

LIEBHERR

Design Guide 2011

Freestanding / Semi Built In Models 30", 36" and 60"

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

Liebherr-appliances consistently specializes in the manufacturing of high quality freezers and refrigerators. With more than 300 basic models, we have the widest selection in the world. Liebherr appliances feature premium quality, numerous innovative product ideas and advanced design. Liebherr freezers and refrigerators are manufactured at three modern production plants:

Liebherr Marica in Bulgaria, Liebherr-Hausgeräte Ochsenhausen GmbH in Germany and the Liebherr-Hausgeräte Lienz GmbH in Austria.

The appliances for the North American market are produced in Austria and in Germany.

Liebherr is committed to the protection of the environment and recognizes it as a critical priority. To guarantee an optimum and consistent implementation, all ecological aspects were observed and integrated into the quality control of Liebherr in compliance with DIN EN ISO 9001.

Liebherr's Commitment to the Environment

The components of Liebherr products can be recycled when the necessary resources are applied. A concern for the environment and a desire to protect resources has lead 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. Whether you are replacing a unit or starting fresh, remember to dispose of your old appliance in an environmentally safe and friendly manner.

Introduction

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 and Parts in the U.S.:

Liebherr Service Center

15545 N. 77th Street
Scottsdale, AZ 85260

Phone: (480) 998-0141
Fax: (480) 998-7877
Toll Free: **1-866-LIEBHERR or**
1-866-543-2437

www.liebherr-appliances.com

For Service and Parts in Canada:

Euro Parts

579 Campbell Street,
P.O. Box 759,
Lucknow, Ontario, N0G 2H0

Phone: (519)528-5005
Fax: (519)528-5001
Toll Free: **1-888-Liebherr or**
1-888-543-2437

www.euro-parts.ca

Contents

General Remarks

Safety Warnings	I
Electrical Requirements & Safety	II
IceMaker (if equipped)	III
Area Requirements	IV
Safety Regulations	V

Freestanding/Semi Built In Models

30" and 60" Models: CS 1400, CS 16..., SBS 32S1	1
36" Models: CS 2062, CBS 2062, CS 2060, CS 2061	3
Unit Dimensions	5
Cabinet Opening Dimensions	7
Ventilation Requirements	9
Front Clearance CS/CBS 2062	11
Front Clearance CS 2060, CS 2061	12
Door Swing Clearance CS/CBS 2062	13
Door Swing Clearance CS 2060, CS 2061	14

General Remarks


I. Safety Warnings

PLEASE READ AND FOLLOW THESE INSTRUCTIONS

This design guide contains Warning and Caution statements. This information is important for safe and efficient installation.

This design guide is not replacing the use and care manual which contains important information on how to use Liebherr appliances.

Always read and follow all Warning and Caution statements!

 **WARNING**

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

 **CAUTION**

Caution indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate 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

II. Electrical Requirements & Safety

A 115 Volt, 60 Hz, 10 Amp (15 Amp for side-by-side installation) fused electrical supply is required. We recommend using a dedicated circuit for these appliances to prevent electrical overload. Comply with the National Electrical Code as well as local codes and ordinances when installing the receptacle.

The power cord is equipped with a three-prong (grounding) plug for your protection against possible shock hazards. To maintain this protection:

- Do not modify the plug by removing the round grounding prong.
- Do not use a power cord that is frayed or damaged.



WARNING

Do not ground to a gas pipe. Check with a qualified electrician if you are not sure the appliance is properly grounded. Do not have a fuse in the neutral or grounding circuit.



WARNING

ELECTROCUTION HAZARD

Electrical Grounding Required. This appliance is equipped with a three-prong(grounding) polarized plug for your protection against possible shock hazards.

- **DO NOT** remove the round grounding prong from the plug.
- **DO NOT** use a two-prong grounding adapter.
- **DO NOT** use an extension cord to connect power to the unit.

III. IceMaker (if equipped)

The icemaker is located in the freezer compartment. It must be connected to the water supply to function properly. The appliance must be level for the icemaker to function properly.

The water supply pressure requirements are different based on whether or not the supplied Liebherr water filter is installed. With the filter installed, the pressure must be in the range of 40-90 psi (2.8-6.2 bar). Without the filter installed the acceptable pressure range is 22-87 psi (1.5-6 bar).

Use a 1/4" OD copper line to connect the water supply to the solenoid valve. This is not supplied with the appliance. If you have hard water, we recommend you install a water softener. Also, a filter must be installed if the water contains solids such as sand. All equipment and devices used to supply the water to the appliance must comply with the current regulations for your geographical area.

Safety Instructions and Warnings

- Do not attach the water source while the appliance is connected to an electrical outlet.
- A shut-off valve, must be installed between the hose line and the main water supply so that the water supply can be stopped if necessary. Do not install the shut-off valve behind the refrigeration unit.
- The connection to the water supply may only be made by a trained and licensed plumber.
- The water quality must comply with the drinking water regulations for the geographical area where the appliance is located.
- The icemaker is designed exclusively to make ice cubes in quantities needed by a household and may only be operated with water appropriate for this purpose.
- All repairs and work on the icemaker may only be done by customer service personnel or other trained personnel.
- The manufacturer cannot accept liability for damage caused by equipment or water lines between the solenoid valve and the water supply.

General Remarks

IV. Area Requirements

Verify the following:

- Floors can support refrigerator's weight plus approximately 1200 pounds (544 kg) of food weight. Not all Liebherr products are designed for 1200 pounds (544 kg) of food. Some units are smaller and total weights may vary.
- Finished kitchen floor height is level. Refrigerator 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 refrigerator opening.
- Cutout dimensions are accurate.
- Electrical outlet is in correct location.

Do not install this unit 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 unit next to any other refrigerator or freezer can cause condensation or cause damage to the Liebherr unit.



CAUTION

To protect the refrigerator from possible damage, allow the appliance to stand 1/2 to 1 hour in place before turning the electricity on. This allows the refrigerant and system lubrication to reach equilibrium.

Blocking For Safety

The anti-tip bracket must be installed to prevent the unit from tipping after it is installed. Refer to chapter "Blocking For Safety" in the installation instructions.

V. Safety Regulations

The appliance complies with UL250 and CAN/CSA-C 22,2 No. 63 and is designed to cool, freeze, store food as well as make ice (if equipped). It is designed as a household appliance.

The appliance is set to operate within specific ambient temperature limits according to its climate rating. These temperature limits should not be exceeded. The correct climate rating for your appliance is indicated on the model plate.

