

# **UNDERCOUNTER REFRIGERATION**

# INSTALLATION INSTRUCTIONS







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Features and specifications indicated herein and on the website are subject to change at any time without notice. Check our website, subzero.com, for the most up-to-date specifications.

#### UNDERCOUNTER INSTALLATION

The importance of the installation of the Sub-Zero Undercounter unit cannot be overemphasized. Installation should be done by a qualified installer.

Before you begin the installation process, it is recommended that you read this entire Installation Instructions book. There are key details that you should take special care to observe during the installation. By reading these instructions carefully, you will make the installation process easier, problem-free and, most importantly, safe.

Any questions or problems about the installation should be directed to your Sub-Zero dealer or the Sub-Zero Customer Service Department at 800-222-7820. You can also visit our website at subzero.com.

As you follow these instructions, you will notice WARNING and CAUTION symbols. This blocked information is important for the safe and efficient installation of Sub-Zero equipment. There are two types of potential hazards that may occur during installation.

## **A**CAUTION

signals a situation where minor injury or product damage may occur if you do not follow instructions.

#### A WARNING

states a hazard that may cause serious injury or death if precautions are not followed.

Another footnote we would like to identify is IMPORTANT NOTE: This highlights information that is especially relevant to a problemfree installation.



# INSTALLATION RECOMMENDATIONS

## SITE PREPARATION

Make sure that the finished rough opening where the Undercounter unit is to be installed is properly prepared. Refer to the Installation Specifications illustration for rough opening dimensions, door swing clearance and location of electrical and plumbing (Model UC-24C).

**IMPORTANT NOTE:** To operate properly, the door must open a minimum of 90°. Use a minimum 2" (51) filler in corner installations to assure a 90° door opening. Allow enough clearance in front of the unit for full door swing.

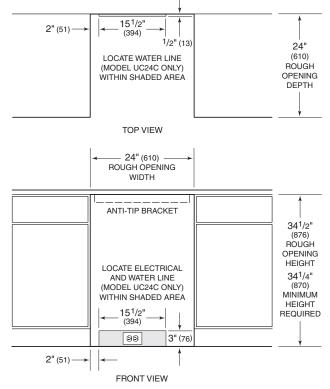
**IMPORTANT NOTE:** Make sure the floor under the unit is level with the surrounding finished floor.

## TOOLS AND MATERIALS REQUIRED

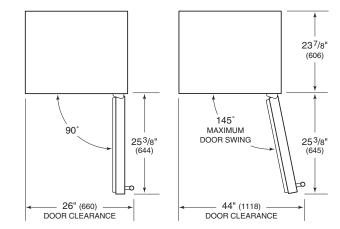
The following is a list of tools and materials that should be available for proper installation.

- Appliance dolly able to support 130 lbs (59 kg)
- Level—2' (.6 m) and 4' (1.2 m) recommended
- Phillips and slotted screwdriver sets
- Wrench set and allen wrench set
- Crescent wrenches
- Various sized pliers
- 5/16" hex bolt nut driver
- Drill and assorted drill bits
- 4' (1.2 m) of <sup>1</sup>/4" copper tubing and saddle valve for the water line—part #4200880 (Model UC-24C)
- Copper tubing cutter (Model UC-24C)
- Masonite, plywood, <sup>1</sup>/<sub>8</sub>" pressed fiberboard, cardboard or other suitable material to protect finished flooring

## INSTALLATION SPECIFICATIONS



#### NOTE: Water line is required for Model UC-24C only.



NOTE: Door swing clearances are based on stainless steel door and handle dimensions.



## **ELECTRICAL** REQUIREMENTS

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

OPTIONAL COMPONENTS

Optional installation components are available through your Sub-Zero dealer. For questions relative to the installation, call Sub-Zero at 800-222-7820. The power supply cord has 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 receptacle. For location of the electrical supply, refer to the Installation Specifications illustration on page 3.

