

Fully Integrated Appliances

Design Guide

LIEBHERR

Refrigeration and Freezing





Table of Contents

The New Fully Integrated Appliances 2022	9
Model Overview	10
Key Features	14
ICS5100 & ICS5101	16
IC5100PC	18
IC5110IM & ICB5160IM	20
ICB5160IM	22
IRB5160	24
IRBP5170	26
SIF5181	28
HW 8000	30
SBS Refrigerator & Freezer	32
Triple SBS	36
Accessories	40
Planning Information	42
Ventilation Requirements	44
Toe Kick Requirements	45
Installation Dimensions	46
Door Clearance Requirements	54
Hardware included	56







The New Fully Integrated Appliances

The new built-in appliances are not only impressive in terms of convenience and freshness technologies, but also with regard to design, materials and energy efficiency.

Simple and timeless on the outside, exclusive with plenty of glass and elegant stainless steel on the inside, the new design language adds the finishing touch to every kitchen.

These eye-catching appliances are ultra-quiet, super-economical and easy to connect to your smart home.

Whether basic or high-end, your Liebherr appliance will do everything it can to make your life easier with fresh ideas.

Model Overview

Bottom Freezers

Model	Door Hinge	Panel	Series	Features
ICS5100	Right, reversible	Custom panels	Pure	
ICS5101	Left, reversible	Custom panels	Pure	
IC5100PC	Right, reversible	Custom panels	Pure	
IC5110IMPC	Right, reversible	Custom panels	Pure	
IC5110IM	Right, reversible	Custom panels	Pure	
ICB5160IM	Right, reversible	Custom panels	Prime	

Refrigerator

Model	Door Hinge	Panel	Series	Features
IRB5160	Right, reversible	Custom panel or stainless steel panel as accessory	Prime	
IRBP5170	Right, reversible	Custom panel or stainless steel panel as accessory	Peak	

Freezer

Model	Door Hinge	Panel	Series	Features
SIF5181	Left, reversible	Custom panel or stainless steel panel as accessory	Peak	

Wine

Model	Door Hinge	Panel	Series	Features
HW 8000	Right, reversible	Custom panel or stainless steel panel as accessory	Vinidor	

Series

	Pure Series	Prime Series	Peak Series
	Simple, clear and perfectly equipped for all essential needs. Pure appliances focus on the basics but are to the absolute highest Liebherr quality.	With the Prime series things get much more classy. It makes an unmistakable mark in terms of design and material. Top quality materials such as stainless steel and special lighting concepts can be found on the inside of the appliances.	The Peak series is our top-of-the-line series. This combines the best with the best. There is no compromise. Innovative Liebherr technology meets exceptional high-end design and convenience in a class of their own. Appliances in this series are for those who want to have it all.
Freshness Technology	EasyFresh DuoCooling FreshAir Filter NoFrost	BioFresh w/ SoftTelescopic DuoCooling FreshAir Filter NoFrost	BioFresh w/ SoftTelescopic FreshAir Filter NoFrost
Comfort & Flexibility		Divisible glass shelf SoftSystem VarioBoxes Butter dish Adjustable egg tray Bottle shelf	OpenStage drawers SoftSystem
Design	Ceiling lighting fridge compartment Transparent glass Stainless steel look shelves Touch display	LightTower Lighting BioFresh Safe Freezer compartment lighting SmartSteel rear wall Satin finish glass Glass & stainless steel rack Touch & Swipe display	LightTower Lighting BioFresh Safe Freezer lighting SmartSteel rear wall Satin finish glass Glass & stainless steel rack Touch & Swipe display
Connectivity (SmartDevice)	Optional accessory	Integrated	Integrated
Water & Ice	IceMaker * specific model	IceMaker InfinitySpring	IceTower

Bottom Freezers



All Refrigerator



All Freezer



Wine



Key Features



DuoCooling:

DuoCooling uses two completely separate refrigeration circuits to ensure no air is exchanged between the refrigerator and freezer compartments. The result: your food is neither dried out nor is odor transferred. This means less waste, shopping less often and saving and enjoying more.



PowerCooling:

Want to make sure the cold is distributed as evenly as possible in your refrigerator? If so, the PowerCooling system is just what you need. The fan—as powerful as it is quiet—distributes cold air efficiently throughout the entire refrigeration compartment.



SuperSilent:

Shh— listen carefully. Your Liebherr is so quiet that you have to strain your ears to hear it. How is this possible? All of our refrigeration components such as compressors, valves, fans and evaporators are optimized and perfectly adapted to one another. This means you only hear what you want to hear in your kitchen.



