

LIEBHERR

Design Guide
Wine and Undercounter
Release 07 2015



Liebherr's engineering excellence in Germany provides the largest selection of freezers, refrigerators and wine refrigerators worldwide.

Liebherr is one of the World's leading Manufacturers of Premium Refrigeration. For more than 60 years, Liebherr has specialized in developing and manufacturing first class refrigerators and freezers as well as wine cabinets. We focus on performance and efficiency as well as keeping food fresher longer. Produced in Austria and Germany, Liebherr has a full line of premium models tailored specifically for the North American marketplace to fit any design vision you have for your kitchen.

Our freestanding stainless models are sleek centerpieces that make a definite statement. Our built-in models are perfect for designs that call for units that slide into cabinet surrounds. And our fully-integrated models become one with your kitchen design, hidden seamlessly behind your custom cabinetry.

High quality materials, perfectly detailed finishes, precise electronic control systems, elite cooling components, variable speed compressors and the latest production processes ensure energy efficiency and performance for years to come. Our superior products offer premium quality, cutting edge design and innovative features that fit with your busy lifestyle.

Liebherr's Commitment to the Environment

The components of Liebherr products can be recycled when the necessary resources are available. A concern for the environment and a desire to protect resources has led to increased levels of recycling year after year. When Liebherr manufactures products, it is essential that the recyclable recovery rate of the materials we use constantly increases.

Recycling is a common goal among all manufacturers, municipalities and recycling companies to protect our environment. Protecting the environment and producing products which have a low impact on the environment, is one of Liebherr's core values. When the time comes, please attempt to dispose of your old appliances in an environmentally safe and friendly manner.

LIEBHERR WARRANTY PLAN

FULL TWO YEAR WARRANTY

For two years from the date of original purchase, your Liebherr warranty covers all parts and labor to repair or replace any part of the product which proves to be defective in materials or workmanship.

FULL FIVE YEAR WARRANTY

For five years from the date of original purchase, your Liebherr warranty covers all parts and labor to repair or replace any components that prove to be defective in materials or workmanship in the sealed system. The "Sealed System" means only the compressor, condenser, evaporator, drier and all connecting tubing.

LIMITED 6TH THROUGH 12TH YEAR WARRANTY

From the 6th through 12th year from the date of original purchase, your Liebherr warranty covers all parts that prove to be defective in materials or workmanship in the Sealed System (parts only).

For Service in the U.S.

Liebherr Service Center

Toll Free: **1-866-LIEBHER**
1-866-543-2437

Email: Service-appliances.us@liebherr.com

PlusOne Solutions, Inc.

3501 Quadrangle Blvd, Suite 120
Orlando, FL 32817

For Service in Canada

Liebherr Service Center

Toll Free: **1-888-LIEBHER**
1-888-543-2437

www.euro-parts.ca

EURO-PARTS CANADA

39822 Belgrave Road
Belgrave, Ontario, N0G 1E0
Phone: (519) 357-3320
Fax: (519) 357-1326

For Installation Questions

Install.Americas@liebherr.com

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General Remarks

Safety Warnings

PLEASE READ AND FOLLOW THESE INSTRUCTIONS

This design guide contains Warning and Important statements. This information is important for planning a safe and efficient installation. Please refer to the Installation Manual specific to your model for complete installation instructions.

This design guide is intended for planning purposes and is not a replacement for your appliance's Use and Care Manual which contains important information on how to use Liebherr appliances.

Always read and follow all Warning and Important statements!



Warning indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

IMPORTANT

This highlights information that is especially relevant to a problem-free installation and operation.

Make sure incoming voltage is the same as the unit rating.

To reduce the risk of fire, electric shock, or personal injury, the installation work and electrical wiring must be done by a qualified electrician in accordance with all applicable codes and standards, including fire rated construction.

To the Installer

It is very important that the guidelines and instructions are followed in this design guide to ensure proper installation and operation of the unit. The Installation Guidelines section contains important information for making sure the installation is correct. Read and understand all the information and installation guidelines in this manual before the unit is installed.

It is also very important to **know** the Safety Information.

General Remarks

Electrical Requirements & Safety

A 15 amp or 20 amp, 110-120 VAC, circuit which is grounded and protected by a circuit breaker or fuse is required.

We recommend using a dedicated circuit for each appliance to prevent circuit overload and the chance of interruption to the appliance.

The appliances are equipped with a three-prong (grounding) polarized plug for protection against possible shock hazards.

Comply with the National Electrical Code as well as local codes and ordinances when installing the receptacle.

Additional Electrical Requirements for Outdoor Refrigerator RO 510

When using the RO 510 Appliance Indoors

Connect the appliance to a 15 amp or 20 amp, 110-120 VAC, circuit which is grounded and protected by a circuit breaker or fuse.

When using the RO 510 Appliance Outdoors

The appliance must be connected to a GFCI (Ground Fault Circuit Interrupter) receptacle.

⚠ WARNING!

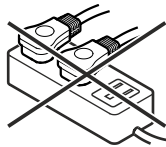
Electrocution hazard.

Electrical grounding required.

- Do not remove the round grounding prong from the plug. →
- Do not use extension cords or ungrounded (two-prong) adapters.
- Do not use a power cord that is frayed or damaged.



- Do not use a power strip. →



Failure to follow these instructions may result in fire, electrical shock or death.

⚠ WARNING!

Electrocution hazard.

For outdoor use, connect this appliance to a GFCI receptacle only.

Failure to follow these instructions may result in fire, electrical shock or death.

IMPORTANT

Do not place the appliance where it may be in standing water or where the power cord may be immersed.

General Remarks

Area Requirements

Verify the following:

- Finished kitchen floor height is level. The appliance must be shimmed to the floor level, or levelled, to make sure air vents are not obstructed.
- Remove anything attached to the rear or side walls that can obstruct the refrigerator opening.
- Cutout dimensions are accurate.
- Electrical outlet is in correct location.

Do not install this appliance next to any other refrigerator or freezer except another Liebherr model.

Liebherr models are designed to allow side by side installation. They are equipped with a heating system to eliminate condensation when units are installed side by side.

Installing this appliance next to any other refrigerator or freezer can cause condensation or cause damage to the appliance.

IMPORTANT

To protect the refrigerator from possible damage, allow the appliance to stand 1 hour in place before turning the electricity on. This allows the refrigerant and system lubrication to reach equilibrium.

Safety Regulations

The appliances are designed to cool and store wine and beverages.

The appliances are manufactured to operate within specific ambient temperature limits according to its climate rating.

The climate rating indicates the ambient temperature at which the appliance may be operated in order to deliver optimal refrigeration performance.

The climate rating for each model is visible in chapter "Specifications".

| Climate Rating | Ambient Temperature |
|-----------------------|------------------------------|
| SN | 50°F to 90°F (10°C to 32°C) |
| N | 61°F to 90°F (16°C to 32°C) |
| ST | 61°F to 100°F (16°C to 38°C) |
| T | 61°F to 109°F (16°C to 43°C) |
| SN-ST | 50°F to 100°F (10°C to 38°C) |
| SN-T | 50°F to 109°F (10°C to 43°C) |

IMPORTANT

Do not operate the appliance outside the specified ambient temperature range.

- Refrigerant circuits are tested for leaks.
- The appliances

WU 3400
WUgb 3400
WU 4500
RU 510
RO 510

complies with current safety regulations

CAN/CSA C22.2 No.60335-1-11
UL 60335-1 Fifth Edition
CAN/CSA C22.2 No. 60335-2-24-06
UL 60335-2-24 First Edition

- The appliances

HWS 1800
WS 17800

complies with current safety regulations

CAN/CSA C22.2 # 63
UL 250

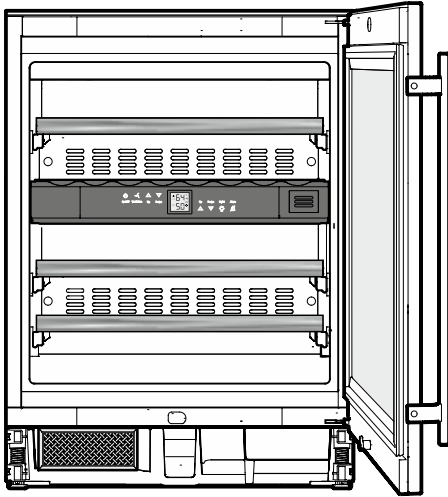
Wine and Undercounter

Specifications

Wine Cabinets WU 3400, WUgb 3400, WU 4500, HWS 1800, WS 17800

Undercounter Beverage Center RU 510

Outdoor Refrigerator RO 510



WU 3400

Energy Supply:

Climate Rating:

Door hinges:

Door:

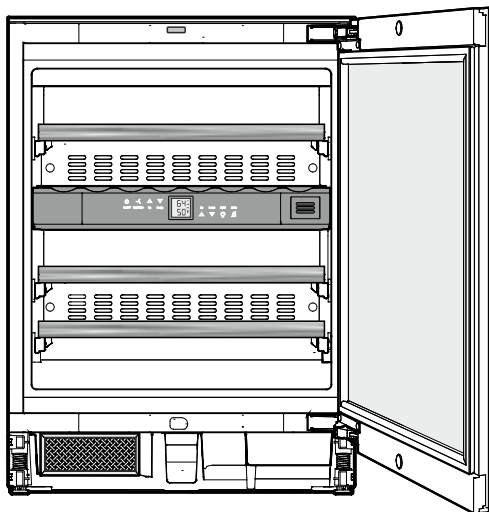
115V / 60Hz / 2A

SN-ST

right/reversible

glass door with stainless
steel frame

- Touch electronic control system
- Telescopic wine shelves
- Activated charcoal filter
- LED-light