**IMPORTANT NOTE:** The electrical outlet must be placed so the grounding prong is to the right of the thinner blades. The outlet must be flush with the back wall.

The Model UC-24RO is designed and safe for use in outdoor applications. When installed outdoors, a ground fault circuit interrupter (GFCI) is required to reduce the risk of electrical shock. A GFCI is not recommended for use with other Undercounter models and may cause interruption of operation.

#### A WARNING

Do not use an extension cord or twoprong adapter. Electrical ground is required on this appliance.

## PLUMBING REQUIREMENTS

Model UC-24C comes with an automatic ice maker. The illustration on page 3 shows the precise placement of the water line. When routing through the side walls, you must place the water line within  $1/2^{"}$  (13) of the floor and as close as possible to the back wall. A minimum of 26" (660) of copper tubing is required for the water line.

Connect the <sup>1</sup>/4" water line from the ice maker water valve to the house water supply. Use an easily accessible shut-off valve between the water supply and the unit. This shut-off valve should not be installed behind the unit. Do not use self-piercing valves. A saddle valve kit (part #4200880) is available from your Sub-Zero dealer.

A line filter is required when water conditions have a high sediment content. The ice maker operates on water pressure of 20 psi (1.4 bar) to 100 psi (6.9 bar).

A reverse osmosis system can be used, provided there is a consistent water pressure of 20 psi (1.4 bar) to 100 psi (6.9 bar) supplied to the water valve at all times.

**IMPORTANT NOTE:** In some cases a reverse osmosis water filter system may not be able to maintain the minimum water pressure consistently.



# UNPACKING AND MOVING

Uncrate the unit and remove its wood base. Remove all packing materials and tape.

**IMPORTANT NOTE:** Do not discard the kickplate, anti-tip bracket, hardware and the shipping bolts that hold the wood to the bottom of the unit (leveling legs). These items will be needed for the installation.

Roller-assembly wine shelves should be removed to reduce weight and prevent them from rolling (Models UC-24B and UC-24C). To remove, pull the shelf out to its full extension, gently and evenly lift up on both sides of the front of the shelf and remove. Reverse the procedure to reinstall the shelf.

Use an appliance dolly to move the Undercounter unit. Position the dolly at the back of the unit to prevent damage to finished surfaces.

#### **A**CAUTION

Before moving the Undercounter unit into position, protect any finished flooring with appropriate materials and secure the door closed.

#### **POSITION** THE UNIT

**IMPORTANT NOTE:** If the Undercounter unit has been laid on its back or side, you must allow the unit to stand upright for a minimum of 24 hours before connecting power.

Plug the power supply cord into the 15 amp grounded electrical outlet. With power applied to the appliance, check for lighting and cooling before going any further. Once you are satisfied that the unit is operating properly, shut off power to the electrical outlet at the circuit breaker and proceed.

## A WARNING

Shut off the power to the electrical outlet.

Pre-level the unit before sliding it into position. Leveling cannot be completed with the unit pushed back in the installation opening.

The Undercounter unit provides the best access to its contents when the front surface of the door panel extends out from surrounding cabinets approximately 1/4" (6).

**IMPORTANT NOTE:** The floor under the Undercounter unit must be at the same level as the surrounding finished floor to allow for removal of the unit for servicing.



## ANTI-TIP BRACKET INSTALLATION

## 

To prevent the unit from tipping forward and provide a stable installation, the unit must be secured in place with the anti-tip bracket.

An anti-tip bracket and hardware is provided with the Undercounter unit. The anti-tip bracket must be installed on a solid base to prevent tipover in case several loaded wine shelves are extended at the same time.

The anti-tip bracket should be attached to the wall behind the unit with the bracket flange located immediately above the top of the unit. Refer to the illustration below.

A smaller metal 'countertop' bracket is also provided with the Undercounter unit, for installations that need to be modified to provide a secure surface for attaching the bracket. This bracket will secure the front of the unit to the underside of the countertop, above the unit. Refer to the illustration below.