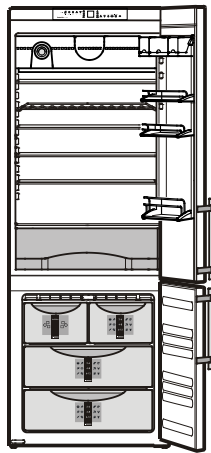
This is explained as follows:

Climate Rating	Set for Ambient Temperatures of
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)

- The refrigerant circuit has been tested for leaks.

30" and 60" Models: CS 1400, CS 16.., SBS 32S1

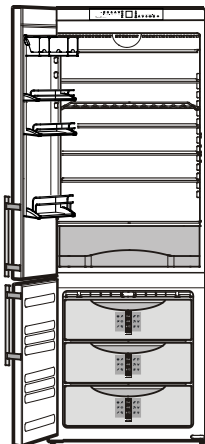
The stainless steel doors on 30" and 60" appliances comes with a SmartSteel surface. SmartSteel significantly reduces the visibility of finger marks and thanks to the high-quality finish of the stainless steel, it is very easy to clean and far more scratch-resistant.



CS 1660

Energy Star:	qualified
Energy consumption p. a.:	431 kWh
Energy Supply:	115V / 60Hz / 2.5A
Total capacity:	15.5 cu ft (438 L)
Refrigerator:	11.3 cu ft (319 L)
Freezer:	4.2 cu ft (119 L)
Ice cube output:	2.2 pd./24h
Ice cube stock:	3.3 pd.
Climate Rating:	SN-T
Door hinges:	right / reversible

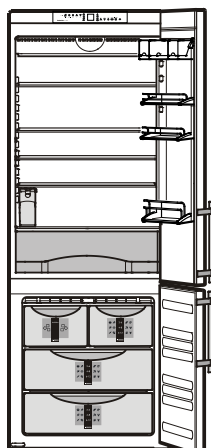
- Automatic refrigerator defrosting
- Automatic freezer compartment defrosting
- Automatic IceMaker can be switched off
- SmartSteel doors
- LED light column and LED freezer lighting



CS 1611

Energy Star:	qualified
Energy consumption p. a.:	431 kWh
Energy Supply:	115V / 60Hz / 2.5A
Total capacity:	15.5 cu ft (438 L)
Refrigerator:	11.3 cu ft (319 L)
Freezer:	4.2 cu ft (119 L)
Climate Rating:	SN-T
Door hinges:	left / reversible

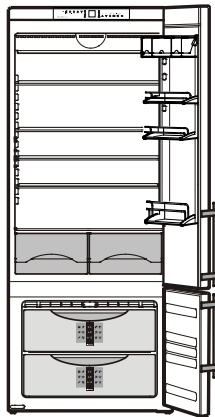
- Automatic refrigerator defrosting
- Automatic freezer compartment defrosting
- SmartSteel doors
- LED light column and LED freezer lighting



CS 1640

Energy Star:	qualified
Energy consumption p. a.:	431 kWh
Energy Supply:	115V / 60Hz / 2.5A
Total capacity:	15.2 cu ft (431 L)
Refrigerator:	11 cu ft (312 L)
Freezer:	4.2 cu ft (119 L)
Ice cube output:	2.2 pd./24h
Ice cube stock:	3.3 pd.
Climate Rating:	SN-T
Door hinges:	right / reversible

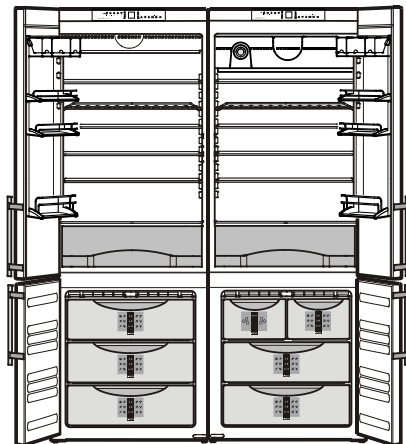
- Automatic refrigerator defrosting
- Automatic freezer compartment defrosting
- Automatic IceMaker can be switched off
- SmartSteel doors



CS 1400

Energy Star:	qualified
Energy consumption p. a.:	423 kWh
Energy Supply:	115V / 60Hz / 2.5A
Total capacity:	14 cu ft (396 L)
Refrigerator:	11 cu ft (312 L)
Freezer:	3 cu ft (84 L)
Climate Rating:	SN-T
Door hinges:	right / reversible

- Automatic refrigerator defrosting
- Automatic freezer compartment defrosting
- SmartSteel doors



SBS 32S1 (CS 1611 & CS 1660)

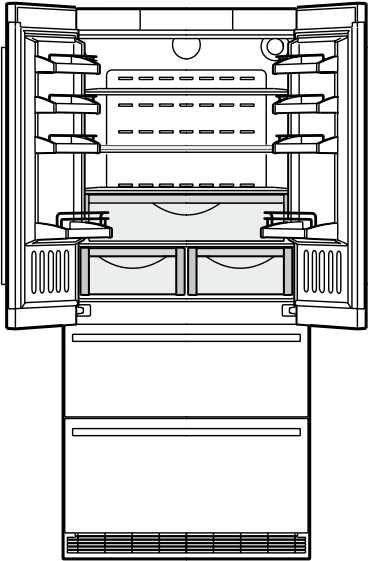
Energy Star:	qualified
Energy consumption p. a.:	862 kWh
Energy Supply:	115V / 60Hz / 5A
Total capacity:	30.9 cu ft (876 L)
Refrigerator:	22.5 cu ft (638 L)
Freezer:	8.4 cu ft (238 L)
Ice cube output:	2.2 pd./24h
Ice cube stock:	3.3 pd.
Climate Rating:	SN-T

- Automatic refrigerator defrosting
- Automatic freezer compartment defrosting
- Automatic IceMaker can be switched off
- SmartSteel doors
- LED light column and LED freezer lighting

Freestanding/Semi Built In Models

36" Models: CS 2062, CBS 2062

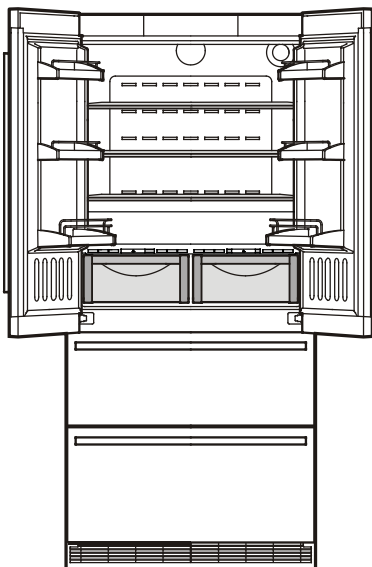
The 36" wide bottom mount refrigerators offer almost 20 cubic feet of capacity to meet all storage demands. Side swing doors or French doors for the refrigerator compartment and double freezer drawers on telescopic rails ensure convenient access as well as elegant esthetics. The French door series features also the model CS 2062 with the patented BioFresh technology.