InfinitySpring:

A source of fresh, cool drinking water in your kitchen. InfinitySpring sounds like something from a fairytale. The water dispenser enables drip-free water dispensing and provides fresh, cold water. Simply press the panel with your carafe or glass and enjoy. This also means you get to save on purchasing water bottles and live more sustainably.



IceMaker:

Are there any ice cubes left? An IceMaker means you never have to ask. With the IceMaker with a fixed water connection, the water comes directly from the tap. The Max Ice function allows you to produce up to three pounds of ice cubes a day. The ice cube separator helps to divide the drawer into any size you want—for example, ice cubes on the left, ice cream on the right, or just a full drawer for ice.



SmartSteel rear wall:

The high-quality, stainless-steel back wall is both eye-catching and highly functional. The interior stainless-steel rear wall protects foods from freezing against the fresh food evaporator, ensuring that the back of the refrigerator is always drip-free.



BioFresh:

BioFresh drawers provide a customizable interplay of temperature and humidity controls. The DrySafe drawer with low humidity is ideal for storing meat, fish and dairy products, while fruits and vegetables are best kept in the high humidity HydroSafe drawer.



EasyFresh:

Our EasyFresh-Safe offers the guarantee of market freshness in your home. Whether it's unpackaged vegetables or fruit, it ensures everything is optimally stored. Thanks to the air-tight closure, the food causes the humidity in the safe to rise. This keeps the food fresh for a long time.



SoftTelescopic:

Store food securely within reach thanks to fully extendable pull-out drawers. The SoftTelescopic system provides convenient and reliable self-retraction with soft closing.



LightTower:

Enjoy an optimally illuminated interior: the LightTower shows off your food and is positioned so that your fully stocked refrigerator is illuminated at all times. The flush mounting of the LightTower in the side walls means there is also more space for your food.



LED freezer compartment lighting:

The LED freezer compartment lighting ensures your freezer drawers are pleasantly lit. This makes it even easier for you to find the food you want. The energy-efficient LED unit is elegantly positioned above the drawers to save space.



IceTower:

Thanks to an ice cube supply of 5.7 kg, the IceTower ensures that you never run out of cool drinks at your party. The ice cube shovel and the pull-out board on telescopic rails allow comfortable access to the ice cubes. With an extra insert tray you can also store smaller amounts of ice and store frozen food underneath. The drawer next door offers storage space for frozen items.

ICS5100 & ICS5101 - Sliding Door Units



Available Accessories:

- Door opening limitation (hinge pin)
- SmartDeviceBox
- Air Filter



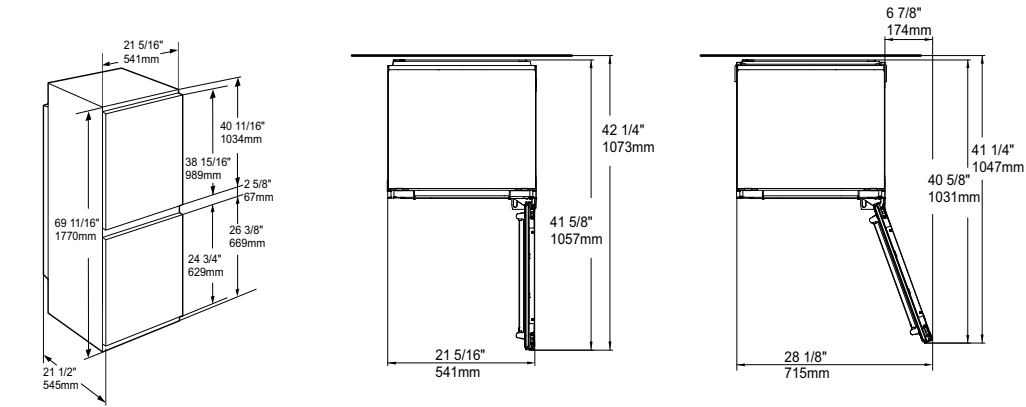
Energy consumption (kWh / y)	300
Estimated Yearly Energy Cost in US \$	42
Sound rating dB(A)	34
Total capacity cu.ft. (l)	8.9
Refrigerator capacity cu.ft. (l)	6.5
BioFresh compartment cu.ft. (l)	N/A
Freezer capacity cu.ft. (l)	2.4
Electronic control	Touch display
Defrost type	Automatic
Interior light	Ceiling LED
Number of shelves	4 / 3 adjustable
Number of door racks	3
Number of freezer drawers	3
Refrigerator Temperature range °F (°C)	+36°F to +48°F (+2°C to +9°C)
Freezer Temperature range °F (°C)	+5°F to -15°F (-15°C to -26°C)
Internal Water Dispenser	No
Ice maker	No
Ice cube output lbs. (kg.)	N/A
Ice cube stock lbs. (kg.)	N/A
Door hinges	right, reversible
Door installation	Sliding door
Product dimensions	
in inch (H / W / D)	69 11/16 21 5/16 21 1/2
in cm (H / W / D)	177.0/54.1/54.5
Cut out dimensions	
in inch (H / W / D)	69 13/16-70 7/16 22 1/16-22 1/2 21 11/16
in cm (H / W / D)	177,2 - 178,8/56 - 57/55,0
Net weight lbs. (kg)	145.50 (66)
Voltage V/Hz	115/60