WUgb 3400

Energy Supply:

Climate Rating:

Door hinges:

Door:

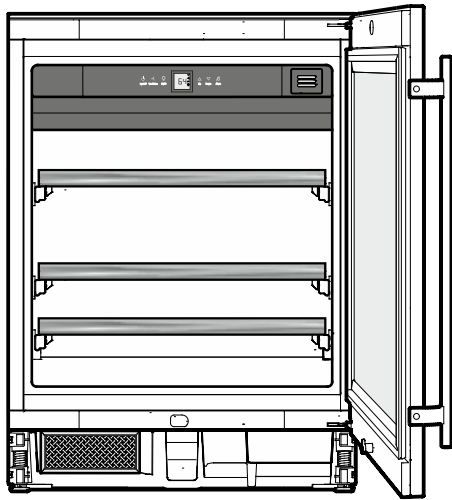
115V / 60Hz / 2A

SN-ST

right/reversible

glass door

- Touch electronic control system
- Telescopic wine shelves
- Activated charcoal filter
- LED-light
- Tip open door mechanism



WU 4500

Energy Supply:

115V / 60Hz / 1.5A

Climate Rating:

SN-ST

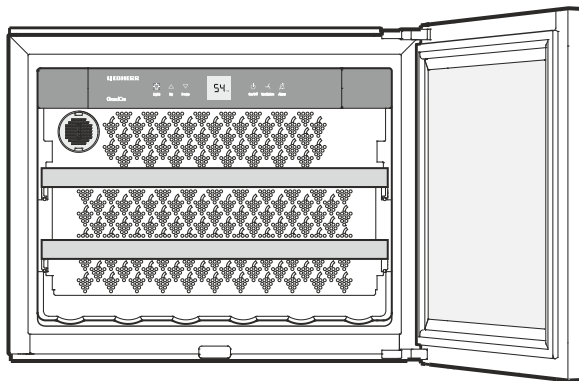
Door hinges:

right/reversible

Door:

glass door with stainless steel frame

- Touch electronic control system
- Telescopic wine shelves
- Activated charcoal filter
- LED-light



HWS 1800

Energy Supply:

115V / 60Hz / 1A

Climate Rating:

SN

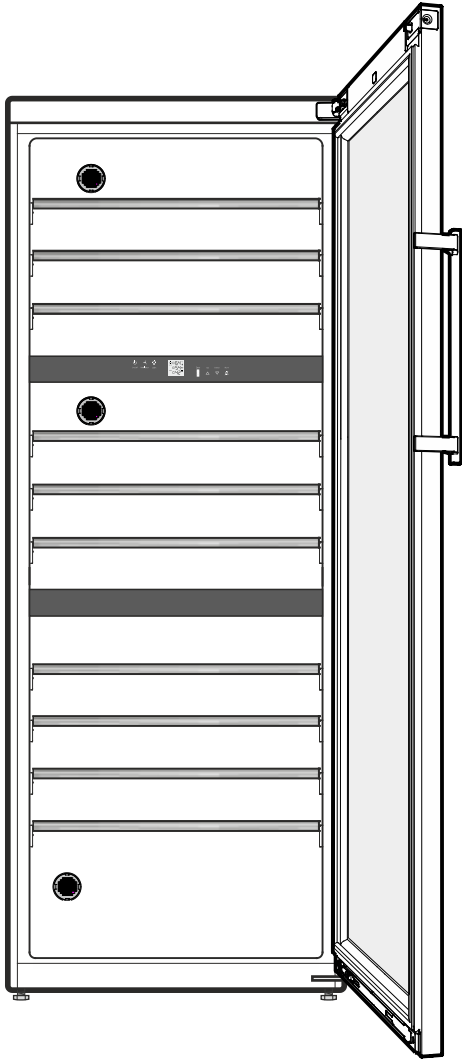
Door hinges:

right/reversible

Door:

glass door with stainless steel frame

- Touch electronic control system
- Telescopic wine shelves
- Activated charcoal filter
- LED-light



WS 17800

Energy Supply:

Climate Rating:

Door hinges:

Door:

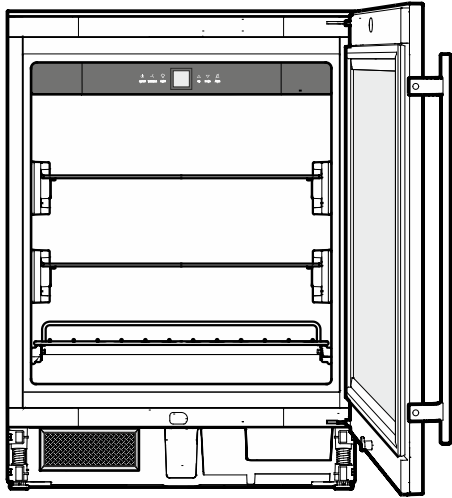
115V / 60Hz / 2A

SN-ST

right/reversible

glass door with stainless
steel frame

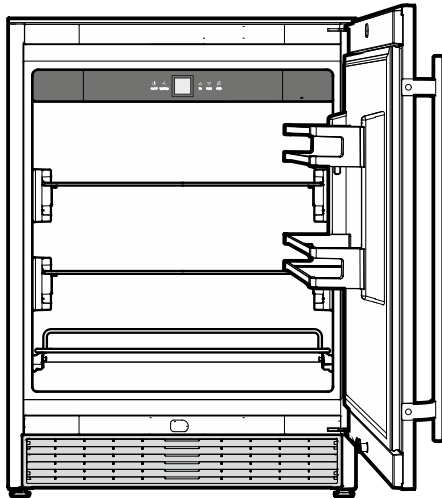
- Touch electronic control system
- Telescopic wine shelves
- Activated charcoal filter
- LED-light



RU 510

Energy Supply: 115V / 60Hz / 1.5A
Climate Rating: SN-ST
Door hinges: right/reversible
Door: glass door with stainless steel frame

- Touch electronic control system
- Telescopic bottom shelf
- Activated charcoal filter
- LED-light
- Glass shelves with stainless steel trim



RO 510

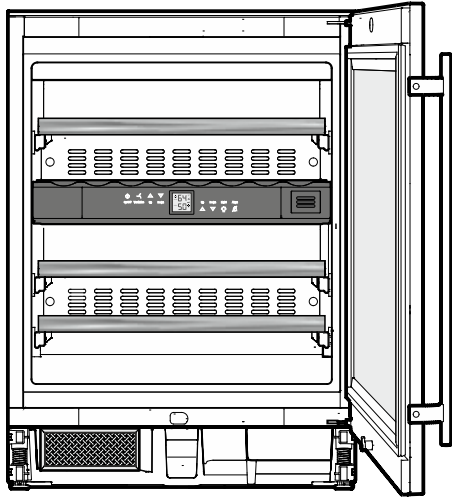
Energy Supply: 115V / 60Hz / 1.5A
Climate Rating: SN-T
Door hinges: right/reversible
Door: stainless steel

- Touch electronic control system
- Telescopic bottom shelf
- Top door rack adjustable
- LED-light
- Glass shelves with stainless steel trim

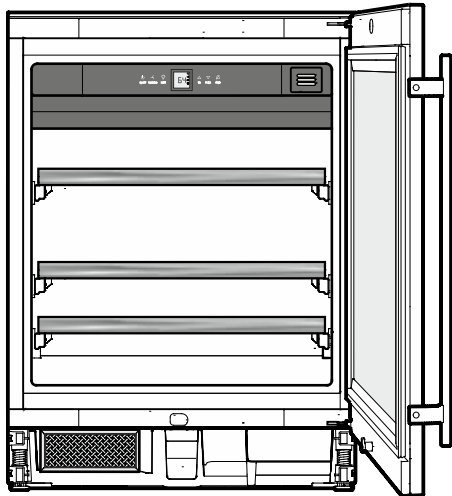
Wine and Undercounter

Undercounter Wine Cabinet WU 3400 / WU 4500

WU 3400



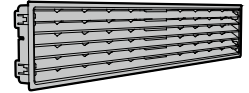
WU 4500



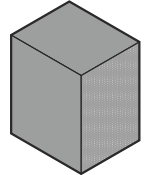
IMPORTANT

To ensure proper refrigeration performance of the appliance, the ventilation grille supplied must be installed.

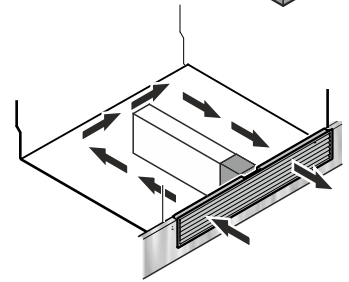
The ventilation grille must be installed into the toe kick panel.



The foam block supplied must be installed in order to ensure the required air flow through the appliance base.



Failure to follow this instruction may result in poor refrigeration performance.



