## 

## **Design Guide** Freestanding / Semi Built-In Models 24" and 48"

Release 11 2015

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 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 work-manship in the sealed system (parts only).



#### **Customer Service**

If your appliance is not working properly, or if the temperature display reads "F0" to "F9", please call the numbers listed below.

Give the **fault number displayed**, together with the **Type Designation**,

## Service Number and

Appliance Number (Serial Number) from the model plate, to ensure prompt, accurate servic-

ing. The model plate is located inside the appliance.

Leave the appliance door closed until the customer service technician arrives to minimize any further cold loss.

#### For Service and Parts in the U.S.:

#### **PlusOne Solutions, Inc.**

3501 Quadrangle Blvd, Suite 120 Orlando, FL 32817

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

Service-appliances.us@liebherr.com www.liebherr-appliances.com

#### For Service and Parts in Canada:

#### **Euro-Parts Canada**

39822 Belgrave Road, BELGRAVE, Ontario, N0G 1E0

Phone:	(519) 357-3320
Fax:	(519) 357-1326
Toll Free:	1-888-LIEBHER or
	1-888-543-2437

#### www.euro-parts.ca

#### Need help?

For design related inquiries not addressed in this Design Guide please email **install.americas@liebherr.com** 

## Contents

## **General Remarks**

I. Safety Warnings	7
II. Electrical Requirements & Safety	8
III. IceMaker (if equipped)	8
IV. Area Requirements	9
V. Safety Regulations	9

## Freestanding/Semi Built In Models

24" and 48" Models: CS 1311 / CS 1360, SBS 26S1, CS 1200, CS 1350B	10
Unit Dimensions	14
Kitchen cabinet setup for the water filter	15
Cabinet Opening Dimensions: CS 1311, CS 1360, CS 1200, CS 1350B	16
Cabinet Opening Dimensions: SBS 26S1	17
Ventilation Requirements	19
Top Door Hinge Clearance CS 13 SBS 26S1	20
Top Door Hinge Clearance CS1200	21
Door Swing Clearance CS 1200, CS 13 SBS 26S1	22
Accessories for Liebherr Freestanding - Semi Built In Appliances	23

## **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!



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

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



States a hazard will cause serious injury or death if precautions are not followed.

IMPORTANT

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

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.

## II. Electrical Requirements & Safety

Circuit has to be grounded and protected by a circuit breaker or fuse.

- Single installation:
- Side-by-side installation: • 115 volt
- 115 volt60 hz
- 60 hz
- 15 amp
- 20 amp

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.

## ⚠ DANGER ■

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.

## 

Electrocution hazard.

**Electrical Grounding Required.** 

- 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.
- Do not use a power cord that is frayed or damged.
- Do not use a power strip.



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

## 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 refrigerator.

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.

## **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.

## V. Safety Regulations

The appliance complies with UL250 and CAN/CSA C22.2 No.63-93 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 101°F (16°C to 38°C)
Т	61°F to 110°F (16°C to 43°C)
SN-ST	50°F to 101°F (10°C to 38°C)
SN-T	50°F to 110°F (10°C to 43°C)

Refrigerant circuits are tested for leaks.



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**

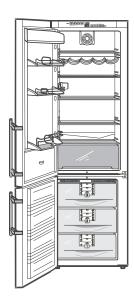
The anti-tip brackets must be installed to prevent the unit from tipping after it is installed.

## 24" and 48" Models: CS 1311 / CS 1360, SBS 26S1, CS 1200, CS 1350B

The unique design of Liebherr's freestanding models features fully stainless steel doors, and even stainless steel side walls - a perfect combination of design and functionality. New Swing Line doors with bevelled edges are a particularly elegant feature of this combination. Practical lever handles with integrated opening mechanisms make opening the appliance almost effortless. The SoftSystem ensures that the door closes gently even when fully loaded.

#### NOTE

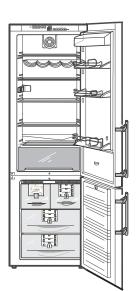
The doors of these models are Liebherr's Smartsteel . The sidewalls are not. Use only a damp cloth and / or mild detergent to clean the Smartsteel doors. Abrasive or aggressive cleaners or cloths will damage the Smartsteel finish.