* Estimated energy cost will depend on utility rates and use. Estimated energy cost based on a national average electricity cost of 14 cents per KWh.

** Noise output – according to EN 60704-3.

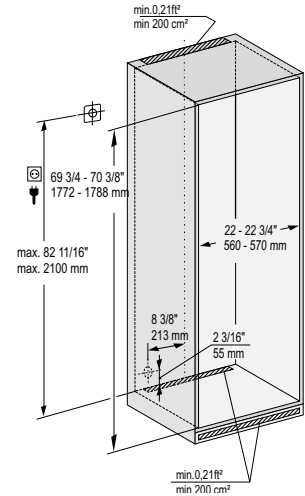
Also available in left hinge as ICNS 51031.

Product Dimensions



Important:
Stated product height dimensions consider leveled feet are fully inserted.

Frameless Dedicated Cabinet Box Dimensions



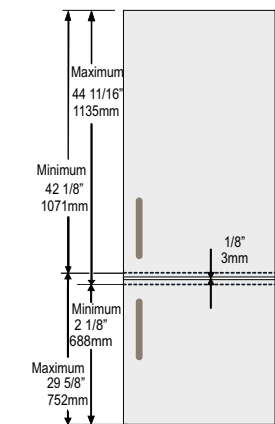
This is a fully integrated refrigerator-freezer appliance designed to be completely enclosed in a dedicated kitchen cabinet. This dedicated cabinet box must be constructed in accordance with the specified dimensions and must allow for sufficient air circulation to ensure proper operation. For more details about ventilation requirements, please refer to page 44.

A ventilation grill (included with the appliance) must be installed in the base of the dedicated box, for dimensions of the toe kick ventilation grill, please refer to page 45. The toe kick area of the Dedicated Cabinet Box can be recessed like the rest of the kitchen cabinets.

We recommend that the power outlet be located outside the dedicated cabinet box for easy access. Free length of the power cord is 7.2 ft. (2.2m)

3" of the cabinet needs to be surface finished as it is visible when the door is open.

Door Panel Dimensions



This is a sliding door model, which means the doors of the appliance are installed on the hinges of the dedicated box cabinet doors.

Custom panels should be at least 5/8"(16mm) and a maximum of 3/4"(19mm) thick and they should cover the front of the dedicated cabinet box.

For the exact size and design method, please refer to pages 48-51.

Panel and handle max weight has to be considered based on the cabinet hinges recommendation. More than 2 hinges can be installed to support more custom panel door weight.

If using a "shaker style" panel that undershoots the minimum panel thickness, please be aware that you will need to use shorter screws than those supplied in the accessory pack.

IC5100PC



Available Accessories:

- Door opening limitation (hinge pin)
- SmartDeviceBox
- FreshAir activated charcoal filter

