

# Installation Guide

FRAMED CABINETERY

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Keep In Mind: The beauty of real hardwood comes from natural variations in grain, texture, and color. Cabinet colors also darken or lighten over time due to sunlight, smoke, household cleaners, age and other environmental conditions.

Most cabinets are also constructed from several pieces, which each accept stain slightly differently. Neither these variations nor natural grain and texture variations are considered reason for replacement.

Some of our door styles use solid wood center panels. Some expansion and contraction will occur, depending on the season and humidity levels. Painted surfaces will develop hairline cracks at joints caused by seasonal humidity changes and the expansion/contraction of the wood. This is the nature of hardwood, and hairline cracks on painted surfaces will not be considered reason for replacement.

We reserve the right to substitute discontinued product with the most similar styling, wood species, and color available at the time a warranty claim is submitted.

Should you have any further questions regarding the care and maintenance of your cabinetry, please contact your dealer.

For complete warranty information, please visit your cabinetry brand's website.

These instructions, while accurate, may not address the many variations and exceptions encountered while installing cabinetry. To that end, we offer these instructions as a guide to proper cabinet installation. If you encounter variations in your kitchen, please consult a licensed professional.

### Before You Begin

Please inspect ALL of the cabinetry for damages and color variation before you begin to tear out your existing kitchen.

Report all issues at one time to your dealer and not as you install the product. Multiple replacement requests will further delay your project. Once received by acpi, replacement products will be ready to ship in 7 business days and will ship via cycle truck to your dealer. Remember, installation of the product indicates acceptance and will not be eligible for replacement or credit.

### First things first. SAFETY!

- Use safety glasses and work methodically.
- Only use properly grounded electrical tools.
- Keep the work area free of clutter.
- If possible, create a flat raised surface on which to work/ connect cabinets together.

### What you will need

- Chalkline
- Countersink
- Electric drill with various bits
- 4' level
- 10' or 12' wood extension rule or tape measure
- Carpenter's square 24" x 16"
- Step ladder
- Screwdrivers
- Screws for countertop
   (length depends on countertop and shim thickness)
- Pan head sheet metal screws:
  - #8 x 3" for mounting wall and base cabinets
  - $\#10 \times 3$ " with flatwashers for mounting ceiling hung

#### cabinets

• #8 x 2 1/2" for joining

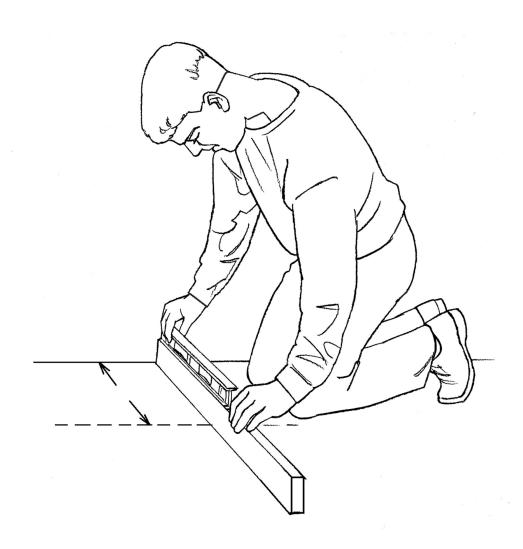
#### face frames

- Wood shims
- Two 4" C-clamps or carpenter style clamps
- Two 1x2x36" wood strips for countertop support with each base Lazy Susan
- 2x4 wall cleat or 2x4 T-brace for installing wall cabinets