CS 1311Energy Star:Energy consumption p. a.:42Energy Supply:11Total capacity:13Refrigerator:9.Freezer:3.Climate Rating:StDoor hinges:

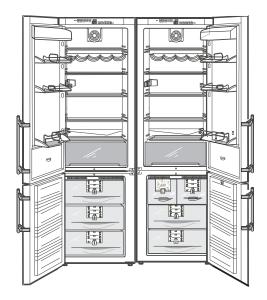
certified 420 kWh 115V/60Hz/350W 13 cu ft (369 L) 9.7 cu ft (275 L) 3.3 cu ft (94 L) SN-T left/reversible

- Automatic refrigerator defrosting
- Automatic freezer compartment defrosting
- LED lighting for refrigerator
- Full extension vegetable drawers on telescopic rails



CS 1360	
Energy Star:	certified
Energy consumption p. a.:	420 kWh
Energy Supply:	115V/60Hz/350W
Total capacity:	13 cu ft (369 L)
Refrigerator:	9.7 cu ft (275 L)
Freezer:	3.3 cu ft (94 L)
Ice cube capacity:	2.2 lbs./24h
Ice cube stock:	3.3 lbs.
Climate Rating:	SN-T
Door hinges:	right/reversible

- · Automatic refrigerator defrosting
- Automatic freezer compartment defrosting
- Automatic IceMaker can be switched off
- LED lighting for refrigerator
- Full extension vegetable drawers on telescopic rails

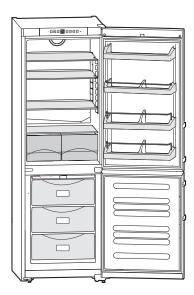


#### SBS 26S1 (CS 1311 & CS 1360) Energy Supply: 115V/60Hz/700W Total capacity: 26 cu ft (738 L) Refrigerator: 19.4 cu ft (550 L) Freezer: 6.6 cu ft (188 L) Ice cube capacity: 2.2 lbs./24h Ice cube stock: 3.3 lbs. Climate Rating: SN-T Door hinges: left / right

- Automatic refrigerator defrosting
- Automatic freezer compartment defrosting
- Automatic IceMaker can be switched off
- $\bullet$  LED lighting for refrigerator and freezer
- Full extension vegetable drawers on telescopic rails

#### NOTE

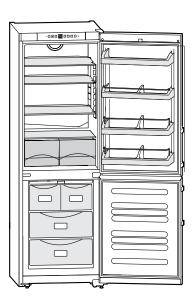
The doors of these models are Liebherr's Smartsteel . The sidewalls are not. Use only a damp cloth and / or mild detergent to clean the Smartsteel doors. Abrasive or aggressive cleaners or cloths will damage the Smartsteel finish.



CS 1200 Energy Star: Energy consumption p. a.: Energy Supply: Total capacity: Refrigerator: Freezer: Climate Rating: Door hinges:

certified 416 kWh 115V/60Hz/350W 11.46 cu ft (325 L) 8.15 cu ft (231 L) 3.31 cu ft (94 L) SN-T right/reversible

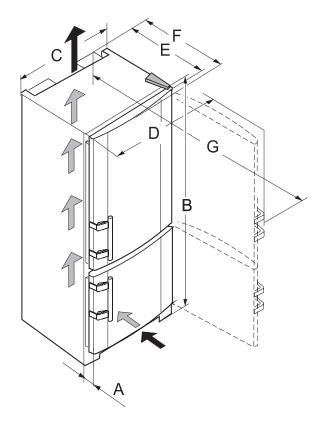
- Automatic refrigerator defrosting
- Automatic freezer compartment defrosting
- LED lighting for refrigerator



CS 1350B Energy Star: certified Energy consumption p. a.: 420 kWh/a Energy Supply: 115V/60Hz/350W Total capacity: 13.02 cu ft (369 L) Refrigerator: 9.71 cu ft (275 L) Freezer: 3.31 cu ft (94 L) **Climate Rating:** SN-T Door hinges: right/reversible