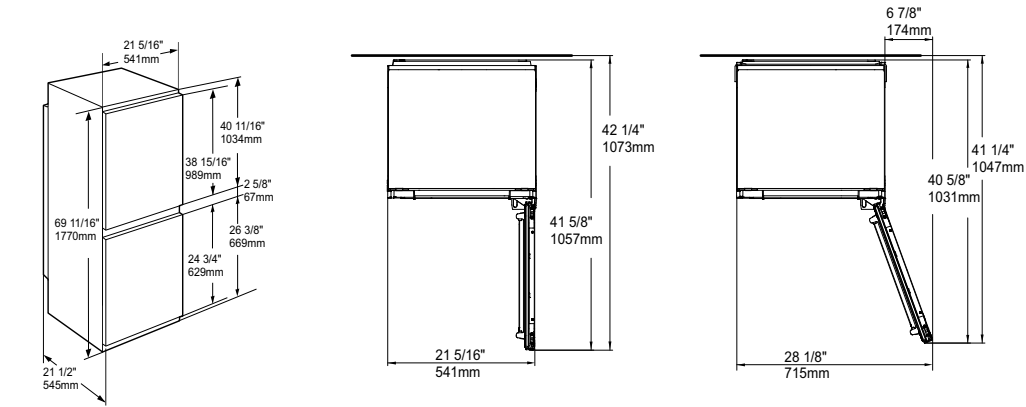


Energy consumption (kWh / y)	300
Estimated Yearly Energy Cost in US \$	42
Sound rating dB(A)	34
Total capacity cu.ft. (l)	8.9
Refrigerator capacity cu.ft. (l)	6.5
BioFresh compartment cu.ft. (l)	N/A
Freezer capacity cu.ft. (l)	2.4
Electronic control	Touch display
Defrost type	Automatic
Interior light	Ceiling LED
Number of shelves	4 / 3 adjustable
Number of door racks	3
Number of freezer drawers	3
Refrigerator Temperature range °F (°C)	+36°F to +48°F (+2°C to +9°C)
Freezer Temperature range °F (°C)	+5°F to -15°F (-15°C to -26°C)
Internal Water Dispenser	No
Ice maker	No
Ice cube output lbs. (kg.)	N/A
Ice cube stock lbs. (kg.)	N/A
Door hinges	right, reversible
Door installation	Door on door
Product dimensions	
in inch (H / W / D)	69 11/16 21 5/16 21 1/2
in cm (H / W / D)	177.0/54.1/54.5
Cut out dimensions	
in inch (H / W / D)	69 13/16-70 7/16 22 1/16-22 1/2 21 11/16
in cm (H / W / D)	177,2 - 178,8/56 - 57/55,0
Net weight lbs. (kg)	145.50 (66)
Voltage V/Hz	115/60

* Estimated energy cost will depend on utility rates and use. Estimated energy cost based on a national average electricity cost of 14 cents per KWh.

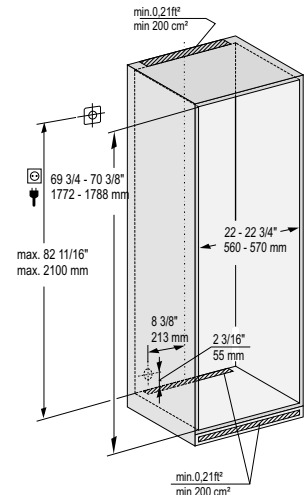
** Noise output – according to EN 60704-3.

Product Dimensions



Important:
Stated product height dimensions consider leveled feet are fully inserted.

Frameless Dedicated Cabinet Box Dimensions



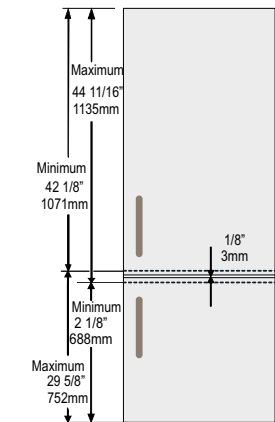
This is a fully integrated refrigerator-freezer appliance designed to be completely enclosed in a dedicated kitchen cabinet. This dedicated cabinet box must be constructed in accordance with the specified dimensions and must allow for sufficient air circulation to ensure proper operation. For more details about ventilation requirements, please refer to page 44.

A ventilation grill (included with the appliance) must be installed in the base of the dedicated box, for dimensions of the toe kick ventilation grill, please refer to page 45. The toe kick area of the Dedicated Cabinet Box can be recessed like the rest of the kitchen cabinets.

We recommend that the power outlet be located outside the dedicated cabinet box for easy access. Free length of the power cord is 7.2 ft. (2.2m)

3” of the cabinet needs to be surface finished as it is visible when the door is open.

Door Panel Dimensions



This is a door-on-door model, which means the custom panels are installed on the appliance doors.

Custom panels should be at least 5/8”(16mm) and a maximum of 3/4”(19mm) thick and they should cover the front of the dedicated cabinet box.

For the exact size and design method, please refer to pages 48-51.

Panel and handle max weight is:
Refrigerator door: 39.5 lbs / 18 kg
Freezer door: 26.5 lbs / 12 kg

If using a “shaker style” panel that undershoots the minimum panel thickness, please be aware that you will need to use shorter screws than those supplied in the accessory pack.

