Contents [hide]

SUB-ZERO BI Series Built In Side By Side Refrigerator

INSTALLATION GUIDE

INSTALLATION CONSIDERATIONS

This section uses some of the information in the BI Series Installation Guide to address common installation issues seen by Service Technicians. Improper installation, though not a valid service issue, has the potential to lead to a call for service. Installation related complaints could include, but are not limited to: Unit leveling, unit movement, door misalignment, improper door and drawer sealing, internal frost or condensation, exterior condensation, warm compartment temperatures, etc.

The Built-In line offers the following design alternatives – framed, overlay and stainless steel models. The overlay design has two possible installation applications – standard overlay and flush inset. Each of these design options has specific installation requirements, which means it is vital that the unit match the planning and space needs.

NOTE: If additional installation information is needed, refer to the complete Installation Guide, or contact Sub-Zero Service Department.

Tools and Materials Required

The following is a list of tools and materials that will assist in a proper installation.

- Phillips screwdriver set

- Slotted screwdriver set
- 6-Lobe, Torx type drive screwdriver set (Specific sizes, T-10, T-20 and T-25)
- 4′ (1.2 m) of 1/4″ copper tubing and saddle
- valve for the water line—part #4200880
- (do not use self-piercing valves)
- Copper tubing cutter
- Level – 2′ (.6 m) and 4′ (1.2 m) recommended
- Appliance Dolly able to support 700 lbs (317 kg) and adequate manpower to handle the weight of the unit
- Various sized pliers
- Wrench set
- Allen wrench set
- 5/16″ hex bolt nut driver
- Crescent wrenches
- Cordless drill and assorted drill bits
- Masonite, plywood, 1/8″ pressed fiberboard, cardboard or other suitable material to protect finished flooring
- Appropriate materials to cover and protect the home and its furnishings during installation

Site Preparation

The finished rough opening where the Built-In unit is to be installed must be properly prepared. Refer to the Finished Rough Opening Specifications for the specific model on the following pages. The specifications for the framed, over-lay and stainless steel applications are identical. The Finished Rough Opening Specifications are different for the flush inset application, whether using custom panels or Sub-Zero accessory stainless flush inset panels. Make sure that the rough opening dimensions, door swing clearance, electrical service and plumbing are correct for the model being installed.

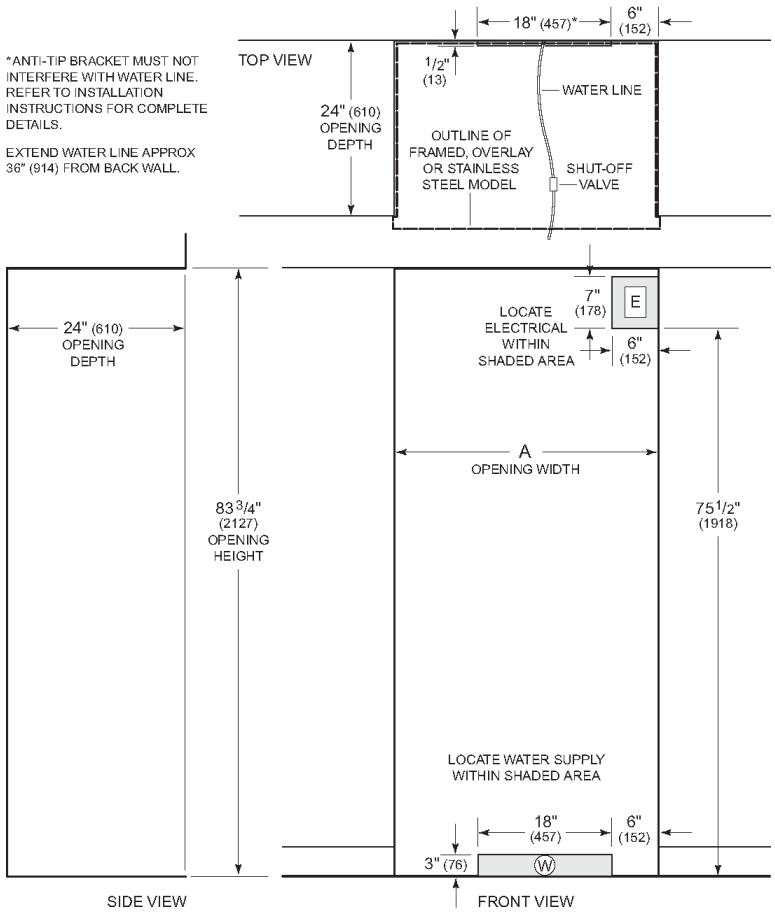
If installing two Built-In units side by side in the framed, overlay or stainless steel application, a separating filler strip is recommended. Add the filler strip width to the finished rough opening dimension, and ALWAYS complete the installation with the Anchoring Kit components.

For installation of two Built-In units side by side in the flush inset application, a dual installation kit will be necessary.
IMPORTANT NOTE: Built-in units installed side by side in the flush inset application cannot use the standard Sub-Zero accessory overlay panels, and must have opposing hinges.

IMPORTANT NOTE: To operate properly, the door must open a minimum of ninety (90) degrees. Use a minimum 3″ (76) filler in corner installations to assure a ninety (90) degree door opening. Allow enough clearance in front of the unit for full door swing.

IMPORTANT NOTE: Make sure the floor under the unit is level with the surrounding finished floor.

Finished Rough Opening Specifications (30” and 36” Over / Under Models)

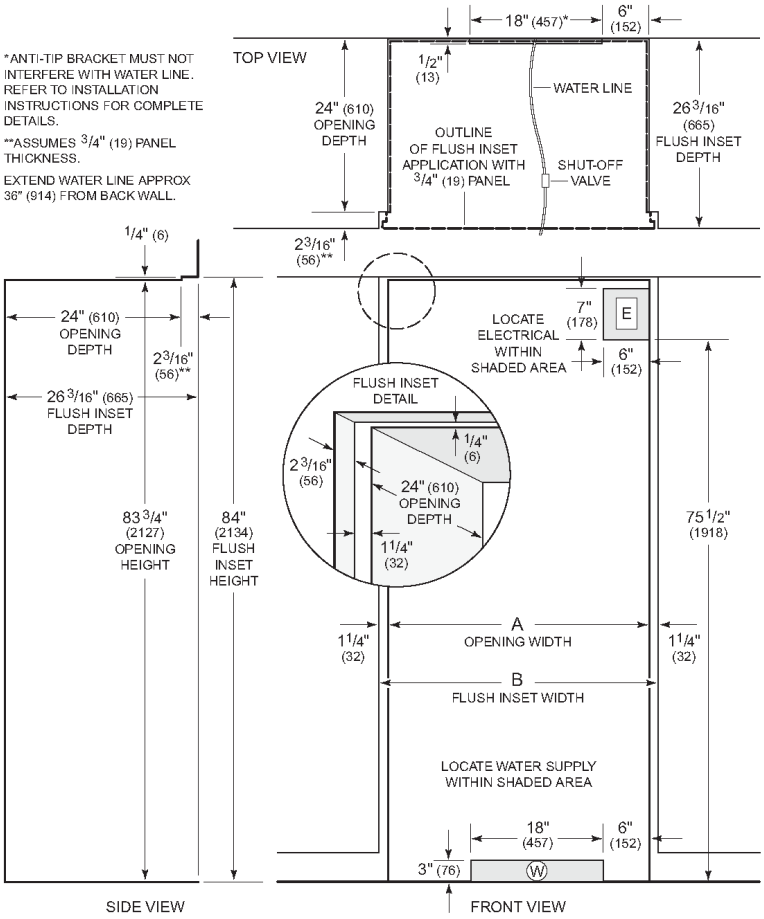


INSTALLATION SPECIFICATIONS

Over-and-Under Models—
Framed, Overlay (non-flush inset) and Stainless Steel

	A
Model BI-30U	29 1/2" (749)
Model BI-30UG	29 1/2" (749)
Model BI-36U	35 1/2" (902)
Model BI-36UG	35 1/2" (902)

Dimensions are for finished rough openings.



INSTALLATION SPECIFICATIONS

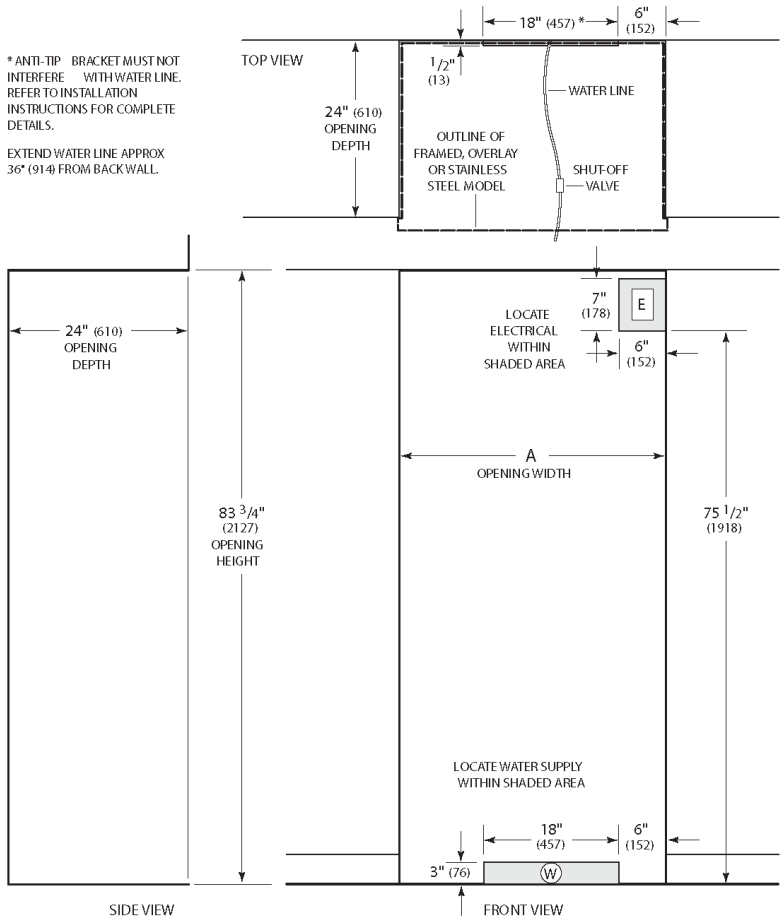
Over-and-Under Models—
Flush Inset Application

	A	B
Model BI-30U	29 1/2" (749)	32" (813)
Model BI-30UG	29 1/2" (749)	32" (813)
Model BI-36U	35 1/2" (902)	38" (965)
Model BI-36UG	35 1/2" (902)	38" (965)

Dimensions are for finished rough openings.

