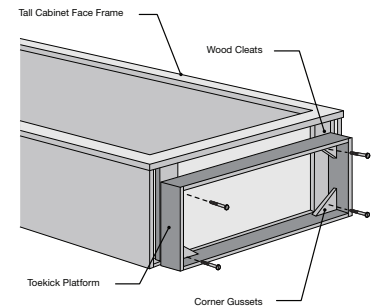
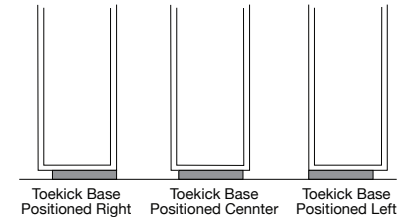
Drill pilot holes through the corner gussets and into the wood cleats in the bottom of the cabinet. Fasten the platform to the bottom of the cabinet with the appropriate length wood screws (not provided).

Set the cabinet upright and install according to the **Attachment to Wall** requirements for Tall cabinets.

If the ceiling height does not permit installing the Toekick Platform to the cabinet before installation, then install and level the Toekick Platform first.

Position the Toekick Platform on the floor. Shim and level following the same procedure for installing a Base Cabinet. The top of the Toekick Platform should match the height of the bottom edge of the Base cabinet Face Frame. Mark wall stud locations and predrill according to the **Attachment to Wall** requirements for Tall cabinets.

Carefully lift and slide the cabinet onto the Toekick Platform. Attach to the wall following the **Attachment to Wall** requirements for Tall cabinets.

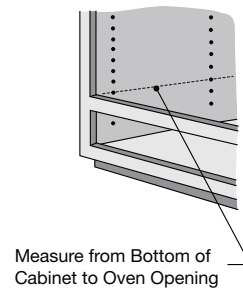
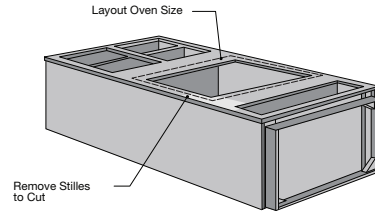


Oven Cut-out

Determine oven opening size (rough-in dimensions) by referring to the oven manufacturer's specifications; or measure your oven. Position the oven so a minimum of 1-1/2" of frame cross rail is left above and below the oven to retain rigidity of the cabinet frame. Larger ovens will require that one or more frame cross rail(s) be removed. **DO NOT** cut an opening larger than what will leave the 1-1/2" required material available.

Install the oven cabinet according to **Attachment to Wall** requirements for Tall Cabinets.

Measure from the inside bottom of the cabinet up to the bottom edge of the oven opening. Use this measurement from the cabinet bottom up to the nearest support bracket attachment hole on the cabinet side panel. This hole will be used for the top screw on the support bracket. Repeat on all four inside corners of the cabinet.

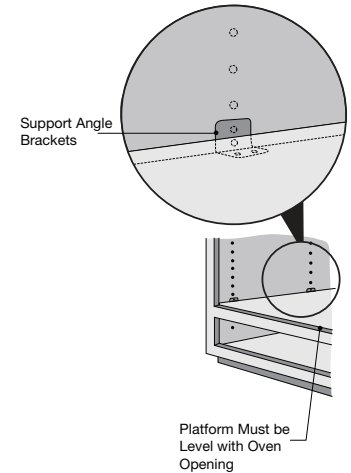


Oven Cut-out (continued)

Attach all four brackets with (2) 1/2" screws per bracket. Brackets must all be at the same level. Place the support platform on the brackets. Shims can be placed under the platform to raise it to the level of the oven opening.

Install the oven according to the oven manufacturer's specifications. Certain oven models require a depth of 24" from the face of the cabinet frame. **These installations require the back to be cut out of the cabinet.**

Install the Oven Drawer Kit Accessories in the remaining drawer openings (as applicable).