CS 2062

Energy Star:	qualified
Energy consumption p. a.:	452 kWh
Energy Supply:	115V / 60Hz / 2.5A
Total capacity:	19.5 cu ft (552 L)
Refrigerator:	13.5 cu ft (382 L)
Freezer:	6 cu ft (170 L)
Ice cube output:	3 pd./24h
Ice cube stock:	6 pd.
Climate Rating:	SN-T

- Automatic refrigerator defrosting
- Automatic freezer compartment defrosting
- Automatic IceMaker can be switched off
- LED light column and LED freezer lighting

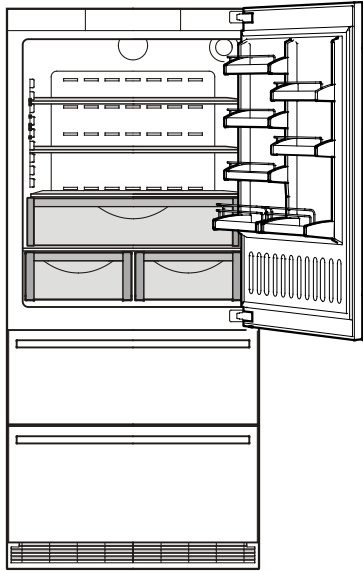


CBS 2062

Energy Star:	qualified
Energy consumption p. a.:	450 kWh
Energy Supply:	115V / 60Hz / 2.5A
Total capacity:	18.9 cu ft (535 L)
Refrigerator:	12.9 cu ft (365 L)
Freezer:	6 cu ft (170 L)
Ice cube output:	3 pd./24h
Ice cube stock:	6 pd.
Climate Rating:	SN-T

- Automatic refrigerator defrosting
- Automatic freezer compartment defrosting
- Automatic IceMaker can be switched off
- LED light column and LED freezer lighting
- BioFresh drawers with adjustable humidity

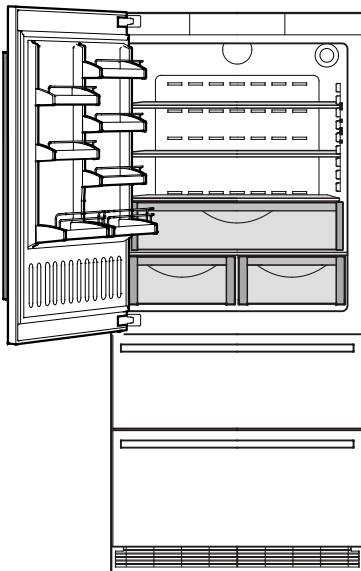
Freestanding/Semi Built In Models



CS 2060 (right hinged)

Energy Star:	qualified
Energy consumption p. a.:	452 kWh
Energy Supply:	115V / 60Hz / 2.5A
Total capacity:	19.5 cu ft (552 L)
Refrigerator:	13.5 cu ft (382 L)
Freezer:	6 cu ft (170 L)
Ice cube output:	3 pd./24h
Ice cube stock:	6 pd.
Climate Rating:	SN-T

- Automatic refrigerator defrosting
- Automatic freezer compartment defrosting
- Automatic IceMaker can be switched off
- LED light column and LED freezer lighting



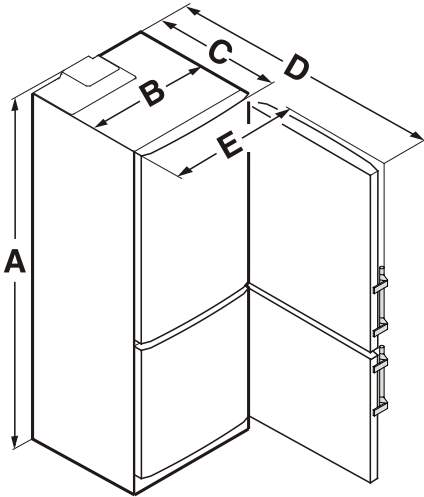
CS 2061 (left hinged)

Energy Star:	qualified
Energy consumption p. a.:	452 kWh
Energy Supply:	115V / 60Hz / 2.5A
Total capacity:	19.5 cu ft (552 L)
Refrigerator:	13.5 cu ft (382 L)
Freezer:	6 cu ft (170 L)
Ice cube output:	3 pd./24h
Ice cube stock:	6 pd.
Climate Rating:	SN-T

- Automatic refrigerator defrosting
- Automatic freezer compartment defrosting
- Automatic IceMaker can be switched off
- LED light column and LED freezer lighting

Freestanding/Semi Built In Models

Unit Dimensions



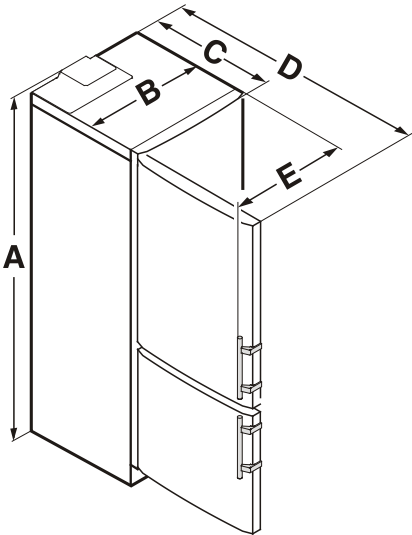
Overall height can be increased on CS 14 and all CS 16 units by 5/8" (16 mm).