Dimensions in parentheses are in millimeters unless otherwise specified.

Finished Rough Opening Specifications (36" All Refrigerator and All Freezer Models)



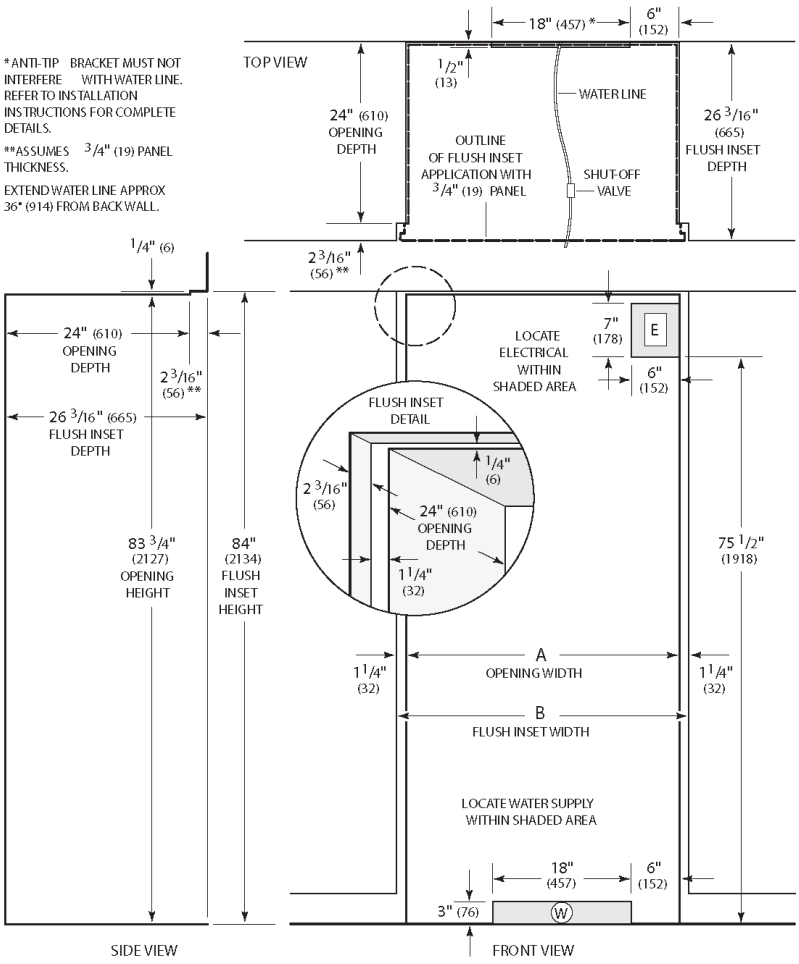
INSTALLATION SPECIFICATIONS

All Refrigerator / All Freezer Models—
Framed, Overlay (non-flush inset) and Stainless Steel

	A
Model BI-36R	35 1/2" (902)
Model BI-36RG	35 1/2" (902)
Model BI-36F	35 1/2" (902)

Dimensions are for finished rough openings.

Models BI-36R and BI-36RG will not require the water line connection.



INSTALLATION SPECIFICATIONS

All Refrigerator / All Freezer Models—
Flush Inset Application

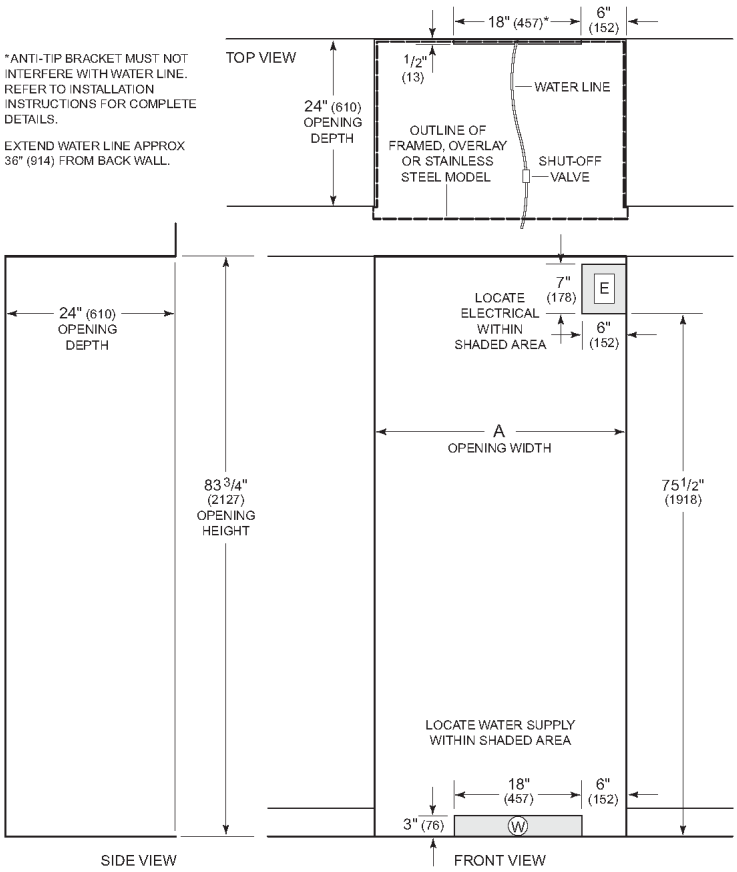
	A	B
Model BI-36R	35 1/2" (902)	38" (965)
Model BI-36RG	35 1/2" (902)	38" (965)
Model BI-36F	35 1/2" (902)	38" (965)

Dimensions are for finished rough openings.

Models BI-36R and BI-36RG will not require the water line connection.

Dimensions in parentheses are in millimeters unless otherwise specified.

Finished Rough Opening Specifications (36", 42" and 48" Side-by-Side Models)

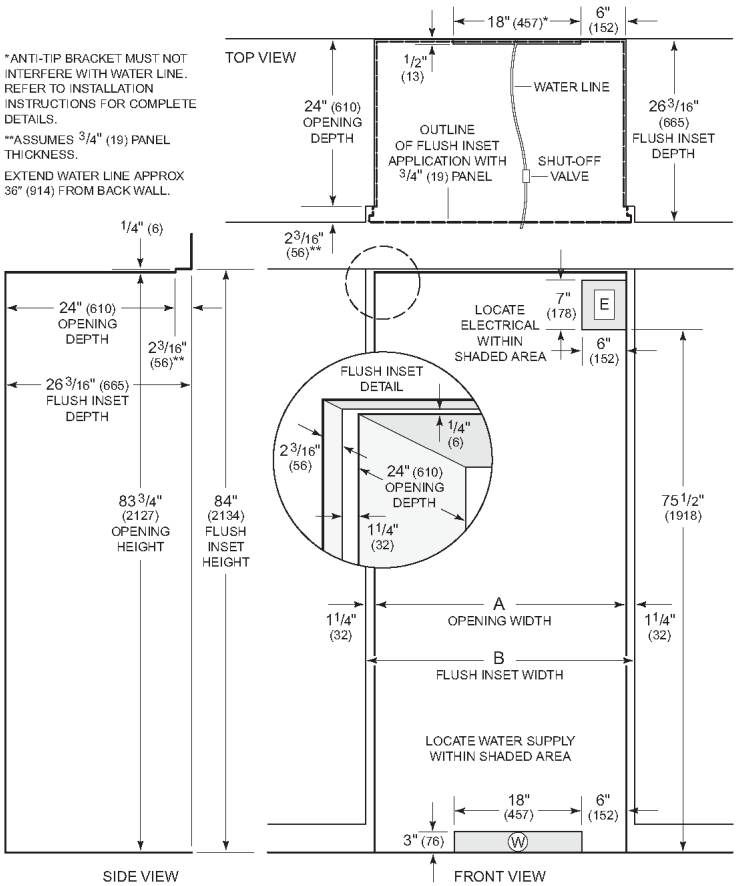


INSTALLATION SPECIFICATIONS

Side-by-Side Models—
Framed, Overlay (non-flush inset) and Stainless Steel

	A
Model BI-36S	35 1/2" (902)
Model BI-42S	41 1/2" (1054)
Model BI-42SD	41 1/2" (1054)
Model BI-48S	47 1/2" (1207)
Model BI-48S	47 1/2" (1207)

Dimensions are for finished rough openings.



INSTALLATION SPECIFICATIONS

Side-by-Side Models—
Flush Inset Application

	A	B
Model BI-36S	35 1/2" (902)	38" (965)
Model BI-42S	41 1/2" (1054)	44" (1118)
Model BI-42SD	41 1/2" (1054)	44" (1118)
Model BI-48S	47 1/2" (1207)	50" (1270)
Model BI-48SD	47 1/2" (1207)	50" (1270)

Dimensions are for finished rough openings.

Dimensions in parentheses are in millimeters unless otherwise specified.

Anti-Tip Bracket Installation

WARNING

THE UNIT COULD TIP FORWARD UNDER CERTAIN LOAD CONDITIONS. FAILURE TO INSTALL BOTH ANTI-TIP BRACKETS AND EXTEND LEVELERS TO FLOOR ACCORDING TO INSTALLATION MANUAL COULD RESULT IN SERIOUS INJURY OR DEATH.