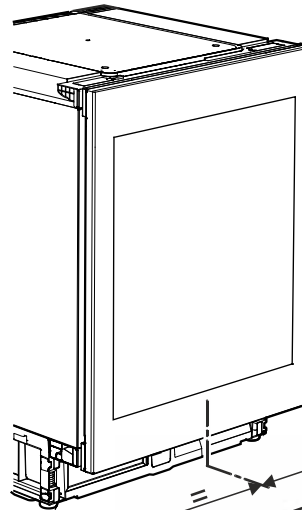
R600a Refrigerant



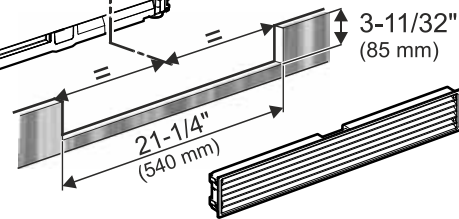
WARNING!

The refrigerant R600a contained within the appliances is environmentally friendly, but flammable. Leaking refrigerant can ignite.

To prevent possible ignition, designed ventilation is required.



Cut-out section in the toe kick panel



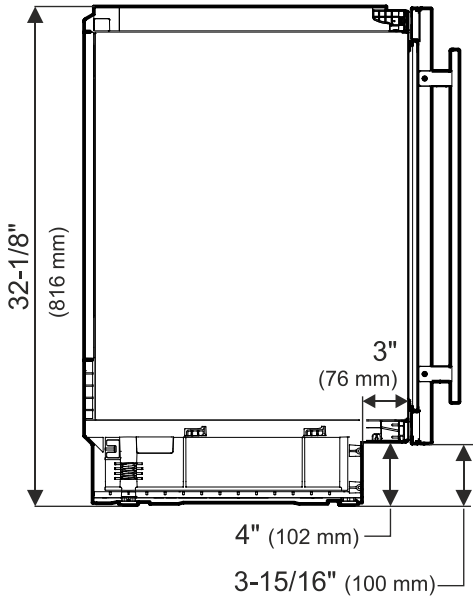
IMPORTANT

The cut-out section in the toe kick panel must be centered in relation to the appliance and in the uppermost part of the toe kick.

Wine and Undercounter

Appliance and Cabinet Dimensions

Side view

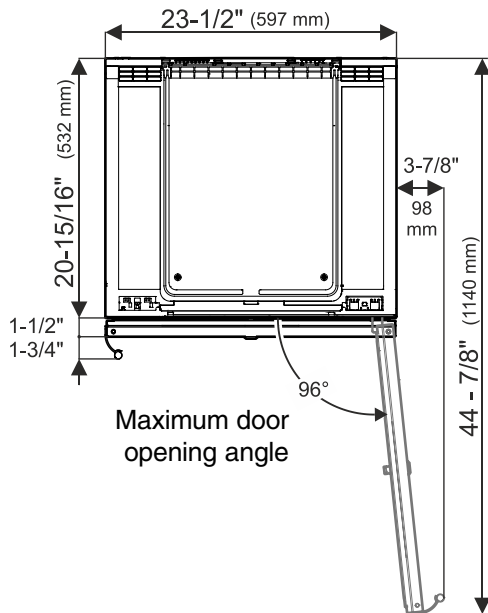


Height when adjustable feet have been screwed in as far as they will go.

Delivery status = feet approx. 1/8" unscrewed.

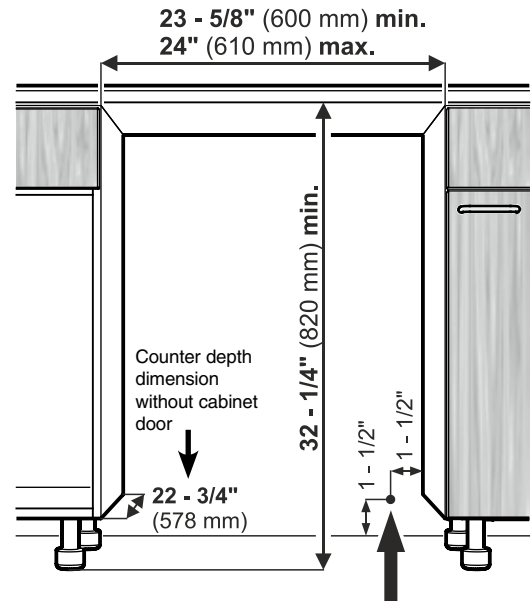
Maximum height adjustment = 2" (51 mm) to allow for a 6" (153 mm) toe kick.

Top view



IMPORTANT

The floor on which the appliance stands must be horizontal and level. The kitchen units must be aligned horizontally and vertically.



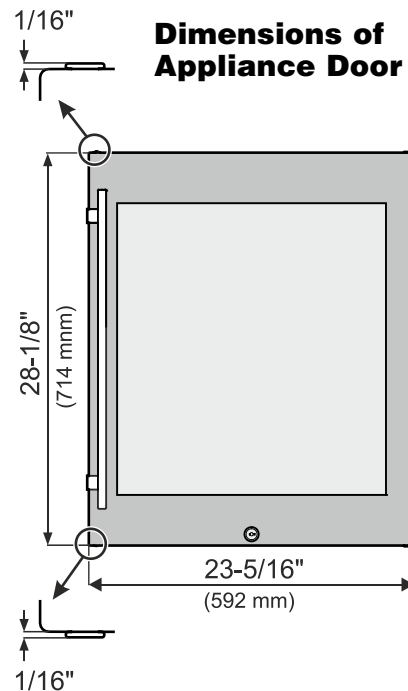
The power cord exits the rear of the appliance at this location.

Free length of the power cord = 78 - 3/4 inch (2000 mm)

IMPORTANT

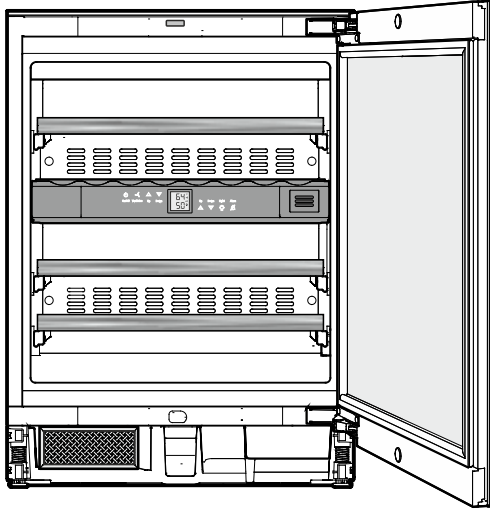
The electrical outlet must not be situated behind the appliance and must be easily accessible.

Dimensions of Appliance Door



Wine and Undercounter

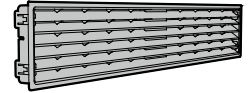
Undercounter Wine Cabinet WUgb 3400



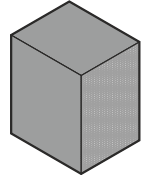
IMPORTANT

To ensure proper refrigeration performance of the appliance, the ventilation grille supplied must be installed.

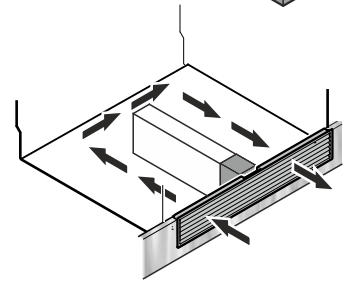
The ventilation grille must be installed into the toe kick panel.



The foam block supplied must be installed in order to ensure the required air flow through the appliance base.



Failure to follow this instruction may result in poor refrigeration performance.



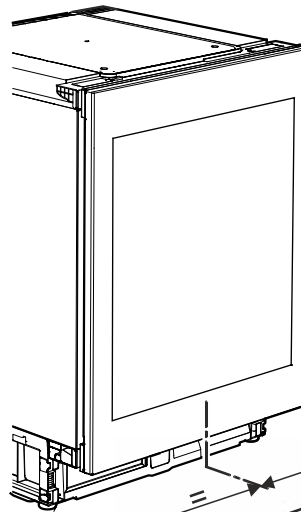
R600a Refrigerant



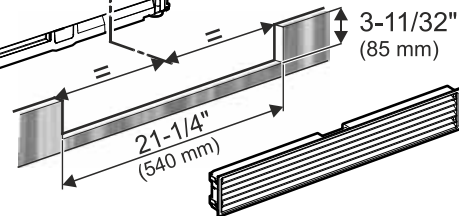
WARNING!

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To prevent possible ignition, designed ventilation is required.



Cut-out section in the toe kick panel

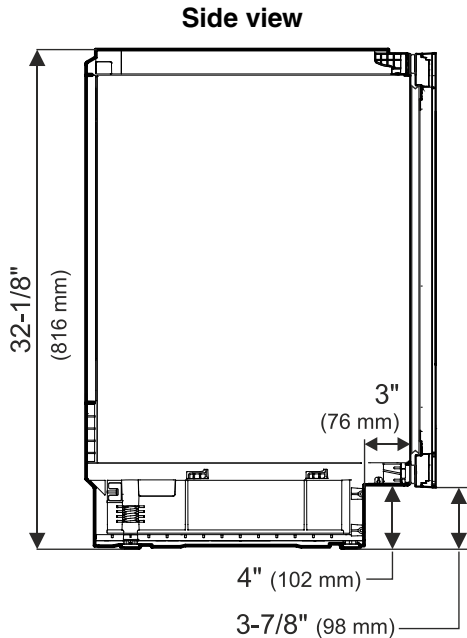


IMPORTANT

The cut-out section in the toe kick panel must be centered in relation to the appliance and in the uppermost part of the toe kick.