CS 1400

A = 73-1/4" (1860 mm)
B = 29-3/8" (747 mm)
C = 24-13/16" (630 mm)
D = 52-3/8" (1330 mm)
E = 31-3/32" (790 mm)

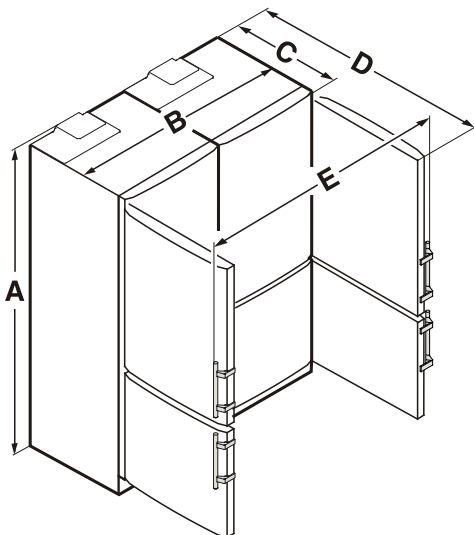
CS 1660, CS 1640

A = 79-1/2" (2020 mm)
B = 29-3/8" (747 mm)
C = 24-13/16" (630 mm)
D = 52-3/8" (1330 mm)
E = 31-3/32" (790 mm)



CS 1611

A = 79-1/2" (2020 mm)
B = 29-3/8" (747 mm)
C = 24-13/16" (630 mm)
D = 52-3/8" (1330 mm)
E = 31-3/32" (790 mm)

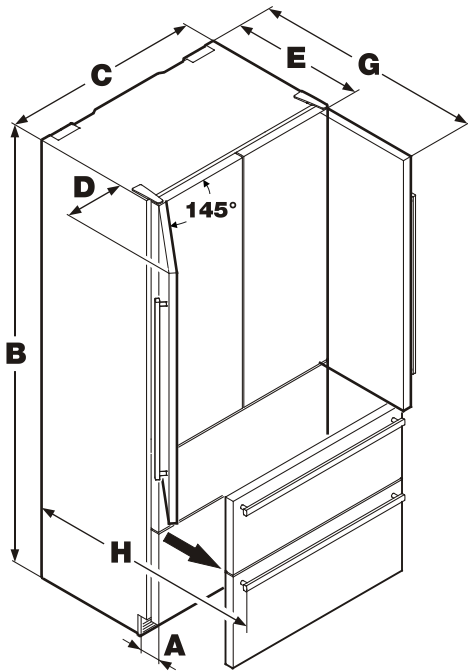


Overall height can be increased on SBS 32 units by 5/8" (16 mm).

SBS 32S1 (CS 1640 & CS 1660)

A = 79-1/2" (2020 mm)
B = 59-1/4" (1505 mm)
C = 24-13/16" (630 mm)
D = 52-3/8" (1330 mm)
E = 62-3/4" (1594 mm)

Freestanding/Semi Built In Models

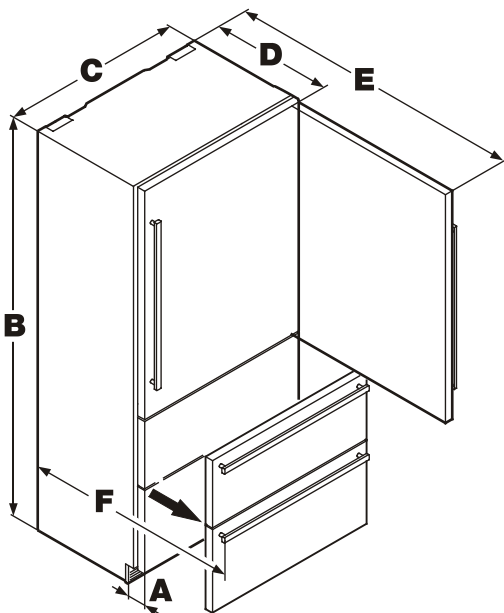


Overall height can be increased on CS 20 units by 1-1/2" (40 mm).

Please allow for door swing clearance at locations next to a wall.

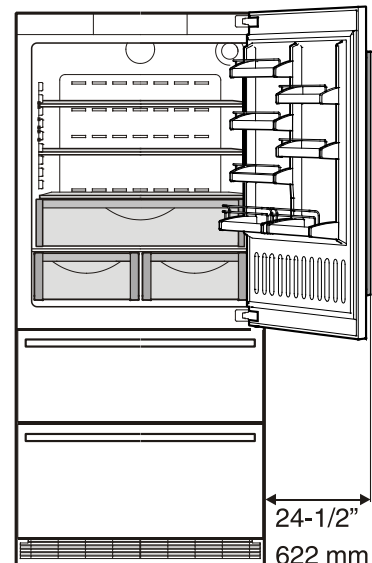
CS 2062, CBS 2062

A = 3-17/32" (90 mm)
 B = 80-9/32" (2039 mm)
 C = 35-13/16" (910 mm)
 D = 13-9/16" (344 mm)
 E = 24-7/32" (615 mm)
 G = 40-13/16" (1037 mm)
 H = 39-7/16" (1002 mm)



CS 2060, CS 2061

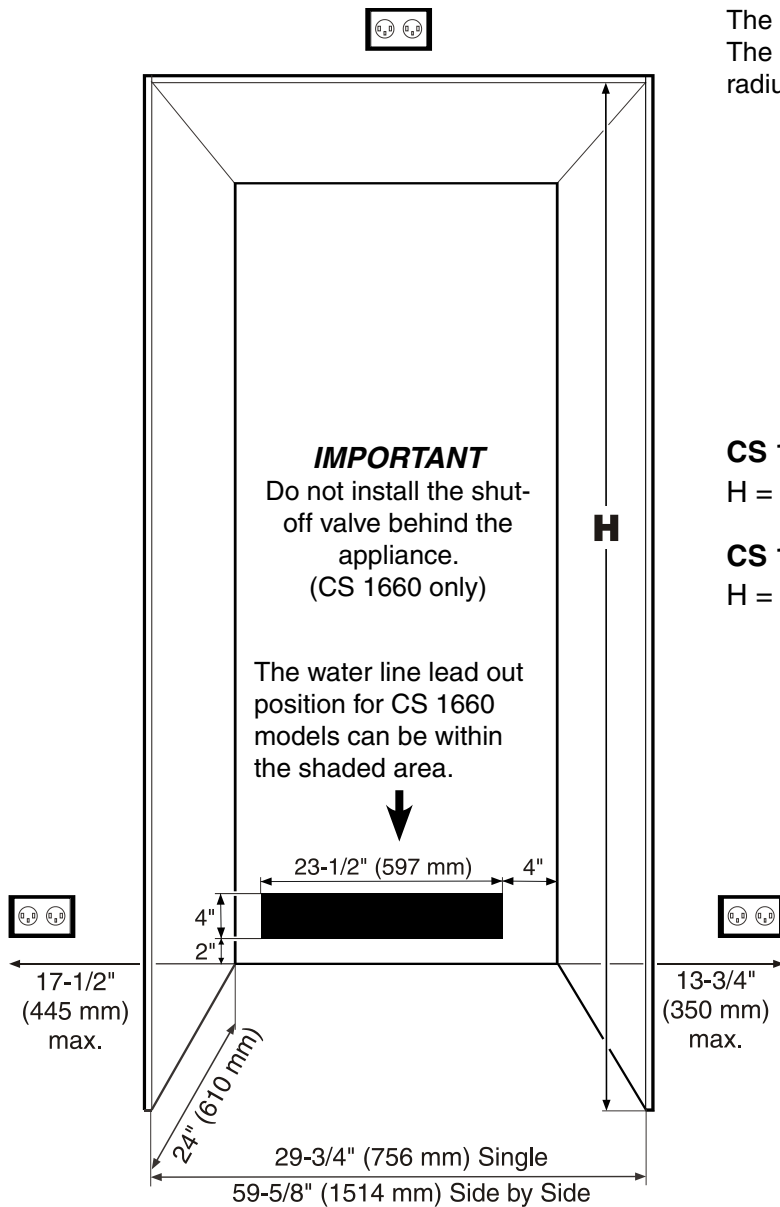
A = 3-17/32" (90 mm)
 B = 79-13/16" (2027 mm)
 C = 35-13/16" (910 mm)
 D = 24-7/32" (615 mm)
 E = 58-5/8" (1489 mm)
 F = 39-7/16" (1002 mm)