IMPORTANT NOTE: Placement of the two anti-tip brackets is critical. They must be installed exactly 24″ (610 mm) from the front of the rough opening to the back of the brack-ets and a minimum of 4″ (102 mm) from the sides of the rough opening. This depth will increase to 26-3/16″ (665 mm) for a flush inset installation based on 3/4″ (19 mm) thick decorative panels. Failure to properly position the anti-tip brackets will prevent them from engaging the unit should it tip forward.

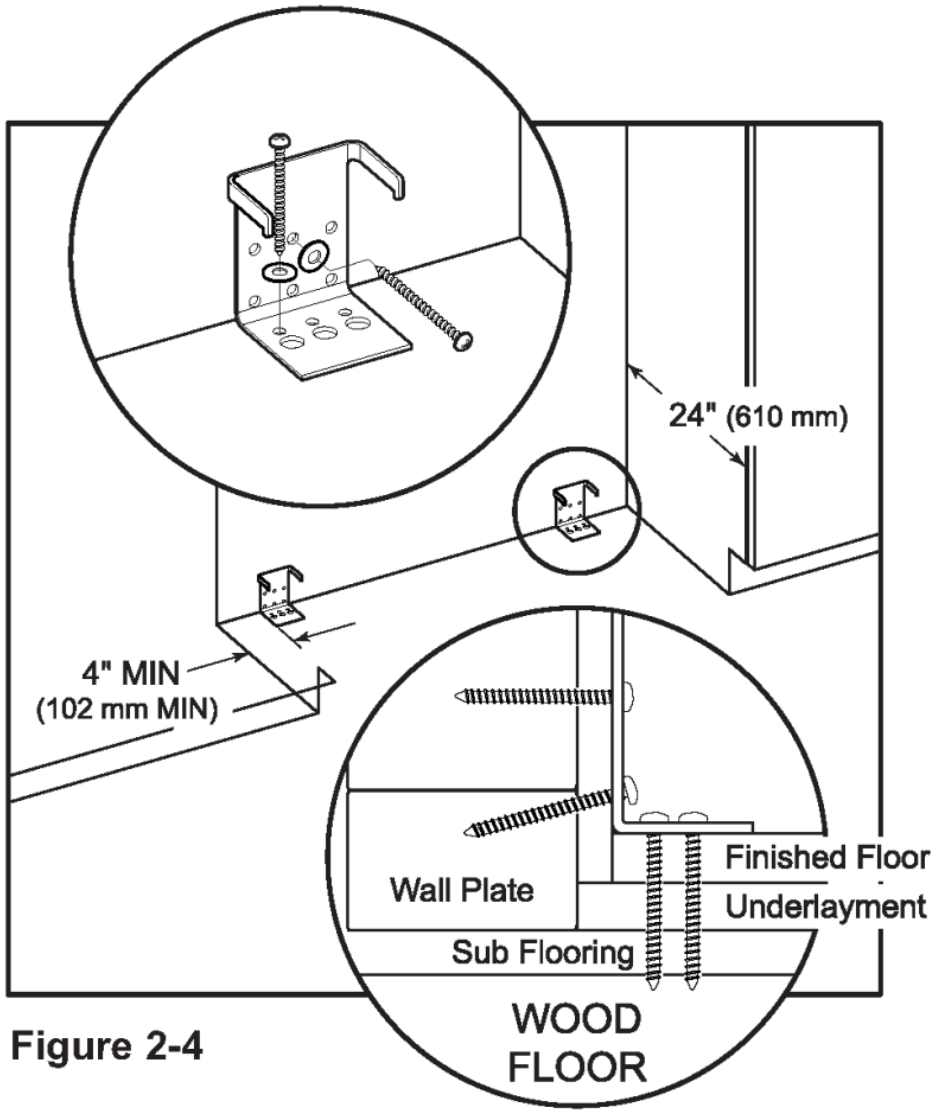


Figure 2-4

Standard Installation Procedure:

The two anti-tip brackets must be located 24”(610 mm) back from front of rough opening and a minimum of 4” (102 mm) from sides of rough opening. This will ensure that ant-tip brackets properly engage anti-tip bar at back of unit.

NOTE: Both brackets MUST be used.

Wood Floor Applications: (See Figure 2-4)

After properly locating anti-tip brackets in rough opening, drill pilot holes 3/16” diameter maximum. Then, use the #12 X 2-1/2” PH Pan HD Zinc Screws and #12 Flat Washers to secure the brackets in place.

NOTES:

- Make sure screws penetrate flooring material and wall stud or wall plate a minimum of 3/4” (19 mm).
- If #12 X 2-1/2” screws do not hit a wall stud or the wall plate in any of the brackets back holes, use the #8-18 X 1- 1/4” PH Truss HD Screws and #12 Flat Washers with the Nylon Zip-It Wall Anchors.

Concrete Floor Applications: (See Figure 2-5)

After properly locating anti-tip brackets in rough opening, drill pilot holes 3/16” diameter maximum in the wall studs and/or wall plate, then drill 3/8” diameter holes into the concrete a minimum of 1/2“ (13 mm) deep. Then, use the #12 X 2-1/2” PH Pan HD Zinc Screws and #12 Flat Washers to secure the brackets to the wall, and use the 3/8”-16 X 3-3/4” Wedge Anchors to secure the brackets to the floor.

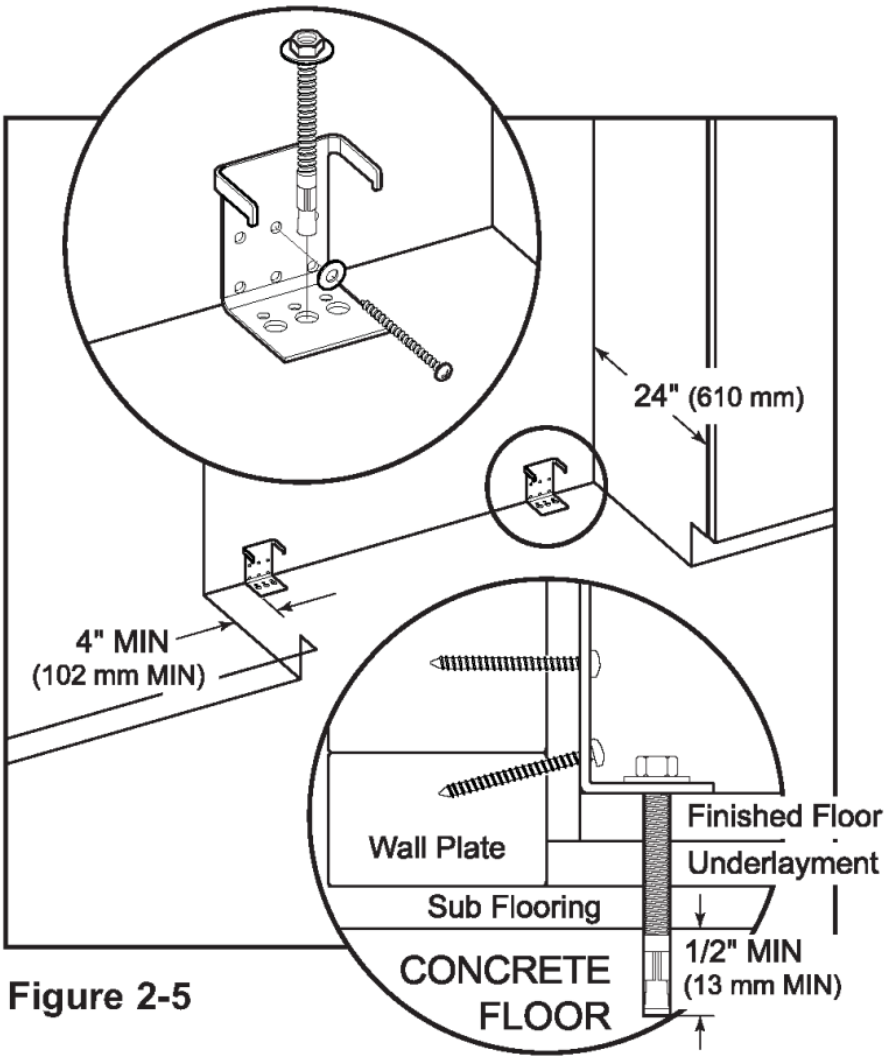


Figure 2-5

NOTES:

- Make sure screws penetrate wall stud or wall plate a minimum of 3/4” (19 mm).
- If #12 X 2-1/2” screws do not hit a wall stud or the wall plate in any of the brackets back holes, use the#8-18 X
  1- 1/4” PH Truss HD Screws and #12 Flat Washers with the Nylon Zip-It Wall Anchors.

Flush Inset Installation Procedure:

The two anti-tip brackets must be located 24”(610 mm) back from front of rough opening and a minimum of 4” (102 mm) from sides of rough opening. This will ensure that ant-tip brackets properly engage anti-tip bar at back of unit.

NOTE: Both brackets MUST be used.

Wood Floor Applications: (See Figure 2-6)

After properly locating anti-tip brackets in rough opening, drill pilot holes 3/16” diameter maximum. Then, use the
#12 X 2-1/2” PH Pan HD Zinc Screws and #12 Flat Washers to secure the brackets in place.