- Automatic refrigerator defrosting
- Automatic freezer compartment defrosting
- LED lighting for refrigerator
- Automatic IceMaker can be switched off
- Height-adjustable feet at front
- Changeable door gasket

#### **Unit Dimensions**

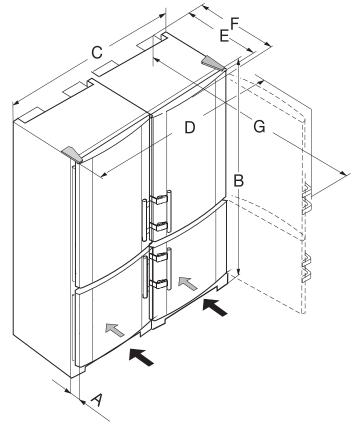


CS 1311, CS 1360, CS 1200, CS 1350B

- (A) 2-7/32" (56.5 mm)
- (B) CS13.. : 79-3/16" (2011 mm) CS12.. : 71-9/16" (1817 mm)
- (C) 23-5/8" (600 mm)
- (D) 25-3/16" (640 mm)
- (E) 24-3/16" (614 mm)
- (F) 24-13/16" (630 mm)
- (G) 46-1/2" (1180 mm)

#### NOTE

Height dimension (B) represents the minimum height of the appliance(s) as measured from the floor to top of the door hinge cover. The height of the door hinge cover on top of the appliance is 15/32". The height of the appliance can be increased by a maximum of 5/8" overall by adjusting the leveling legs / rollers.



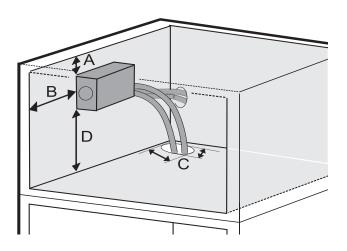
SBS 26S1 (CS 1311 & CS 1360)

- (A) 2-7/32" (56.5 mm)
- (B) 79-3/16" (2011 mm)
- (C) 47-3/8" (1204 mm)
- (D) 49" (1244 mm)
- (E) 24-1/8" (613 mm)
- (F) 24-3/4" (629 mm)
- (G) 46-9/16" (1182 mm)

#### Kitchen cabinet setup for the water filter

To ensure optimum water quality for the production of ice cubes (CS 1360 and CS 1350B) an external water filter module is available as an accessory.

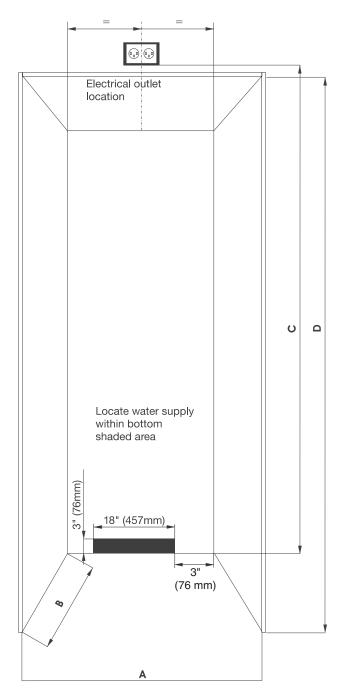
It should be installed near the appliance in the cabinet, for example, in the adapter cabinet above the appliance. To connect the filter to the appliance, it may be necessary to make an opening (C) in the floor of the adapter cabinet through which the hoses will be routed. The maximum length of the water hose is 98-7/16 " (2.5 m). The filter cover must be in stalled during assembly to leave sufficient space around the filter module.



Maintain the dimensions shown in Fig. so that the filter can be replaced and the cover can be removed.

- (A) 13/16in (20mm)
- (B) 3-15/16in (100mm)
- (C) 1-3/16in. x 3/8in. ( 30mm x10mm)
- (D) min. 4in (100mm)

## Cabinet Opening Dimensions: CS 1311, CS 1360, CS 1200, CS 1350B



The appliance can be integrated into the kitchen units. To adapt the appliance to the height of the row of kitchen units, a suitable top cupboard can be fitted above the appliance.