Wine and Undercounter

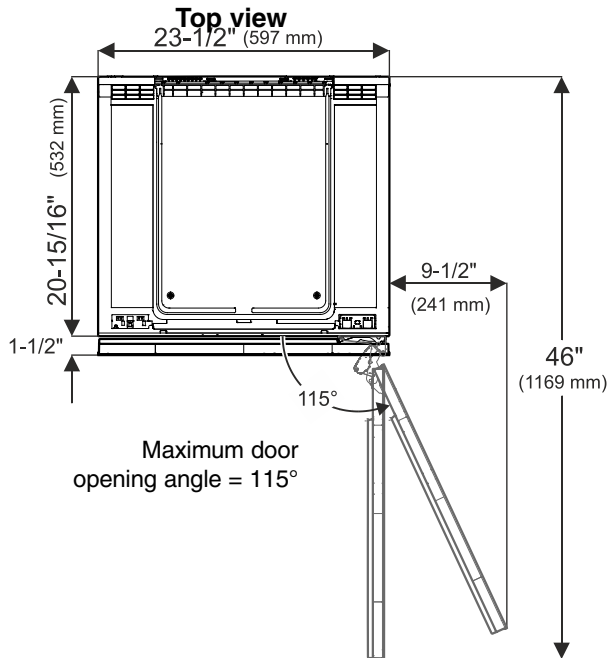
Appliance and Cabinet Dimensions



Height when adjustable feet have been screwed in as far as they will go.

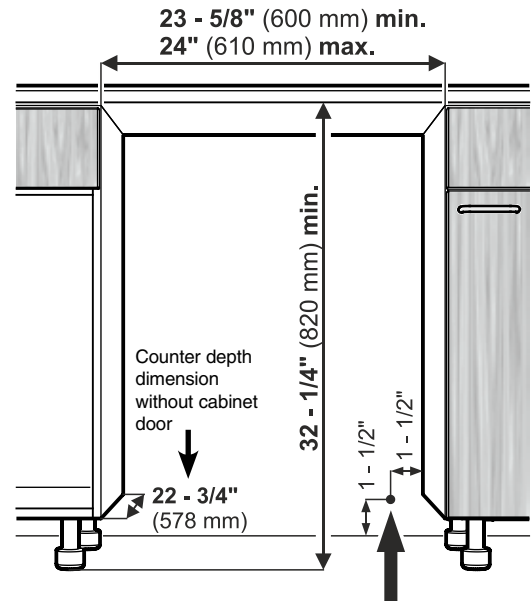
Delivery status = feet approx. 1/8" unscrewed.

Maximum height adjustment = 2" (51 mm) to allow for a 6" (153 mm) toe kick.



IMPORTANT

The appliance stands must be horizontal and level. The kitchen appliances must be aligned horizontally and vertically.



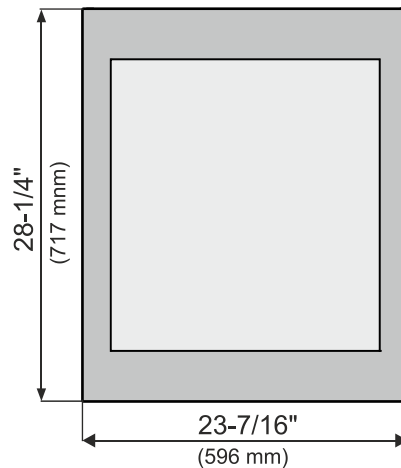
The power cord exits the rear of the appliance at this location.

Free length of the power cord = 78 - 3/4 inch (2000 mm)

IMPORTANT

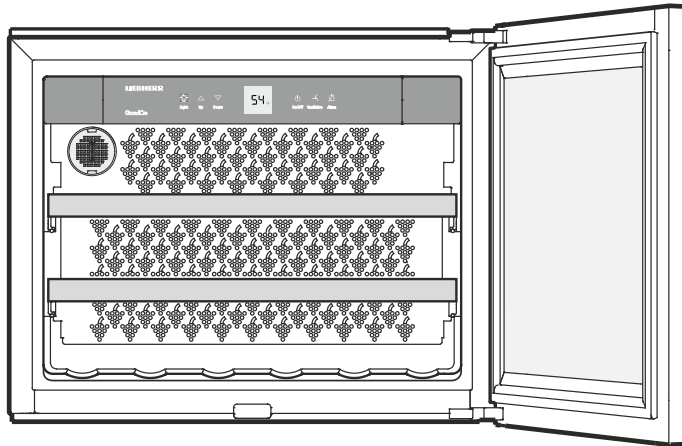
The electrical outlet must not be situated behind the appliance and must be easily accessible.

Dimensions of Appliance Door



Wine and Undercounter

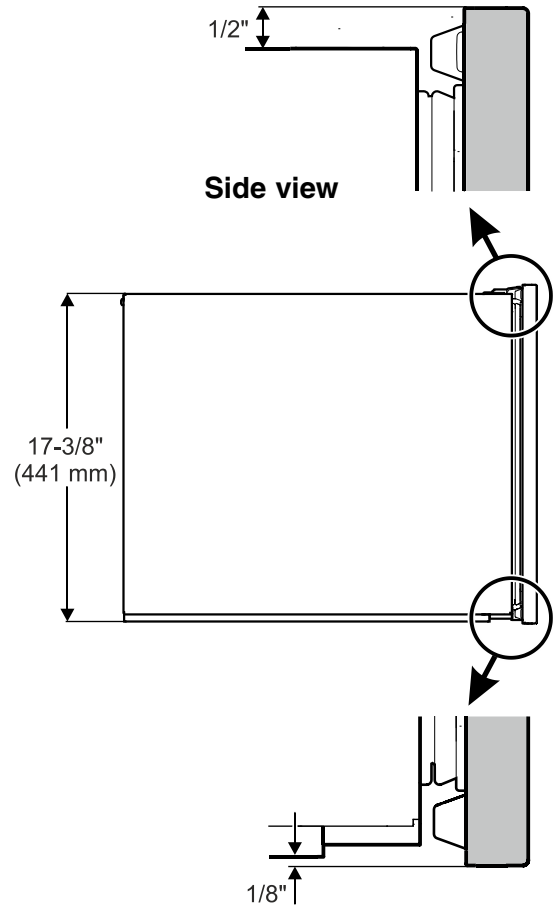
Built in Wine Cabinet HWS 1800



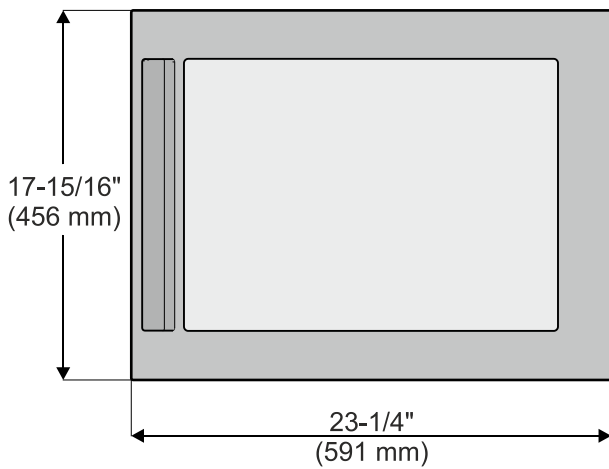
For installation in a 30" recess the Trim Kit is required.

See chapter "Accessories".