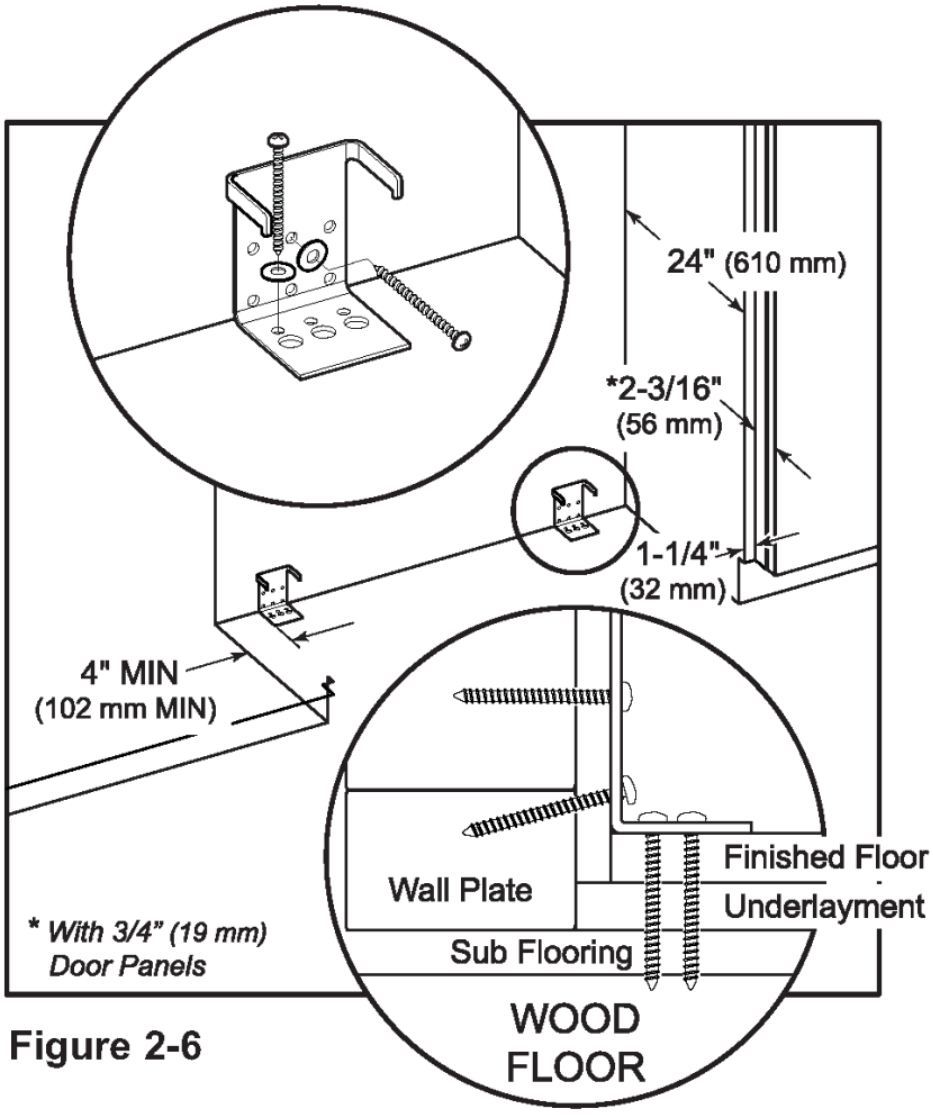


Figure 2-6

NOTES:

- Make sure screws penetrate flooring material and wall stud or wall plate a minimum of 3/4” (19 mm).
- If #12 X 2-1/2” screws do not hit a wall stud or the wall plate in any of the brackets back holes, use the #8-18 X
  1- 1/4” PH Truss HD Screws and #12 Flat Washers with the Nylon Zip-It Wall Anchors.

Concrete Floor Applications: (See Figure 2-7)

After properly locating anti-tip brackets in rough opening, drill pilot holes 3/16” diameter maximum in the wall studs and/or wall plate, then drill 3/8” diameter holes into the concrete a minimum of 1/2“ (13 mm) deep. Then, use the #12 X 2-1/2” PH Pan HD Zinc Screws and #12 Flat Washers to secure the brackets to the wall, and use the 3/8”-16 X

3-3/4” Wedge Anchors to secure the brackets to the floor.

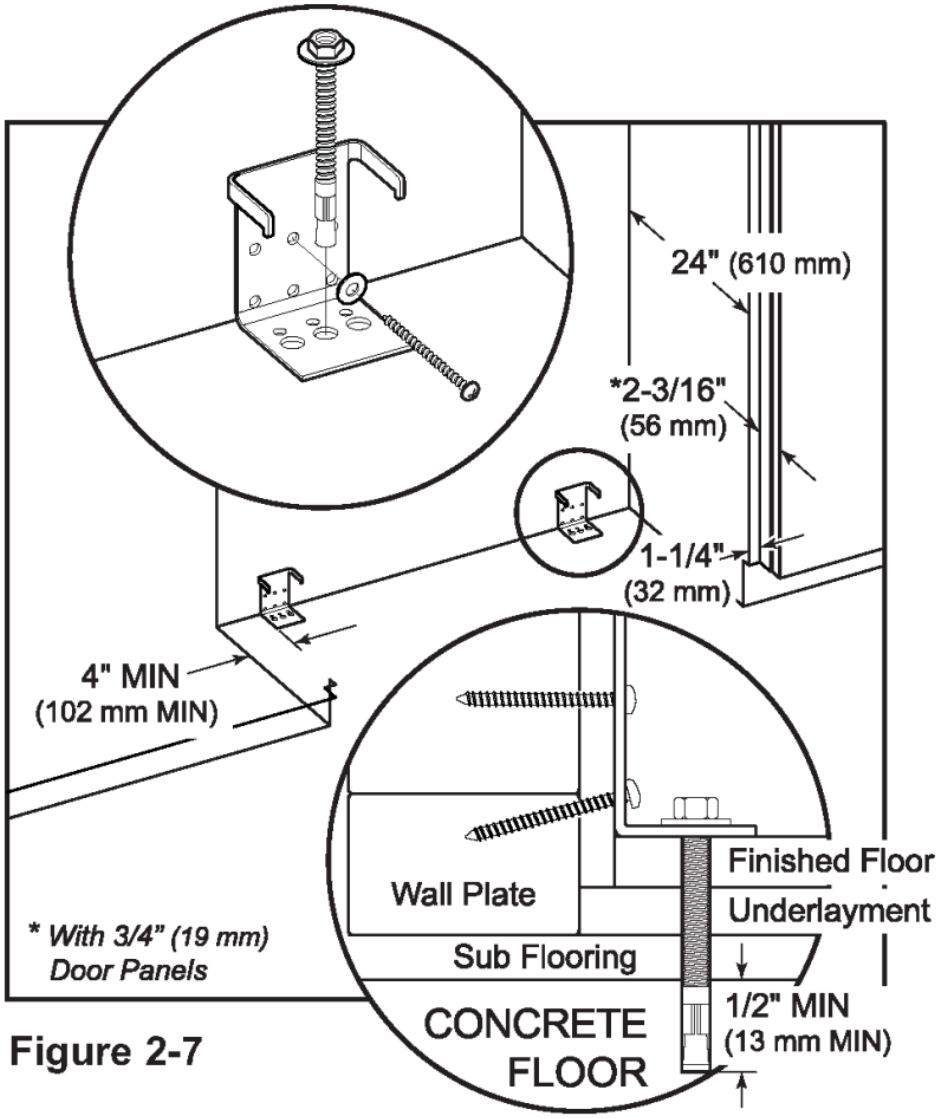


Figure 2-7

NOTES:

- Make sure screws penetrate wall stud or wall plate a minimum of 3/4” (19 mm).
- If #12 X 2-1/2” screws do not hit a wall stud or the wall plate in any of the brackets back holes, use the#8-18 X
  1- 1/4” PH Truss HD Screws and #12 Flat Washers with the Nylon Zip-It Wall Anchors.

Electrical Requirements

A 115 V AC, 60 Hz, 15 amp circuit breaker and electri-cal supply are required. A separate circuit, servicing only this appliance, is required.

All Sub-Zero Built-In models are equipped with a power supply cord with a 3-prong grounding plug, which must be plugged into a mating 3-prong grounding-type wall receptacle. Follow the National Electrical Code and local codes and ordinances when installing the recepta-cle. For location of the electrical supply, refer to the Finished Rough Opening Specifications illustration for your specific model.

IMPORTANT NOTE: A ground fault circuit interrupter (GFCI) is not recommended and may cause interruption of operation.

DO NOT USE AN EXTENSION CORD OR TWO PRONG ADAPTER. ELECTRICAL GROUND IS REQUIRED ON THESE APPLIANCES. DO NOT REMOVE POWER SUPPLY CORD GROUND PRONG!

The outlet must be checked by a qualified electri-cian to be sure that it is wired with the correct polarity. If the power and neutral polarity are reversed at the outlet, the appliance will not oper-ate. Verify that the outlet provides 115 V AC and is properly grounded.

Plumbing Requirements

All Built-In models with an automatic ice maker are also equipped with a factory installed, microbiological water filtration system. This system operates on water pressure between 30 psi (2.1 bar) to 100 psi (6.9 bar).

IMPORTANT NOTE: A reverse osmosis system can be used, provided there is constant water pressure of 30 psi (2.1 bar) to 100 psi (6.9 bar) supplied to the unit at all times. If a reverse osmosis system is used, it is rec-ommended that the water filter be bypassed. Refer to Water Filter Bypass Plug Installation instructions on the following page.

Rough in the cold water supply line using 1/4″ OD cop-per line. The water line should be routed up through the floor within 1/2″ (13) from the back wall and no higher than 3″ (76) off the floor. If the water line comes through the wall, make sure it is no more than 3″ (76) from the floor.

Regardless of the routing, allow 3′ (.9 m) of excess cop-per tubing to remain outside the wall or floor for easy connection to the unit. The water supply line should be locate within the shaded area indicated in the Finished Rough Opening Specifications illustration for

the specif-ic model.

An easily accessible shut-off valve should be used between the water supply and the unit. Do not use self-piercing valves. A saddle valve kit (part #4200880) is available from a Sub-Zero dealer or parts distributor.
It is not recommended that the ice maker be connected to a softened water supply. Water softener chemicals, such as salt from a malfunctioning softener, can dam-age the ice maker and lead to poor ice quality. If a soft-ened water supply cannot be avoided, be sure that the water softener is well maintained and operating proper-ly.

IMPORTANT NOTE: All installations must meet local plumbing code requirements.

Water Line Connections

Approximately 3′ (.9 m) of 1/4″ plastic tubing is connected to the unit with a preassembled 1/4″ compression connection at the end. This tubing is located under the unit.

The water line fitting connection kit, provided with the unit, contains a 1/4″ compression union fitting for connection to the household water supply line. The compression nut and sleeve should be placed on the water line and fastened to the connection at the end of the tubing under the unit. Do not over tighten. Check all water line fittings for leaks. Make sure that the drain pan can be installed and/or removed without any water line interference.