### Prepare the walls

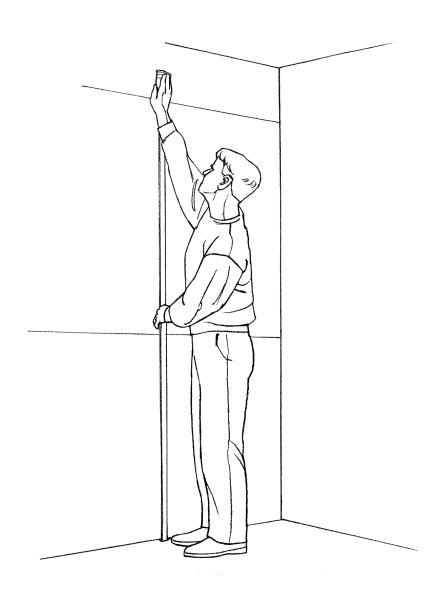
Cabinets must be mounted plumb, level and square. Remove protruding objects from the walls. With a level, check walls for high spots and remove them if possible; otherwise shim cabinets during installation.

Use the level to find the highest point of the floor and mark this point along the walls.



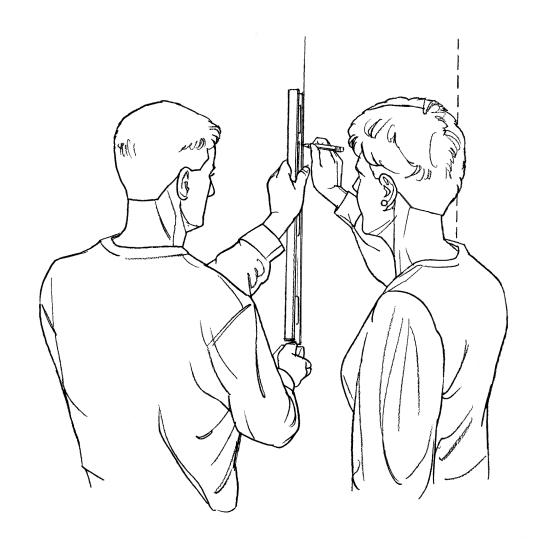
#### Measure and mark walls

From the mark on the wall that indicates the high point of the floor, measure 34-1/2" up the wall; using a level, draw a horizontal line. This is the top height of the base cabinets. Draw another horizontal line for the top of the wall cabinets (84", 87", 90", 93", 96" or 102" respectively for 30", 36" or 42" high wall cabinets).



#### Locate wall studs

Cabinets must be attached to wall studs for support. Find the studs with a stud finder, by tapping the wall with a hammer, or by driving a nail through the wall board at a height that will later be covered by cabinets. Studs are usually 16 inches apart. Draw a line on the wall at the center location of each stud.



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### **Installing wall cabinets**

For ease of installation, remove doors from the cabinets by unscrewing the hinge from the cabinet front frame. Set the doors aside, stacking them front to front to avoid damage. Remove shelves.

### Step 4 - continued

#### Always install wall corner cabinets first

Use a T-brace or nail a 2x4 cleat to the wall at the proper height to support the cabinets during installation. With the cabinet top placed at the line you marked on the wall, transfer the location of the wall studs to the inside of the cabinet. Then, at the wall stud

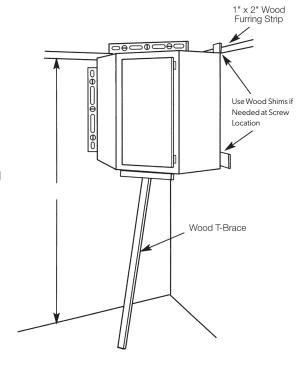
marks, use a 3/32" twist drill bit to drill pilot holes through the hanger rails in the back of the cabinet at top and bottom. Drill these holes into the wall studs also, to a depth of about 1-3/4".

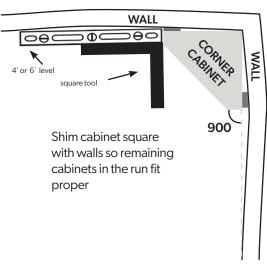
Use a 3/16" twist drill bit to enlarge the holes in the hanger rails only. Fasten the cabinet to the wall using two #8 x 3" screws at top and bottom hanger rails. It is important not to tighten screws completely until cabinet has been shimmed as needed.

Do not use nails to install cabinets to wall.

Be sure to use a level to check against the front, sides and bottom of each cabinet during installation (see details in Step 9).