#### Unit Venting

DO NOT restrict the air flow. A cross-sectional air flow of at least 31" square (200cm<sup>2</sup>) must be provided. The opening can either be directly over the appliance or behind of the cabinet on top of the unit (see ventilation requirements).

The CS models can be installed in standard 24" (609mm) deep cabinets. You will only have to make sure that the door swing clearance is enough. It is possible to push all CS models to the rear wall of the cabinet without modification.

When installing the appliance next to a wall, a distance on the hinge side of 1 13/32 inches (36 mm) minimum is required between the appliance and the wall to allow for the door handle projection when the door is open.

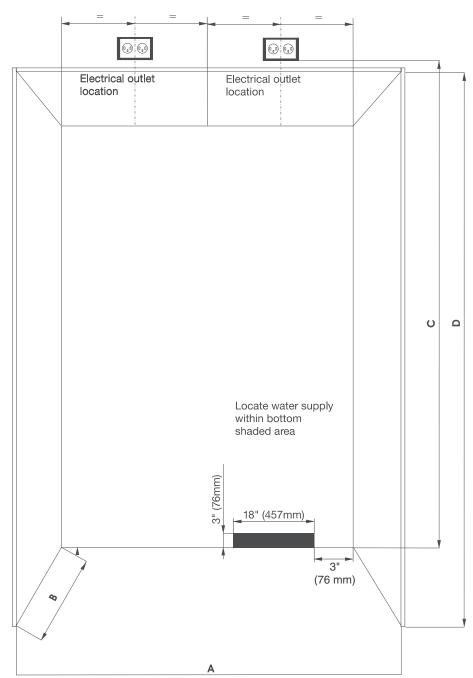
Minimum Cabinet Opening Dimensions:

- (A) 23-7/8" (606 mm)
- (B) 24" (609 mm)
- (C) 85-7/8" (2182 mm)
- (D) CS 13.. 80" (2032 mm)\* CS 12.. 72-3/8" (1838 mm)\*

#### \*NOTE

The given cabinet opening height dimension is such that it accommodates the ventilation requirements for the appliance. If you will be bringing the cabinet above or header of the opening down tight (no air space - refer to the section 'Top Door Hinge Clearance' later in this Design Guide) to the top of the appliance for a built-in look then you still must accommodate ventilation by some other means. The warm air from behind the appliance must be able to escape. Please refer to the section 'Ventilation Requirements' further on in this Design Guide.

#### **Cabinet Opening Dimensions: SBS 26S1**



The appliance can be integrated into the kitchen units.

To adapt the appliance to the height of the row of kitchen units, a suitable top cupboard can be fitted above the appliance.

#### Unit Venting

DO NOT restrict the air flow. A crosssectional air flow of at least 62" square (400cm<sup>2</sup>) must be provided. The opening can either be directly over the appliance or behind of the cabinet on top of the unit (see ventilation requirements).

The SBS 26S1 model can be installed in standard 24" (609mm) deep cabinets. You will only have to make sure that the door swing clearance is enough. It is possible to push the SBS 26S1 to the rear wall of the cabinet without modification.

When installing the appliance next to a wall, a distance on the hinge side of 1 13/32 inches (36 mm) minimum is required between the appliance and the wall to allow for the door handle projection when the door is open.

Minimum Cabinet Opening Dimensions:

- (A) 47-3/4" (1212 mm)
- (B) 24" (609 mm)
- (C) 85-7/8" (2182 mm)
- (D) CS 13.. 80" (2032 mm)\*
  - CS 12.. 72-3/8" (1838 mm)\*

#### \*NOTE

The given cabinet opening height dimension is such that it accommodates the ventilation requirements for the appliance. If you will be bringing the cabinet above or header of the opening down tight (no air space - refer to the section 'Top Door Hinge Clearance' later in this Design Guide) to the top of the appliance for a built-in look then you still must accommodate ventilation by some other means. The warm air from behind the appliance must be able to escape. Please refer to the section 'Ventilation Requirements' further on in this Design Guide. The cabinet opening height is 84" when using the decorative grille. The decorative grille is deliverable as accessory and is not required for proper operation of the appliance. All ventilation requirements are handled through the toe kick grille on the appliance and this decorative grille is intended to be used as a filler for pre-existing 84" openings.