IMPORTANT NOTE: The water line should be purged prior to final connection to the unit. This will remove any debris that may be present in the tubing from installing the new water line.

IMPORTANT NOTE: If a reverse osmosis system used, it is recommended that the water filter be bypassed as mentioned earlier is this section.

IMPORTANT NOTE: The customer should be made aware that the ice maker will not produce ice immediately, and that the first few batches of ice produced should be discarded, allowing twenty-four (24) hours for proper ice production.

IMPORTANT NOTE: Caution must be taken to not expose the water lines leading to the refrigerator to freezing temperatures. Failure to do so could cause damage to the product and home.

Water Filter Bypass Plug

A water filter bypass plug (part #7005018) to bypass the water filtration system is available from a Sub-Zero dealer or parts distributor.

Bypass Plug Installation Procedure:

1. Remove the water filter cartridge by first pushing it in toward the manifold to disengage it from the manifold spring catch (See Figure 2-8), then pull the filter cartridge straight out (See Figure 2-9).
2. Install bypass plug by aligning it with the filter manifold, then push it in to engage the spring catch (See Figure 2-10).

NOTE: Whenever the water filter or the filter bypass plug is removed from the unit, the water supply will be interrupted.

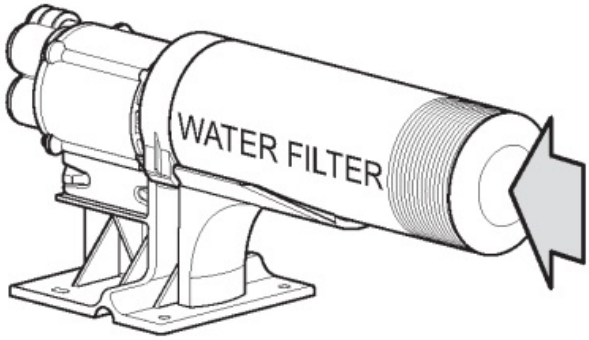


Figure 2-8. Water Filter Removal, Push In

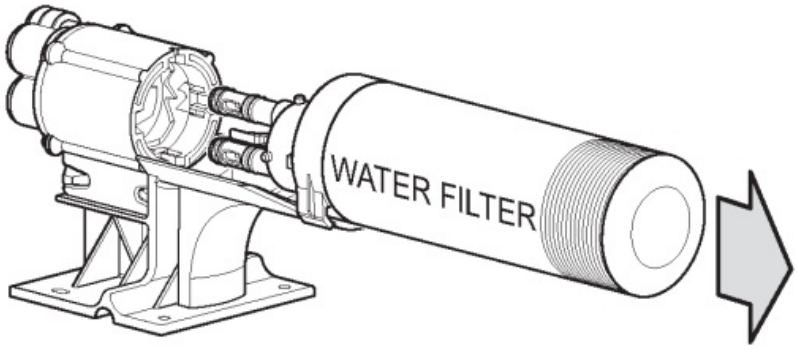


Figure 2-9. Water Filter Removal, Pull Out

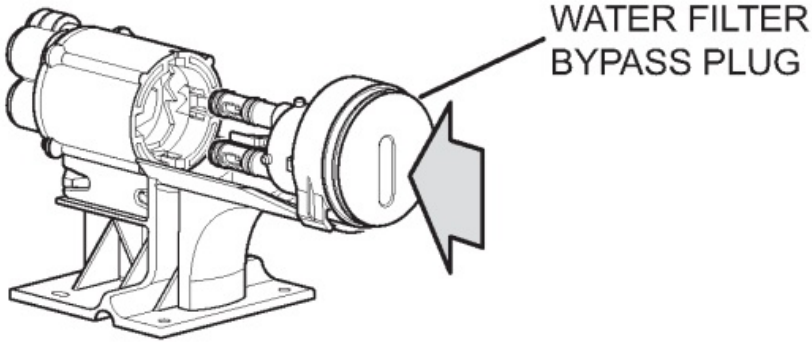


Figure 2-10. Water Filter Bypass Plug Installation

Leveling the Unit

Once the unit is in position, the front leveling legs must be extended down to the floor by turning them clockwise.

The front leveling legs are also used to make front height adjustments, turn the leveling legs clockwise to raise the unit and counterclockwise to lower it.

The rear height adjustment can be performed at the front of the base using a 5/16″ socket to turn the adjusting bolt that reaches to rear leveler/roller assembly.
Turn the 5/16″ hex bolt clockwise to raise the rear of the unit or counterclockwise to lower it.

When the unit is leveled properly, door and/or drawer adjustments are less likely to be necessary. Refer to the illustration below for location of the rear roller base adjustment.

IMPORTANT NOTE: Be sure to reference “level” of the unit to the floor, not “squareness” of the unit to the surrounding cabinetry. This could affect the operation of the unit, such as door closing.

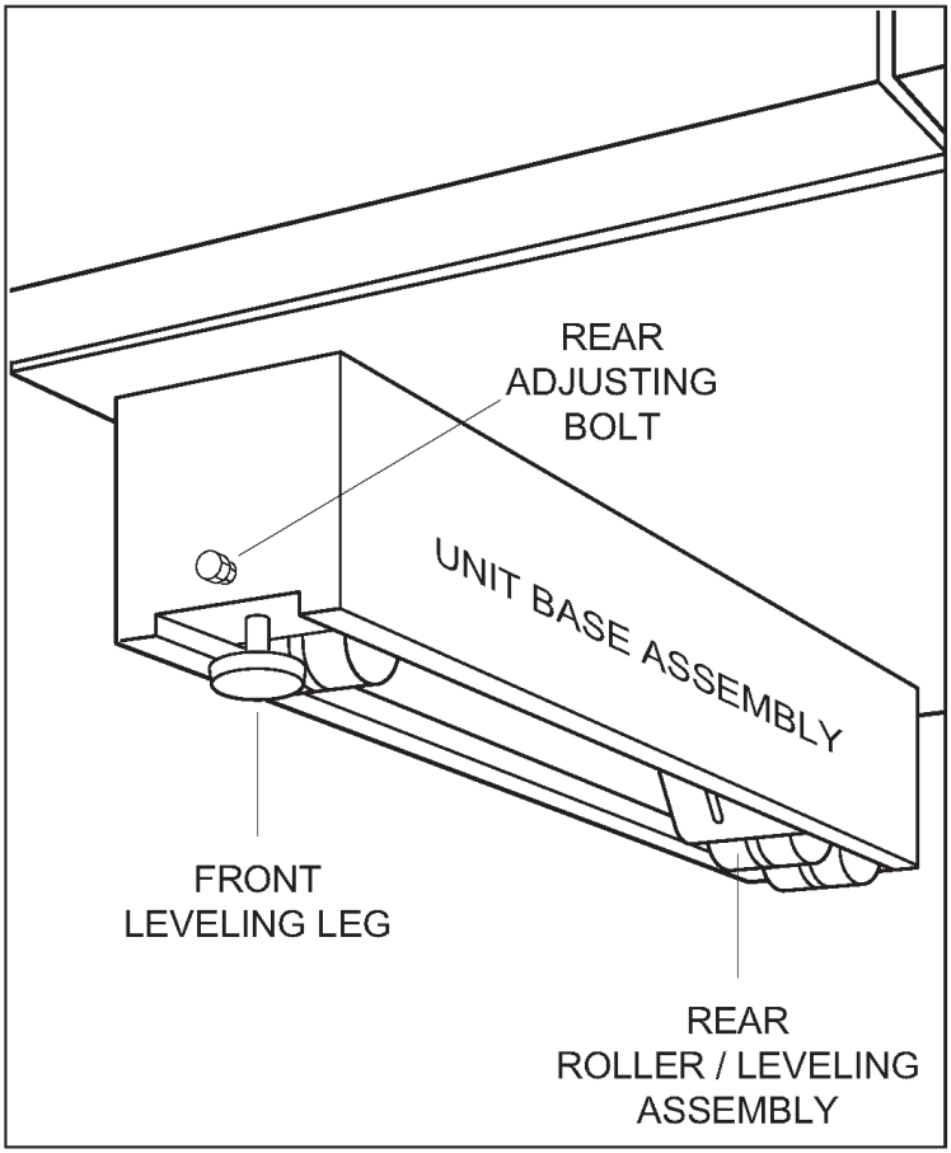


Figure 2-11. Unit Leveling

Door Adjustments

The doors on the Built-In Series side-by-side and single door models can be adjusted in three ways: up and down, side to side, and in and out. The doors on over / under models can be adjusted in two ways: side to side, and in and out.

IMPORTANT NOTE: Door adjustments should only be performed after the unit is installed and properly leveled.