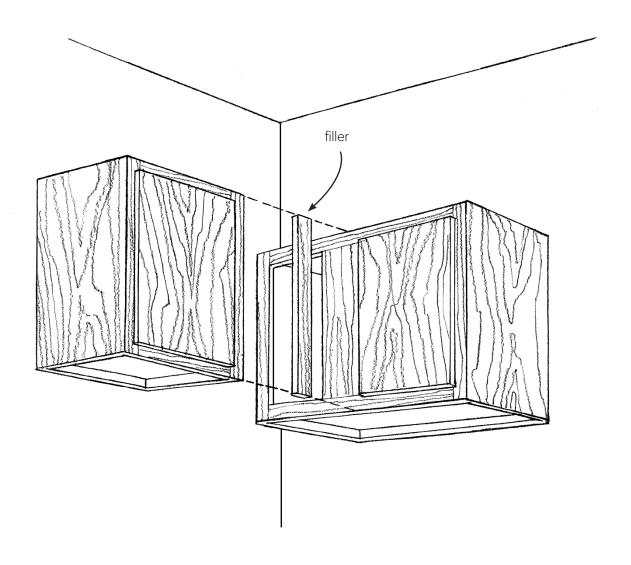
**NOTE:** When tightening hanger rails against a wall it is important not to apply so much torque on the install screws that the hanger rails are compressed. Doing so can cause the joint between hanger rail and cabinet to break, in time, the improperly installed cabinet could fall off a wall.





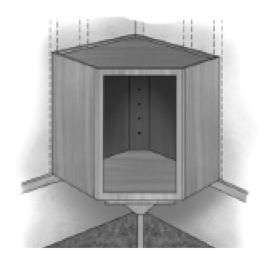
### Installing blind corner wall cabinets

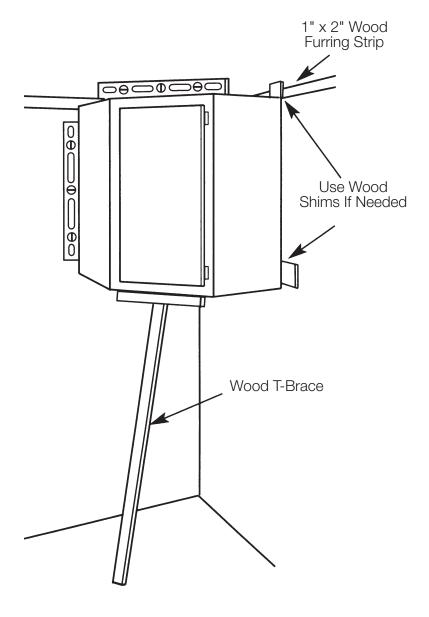
Proper installation of other cabinets will depend on level and square install of blind corner cabinet. Blind corner wall cabinets can be installed up to 3" away from adjoining wall, providing adequate clearance for cabinet doors. Hang blind corner cabinets as described in Step 4, but a WF3 filler is required. Attach the filler to both cabinets using the procedure for joining face frames outlined in Step 7.



#### Installing diagonal corner wall cabinets

These cabinets require 24 inches on each of two adjoining walls. When installing, use your level to be sure cabinets are level vertically and horizontally and square with remainder of the wall before securing to wall. Proper installation of other cabinets will depend on squareness and level installation of the corner cabinet.





#### Joining face frames

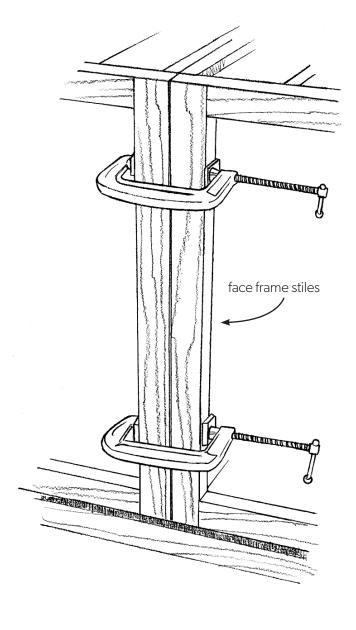
Make sure cabinet face frames are flush at top and bottom. Hold cabinets together with C-clamps at top and bottom while installing. Use a 11/32" twist drill bit to drill a hole part way through one cabinet stile (the vertical portion of the face frame) at top and bottom.

