



OUTDOOR KITCHEN Installation Manual

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Important

This guide contains basic information required to install standard Challenger Design cabinetry. The specifics of the design, configuration, location, space and other factors influencing your project, may require deviations from the stated instructions.

It is recommended that installation be performed by a licensed contractor or other professional with experience installing cabinetry.

Observe Local Building Codes

Local building codes may supersede the information contained within this guide. It is imperative that you understand and adhere to local codes and regulations when installing the cabinetry and appliances.

Required Tools

- Screw gun with #2 square head bit
- Level
- 2- 1/2" End Wrenches
- Tin Snip (if optional toe kicks were ordered)
- Saw (if optional toe kicks were ordered)
- #2 Phillips head manual screw driver
- Tape measure
- Drill
 - 1/8" Bit
 - Holesaw (size dependant upon installation)
- Bar or C Clamps
- Silicone

Basic Notes on Installation

- Do not completely remove protective plastic until installation is complete. Peel back plastic only in areas where it will be hard to remove after installation (i.e. edges of countertops and side panels).

NOTE: The protective plastic is for temporary protection during production, transport, and installation. Prolonged exposure to light and heat may cause degradation, which can stain or damage the cabinets. Cabinets should be warehoused in a cool, dry location. For extended storage, remove the protective plastic.

- Remove all drawers and doors before installation. This will make cabinets easier to lift, install, and gives access to installation areas. See page 8 for drawer removal details. When reinstalling, insure that doors and drawers are returned to their original cabinets.
- Install cabinets in final position. The cabinets are difficult to move after assembly is complete.
- Install the first cabinet at the highest point so the toe kick area is at least 4" high, then install adjacent cabinets. This ensures that the toe kick will fit under all cabinets without modification.
- Cabinets may flex out of square until they are locked into place with one another.
- Complete cabinet install (fastened together, countertop attached, appliances installed, doors installed, drawers returned to original positions and level is obtained) before adjusting doors or drawers. See page 9 for proper adjustment details.
- Side panels of cabinets are prefinished per order. Refer to the design layout for proper cabinet location.
- Back panels come finished and pre-installed on all base cabinets.

Prepare Area for the Kitchen

Make sure that your installation site is as level as possible.

When starting the installation, check floor for pitch both side-to-side and front-to-back to find the highest point. Your choice of under-counter appliances may impact and determine the finished height of the cabinetry.

Create a level line across back wall (if applicable). If there is a corner, start in the corner and adjust cabinets to this line.

Notes on Unpacking Cabinets

- Carefully review the packing list to verify your order has been shipped complete. Unpack cabinets and parts, making sure not to scratch the product, misplace any hardware or accessories.
- Hardware bags included for each cabinet contain the screws for assembly of cabinets to each other and to countertops. (If provided by Challenger Designs)
- Doors and drawers are shipped installed with standard stainless steel pulls.
- It is recommended that all doors, drawers and shelves be removed during the placement and installation process. Be sure to return them to their original cabinets when reinstalling. See page 8 for proper adjustment details
- If toe kick(s) were ordered, they will be packaged separately.

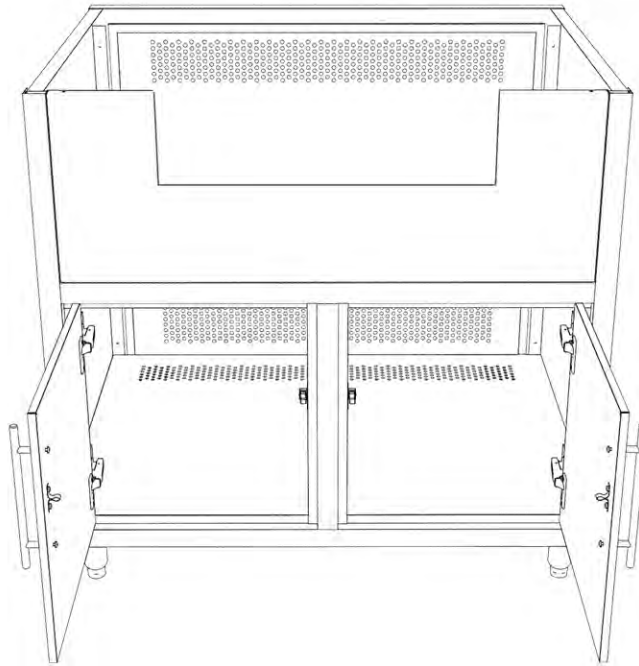
Utility Access Holes

Layouts may require cabinets to be modified to allow access for plumbing, electrical, etc. The cabinets can have holes drilled in them. In the event a hole does need to be made, using a metal bit hole saw may also be used to drill through cabinets.

If necessary, consider locating GFI electrical outlets in cabinets adjacent to the appliances to allow for ease of resetting the GFI and to ensure proper fit of the appliance.

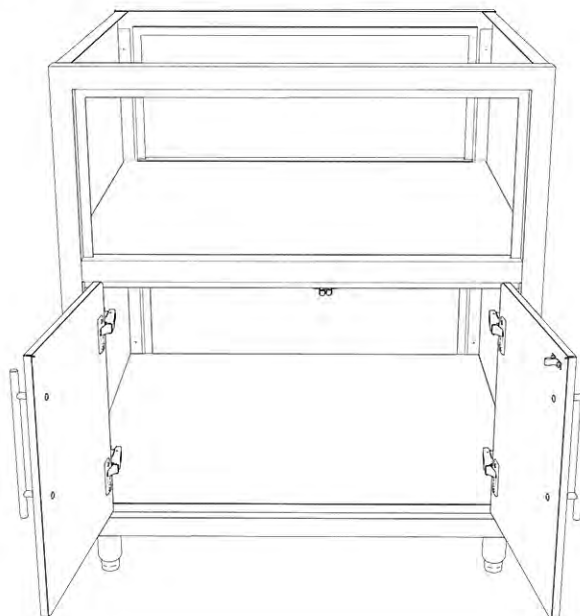
Gas Grill Cabinets

Challenger Designs' gas grill cabinets are designed for appliances that hang from the countertop. Grill liners/insulation jackets are not required nor accounted for in the cabinet design. The cutout on the face panel is cut per manufacture's specifications. The cabinet is ventilated through the floor and back panel.