Bookcase

Installation of a bookcase by itself is NOT recommended unless additional support such as attachment to a soffit or supported by a countertop. Bookcases that are 54" or 60" high are designed to mount on a countertop and must be secured to the wall.

Follow the *Minimum Attachment Requirements* found earlier.

⚠ **WARNING!** Bookcase cabinets are subject to extreme weight. Bookcase cabinets used for wall hung applications must be limited to 15 lbs. per sq. ft. of shelf area and should not be hung on the wall. FAILURE TO FOLLOW THESE LIMITATIONS COULD CAUSE SERIOUS INJURY AND WILL VOID THE PRODUCT WARRANTY.

⚠ **WARNING!** Special depth bookcase cabinets greater than 12" deep should not be used in wall hung applications.

Vanity Sink Cabinets

Transfer the location of the supply and drain lines to the back or bottom of the cabinet. Using a hole saw, cut openings 1/4" larger than that of the pipe at these locations.

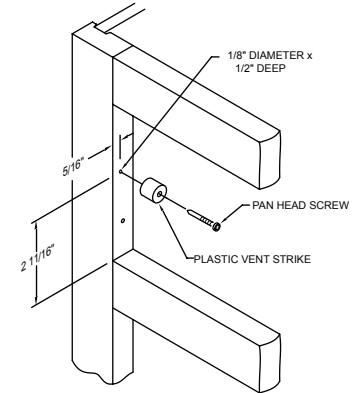
Follow the *Minimum Attachment Requirements* found earlier.

Conversion of Vanity Drawers to False Front

The drawers can be changed to a false front if twin or off-center sink bowl locations are required.

Remove the drawer. Unscrew the Drawer Front from the Drawer Box. Unscrew the Drawer Guide from the Face Frame and pull the guide out of the cabinet back.

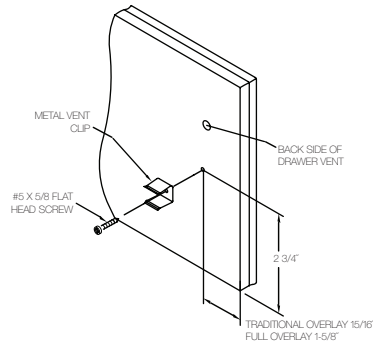
Drill a 1/8" diameter 1/2" deep hole on each side of the drawer opening in the face frame as shown; 2-11/16" from the bottom of the drawer opening and 5/16" in from the front of the face frame. Install the (2) plastic strikes in the holes drilled in the face frame using the provided #8 X 1" pan head screws.



Conversion of Vanity Drawers to False Front (continued)

Lay the Drawer Front face down on a protected surface. Drill a 3/32" diameter 1/2" deep hole as shown. For traditional overlay door styles, the hole is located 2-3/4" from the bottom of the drawer front and 15/16" from the side of the drawer front. For full overlay door styles, the hole is located 2-3/4" from the bottom of the drawer front and 1-5/8" from the side of the drawer front. Repeat on both sides.

Install the (2) metal clips in the pre-drilled holes on the back side of the drawer front using the provided screws. Snap the Drawer Front onto the drawer opening.

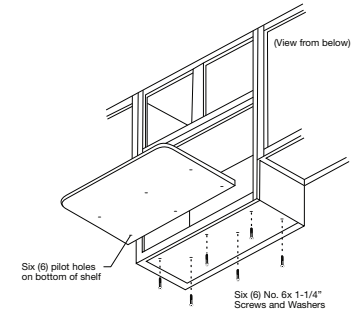


Wall Microwave Shelf

Transfer measurements for the location of the electrical outlet onto the back of the Wall Microwave Shelf. Cut the hole in the cabinet back to accommodate the outlet box. If no outlet exists, check your microwave oven manufacturer's recommendation.