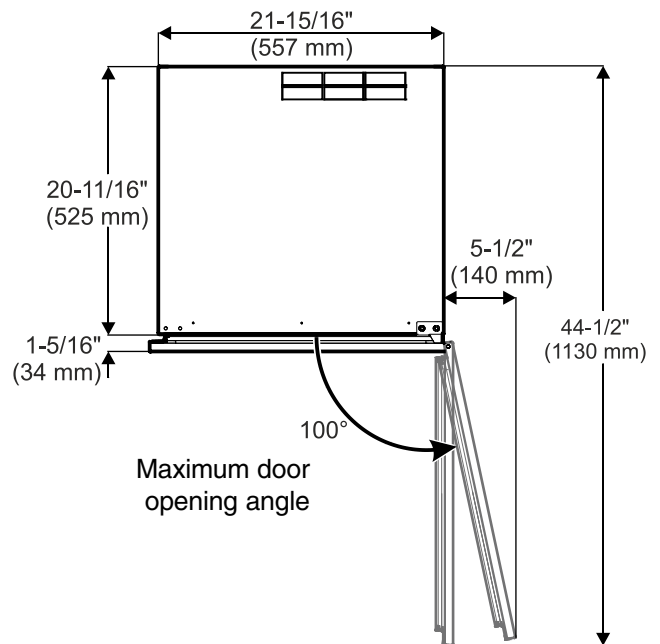
Appliance Dimensions



Dimensions of Appliance Door

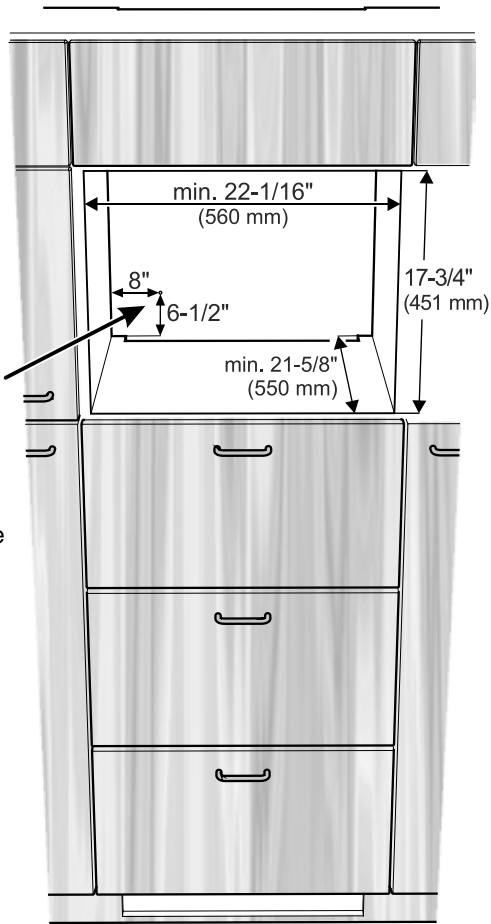


Top view



Wine and Undercounter

Cabinet Dimensions



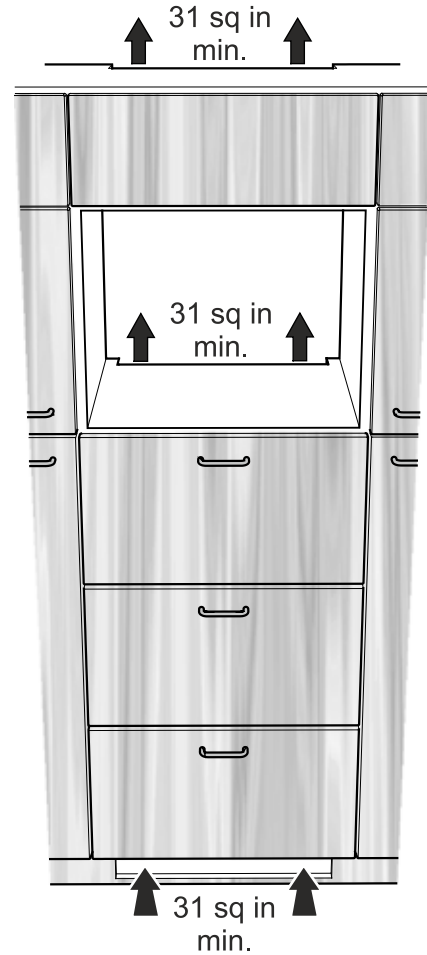
The power cord exits the rear of the appliance at this location.

Free length of the power cord = 48" (1220 mm)

IMPORTANT

The electrical outlet must not be situated behind the appliance and must be easily accessible.

Appliance Venting



IMPORTANT

The clear ventilation cross section must be at least 31 sq inches from the lower to the top opening.

Cabinet Dimensions - Flush Face Installation

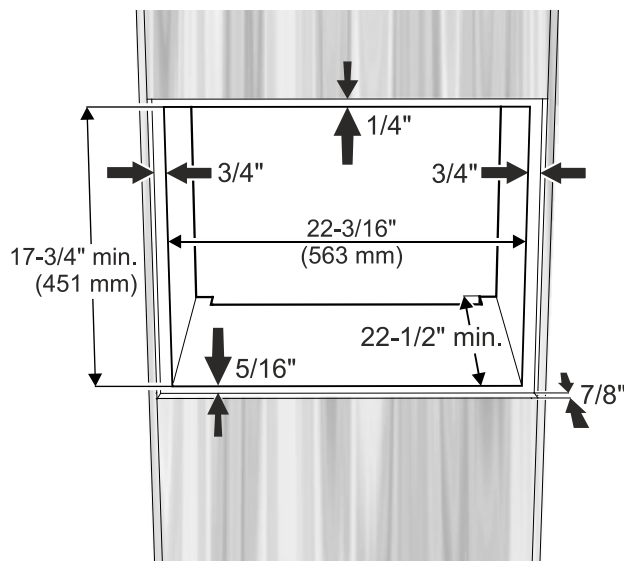
Cabinet dimensions for installations into a cabinet wall.

Front of appliance door is flush with the cabinet front surface.

Front opening results in a 3/16" gap between appliance door and outer recess.

IMPORTANT

The appliance must be centered in the recess to avoid collision of the right door edge with the cabinet when the door is opened.

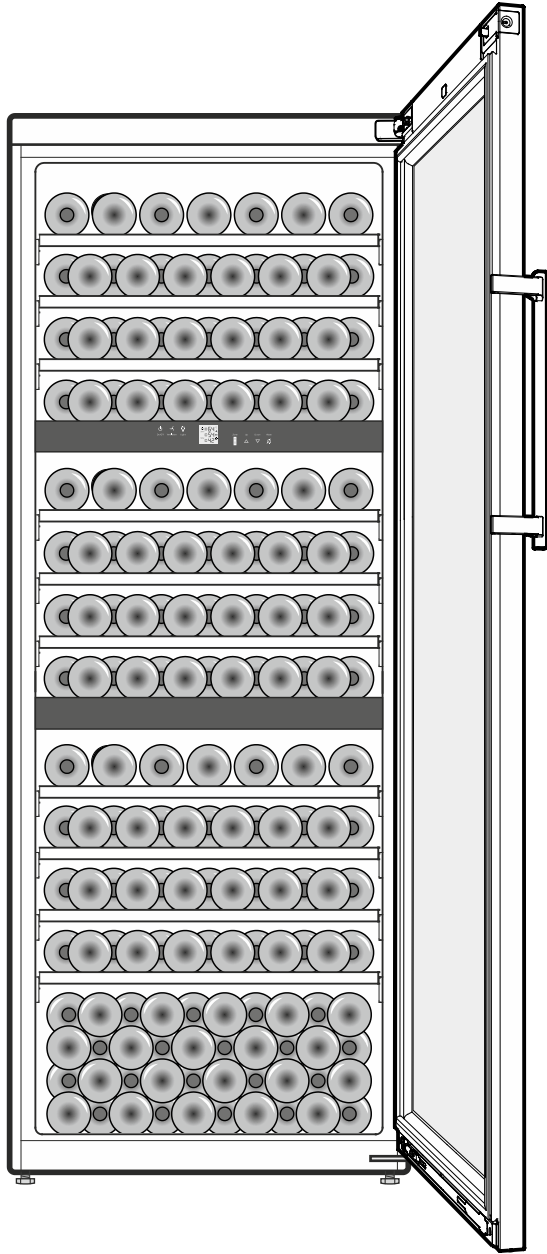


Wine and Undercounter

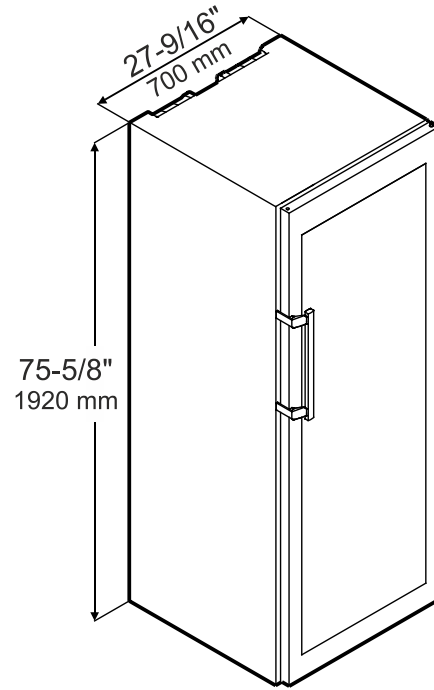
Freestanding Wine Cabinet WS 17800

Wine cooler with three temperature zones.

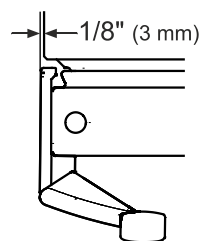
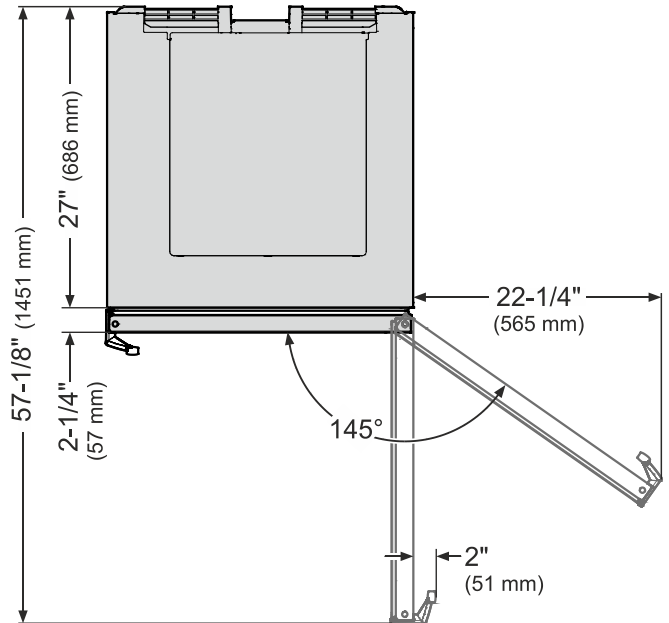
Every temperature zone can be adjusted separately and independent from the other zones.