If it is not possible to use the countertop bracket, wedge shims along the sides and top of the unit.

#### LEVEL THE UNIT

Using an adjustable wrench or pliers, turn each of the four leveling legs clockwise to raise the unit and counterclockwise to lower the unit. For the location of the leveling legs, refer to the illustration below.

## A WARNING

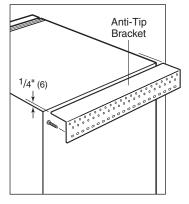
To reduce the possibility of the unit tipping forward, the front leveling legs must be in contact with the floor.

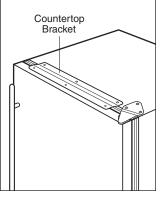
#### KICKPLATE INSTALLATION

Once the unit is leveled, the kickplate can be installed. Use the two  $\#10 \times 1/2^{"}$  stainless steel screws that are provided with the kickplate. Refer to the illustration below.

**IMPORTANT NOTE:** The kickplate must be removed for servicing. The floor cannot interfere with removal. The louvered section of the kickplate must not be covered so as to prevent air circulation.

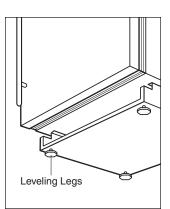
Turn power back on to the electrical outlet.

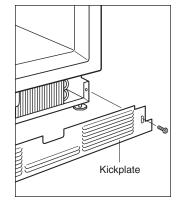




Anti-tip bracket installation

Countertop bracket installation





Location of leveling legs

**Kickplate installation** 



## DOOR PANEL INSTALLATION

#### MODELS UC-24R AND UC-24C

Models UC-24R and UC-24C can be fitted with a custom overlay or stainless steel door front panel. A classic stainless steel door panel with tubular handle is available as a sales accessory. Installation of the stainless steel panel will be required.

For the overlay application, a decorative door panel and handle hardware must be provided. You can match your handle hardware with surrounding cabinetry or use a Sub-Zero accessory handle. Handles must be attached directly to the overlay panel.

The overlay application requires a decorative door panel  $23^{3}/4^{"}$  (603) by  $30^{1}/16^{"}$  (764). The overlay panel must be a minimum of  $5/8^{"}$  (16) thick and has a weight limit of 20 lbs (9 kg). Installation of the overlay door panel for Models UC-24R and UC-24C is outlined on the following pages.

## OUTDOOR MODEL UC-24RO

Model UC-24RO is shipped from the factory with the classic stainless steel door panel and tubular handle in place. No panel installation is required.

**IMPORTANT NOTE:** Model UC-24RO must be built into cabinetry and cannot be used in a free-standing application.

## GLASS DOOR MODEL UC-24B

The classic stainless steel Model UC-24B/S is shipped from the factory with the classic stainless steel door panel and tubular handle in place. No panel installation is required.

For the overlay Model UC-24B/O, a decorative frame door panel must be provided to surround the glass. The door panel must be  $23^{3}/4^{"}$  (603) by  $30^{1}/16^{"}$  (764) with rails and stiles a minimum of  $2^{1}/4^{"}$  (57) wide. The overlay panel must be a minimum of  $5/8^{"}$  (16) thick and has a weight limit of 10 lbs (5 kg). Installation of the overlay door panel for Model UC-24B/O is outlined on the following pages.

You may also use your own handle hardware to match surrounding cabinetry. If you do not use the pre-drilled holes on the door of the unit, you will need to attach the handle directly to the overlay panel.

**IMPORTANT NOTE:** For installations at or above 5,000' (1524 m) in altitude, a special high altitude glass door unit must be ordered.

#### **A**CAUTION

A solid panel must not be installed on a glass door unit, as this may cause moisture to form behind the panel.



## **OVERLAY PANEL INSTALLATION**

#### GLASS DOOR MODEL UC-24B/O

Inspect the door panel for the minimum <sup>5</sup>/s" (16) thickness, the finished inside edge and the weight limit.