Cabinet Opening Dimensions - 30" and 60" Models

The appliance can be used freestanding or semi built-in.

If semi built-in, please consider the cabinet opening dimensions.



The power cord comes out of the appliance top.
The location of the electrical outlet can be within a radius of 90 inch from the appliance top center.

CS 1400

H = 73-3/4" (1873 mm)

CS 16.., SBS 32..

H = 80" (2032 mm)



With the electrical outlet at the bottom, please consider the maximum distance left or right.

13-3/4" (350 mm) max.

Cabinet Opening Dimensions 36" Models

The appliance can be used as freestanding or semi built-in.

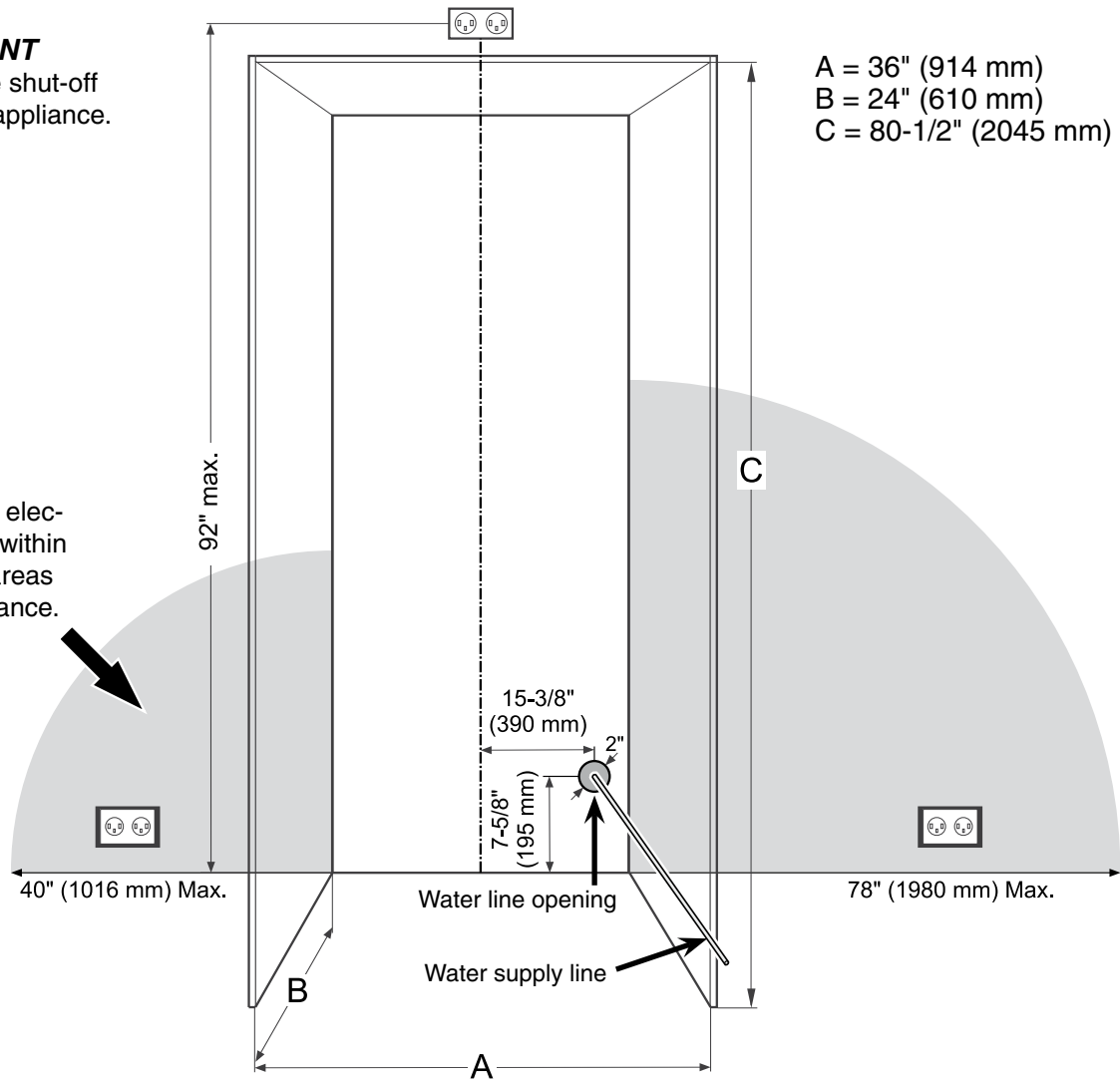
At semi built in please consider the cabinet opening dimensions.

The requirements for water supply and electrical outlet are the same for both applications.

IMPORTANT

Do not install the shut-off valve behind the appliance.

The position of the electrical outlet can be within the grey shaded areas or above the appliance.



IMPORTANT

At 24" cabinets, the water line opening must be in the location as shown.

At cabinets deeper than 24" there is room to fit the pipe behind the appliance and the wall so there are no requirements for the water line lead out position.

IMPORTANT

The free length of the water supply line must be at least 31 - 1/2" (800 mm) when the tube comes out of the prescribed opening.