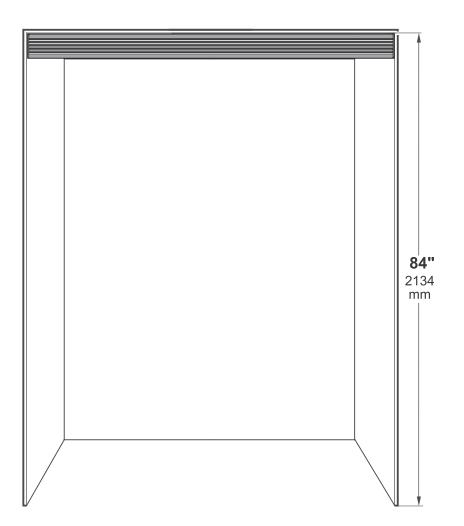
See chapter "Accessories for Liebherr Freestanding -Semi Built In Appliances" page 23.

#### NOTE

The decorative upper grille attaches to the cabinets / gables on either side of it and not to the appliance itself nor any cabinet above.

#### **IMPORTANT!**

Do not attempt to fix or block the appliance into a custom opening. In the event of service, the appliance must still be accessible to service personnel.



#### **Ventilation Requirements**

This type of cabinet must be carefully constructed using the correct dimensions and it must provide suitable ventilation to ensure proper appliance operation.

#### **Kitchen Cabinet Airflow**

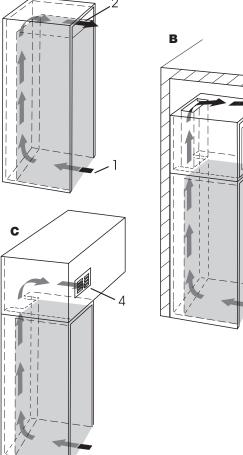
The following ventilation dimensions must be observed:

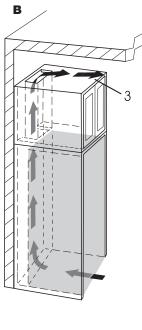
There must be a ventilation space at least 31 in.<sup>2</sup> (200 cm<sup>2</sup>) per appliance at the airflow inlet (1) and at the airflow outlet (2).

The top ventilation space can be directed in one of the following ways:

- A) Directly over the appliance (2) with a gap between the ceiling of the unit and the cabinet.
- B) Above the cabinet and below the ceiling (3).
- C) Through a vent installed in a soffit (4).

A





# Side view 1-1/2 IN.MIN (38 mm) Cabinet Refrigerator

#### NOTE

The appliance ships with bumpers on the back of it to allow the appliance to be pushed up against the wall behind it and still provide optimal air flow for ventilation.

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" (38mm) is required behind any cabinet above the appliance if ventilating above that cabinet.

#### **IMPORTANT!**

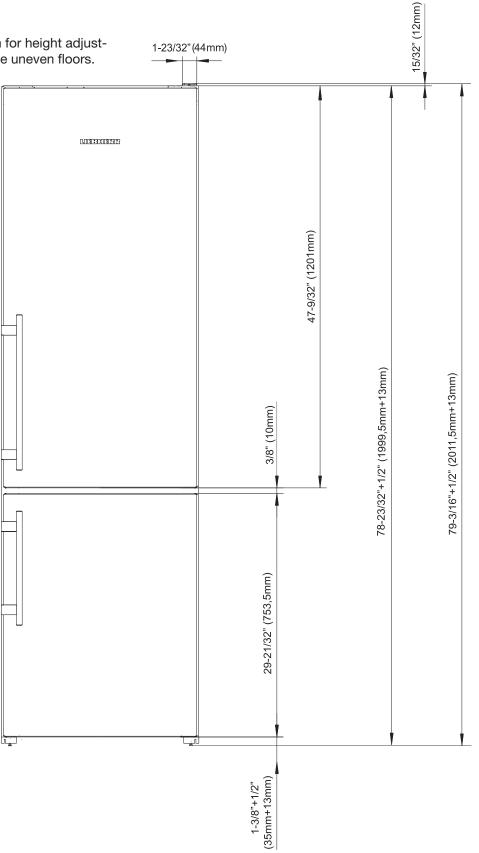
Do not block the toe kick ventilation grille with a molding. Intake ventilation is just as important as exhaust ventilation. The appliance relies on natural convection to cool the condenser mounted on the back. Improper ventilation will lead to performance issues, shorter lifespan of the appliance and will likely void warranty coverage for any service issues resulting from incorrect installation.