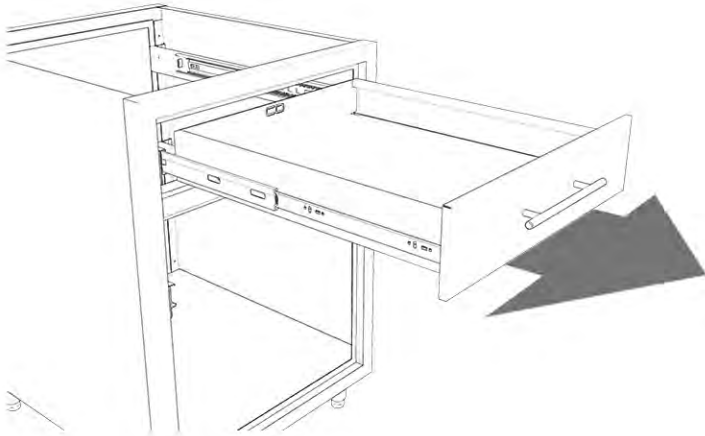
Kamado Grill Cabinets

Challenger Designs' kamado grill cabinets are designed for appliances to sit directly on the cabinet shelf. Feet or Nests may be used but are not required. The cabinet is built per manufacture's specifications. It is open front and back above the shelf for ventilation. The cabinet below is weather sealed. Note: Most kamado grills are comprised of materials that can be abrasive, resulting in paint damage hidden under the grill. This does not affect the function of the cabinet and is not a warrantable issue.

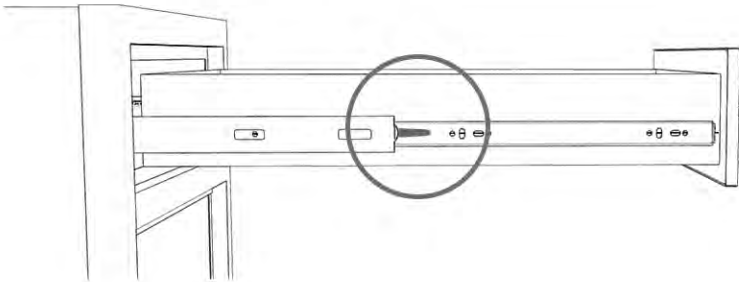


Drawer/Slide-Out Component Removal

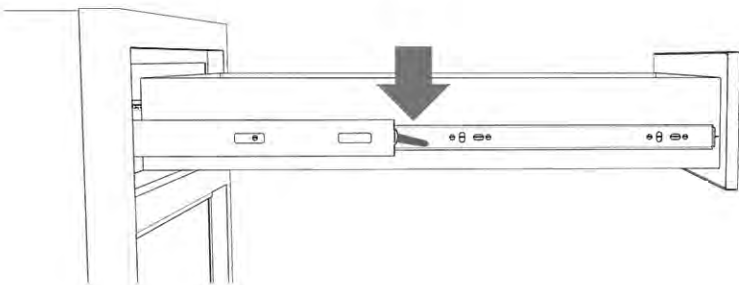
Removal of cabinet drawers allows for ease of moving, assembly and installation. Be sure to store drawers away from the work site to prevent damage. When reinstalling, be sure to return them to their original location.



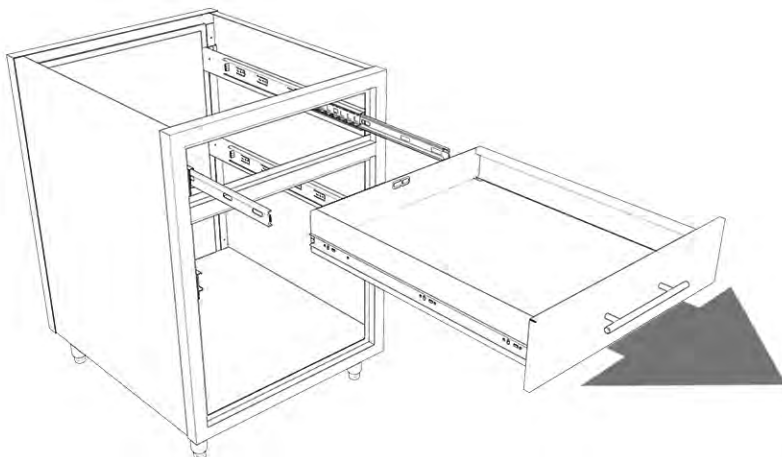
1. Open the drawer fully.



2. Locate the drawer release levers on both sides of the drawer.



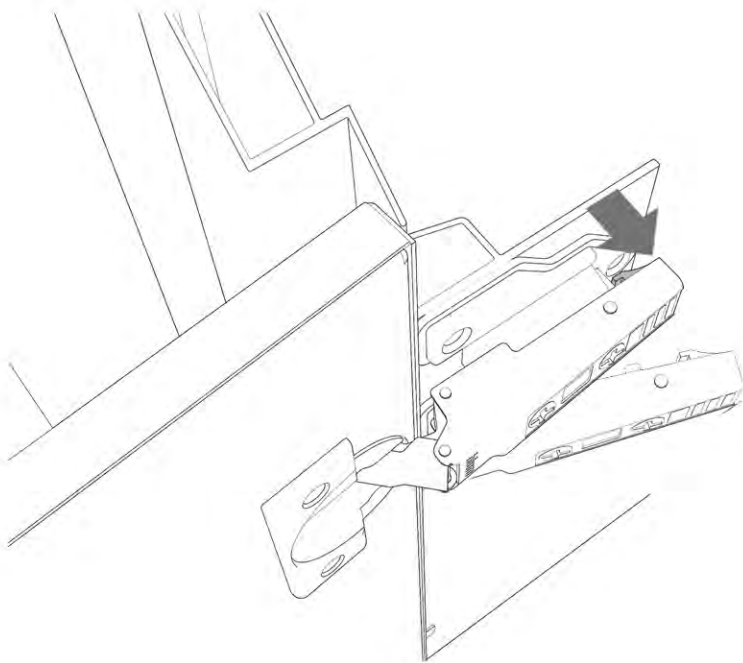
3. Depress both drawer release levers at the same time and hold.
Note: Down on left, up on right.