Appliance Dimensions



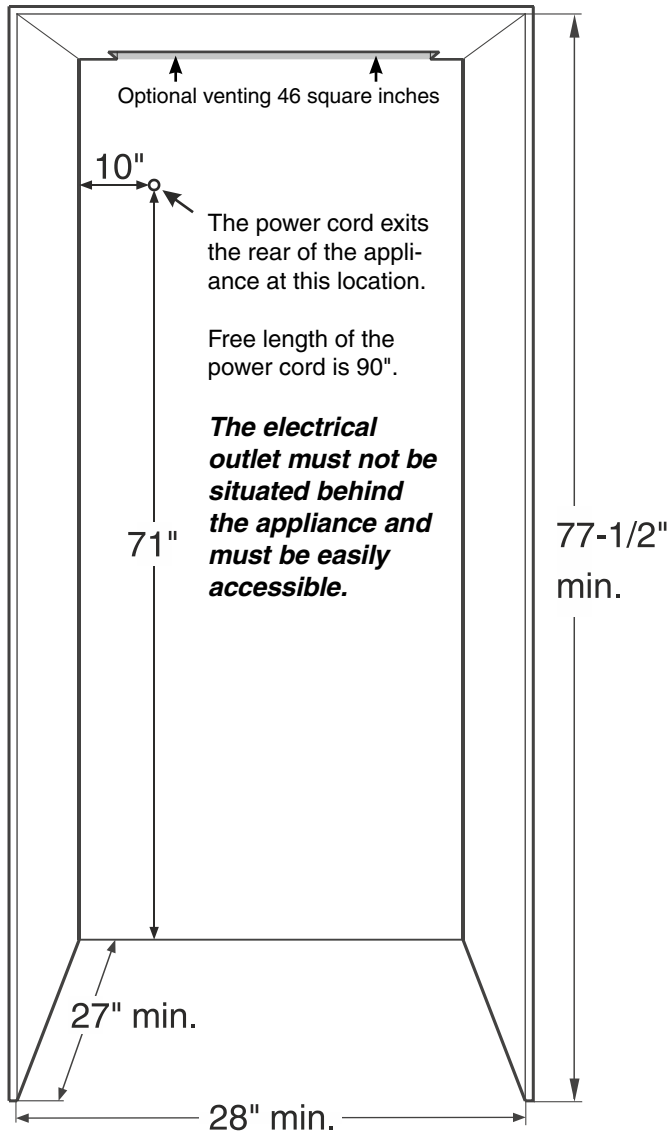
Appliance Dimensions Top view



The handle protrudes approx. 1/8" to the left side wall of the appliance.

Wine and Undercounter

Cabinet Opening Dimensions



The given cabinet opening height dimension includes 2" for ventilation.

If the appliance will be ventilated above the cabinet or in a soffit, the height dimension can be adjusted accordingly.

IMPORTANT

Minimum ventilation opening is 46 sq in !

With a cabinet depth of 27", the front of the appliance housing is flush with the cabinet frame. (see chapter "Appliance Dimensions Top View")

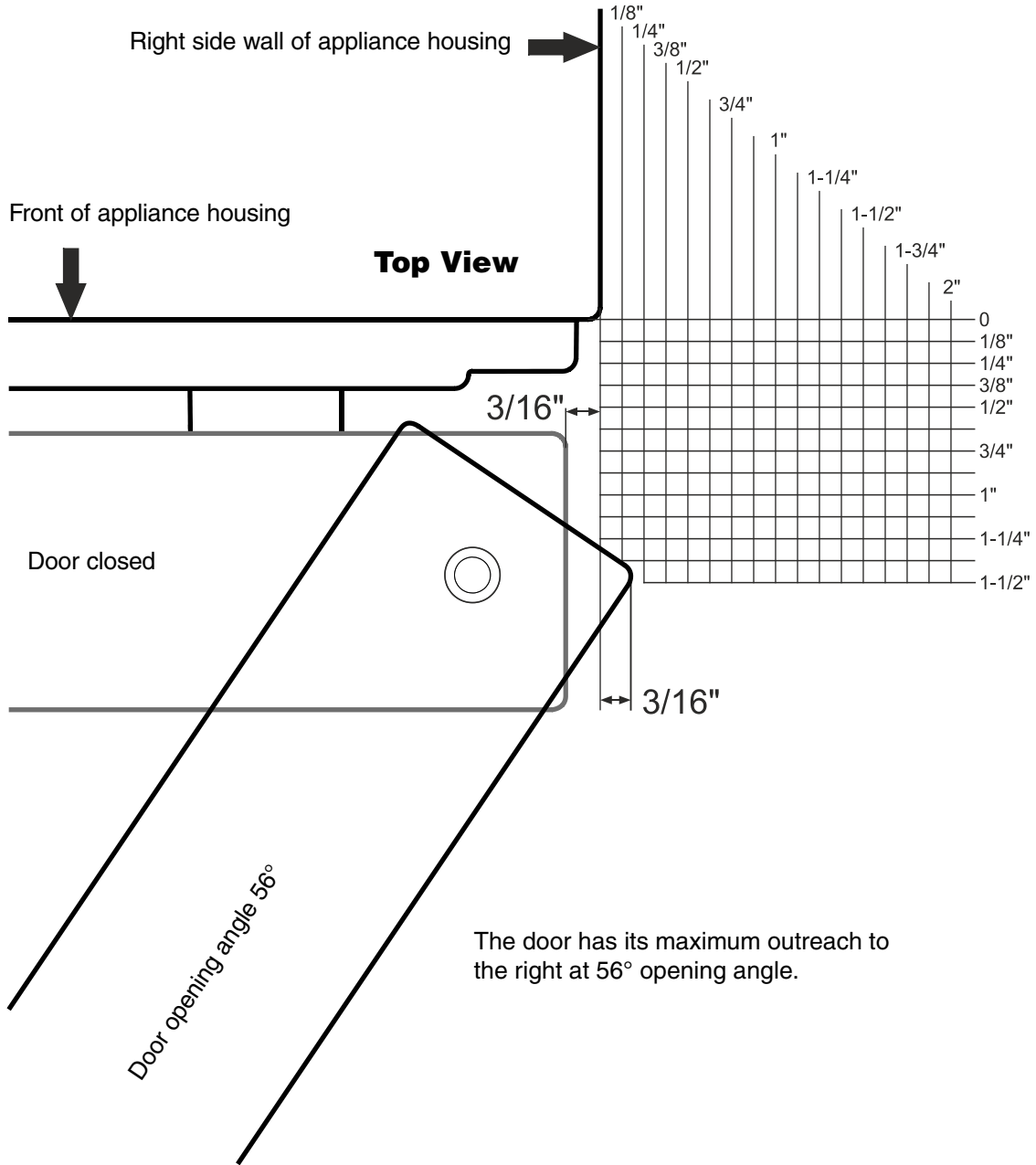
Side by Side WS 17800

To avoid condensation on the side walls at side by side applications a minimum distance of 2" between the appliances is required.