Decide if the handle will be attached through the glass door frame or just through the decorative door panel. If it is just through the door panel, the handle must be attached first.

The decorative panel is attached using  $#8 \times 5/8^{"}$  square drive screws passing through the door frame from the rear, behind the gasket into the panel. The door panel is marked for screw locations by the use of 'tenon centers', which are temporarily inserted into the  $1/4^{"}$  (6) diameter holes in the front of the door frame. Refer to the illustration below.

With the unit secured in place and the door closed, the panel is held in the desired position on the door and rapped by hand from the front, putting center marks on the rear surface of the panel. If the door panel is made of such a material that pre-drilling is needed, all of the mounting holes should be marked. If not, only enough holes to hold the panel in place temporarily, are necessary.

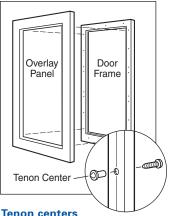
The door panel is then lowered from the door frame, tenon centers removed, the door opened and the screws driven into the panel through the black tape on the door frame, using the center marks to locate the screws. The screw holes inside the door are hidden under a cover flap on the door gasket. It is necessary to lift the flap to insert the screws. Use as many screws as necessary to hold the door panel in place properly.

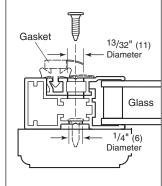
**IMPORTANT NOTE**: After the first three or four mounting screws are in place, but not completely tightened, close the door and check your panel fit. This is the time to make small adjustments. Once you are satisfied with the appearance, open the door and apply the remainder of the screws. Check all screws for tightness.

The metal frame on the door has numerous mounting holes on each side of the door. This is to accommodate the Sub-Zero accessory handles and provide for easy attachment of the handle through the door frame.

If you choose not to use the pre-drilled handle mounting holes, it will be necessary to fasten the handle from the rear of the door panel only, or drill one or more additional holes through the metal frame of the door.

The illustration below shows how this hole passes through the door frame. The hole center is on the small locator groove in the front of the frame. A 1/4" (6) diameter hole is made in the front wall of the extrusion and a  $1^{3}/_{32}"$  (11) diameter hole through the rest of the frame.





**Door frame cross-section** 



# OVERLAY PANEL INSTALLATION

## **A**CAUTION

The Model UC-24B glass door is made with a sealed double-wall tempered glass core. The drill must not contact this core when drilling. Be sure the hole is centered on the small groove in the front of the door frame and the drill passes squarely through the frame. If you are inexperienced with drilling, fasten the handle from the rear of the door panel only.

**IMPORTANT NOTE:** For Model UC-24B, install screws in all the mounting holes in the door frame. The nature of the door panel with a narrow outer rim and no connecting center member requires the support provided by the glass door.

After the door panel installation is complete, apply the cover patches or plugs provided over the holes on the inside surface of the door.

#### **A**CAUTION

The cover patches or plugs are part of the insulation system on the door of the Undercounter unit. Be sure to cover all the holes in the door that were used.

## MODELS UC-24R AND UC-24C

Remove the two panel mounting brackets attached to the front of the door and set aside.

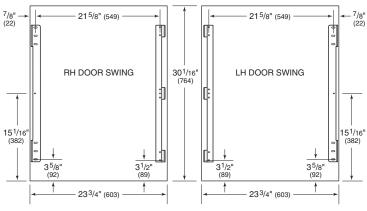
Place the overlay door panel lying face down on a protected surface to ensure that the front is not scratched or damaged.

Position the plastic template (provided) flush with the lower edge of the door panel. Be sure you are following the exact location for the right-hand (RH) or left-hand (LH) door swing. Refer to the illustrations below for placement of the mounting brackets.