4. Pull the drawer all the way out of the cabinet.

Door Removal

Removal of cabinet doors allows for ease of moving, assembly and installation.
Be sure to store doors away from the work site to prevent damage.

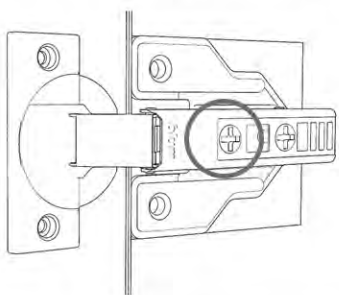


1. Depress release found at the rear of the hinge assembly.

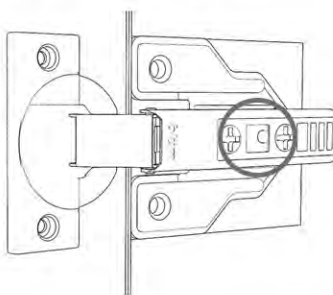
2. Rotate from rear out and away to remove.

Door Adjustment

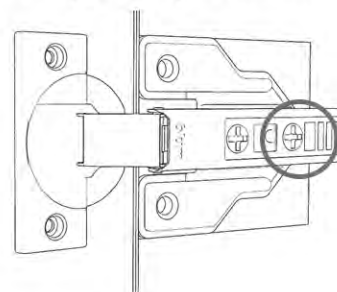
Side Adjustment



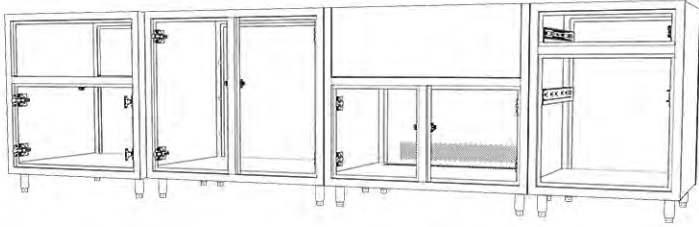
Height Adjustment



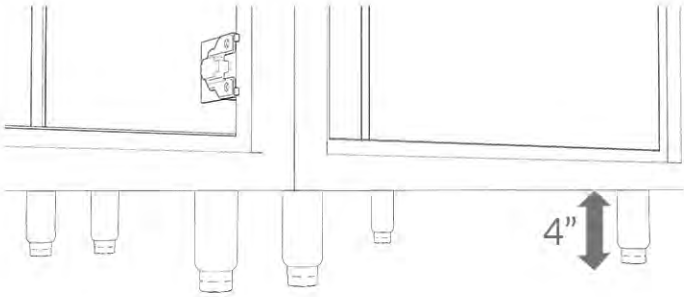
Depth Adjustment



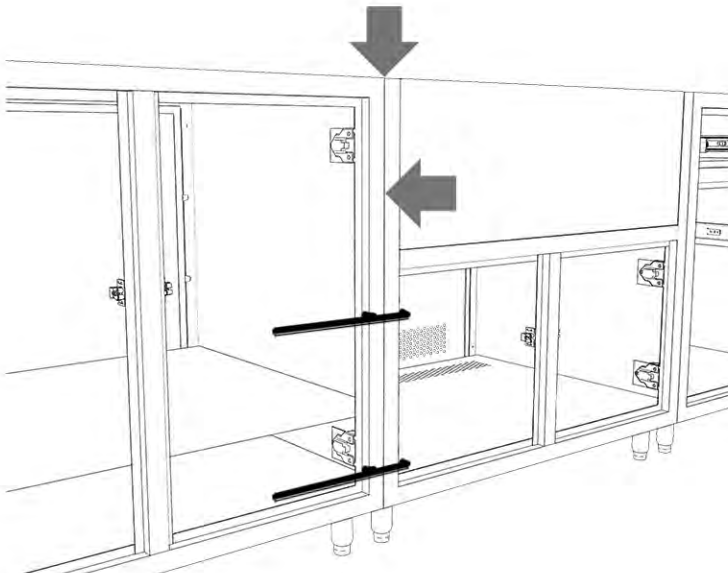
Cabinet Installation-Joining Cabinets



1. Place cabinet(s) in final position.



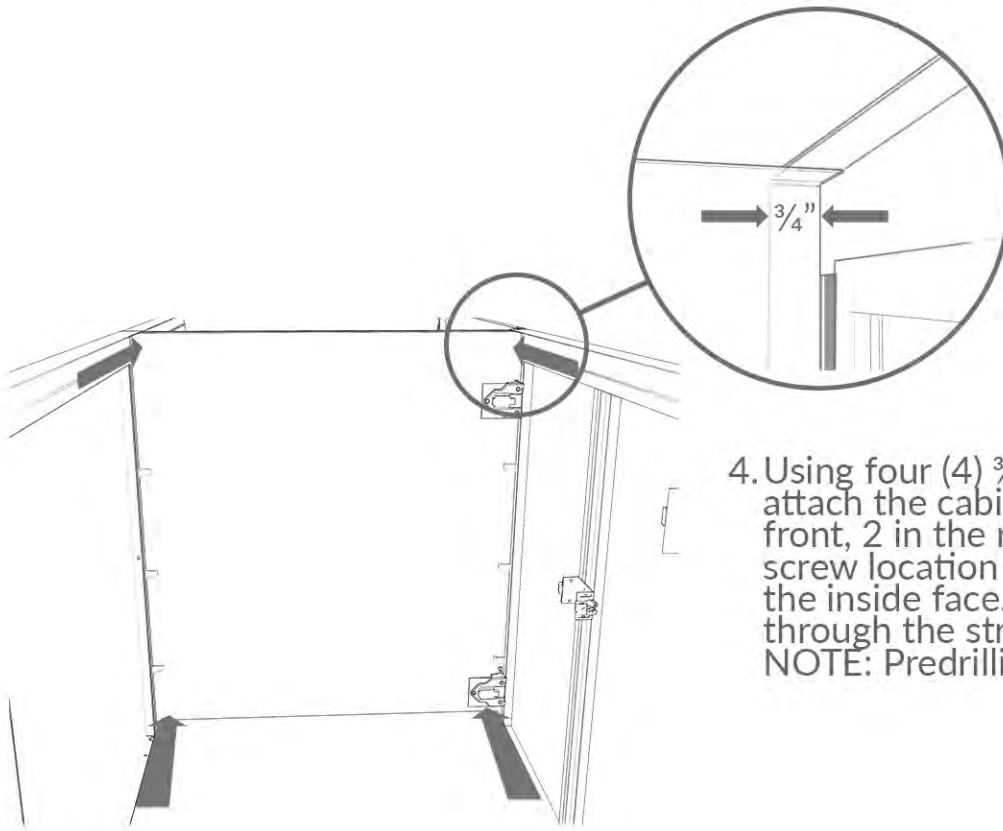
2. Use the cabinet that would be on the highest ground, set the height first, to the minimum 4" toe kick height.



3. Align the faces and tops of the cabinets.
Use a clamp to hold the position.

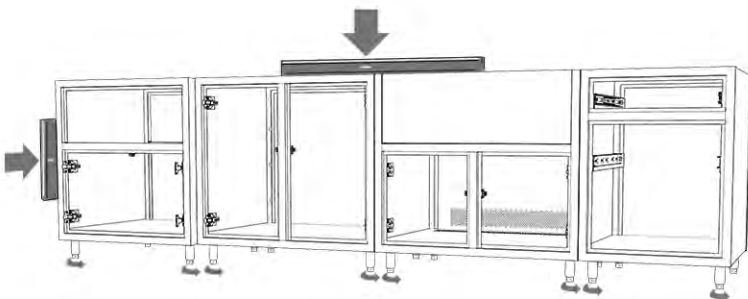
NOTE: Protect finish when clamping.

Cabinet Installation-Joining Cabinets