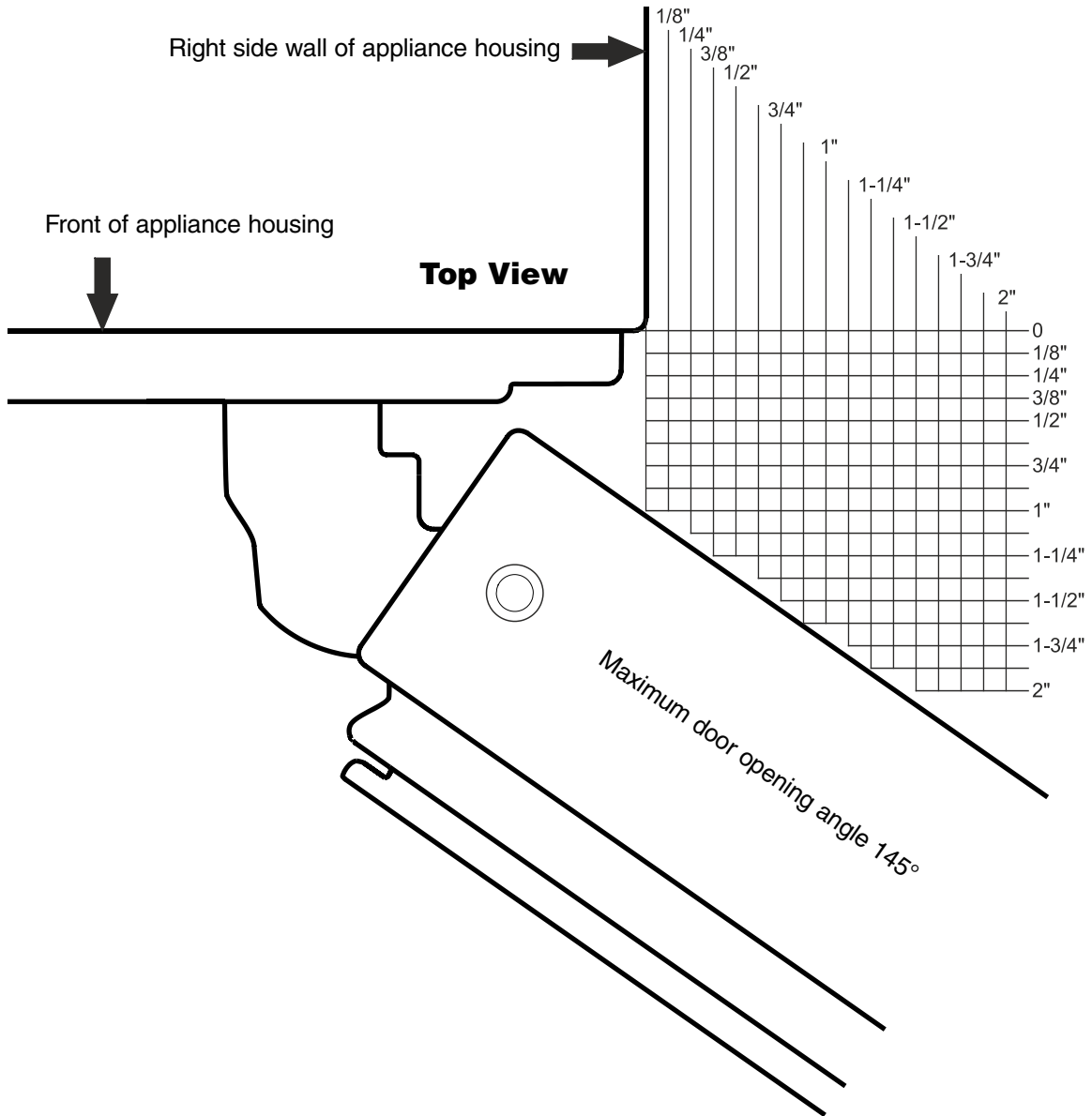
Wine and Undercounter

Door Swing Clearance WS 17800

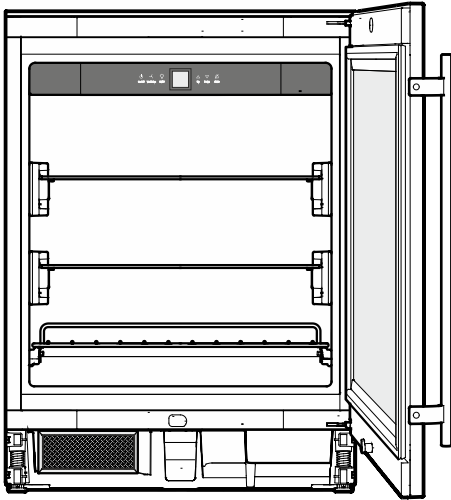


Wine and Undercounter

Door Swing Clearance WS 17800



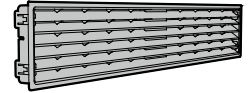
Undercounter Beverage Center RU 510



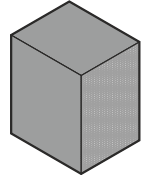
IMPORTANT

To ensure proper refrigeration performance of the appliance, the ventilation grille supplied must be installed.

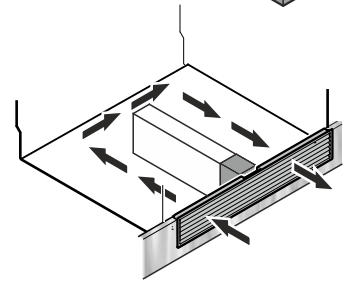
The ventilation grille must be installed into the toe kick panel.



The foam block supplied must be installed in order to ensure the required air flow through the appliance base.



Failure to follow this instruction may result in poor refrigeration performance.



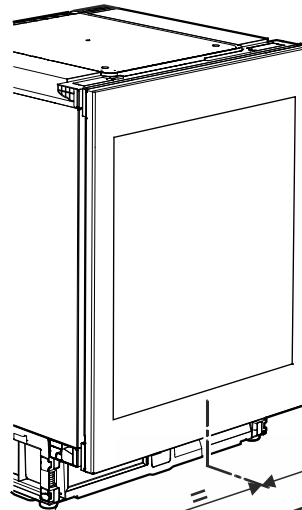
R600a Refrigerant



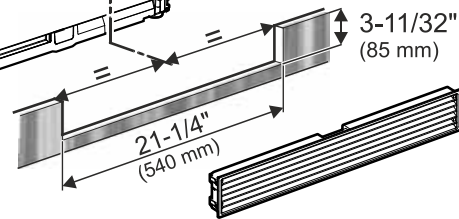
WARNING!

The refrigerant R600a contained within the appliances is environmentally friendly, but flammable. Leaking refrigerant can ignite.

To prevent possible ignition, designed ventilation is required.



Cut-out section in the toe kick panel

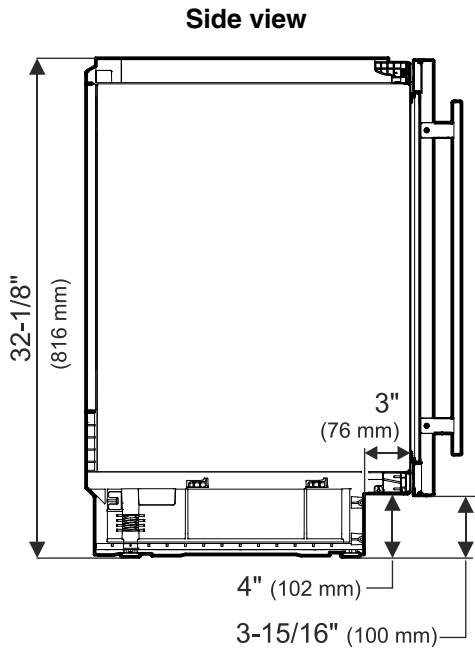


IMPORTANT

The cut-out section in the toe kick panel must be centered in relation to the appliance and in the uppermost part of the toe kick.

Wine and Undercounter

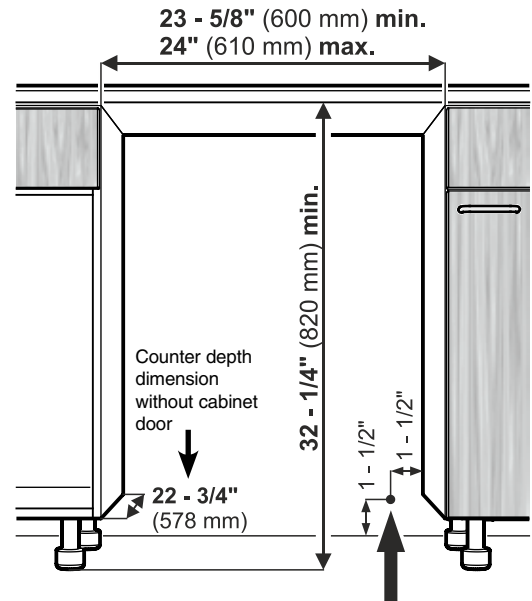
Appliance and Cabinet Dimensions



Height when adjustable feet have been screwed in as far as they will go.

Delivery status = feet unscrewed approx. 1/8" .

Maximum height adjustment = 2" (51 mm) to allow for a 6" (153 mm) toe kick.

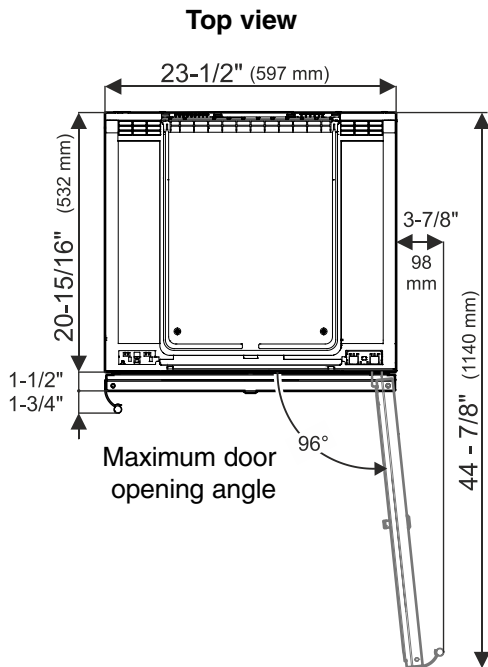


The power cord exits the rear of the appliance at this location.

Free length of the power cord = 78 - 3/4 inch (2000 mm)

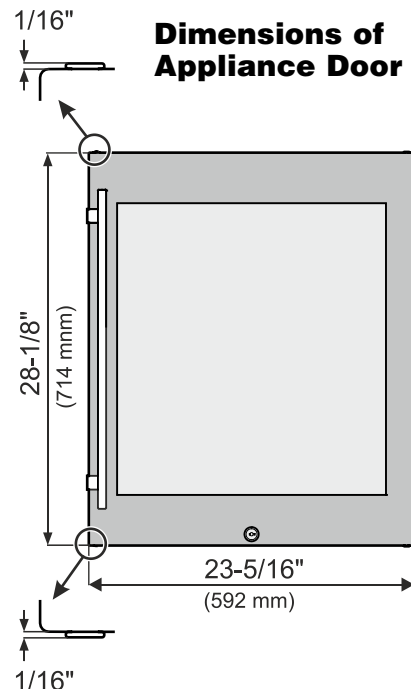
IMPORTANT

The electrical outlet must not be situated behind the appliance and must be easily accessible.

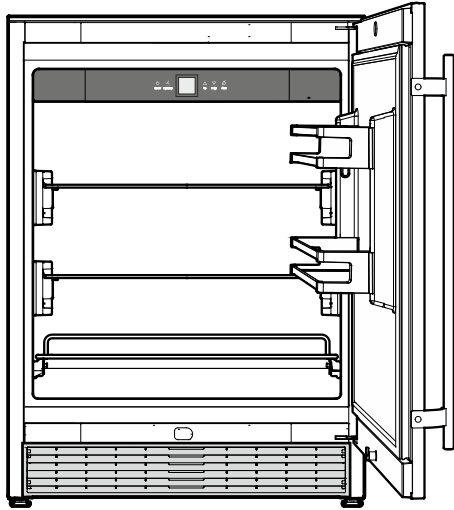


IMPORTANT

The floor on which the appliance stands must be horizontal and level. The kitchen units must be aligned horizontally and vertically.