At the center of these holes, use a 1/8" twist drill bit to drill a pilot hole the rest of the way through the cabinet stile, about 1" into the adjoining cabinet stile.

Fasten cabinets together with  $#8 \times 2-1/2$ " screws.

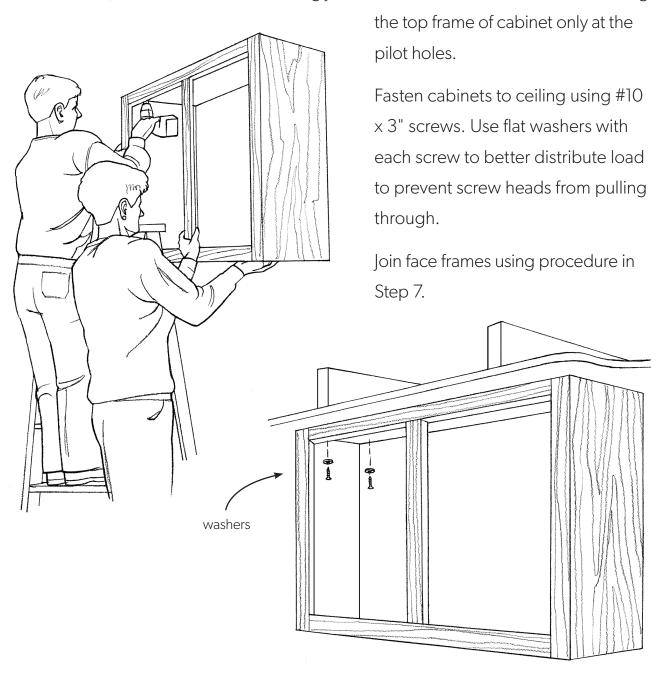
If necessary, shim between wall and cabinet, then tighten screws completely, making sure screws go into studs at least 1".

**NOTE:** Shorter screws may be required for fillers that are to be trimmed.



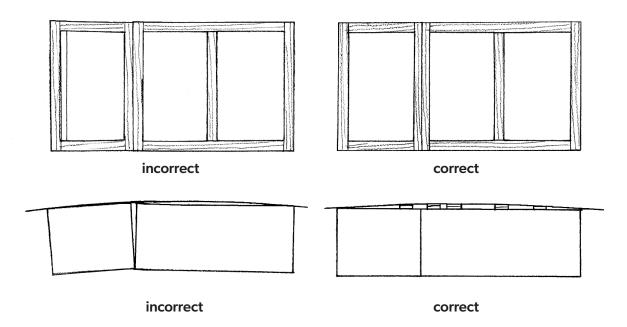
#### Installing ceiling hung cabinets

Locate ceiling joists above wall cabinets (a minimum of 2 joists or proper anchor bolts per cabinet). Using a 3/32" twist drill bit, drill four pilot holes through the top frame of the cabinet, about 1-1/2" into the ceiling joist. Use a 3/16" twist drill bit to drill through



### Leveling wall cabinets

After hanging each wall cabinet, check with a level against the front, sides and bottom of cabinet to ensure it is plumb and level. If necessary, shim between wall and cabinets to correct for uneven walls. You may need to loosen screws slightly to insert shims. Shim ceiling-hung cabinets as necessary between ceiling and cabinet. After alignment, tighten all screws securely.



#### **Installing base cabinets**

**Install base cabinets after ceiling or wall-hung cabinets.** For ease of installation, remove doors from the cabinets by unscrewing the hinge from the cabinet front frame.

Remove the drawers.