4. Using four (4) $\frac{3}{4}$ " #8 screws provided, attach the cabinets together, 2 in the front, 2 in the rear. If permitted, screw location should be within $\frac{3}{4}$ " of the inside face. This will join the cabinets through the structural faceframe. NOTE: Predrilling is recommended.

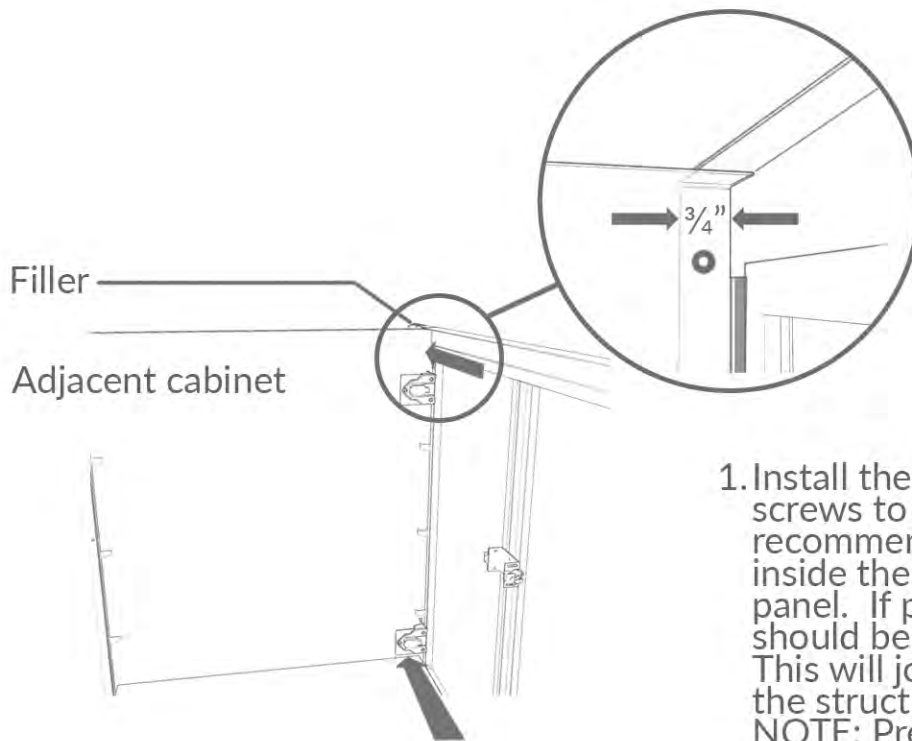
5. Repeat steps 3-4 through the run of cabinets.



6. Level cabinets together in all directions. Be sure to check along back as well.

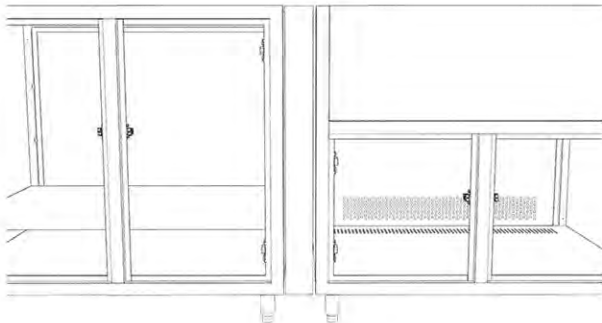
Cabinet Installation-Standard Fillers

Standard fillers are offered in standard sizes from 1" to 6". They are a bent panel design that extend from the top to the bottom of the face frame.



1. Install the panel using two (2) $\frac{3}{4}$ " #8 screws to the adjacent cabinet. It is recommended to fasten from inside the cabinet out to the side of panel. If permitted, screw location should be within $\frac{3}{4}$ " of the inside face. This will join the components through the structural faceframe.
NOTE: Predrilling is recommended.