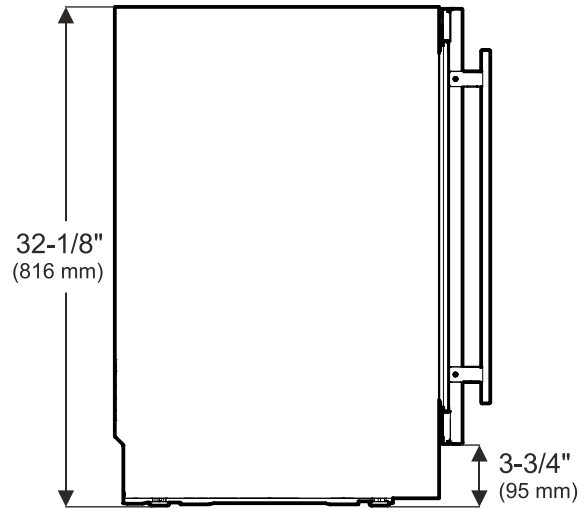


Outdoor Refrigerator RO 510



Appliance Dimensions

Side view



R600a Refrigerant



WARNING!

The refrigerant R600a contained within the appliances is environmentally friendly, but flammable. Leaking refrigerant can ignite.

To prevent possible ignition, designed ventilation is required.

It is recommended to install the appliance in a sheltered area, avoiding direct contact with extreme weather.

Avoid placing the appliance in direct sunlight or near the stove, range top, radiators and similar heat sources.

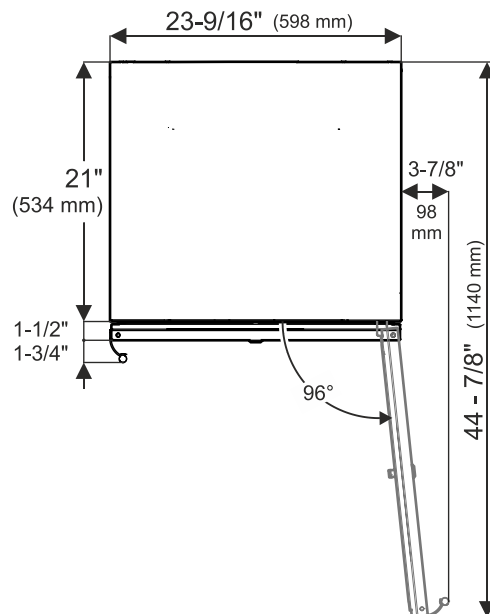
The appliance is designed for a freestanding setting up.

Height when adjustable feet have been screwed in as far as they will go.

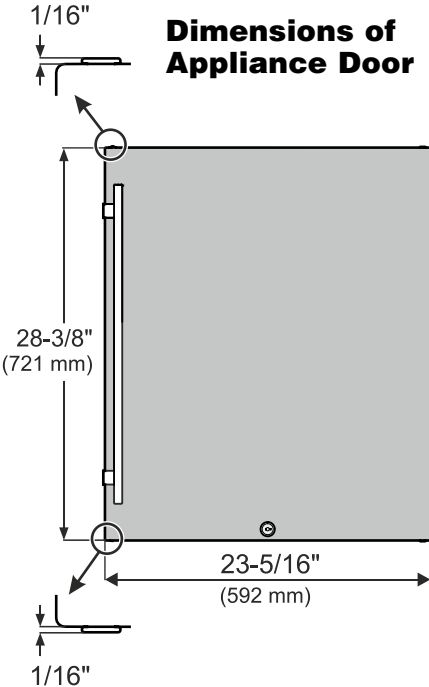
Delivery status = feet approx. 1/8" unscrewed.

Maximum height adjustment = 2" (51 mm)

Top view

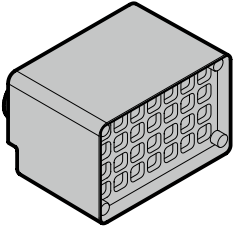
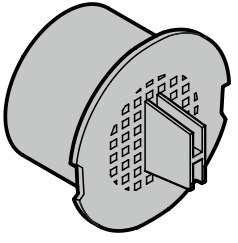
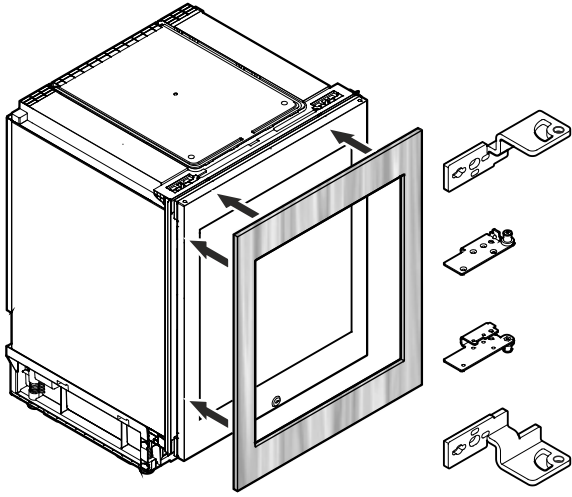
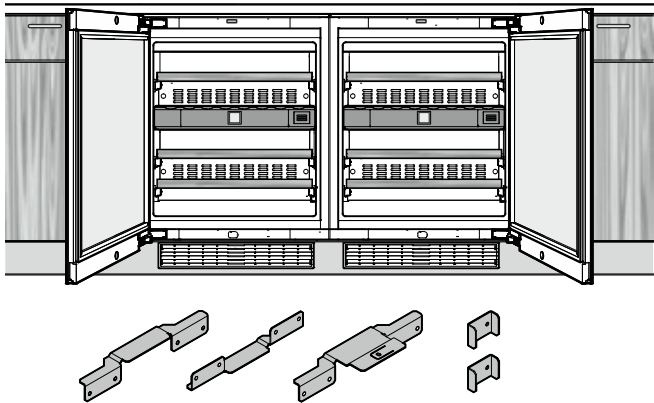


Wine and Undercounter

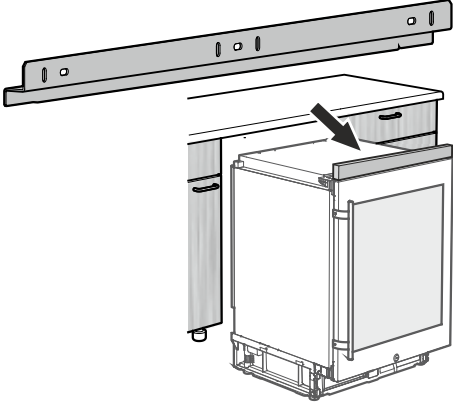
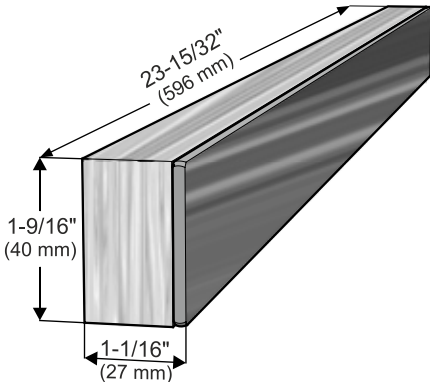
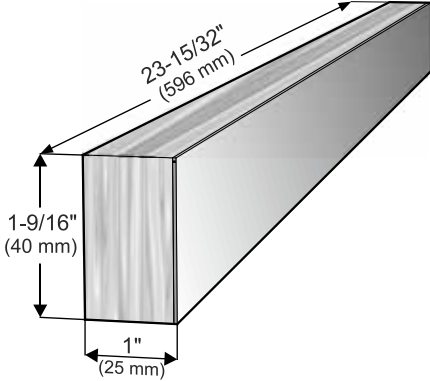
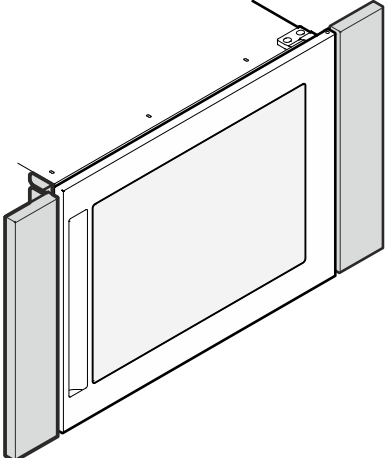


Wine and Undercounter

Accessories

| Image | Article number | Name of the item | For use with model |
|---|----------------|--|---|
|  | 7434 557-00 | Charcoal Filter | WU 3400 WUgb 3400 WU 4500 |
|  | 7440 999-00 | Charcoal Filter | HWS 1800 WS 17800 |
|  | 9590 131-00 | Overlay Kit Includes hinges, brackets, screws and manual. Panel is not included. | WU 3400 WU 4500 RU 510 |
|  | 9901 647-00 | Side by Side Kit Includes angle brackets, screws and installation manual. | WU 3400 WUgb 3400 WU 4500 RU 510 |

Wine and Undercounter

| Image | Article number | Name of the item | For use with model |
|---|----------------|--|---|
|  | 9901 651-00 | <p>Angle bracket for cover panel</p> <p>One is included with the appliance.</p> <p>The bracket can be mounted at top or bottom of the appliance.</p> | <p>WU 3400 WUgb 3400 WU 4500 RU 510</p> |
|  | 9901 599-00 | <p>Trim Kit</p> <p>Cover panel with black glass front</p> <p>(for use with angle bracket 9901 651-00)</p> | WUgb 3400 |
|  | 9901 601-00 | <p>Trim Kit</p> <p>Cover panel with stainless steel front</p> <p>(for use with angle bracket 9901 651-00)</p> | <p>WU 3400 WU 4500 RU 510</p> |
|  | 9900 073-00 | Trim Kit for 30" wide recess | HWS 1800 |