Set the doors aside, stacking them front to front to avoid damage. Remove shelves. Start from one corner. Using a 1/8" twist drill bit, drill holes through the top rail at back of cabinet at stud location marked on wall, about 1-1/2" into the stud.

Secure cabinet to the wall using #8 x 3" screws, making sure screws go into studs at least 1". Use a level to check against front, sides and top of cabinet (see Step 14).

Shim between wall and cabinet at screw locations and between floor and cabinet as necessary to keep cabinet plumb and level and aligned with base cabinet mark on wall from Step 2.

**NOTE:** Tightening hanger rails against a crooked wall without shims can break joint between hanger rail and cabinet.

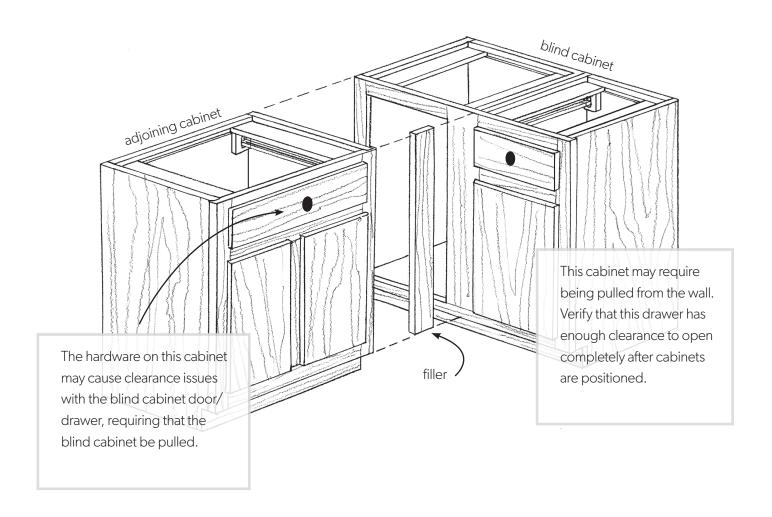
When tightening hanger rails against a wall it is important not to apply so much torque on the install screws that the hanger rails are compressed. Doing so can cause the joint between hanger rail and cabinet to break.

#### Installing base cabinets with blind corner

**NOTE: Always start in the corner.** Since each unit differs, check layout drawing to determine proper distance from adjoining wall.

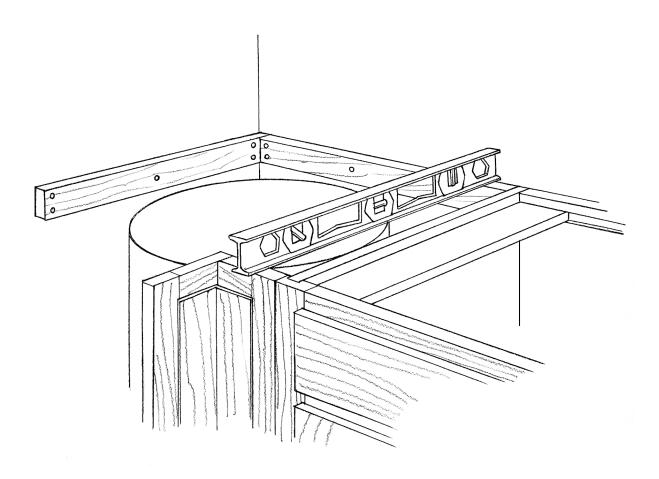
Position and secure cabinets using same procedure as for base cabinets (Step 10), except that a BF3 filler is required.

Attach base filler to both base cabinets using procedure for joining face frames (Step 7).



### Installing lazy susan base cabinet

Square and level installation assures smooth operation, as well as proper installation of remaining cabinets. Provide support for the countertop in the corner behind the Lazy Susan by securing two 36" lengths of 1x2 stock to the wall; level these two pieces with the base cabinet mark from Step 2.