Door Height Adjustment Procedure:

Using a 1/4″ allen wrench, turn the bottom hinge adjuster bolt clockwise to raise the door and counterclockwise to lower the door. (See Figure 2-12)

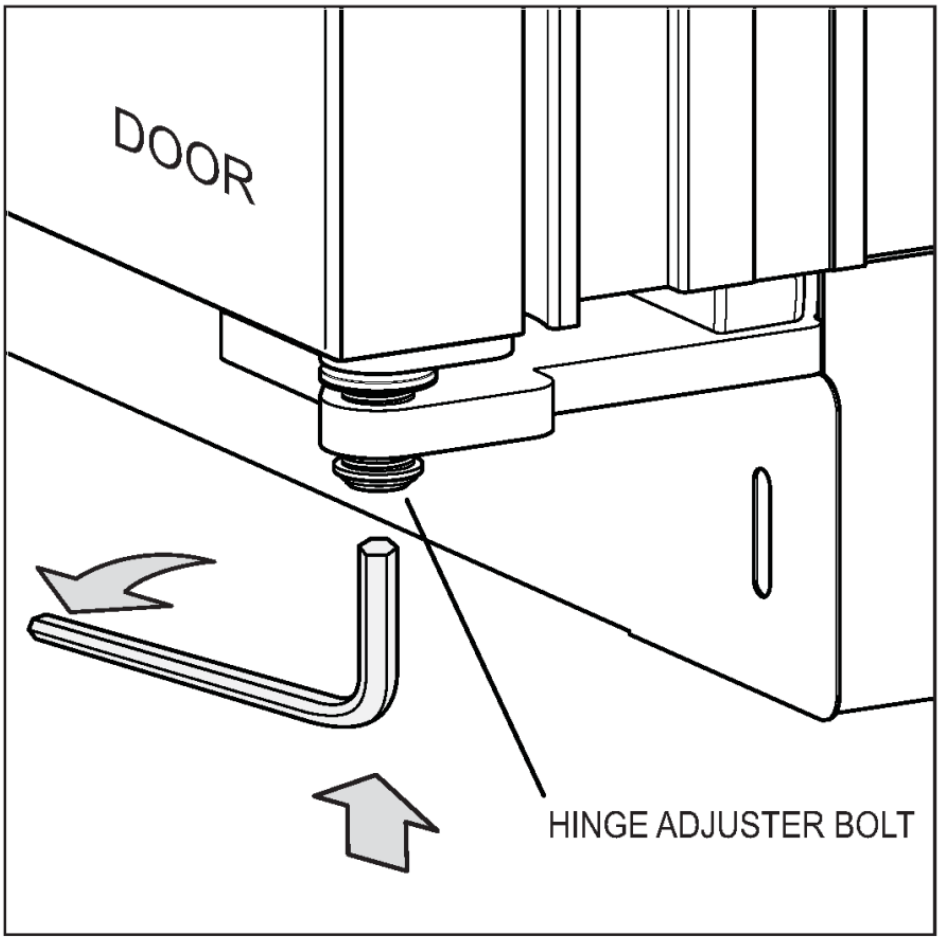


Figure 2-12. Door Height Adjustment

Side to Side and In and Out Adjustment Procedure:

IMPORTANT NOTE: Side to side and in and out adjustments only affect the top of the door. The bottom hinge is stationary, except for up and down adjustments.

1. Slightly loosen the two upper cabinet hinge mounting bolts using a 1/2″ wrench (See Figure 2-13).
2. For side to side adjustments, use a 3/8″ open-end wrench to turn the bolt mounted left to right in the top hinge assembly in the appropriate direction (See Figure 2-13).
3. For in and out adjustments, use a 5/32″ allen wrench to turn the bolt mounted front to back in the top hinge assembly in the appropriate direction (See Figure 2-13).

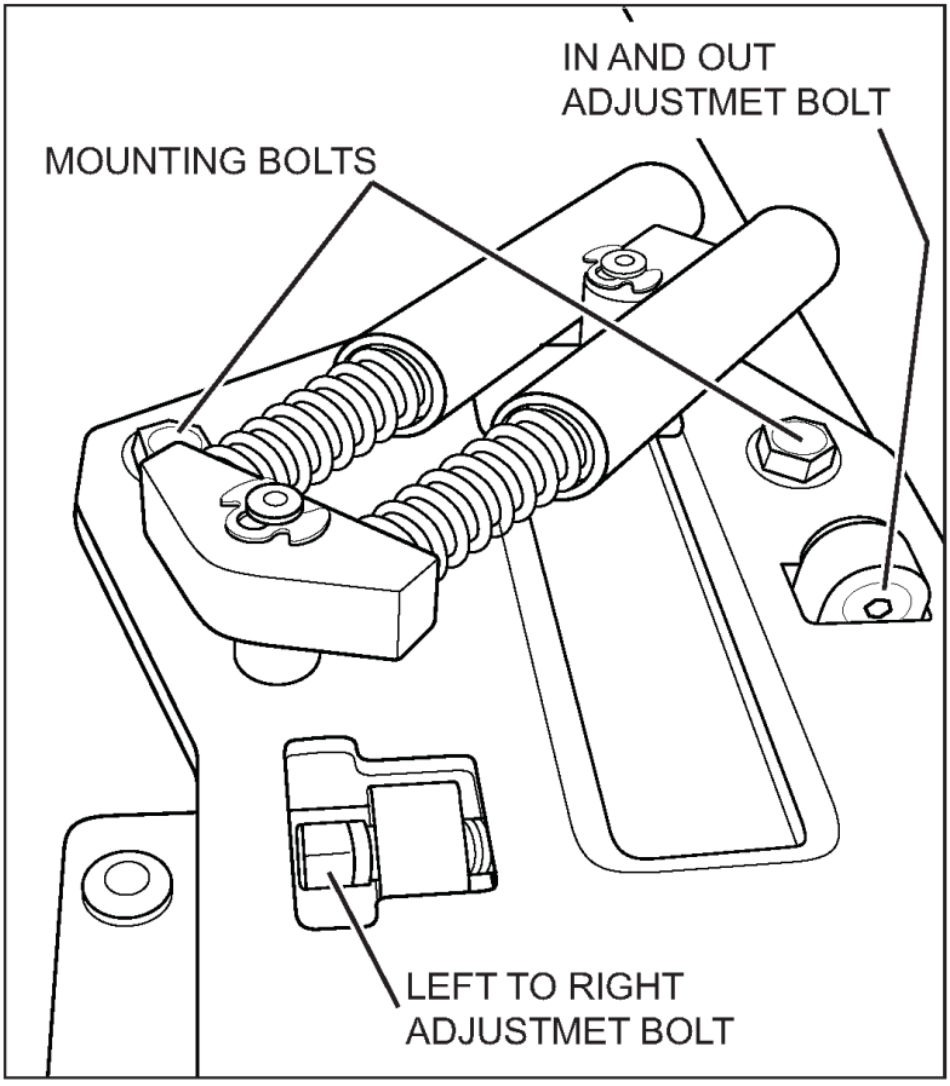


Figure 2-13. Door Adjustment, Left to Right and In and Out

90-Degree Door Stop

The doors on all Built-in Series units open to 110-degrees. An optional 90-degree door

stop kit is supplied with the unit, and is also available through a Sub- Zero dealer or distributor.

The 90-degree door stop will be installed in the top hinge of the door.

Door Stop Installation Procedure:

1. Open door to approximately 90 degrees.
2. At top of door, insert door stop cam down between door hinge and door closer arm as shown in Figure 2-14.
3. Insert screw through door stop and into door as shown in Figure 2-14.

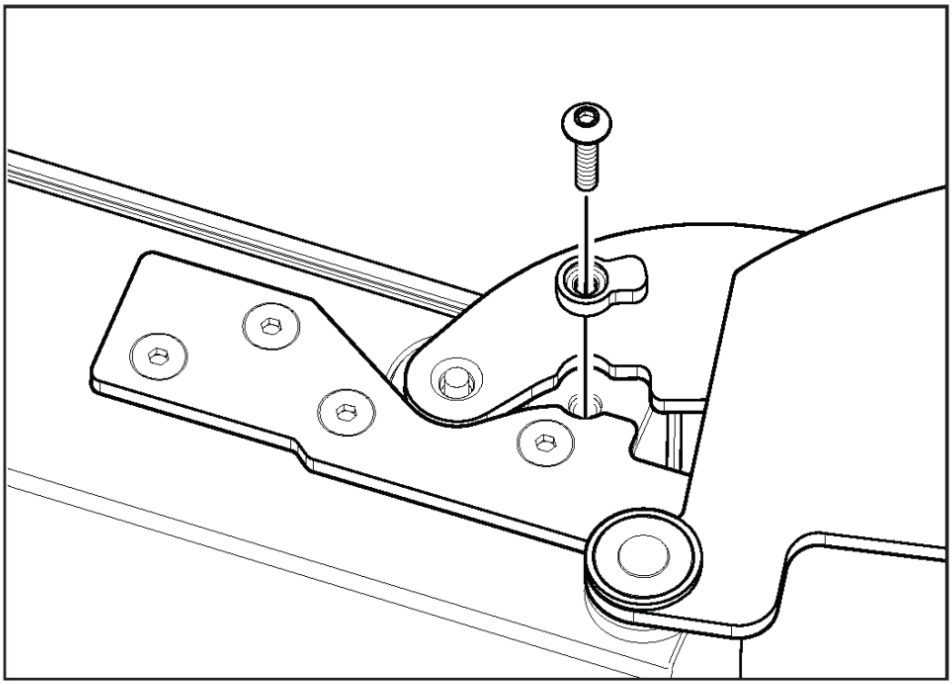


Figure 2-14. 90 Degree Door Stop

Door and Drawer Panels

Regardless of the installation application, it may be necessary to remove and/or install a door or drawer panel. To do this, the handle or handle-side trim will need to be removed first. The handle or handle-side trim is attached to the door or drawer with screws, and these screws are concealed by a screw cover. Follow the procedures below to access the mounting screws and remove a handle or handle-side trim in order to remove and/or install a door or drawer panel.

MPORTANT NOTE: The weight of a door or drawer panel cannot exceed 50 lbs (23 kg).

IMPORTANT NOTE: Depending on the thickness of a wood panel used on a framed application, it may be necessary to router a recessed area into the panel for proper finger clearance under the door handle. Optional extended handles are also available that offer an additional 3/4” (19 mm) of clearance under the handle.

Door Handle / Handle-Side Trim Removal Procedure:

1. At the top of the door, insert a flat blade screwdriver into the channel of the screw cover and push the cover away form the handle or handle-side trim, disengaging the screw cover from the clips (See Figures 2-15A and 2-15B).

2. With a T-20, 6-lobe Torx type bit, extract the handle or handle-side trim mounting screws and pull the handle or trim from the door (See Figures 2-16A and 2-16B).