Ventilation Requirements 30" and 60" Models

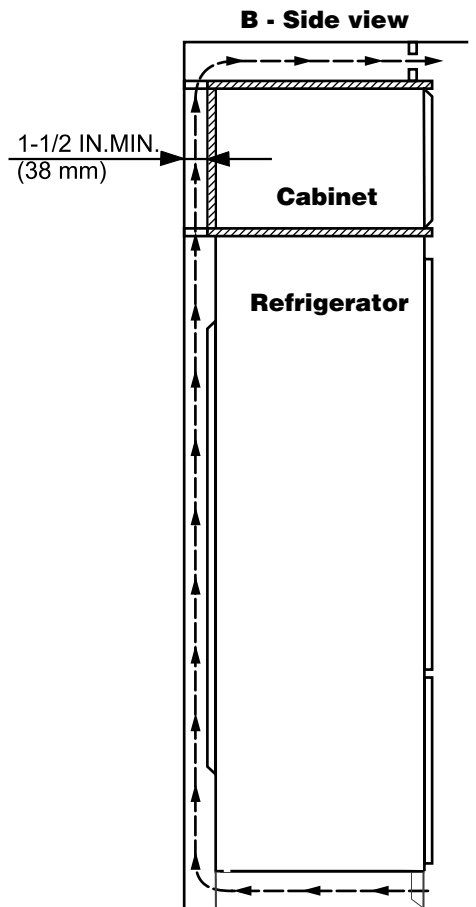
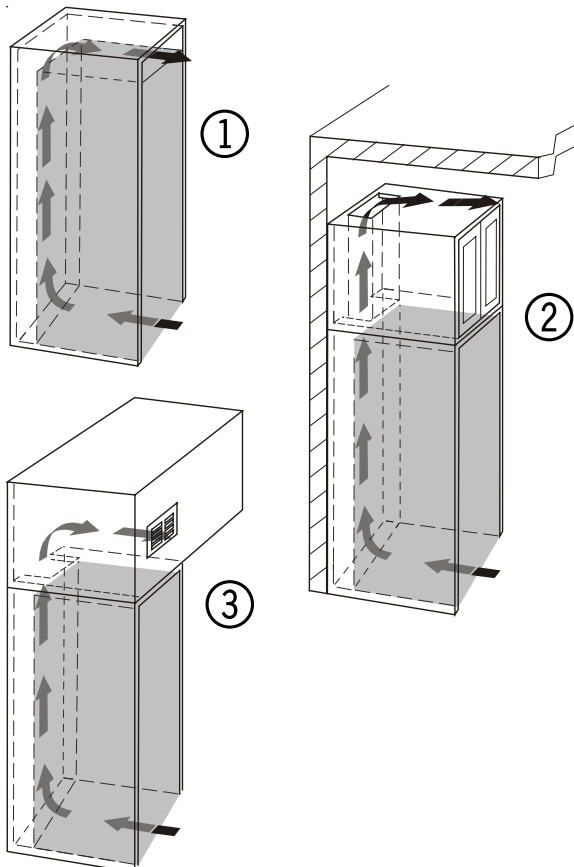
DO NOT restrict the air flow. The opening can either be directly over the appliance ①, above the cabinet and below the ceiling ② or through a vent installed in a soffit ③.

The cabinet height as specified at 80" (2032 mm) will create a 1-5/16" (33 mm) gap above the appliance providing optimal air flow over the top of the appliance for its efficient operation. To have the same air flow for CS 1400 appliances, the cabinet opening height must be 73-3/4" minimum.

Be sure to consider the possibility of having to raise some of the leveling legs in order to level the appliance when installing. If you adjust the height of the appliance - it will effectively reduce air flow. Therefore leave yourself some room for adjustment.

IMPORTANT

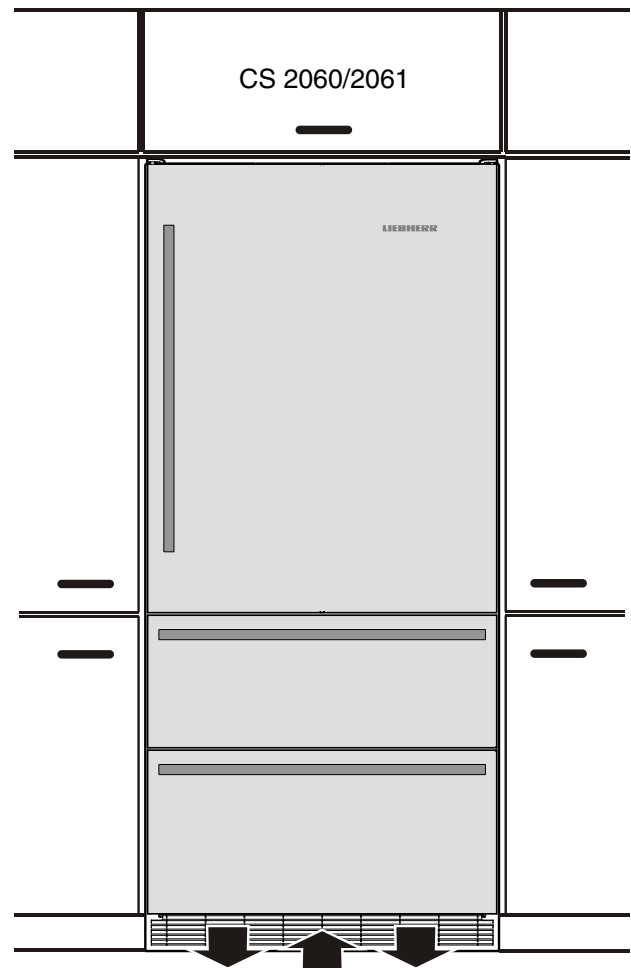
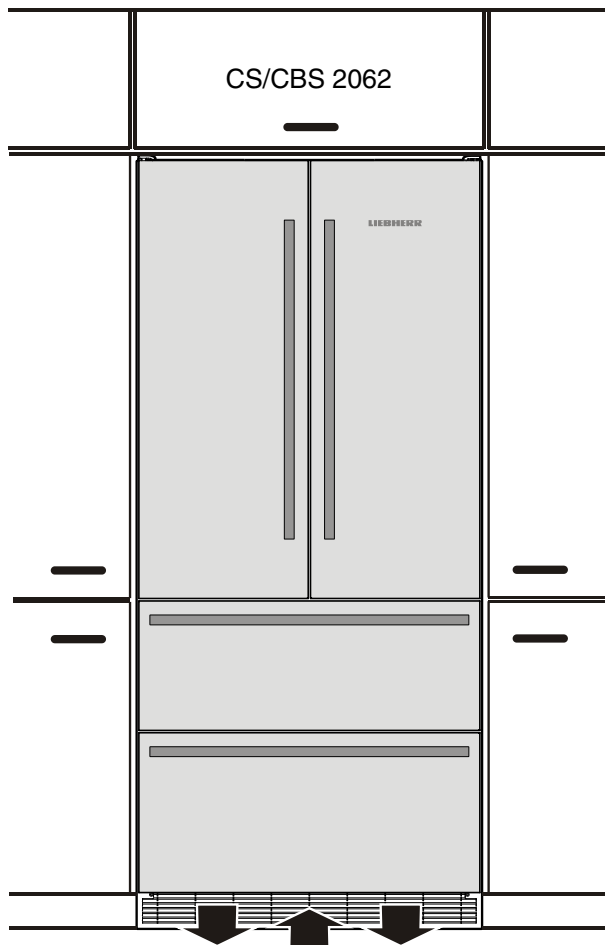
The section below the freezer door and the floor must not be covered.