## Top Door Hinge Clearance CS 13.. - SBS 26S1

When installing CS units into a row of cabinets or wall units; use these dimensions to achieve a custom look with the cabinetry while providing the necessary clearance for the top door hinge.

#### NOTE

It is good practice to leave some room for height adjustment of the appliance to accommodate uneven floors.



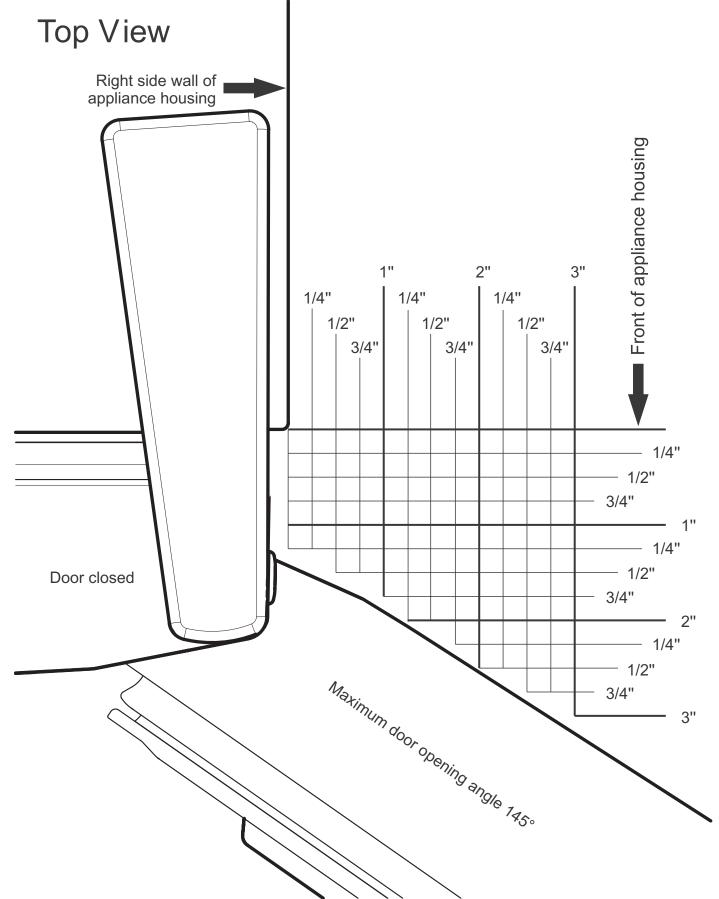
## Top Door Hinge Clearance CS1200

When installing CS units into a row of cabinets or wall units; use these dimensions to achieve a custom look with the cabinetry while providing the necessary clearance for the top door hinge.

#### NOTE

ance for the top door hinge.			Ê
NOTE			11 E
It is good practice to leave son ment of the appliance to accor		(44mm)	7/16" (11 mm)
	LODBERGORD303		
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		1-3/8" (35mm)	

Door Swing Clearance CS 1200, CS 13.. - SBS 26S1



## Accessories for Liebherr Freestanding - Semi Built In Appliances

Kits may be necessary to complete this unit's installation or to apply it in a different manner than its original intent. If a kit is necessary, contact your Liebherr retailer or distributor. All installation materials for accessories are included with the kits.

Image	Article number	Name of the item	For use with model
	9900 368-00	Top ventilation grille for SBS	SBS 26S1
T C C C C C C C C C C C C C C C C C C C	9900 340-00	Water filter kit (External - installs in an adjacent cabinet)	CS 1360 SBS 26S1
	7440 002-00	Water filter	CS 1360 CS 1350B SBS 26S1

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## **Design Guide**

Release 11 2015