Once you have located the proper placement for the brackets, mark the pilot holes, remove the template and drill pilot holes for mounting the brackets. It is best to start with a few holes, position the bracket, drill the remaining pilot holes and then secure the mounting bracket with the #8 x 1/2" screws provided.

#### A CAUTION

Exercise caution when drilling holes for mounting hardware. This is especially critical with inset panels.



**Overlay Panel Bracket Placement** 

Dimensions in parentheses are in millimeters unless otherwise specified.



## **OVERLAY PANEL** INSTALLATION

#### MODELS UC-24R AND UC-24C

Before attaching the panel to the door, remove the outer screws from each of the two mounting positions along the hinge side of the door. Unscrew the two remaining screws in the center of each mounting position just enough that the slotted holes on the hinge side door panel bracket will slide under the heads. These positioning screws will support the door panel during installation and adjustment. Refer to the illustration below.

Install the door panel by engaging the tabbed bracket to the handle side of the door first and then sliding the hinge side mounting bracket onto the positioning screws on the hinge side of the door. The panel can be adjusted 1/4" (6) up and down and side to side.

Once the door panel is in place and adjusted correctly, attach the four remaining  $\#10 \times 1/2"$  screws to the hinge side mounting bracket and install the magnetic decorative caps as shown in the illustration below.

#### HINGE ADJUSTMENT

**IMPORTANT NOTE**: The Undercounter unit should be properly leveled in position before door hinge adjustments are made.

The top and bottom cabinet hinges are held in place with three permanent adjustment screws. If the door needs adjustment, loosen the adjustment screws and reposition the door. Once in position, tighten the adjustment screws. Refer to the illustrations below.

#### **INSTALLATION** CHECKLIST

The importance of the installation of the Sub-Zero Undercounter unit cannot be overemphasized. Proper installation is the responsibility of the selling dealer or installer.

**IMPORTANT NOTE:** The following checklist should be completed by the installer to ensure that no part of the installation has been overlooked.

Advise the homeowner to fill out and return all product registration forms. This will ensure that the customer information is in our database in the event service is required.

Any questions or problems about the installation should be directed to your Sub-Zero dealer or the Sub-Zero Customer Service Department at 800-222-7820. You can also visit our website at subzero.com.



Door panel mounting brackets



Bottom hinge adjustment



# SERVICE INFORMATION

## INSTALLATION CHECKLIST

- □ Has all packing material been removed?
- Turn the unit on first, is the unit operating properly? If not, is it plugged in? Is the control turned on?
- Has the unit been secured in place with the anti-tip bracket?
- □ Is the unit level? Are all leveling legs making contact with the floor?
- Is the power cord plugged into a properly grounded 3-prong outlet, which has been installed in accordance with all applicable electrical codes?
- Is the water supply connected (Model UC-24C)? Have you checked for leaks?
- □ Is the kickplate screwed in place?
- Is the door panel attached securely and properly aligned?
- □ Is the door aligned for proper appearance and operation?
- Have any installation/service problems been noted on the product registration card?
- Has the stainless steel door or panel been inspected for any imperfections? This is to be done by the dealer/installer with the customer upon completion of the installation. NOTE: Classic stainless steel panels are covered by a limited 60-day parts and labor warranty for cosmetic defects.

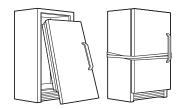
If service is necessary, maintain the quality built into your Sub-Zero unit by calling a Sub-Zero authorized service center.

To obtain the name and number of a Sub-Zero authorized service center, check the Locator section of our website, subzero.com or call Sub-Zero Customer Service at 800-222-7820.

When calling for service, you will need the model and serial number of your unit. Both numbers are listed on the product rating plate located inside the cabinet, in the upper left area of the unit.

#### A WARNING

If you are storing or disposing of your old refrigerator or freezer, please do it safely. Remove the doors or tightly secure the doors closed. Child entrapment accidents can be tragic.



## CONTACT INFORMATION

Sub-Zero Customer Service: 800-222-7820

Website: subzero.com

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