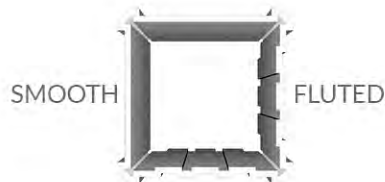
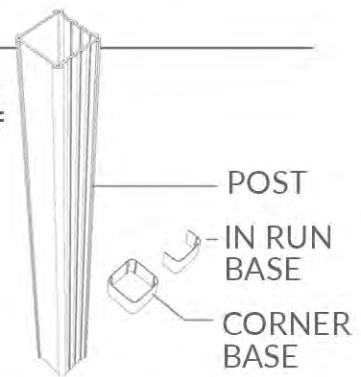
2. Align the rear filler to the back panel and install in the same manner as the front filler (If applicable)



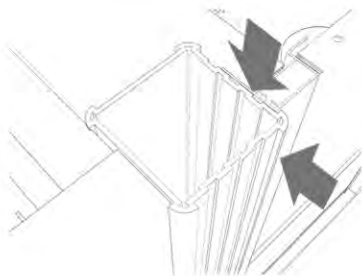
3. Continue with run of cabinet installation by aligning and attaching the filler to the next cabinet in the line in the same manner.

Cabinet Installation-Column Fillers

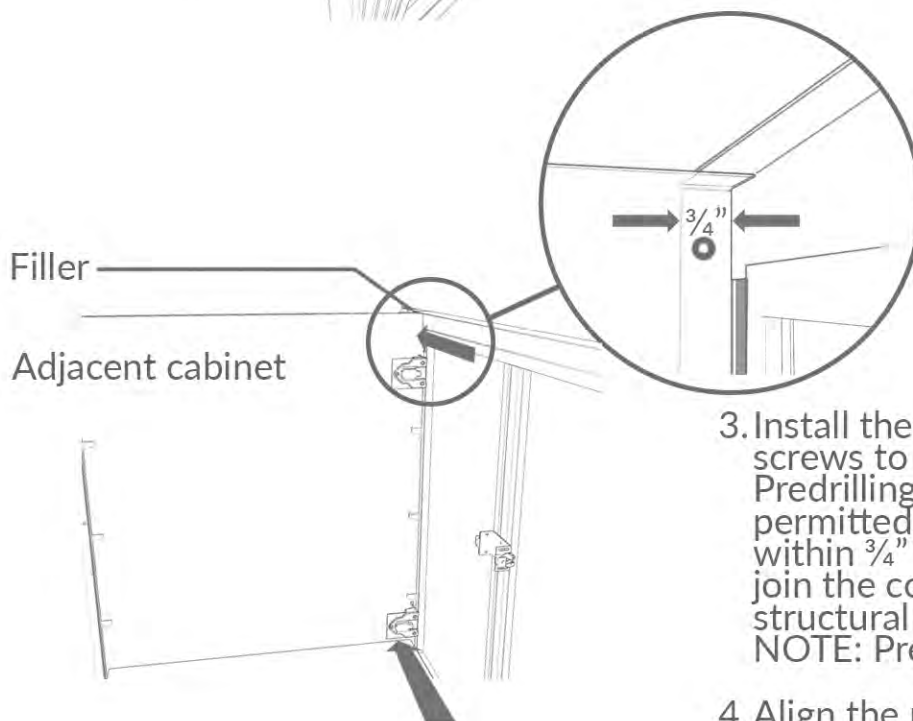
Column fillers are 3" standard. They are an extruded design, featuring 2 decorative styles smooth or fluted. The columns extend from the top of the face frame, down to the floor. It is recommended that if a finished end panel is being used, install the columns to the end panel first, then attach the end panel/post assembly to the end cabinet.



1. Rotate/flip the column so that the desired design is exposed. Take consideration if the corner is to be exposed.



2. Align the top edge of the column with the top edge of the cabinet frame. Slide the column rearward against the face of the cabinet. Note: the column will be sitting up, off of the ground.

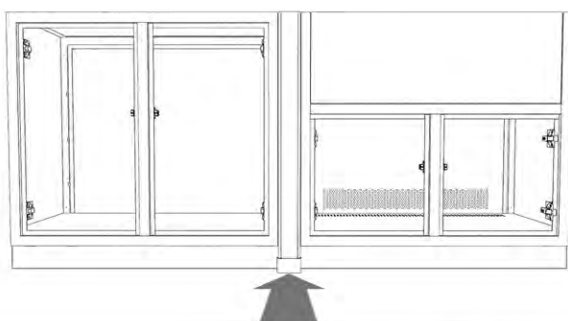


3. Install the column using two (2) $\frac{3}{4}$ " #8 screws to the adjacent cabinet. Predrilling may help in the attachment. If permitted, screw location should be within $\frac{3}{4}$ " of the inside face. This will join the components through the structural faceframe. NOTE: Predrilling is recommended.

4. Align the rear filler to the back panel and install the same way as the front filler. (If applicable)

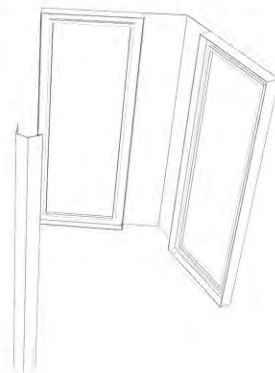
5. Continue with run of cabinet installation by aligning and attaching the column to the next cabinet in the line.