The refrigerator is designed to allow proper air flow when the appliance is installed up against the wall. A minimum space of 1 1/2" is required when a cabinet is built above.

Ventilation Requirements 36" Models

CS/CBS 20 appliances dont need any ventilation openings in the cabinet. The required airflow is directed through the toe kick area.



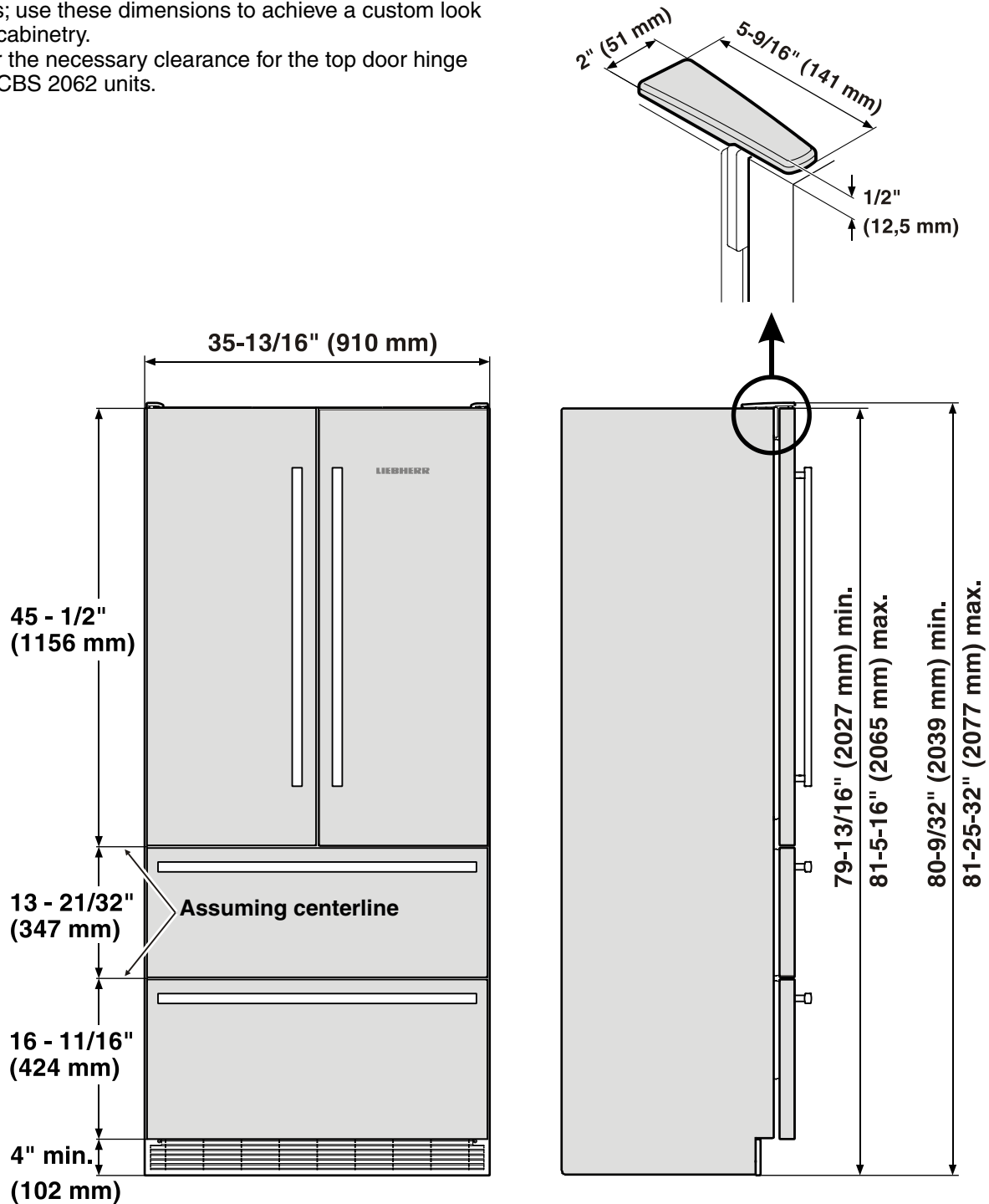
It is important to use the provided cover grille for the ventilation opening. This opening must not be covered with a cabinet base.