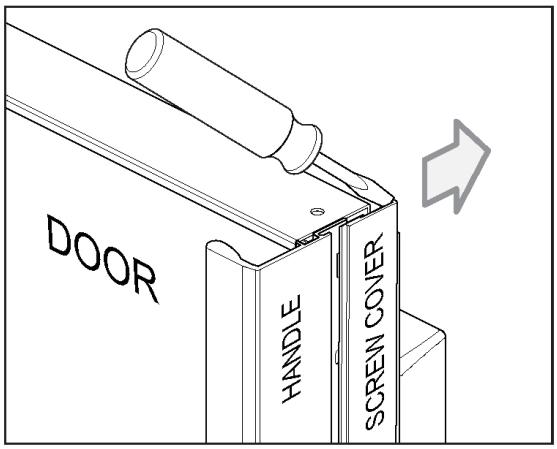


Figure 2-15A. Screw Cover Removal with Handle

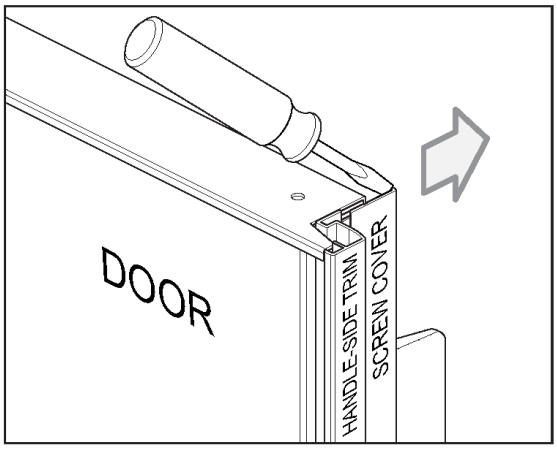


Figure 2-15B. Screw Cover Removal with Handle-Side Trim

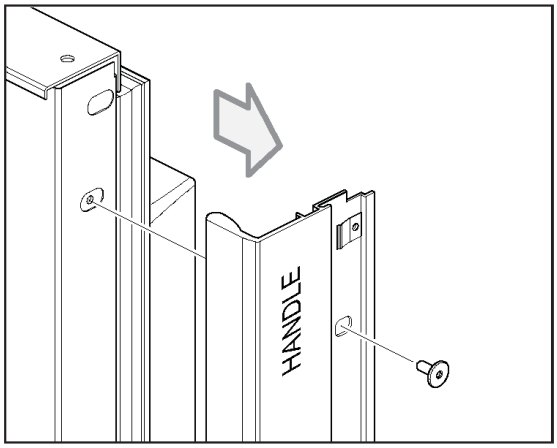


Figure 2-16A. Handle Removal

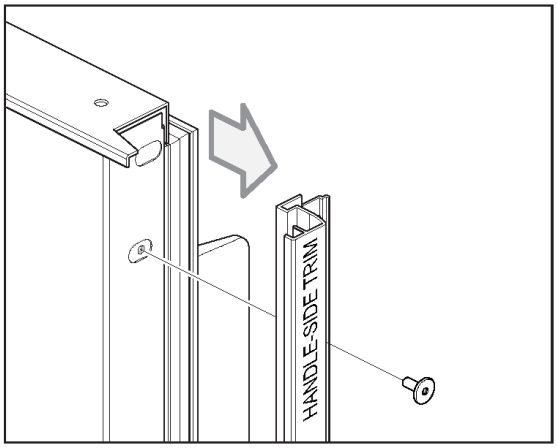


Figure 2-16B. Handle-Side Trim Removal

Drawer Handle / Handle-Side Trim Removal Procedure:

1. At the back right-hand side of the drawer handle or handle-side trim, insert a flat blade screwdriver into the notch in the screw cover and pry the cover away form the handle or handle-side trim, disengaging the screw cover from the clips (See Figures 2-17A and 2-17B).

2. With a T-20, 6-lobe Torx type bit, extract the handle or handle-side trim mounting screws and pull the handle or trim from the drawer (See Figures 2-18A and 2-18B).

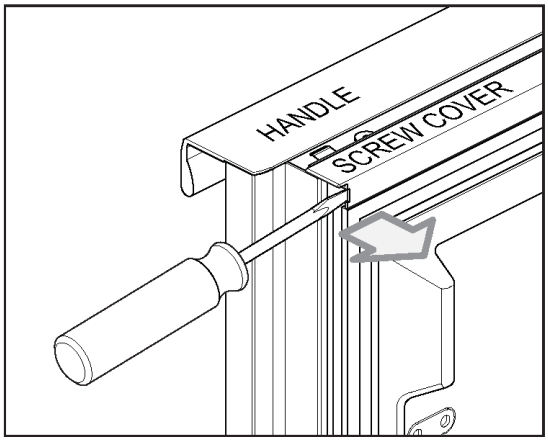


Figure 2-17A. Screw Cover Removal with Handle

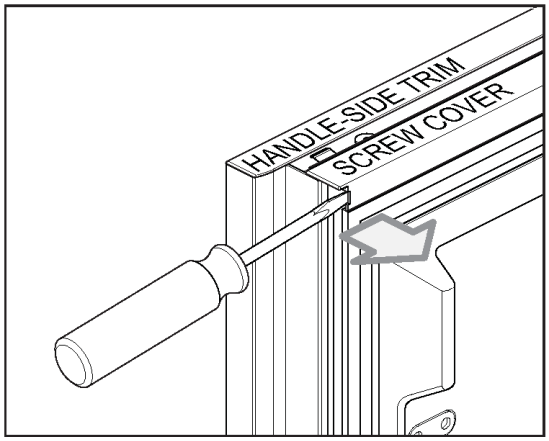


Figure 2-17B. Screw Cover Removal with Handle-Side Trim

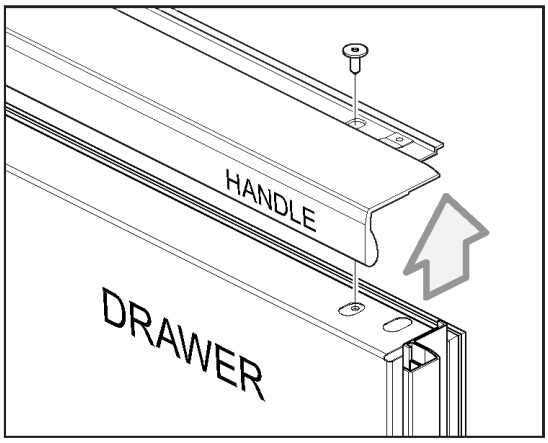


Figure 2-18A. Handle Removal

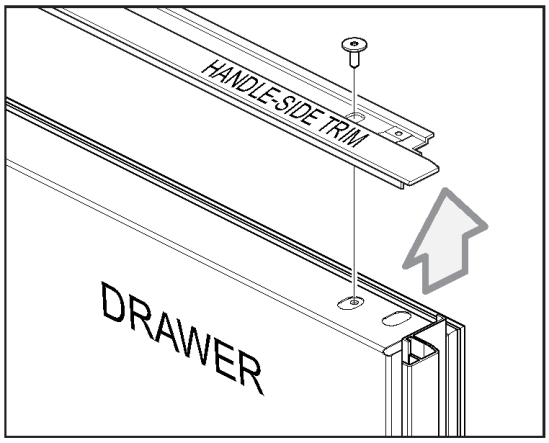


Figure 2-18B. Handle-Side Trim Removal

Glasswell – Dispenser Assembly

If attempting to remove and/or install a door panel on the refrigerator door of a dispenser model, note that the procedure is the same as that listed on the previous pages. However, the dispenser control panel and glasswell bezel will also need to be removed.

Dispenser Control Panel Removal Procedure:

1. Extract the center post of the plastic rivets using a fingernail, putty knife, or similar device (See Figure 2-19), then pull the rivets out.
2. Pull the dispenser control panel down and disconnect the ribbon cable (See Figure 2-20).

NOTE: When reassembling:

a. Make sure blue side of ribbon cable is up when connecting to dispenser control panel.
b. Take care not to pinch or kink ribbon cable when reassembling.

Glasswell Bezel Removal Procedure:

1. Remove the dispenser control panel first, then lift out the glasswell grille to access the bottom screws.
2. Extracting the bezel mounting screws from each corner, then pull the bezel forward (See Figure 2-21).

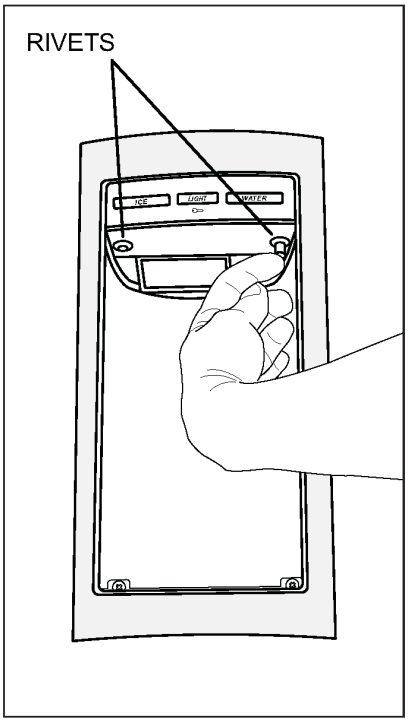


Figure 2-19. Dispenser Control Panel Removal, Extract rivets

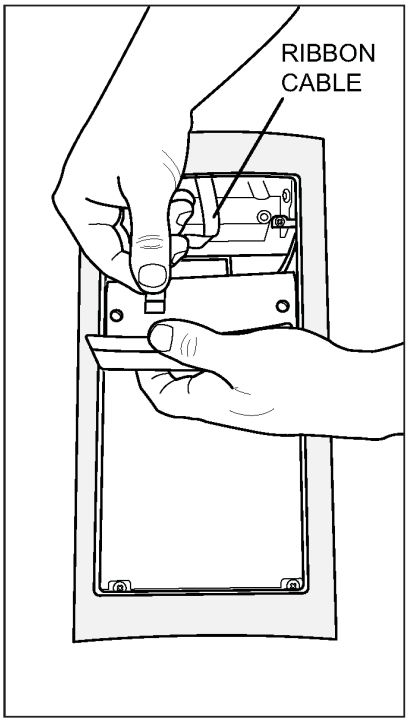


Figure 2-20. Dispenser Control Panel Removal, Disconnect Ribbon Cable

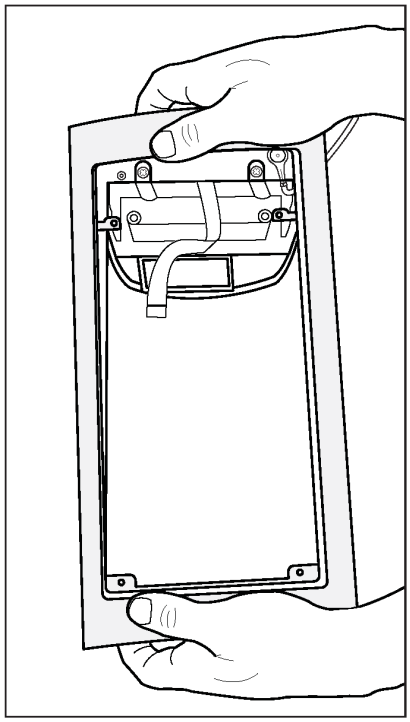


Figure 2-21. Glasswell Bezel Removal

Anchoring the Unit

After the unit has been installed and leveled, it is recommended that it be anchored to the surrounding cabinetry.
This will assure a secure installation.