#### Joining base cabinets

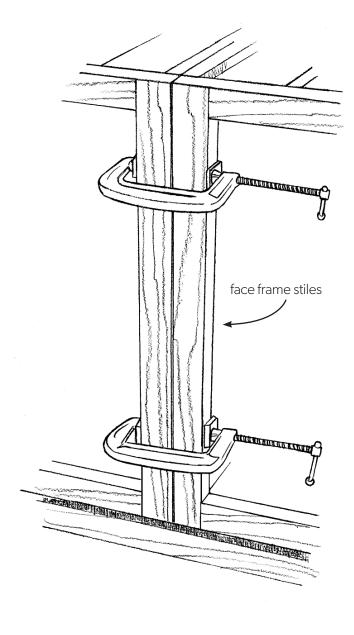
Make sure cabinet face frames are flush at top and bottom. Hold cabinets together with C-clamps at top and bottom while installing. Use a 11/32" twist drill bit to drill a hole part way through one cabinet stile (the vertical portion of the face frame) at top and bottom.

At the center of these holes, use a 1/8" twist drill bit to drill a pilot hole the rest of the way through the cabinet stile, about 1" into the adjoining cabinet stile.

Fasten cabinets together with  $#8 \times 2-1/2$ " screws.

If necessary, shim between wall and cabinet, then tighten screws completely, making sure screws go into studs at least 1".

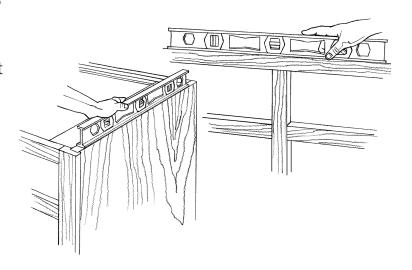
**NOTE:** Shorter screws may be required for fillers that are to be trimmed.



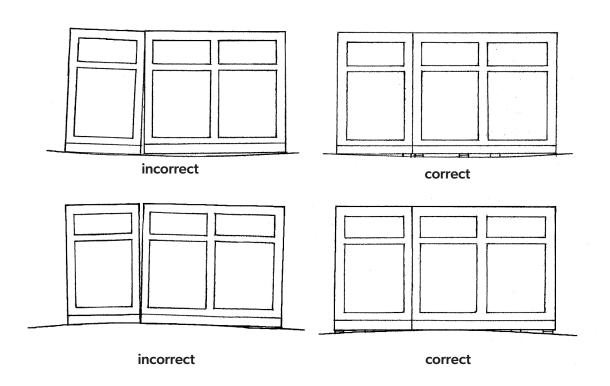
### Leveling base cabinets

Check each cabinet as it is attached to wall, front to back and across front edge with a level. Be certain cabinet is level in both directions.

Shim between cabinet and floor or between cabinet and wall to keep base units level and plumb. Shim between back rail and wall at screw

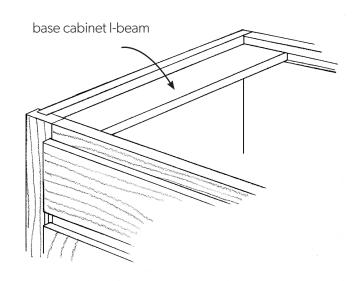


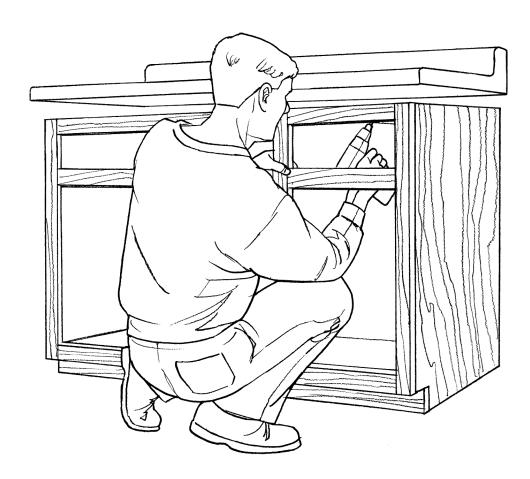
locations as necessary to prevent rail from bowing when secured to wall. Tighten all screws.