Install the cabinet following the **Installation Requirements**. Once the cabinet is mounted, slide the cabinet shelf (shipped not installed) into the cabinet with the pilot holes facing down. Attach the shelf to the cabinet using the (6) #8 x 1-1/4" screws with washers provided with cabinet.

⚠ WARNING! Use the washers to ensure the screw heads will not pull through the bottom of the cabinet.

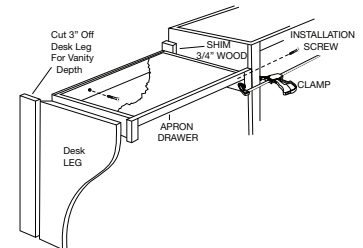


Desk Knee Drawer

The width of the Knee Drawer Trimmable can be trimmed up to 3" on each side. Must be attached on both sides to an adjacent cabinet face frame, wall, or Desk End Panel.

Transfer wall stud locations onto back panel, shim, and pre-drill to attach to wall. Position the Desk End Panel even with the top of, and just behind the Drawer frame, clamp to Drawer side panel, pre-drill through the Drawer side panel in (4) places with a 1/8" drill bit, 1" deep.

DO NOT drill through the Desk End Panel. Fasten Desk End Panel to side panel with #8 x 1" pan head screws (not provided). Firmly seat the head of the wall attachment screw against the back of 36" wide Tall cabinets so as to prevent the back joint from breaking.



Toeckick Covers

Measure the length of the toekick area and cut the Toeckick Cover to that length. Clean the area of any debris. Apply glue to the back of the Toeckick Cover and place onto the toekick area. Use small finishing nails to tack the Toeckick Cover in place.

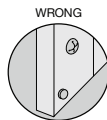
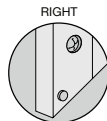
Hardware

Drill 11/64" holes from the front side of the door for decorative hardware. It is recommended to apply masking tape on both sides of the door stile and drawer assemblies in order to reduce tear out when drilling. This is also beneficial for marking the drilling hole location.

It is recommended on Full Overlay door styles to keep the door ajar when drilling through the stile so the drill bit does not strike the cabinet frame.

Countersinking the hardware screws to the proper depth will prevent the screw heads from striking the cabinet frames during normal operation.

INSTALLER NOTE: Some door styles may have holes on the back that were used in the finishing process. These should not be used as pilot holes to mount the hardware.



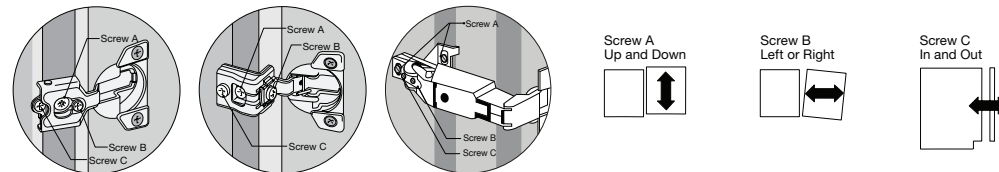
6-way Hinge Adjustments

A. Up and down adjustment +/- 2.0mm. Loosen Screw A, align door, tighten Screw A. **DO NOT** overtighten Screw A.

B. Left or Right adjustment +/- 1.5mm. Turn Screw B clockwise or counterclockwise.

C. In or Out adjustment -.5 / +2.5mm. Turn Screw C clockwise or counterclockwise.

6-way Hinge Adjustments (continued)



Undermount Guide - Drawer Removal and Adjustment

To remove drawer, open the drawer and squeeze the orange handles of both locking devices. While holding the handles, pull the drawer straight out and lift it off the guide runners.

To install drawer, place drawer on the guide runners (either extended or retracted) and close the drawer. The locking devices will automatically engage with the guide runners. Open the drawer completely to confirm that both locking devices have engaged.

To adjust the drawer height, open the drawer and press down on either or both adjustment lever(s). Slide the lever(s) toward the front of the drawer to lower the drawer and toward the front of the drawer to raise the drawer.