IMPORTANT NOTE: Be sure the unit is level before anchoring it to the surrounding cabinetry.

Anchoring Procedure:

1. Open the grille, then install anchor screws through the grille frame clearance holes and the grill frame support brackets into the cabinetry (See Figure 2- 22). There are several hole locations provided.

2. At the unit roller base assemblies, locate the anchoring holes, one in each assembly. Install anchor screws, keeping in mind that they will need to be driven in at an angle (See Figure 2-23).

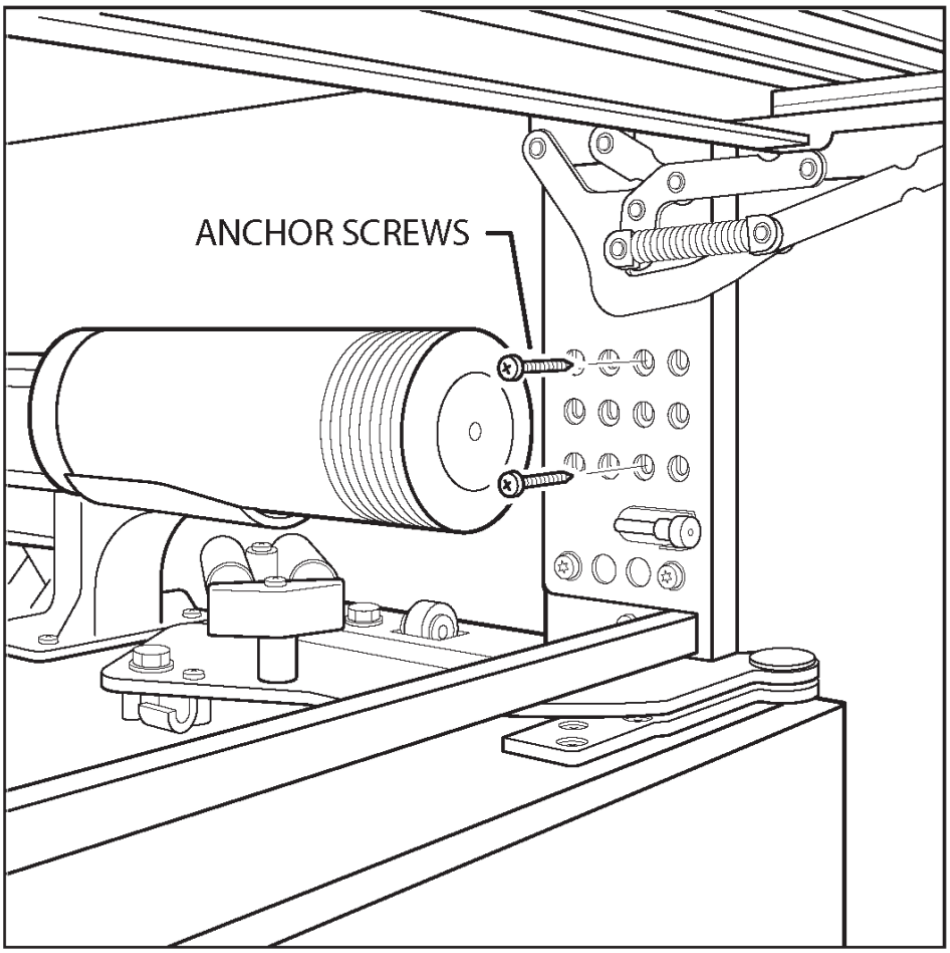


Figure 2-22. Anchoring at Top of Unit

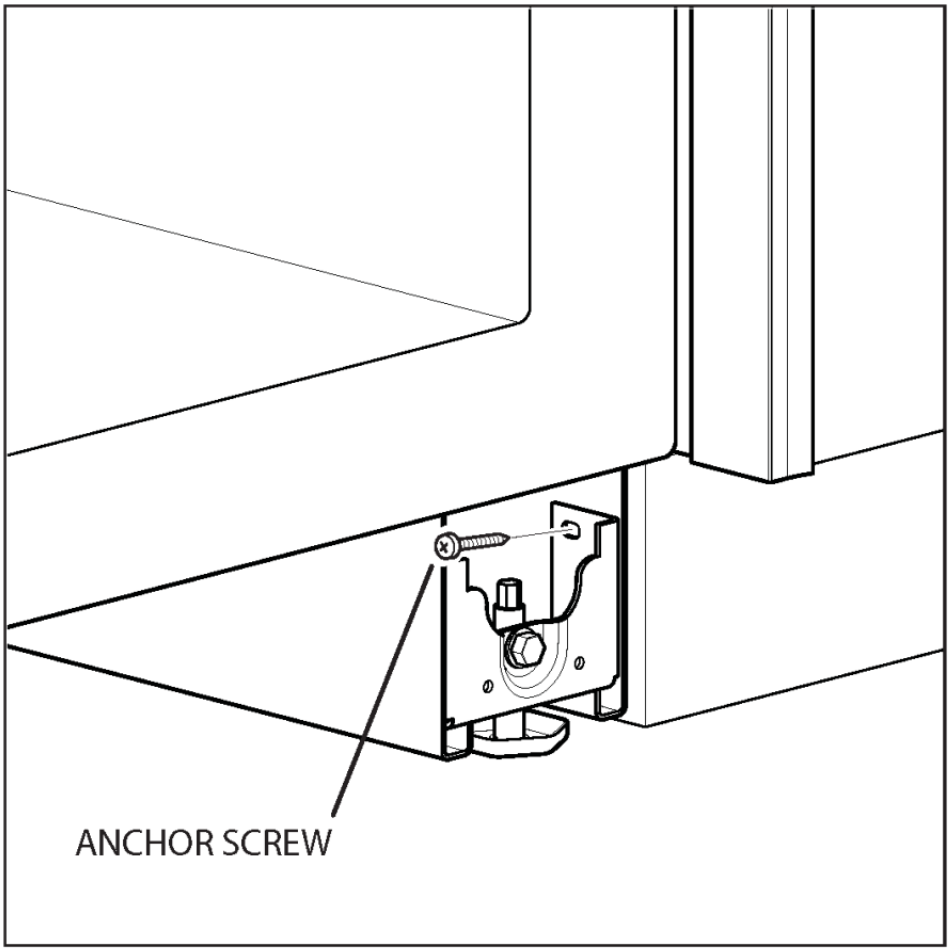


Figure 2-23. Anchoring at Bottom of Unit

Specifications:

Model: Built-In (BI) Series

Design Alternatives: Framed, Overlay, Stainless Steel

Installation Applications: Standard Overlay, Flush Inset

Dimensions:

- Model BI-30U: 29 1/2″ (W) x 83 3/4″ (H) x 24″ (D)
- Model BI-30UG: 29 1/2″ (W) x 83 3/4″ (H) x 24″ (D)
- Model BI-36U: 35 1/2″ (W) x 75 1/2″ (H) x 24″ (D)
- Model BI-36UG: 35 1/2″ (W) x 75 1/2″ (H) x 24″ (D)

FAQ:

Q: What should I do if I encounter installation issues?

A: Refer to the Installation Guide for troubleshooting tips or contact the Service Department for assistance.

Q: Can I use standard overlay panels for flush inset applications?

A: No, flush inset applications require a different approach and specific components.

Documents / Resources

	SUB-ZERO BI Series Built In Side By Side Refrigerator [pdf] Installation Guide Classic Series-9-22, BI Series Built In Side By Side Refrigerator, BI Series, Built In Side By Side Refrigerator, Side By Side Refrigerator, Refrigerator

References

- User Manual

Related Posts

Kenmore Side by Side Refrigerator User Manual

Kenmore Side by Side Refrigerator User Manual

SAMSUNG RS62K62B7SL Side by Side Refrigerator Instructions

SAMSUNG RS62K62B7SL Side by Side Refrigerator Product Specifications Brand: Samsung Type: Refrigerator Product Usage Instructions Freezer Usage Instructions…

[Hisense RS670N4HC2 Side-by-Side Refrigerator User Manual]

Hisense RS670N4HC2 Side-by-Side Refrigerator User Manual - Download [optimized] Hisense RS670N4HC2 Side-by-Side Refrigerator User Manual - Download

[Frigidaire FGHC2331PF Side By Side Refrigerator User Manual]

Frigidaire FGHC2331PF Side By Side Refrigerator User Manual - Download [optimized] Frigidaire FGHC2331PF Side By Side Refrigerator User…

SUB-ZERO

BI Series, BI Series Built In Side By Side Refrigerator, Built In Side By Side Refrigerator, Classic Series-9-22, Refrigerator, Side by Side Refrigerator, SUB-ZERO

Leave a comment

Your email address will not be published. Required fields are marked *

Comment *

Name

Email

Website

Save my name, email, and website in this browser for the next time I comment.

Post Comment

Search:

e.g. whirlpool wrf535swhz

Search