### **Installing countertop**

Follow countertop manufacturer's instructions for proper installation. Base cabinet I-beams should be utilized when attaching countertop. Be careful to use the proper length screw and not to overtighten, damaging the countertop. Screws should be placed no further than 1" from the front or back of the cabinet.

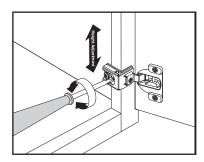




#### Adjusting cabinet doors

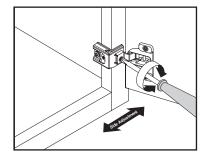
Replace doors and drawers removed during installation and adjust as needed. Loosen vertical adjustment screw on each hinge. Align cabinet door to frame, then re-tighten screws. Loosen horizontal adjustment screws, reducing gap between doors by moving left or right, then tighten screws. Re-insert shelves at desired intervals.

#### **Overlay Hinge**



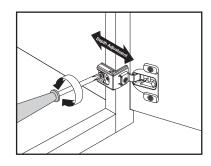
#### Height

Adjustment of the door up or down, allowing alignment of door tops and bottoms in relation to the frame or as compared to the drawer front.



#### Side

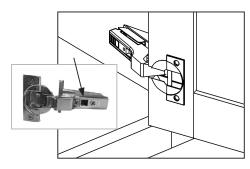
Allows the door to be moved from side to side giving you the ability to adjust the gap on butt doors to accommodate humidity changes in the home.



#### Depth

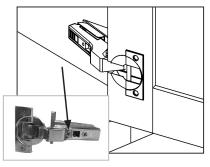
Allows adjustment of the door closer to, or further away from the face frame. This gives you the ability to compensate for any "racking" of the cabinet box during installation.

#### Concealed Hinge (Inset)



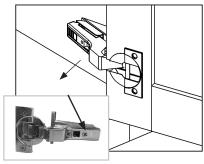
#### Height

Adjustment of the door up or down, allowing alignment of door tops and bottoms in relation to the frame opening.



#### Side

Allows the door to be moved from side to side giving you the ability to adjust the gap on butt doors to accommodate humidity changes in the home.



#### Depth

Allows adjustment of the door closer to, or further away from the face of the face frame. This gives you the ability to compensate for any "racking" of the cabinet box during installation.

### **Decorative hardware**

Install decorative knobs or pulls as desired.

# **Final Adjustments**

All cabinets require final adjustments after initial installation.

Door does not close properly against cabinet face frame at either top or bottom.

#### **Solution:**

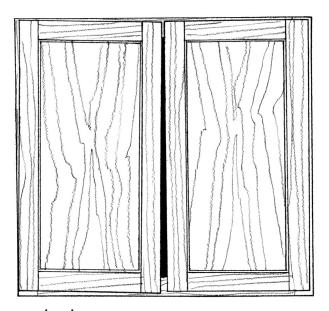
This could be a result of improper adjustment of door hinges, the cabinet is not installed "square," or door warping due to insufficient or excessive humidity. Loosen mounting screws and shim to make cabinet plumb, level and square. Loosen hinge screws and readjust. If necessary, install humidity control to keep relative humidity to 35%.

Space between two butt doors exceeds 1/8" or is uneven or doors do not line up properly.

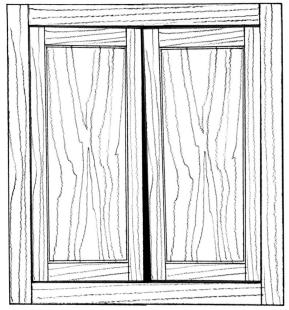
#### **Solution:**

Your cabinet may not be installed level, or door hinges are not correctly adjusted.

Always use a level on horizontal and vertical surfaces.



overlay doors

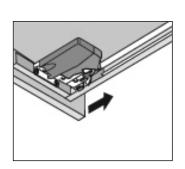


inset doors

Drawer does not close evenly or drawer movement in/out is stiff.