6. After assembly and toe kick installation, Clip the base cover of the column on to the bottom



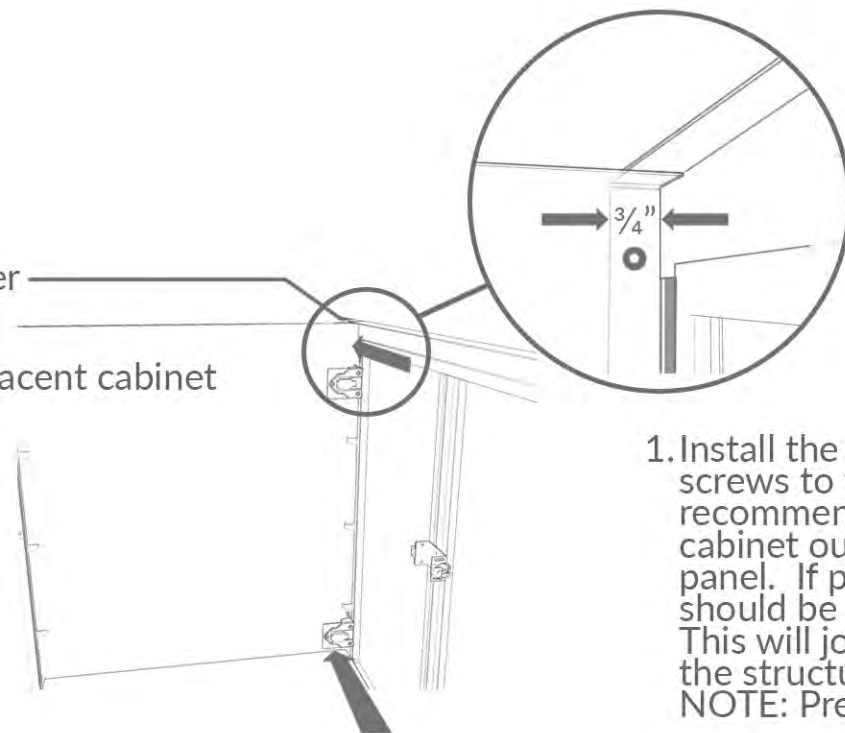
Cabinet Installation-Angle Fillers

Angle fillers are offered in standard angles of 30 degrees and 45 degrees. They are a combination of bent panel and framed panel design and extend from the top of the face frame to the bottom of the face frame.

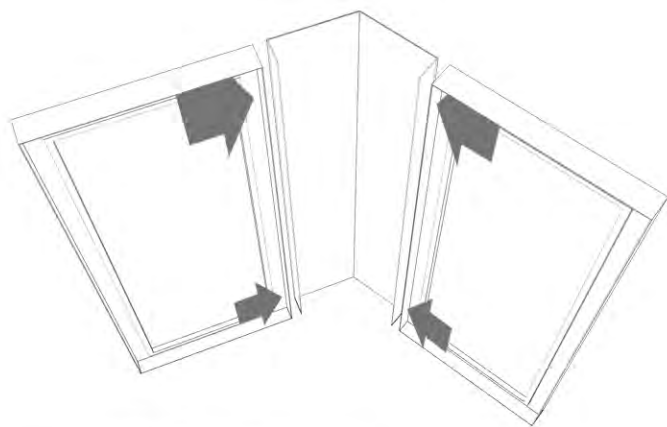


Filler

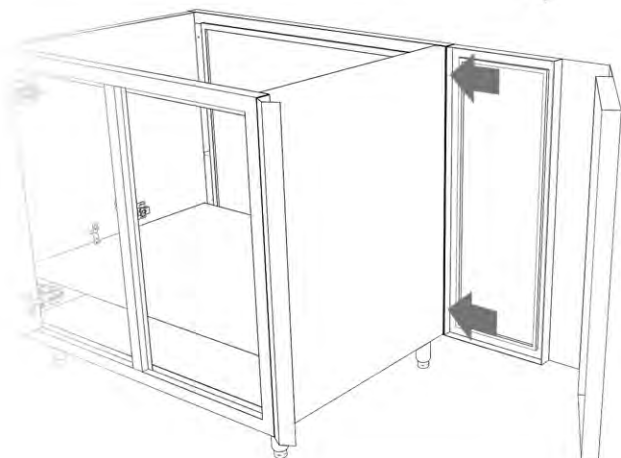
Adjacent cabinet



1. Install the front panel using two (2) $\frac{3}{4}$ " #8 screws to the adjacent cabinet. It is recommended to fasten from inside the cabinet out to the side of the filler panel. If permitted, screw location should be within $\frac{3}{4}$ " of the inside face. This will join the components through the structural faceframe.
NOTE: Predrilling is recommended.



2. Assemble the rear filler kit using four (4) $\frac{3}{4}$ " #8 screws, two (2) at the top and two (2) at the bottom. Fasten from the framed panels into the bent panel.

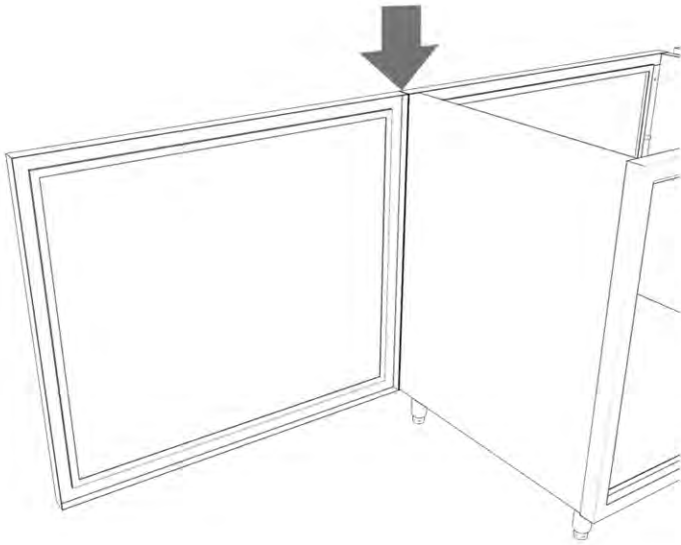


3. Align the rear framed panel to the back panel of the adjacent cabinet and install the same way as the front filler using two (2) $\frac{3}{4}$ " #8 screws (If applicable)