Front Clearance

Top Door Hinge Dimensions CS 2062, CBS 2062

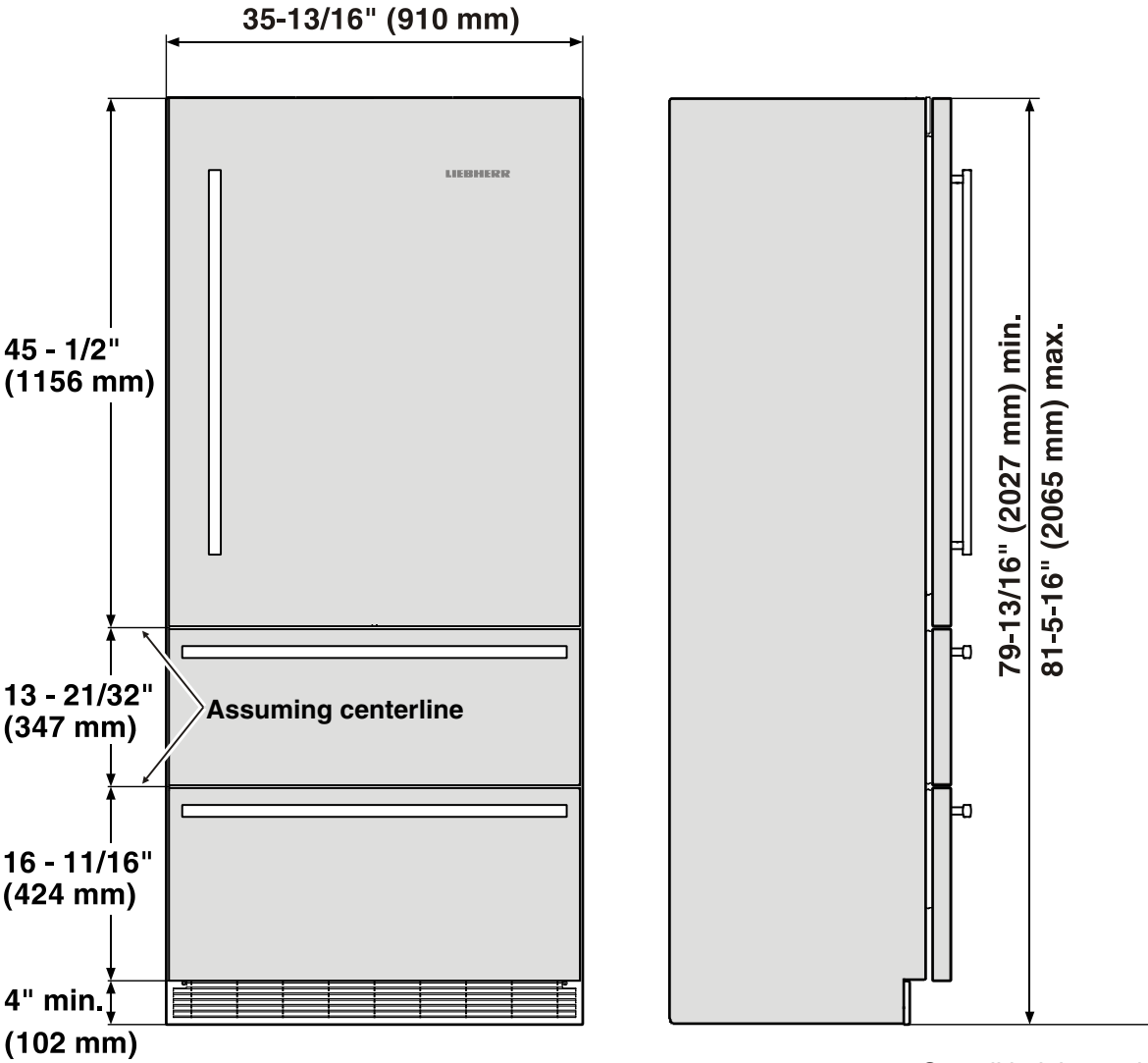
When installing CS/CBS 20 units into a row of cabinets or wall units; use these dimensions to achieve a custom look with the cabinetry.

Consider the necessary clearance for the top door hinge with CS/CBS 2062 units.



Overall height can be increased by $1\text{--}1/2"$ (40 mm).

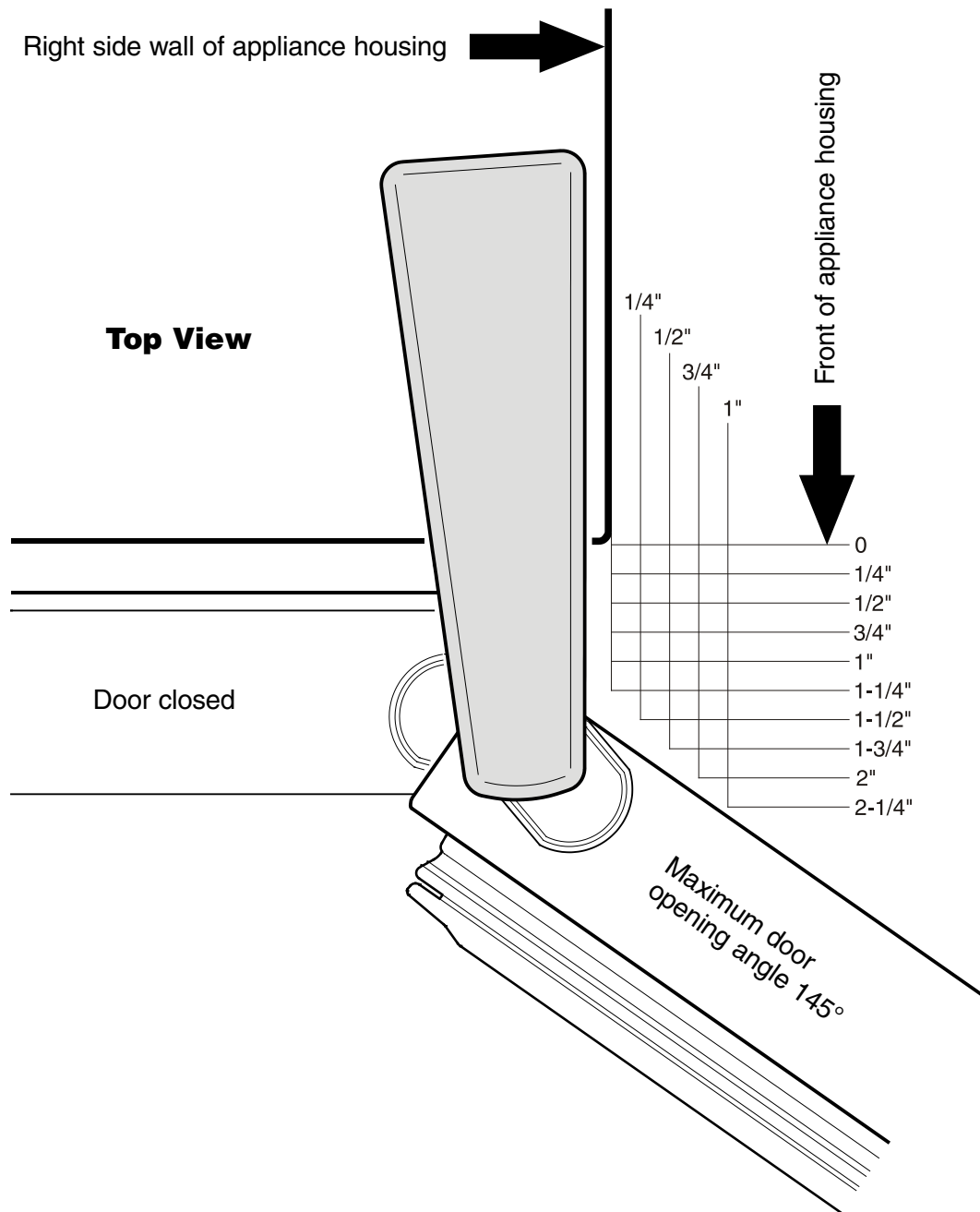
Front Clearance CS 2060, CS 2061



Overall height can be increased by 1-1/2" (40 mm).

Freestanding/Semi Built In Models

Door Swing Clearance CS 2062, CBS 2062



Freestanding/Semi Built In Models

Door Swing Clearance CS 2060, CS 2061