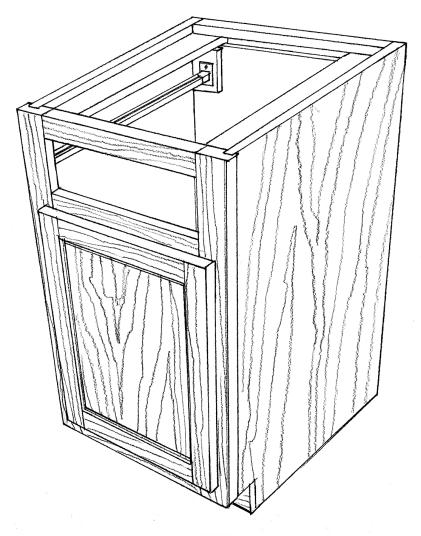
#### **Solution:**

Check guides to ensure they are free of sawdust or foreign objects that may obstruction guide operation. Ensure guide moves left and right on socket and check that drawer guides are engaged with locking device and are fully operational.



**Drawer Box Placement:** 

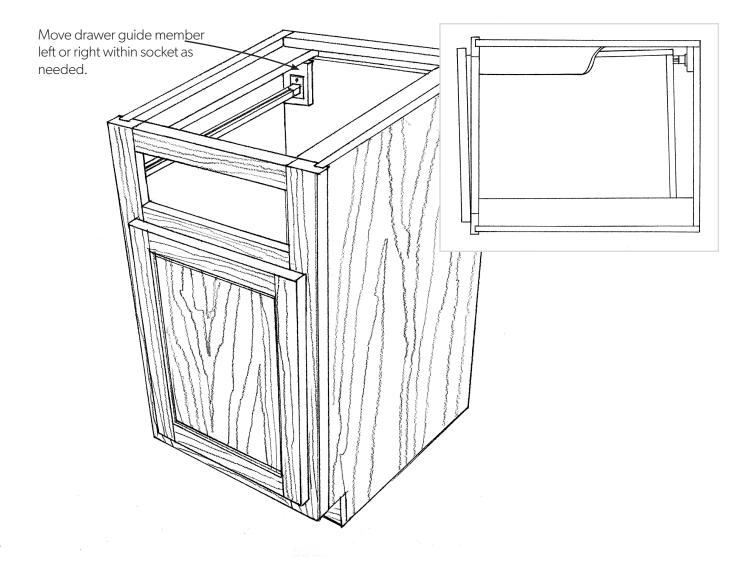
Place drawer box on runners and close; drawer will automatically engage runners.



Drawer front does not fit flush with cabinet.

#### **Solution:**

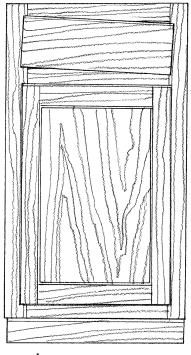
Cabinet may not be installed level. Loosen mounting screws and shim to make cabinet plumb and level. Check that drawer guides are engaged with locking device and are fully operational.



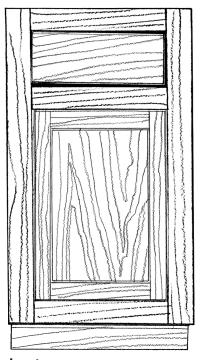
Drawer front is crooked.

#### **Solution:**

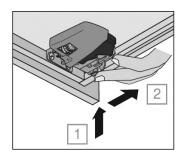
Press up on adjustment latch and slide forwards or backwards. To raise drawer, slide towards back of cabinet; to lower, slide towards front of cabinet.



overlay

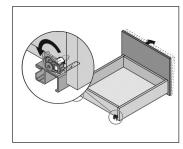


inset



Vertical Adjustment of Drawer Front:

Press up on adjustment latch and slide forwards or backwards. To raise drawer, slide towards back of cabinet; to lower, slide towards front of cabinet.



For Drawer Guides with Tilt Adjustment:

Rotate adjustment lever on rear of each guide to adjust tilt of drawer front.