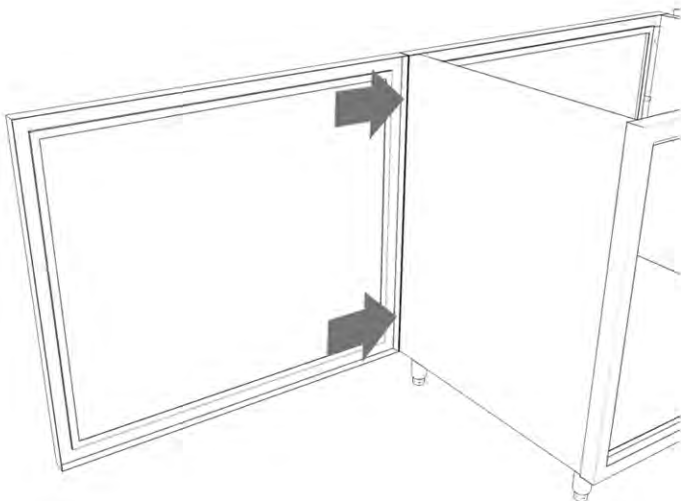
4. Continue with run of cabinet installation by aligning and attaching the filler to the next cabinet in the line.

Cabinet Installation-Finished Back Panels

Finished back panels are manufactured to order at custom lengths as specified by customers. They accommodate openings where traditional cabinetry is not desired (i.e. behind a refrigerator) They extend from the top of the face frame to the bottom of the face frame.



1. Align the finished back panel with the back panel of the adjacent cabinet.
NOTE: The back panel will be sitting flush with the bottom of the adjacent cabinet.

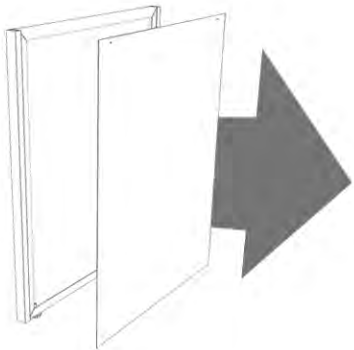


2. Install the back panel using two (2) $\frac{3}{4}$ " #8 screws to the adjacent cabinet.
NOTE: Predrilling is recommended.

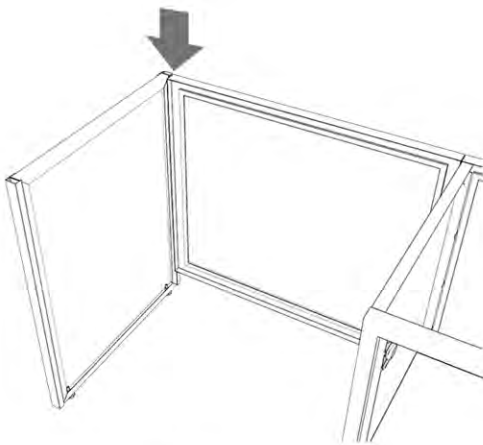
3. Continue with run of cabinet installation by aligning and attaching the finished back panel in the same manner to the next component in the line.

Cabinet Installation-Finished End Panels

Finished end panels are manufactured to be used as a left or right finished panel. They provide support to countertops or simply finish out the end of a run of cabinets. They commonly are used beside appliances such as under counter refrigeration.

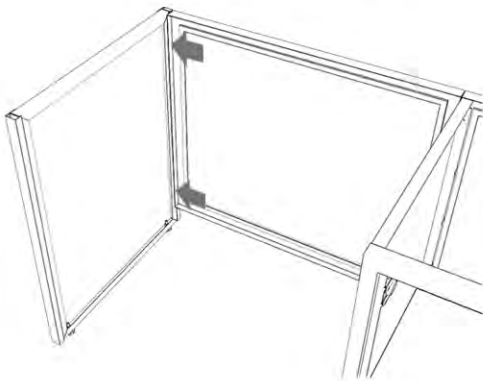


1. Remove the inner panel by removing the screws holding them in place. This will allow for installation of the countertop later.

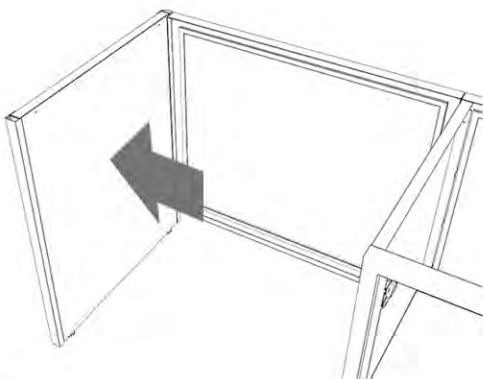


2. Align the finished end panel frame with the frame of the adjacent component.

NOTE: The finished end panel height matches the height of the cabinet assembly with legs.



3. Install the finished end panel using two (2) $\frac{3}{4}$ " #8 screws to the adjacent cabinet or back panel. If permitted, screw location should join the cabinets through the structural faceframes.
NOTE: Predrilling is recommended.

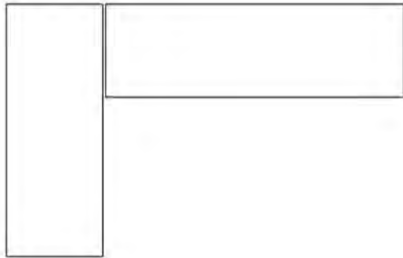


3. After attaching counter top, in later steps, reattach inner panel using the original hardware.

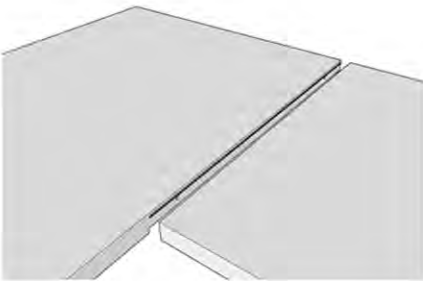
Cabinet Installation-Countertops

This guide contains basic information required to install Challenger Design supplied countertops. The specifics of the design, configuration, location, space and other factors influencing your project, may require deviations from the stated instructions.

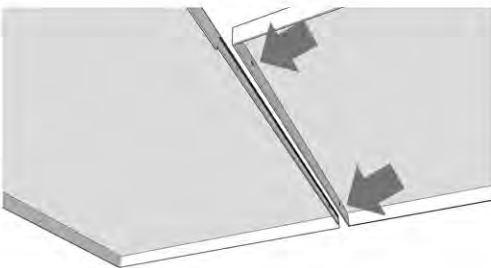
For installation of counter surfaces, not provided by Challenger Designs please contact your countertop provider.



1. Set countertops in place.



(If top is one piece construction, skip to step 4.)
2. Add bead of silicone in seam for water proofing.



3. Bolt the countertop sections together using the hardware provided in clear bag.

4. Confirm overhangs. Tops are custom made to order. Exposed overhangs are approximately .5" standard and flush (0") when against wall.

5. Using the $\frac{3}{4}$ " #8 screws provided, attach the countertop to the top of the cabinet frames. Make sure to attach the corners and along the front and rear as necessary. NOTE: Predrilling cabinets is recommended.

Cabinet Installation-Toe Kicks

The toe kick is specially designed by Challenger Designs to allow for up to 1" of variation in the floor. Beyond that, customers may order in addition to the toe kick, a custom made filler. Toe kicks may require cutting to fit specific layouts.

NOTE: Predrilled holes are not for installation (used in manufacturing process).

For islands with toe kicks on multiple sides, start with the front of the kitchen.

FRONT AND REAR TOE KICKS

The toe kick should be cut .375" less than the length of the run per return.

- a. Example: 96" run of cabinets that has toe kick on *front, left, & right sides* would need a 95.25" toe kick for front.
 - i. $96 - .375 - .375 = 95.25$
- b. Example: 96" run of cabinets that has toe kick on *front and left side* would need a 95.625" toe kick for front.
 - i. $96 - .375 = 95.625$

1. Measure, mark, and cut the toe kick to the desired length. (See above)

2. Slide the provided leg clip brackets into the channels in the back of the toe kick. Challenger Designs recommends using 4 brackets in an 8' run.
*** Note that the two end brackets will be used to support the *return* toe kick. The clip bracket should be as shown.

3. Clip the toe kick assembly into place on the stainless steel legs. All pieces of toe kick must have at least two points of contact with run of cabinets.

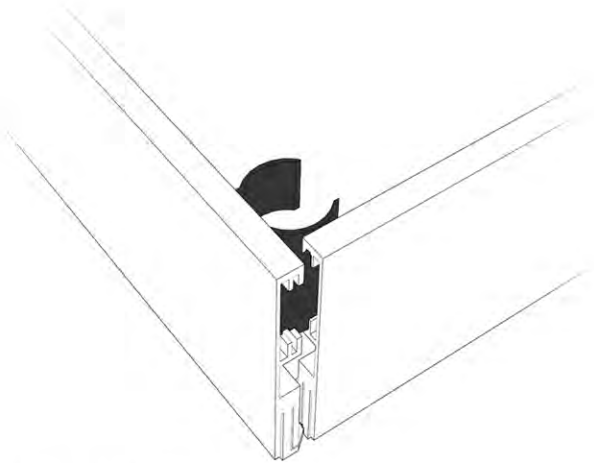
4. If your kitchen requires a toe kick on the rear side of the layout, repeat the steps above on the rear of the kitchen.

Cabinet Installation-Toe Kicks

RETURNS (SIDES)

The toe kick return should be cut 1.25" less than the depth of the cabinets when there is no rear toe kick, and 2.5" less if there is.

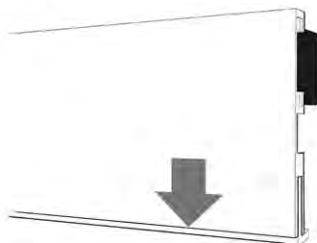
- a. Example: 28" deep cabinets that have toe kicks on *front, side(s), and rear* would need a 25.5" toe kick for left or right side.
 - i. $28 - 2.5 = 25.5$
- b. Example: 28" deep cabinets that have toe kicks on *front and side(s)* would need a 26.75" toe kick for left or right side.
 - i. $28 - 1.25 = 26.75$



1. Measure, mark, and cut the toe kick to the desired length. (See above)

2. A toe kick return can be mounted to the kitchen using the same bracket that holds the end of the front and/or rear toe kick. If required a single bracket can be utilized on end of toe kick.

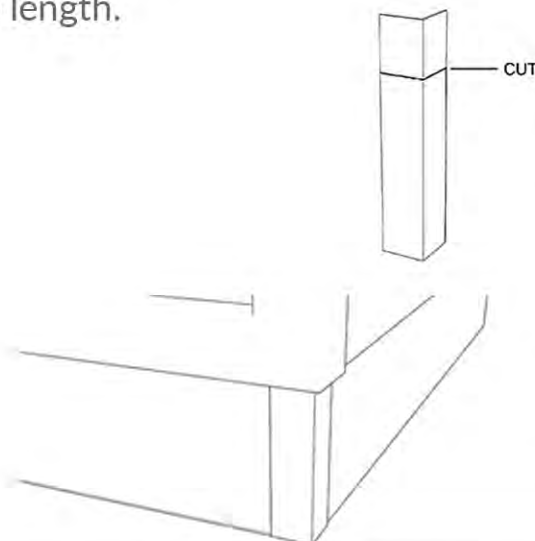
FASCIA SKIRT



1. Remove the tape that holds the fascia skirt in place for shipping. Fascia skirt is used to hide any variation in elevation due to floor slope.

CORNER COVER

The corner cover pieces will be manufactured in 12" pieces as shown below and need to be cut to length.



1. Measure from the floor, to the top of the toe kick. Cut the corner cover to length.

2. Remove the adhesive backing and apply the corner to the toe kick for a clean finish. (repeat as necessary on all exposed corners)

Cabinet Installation-Toe Kicks



To maintain the toe kick height,
Cut the plastic key material to size.



Insert the key into the space between
the toe kick body and the lower portion
of the toe kick.

Repeat at opposite end.