IC5110IMPC &IC5110IM



Available Accessories:

- Door opening limitation (hinge pin)
- SmartDeviceBox
- FreshAir activated charcoal filter

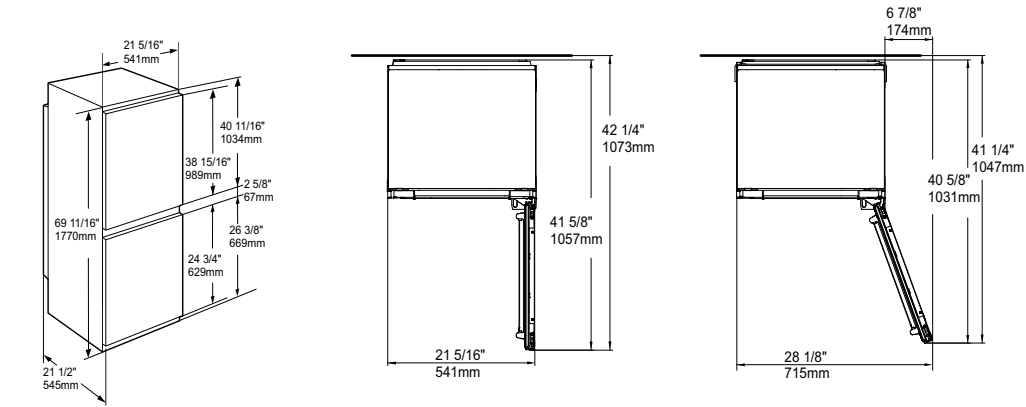


Energy consumption (kWh / y)	475
Estimated Yearly Energy Cost in US \$	66
Sound rating dB(A)	34
Total capacity cu.ft. (l)	9.0
Refrigerator capacity cu.ft. (l)	6.5
BioFresh compartment cu.ft. (l)	N/A
Freezer capacity cu.ft. (l)	2.5
Electronic control	Touch display
Defrost type	Automatic
Interior light	Ceiling LED
Number of shelves	4 / 3 adjustable
Number of door racks	3
Number of freezer drawers	3
Refrigerator Temperature range °F (°C)	+36°F to +48°F (+2°C to +9°C)
Freezer Temperature range °F (°C)	+5°F to -15°F (-15°C to -26°C)
Internal Water Dispenser	No
Ice maker	Fixed water connection
Ice cube output lbs. (kg.)	2.6 (1.2)
Ice cube stock lbs. (kg.)	11 (5)
Door hinges	right, reversible
Door installation	Door on door
Product dimensions	
in inch (H / W / D)	69 11/16 21 5/16 21 1/2
in cm (H / W / D)	177.0/54.1/54.5
Cut out dimensions	
in inch (H / W / D)	69 13/16-70 7/16 22 1/16-22 1/2 21 11/16
in cm (H / W / D)	177,2 - 178,8/56 - 57/55,0
Net weight lbs. (kg)	145.50 (66)
Voltage V / Hz	115/60

* Estimated energy cost will depend on utility rates and use. Estimated energy cost based on a national average electricity cost of 14 cents per KWh.

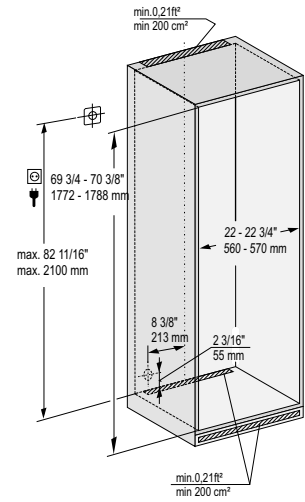
** Noise output – according to EN 60704-3.

Product Dimensions



Important:
Stated product height dimensions consider leveled feet are fully inserted.

Frameless Dedicated Cabinet Box Dimensions



This is a fully integrated refrigerator-freezer appliance designed to be completely enclosed in a dedicated kitchen cabinet. This dedicated cabinet box must be constructed in accordance with the specified dimensions and must allow for sufficient air circulation to ensure proper operation. For more details about ventilation requirements, please refer to page 44.

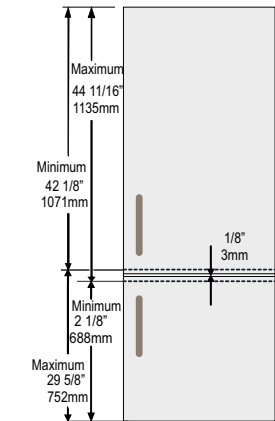
A ventilation grill (included with the appliance) must be installed in the base of the dedicated box, for dimensions of the toe kick ventilation grill, please refer to page 45.

We recommend that the power outlet be located outside the dedicated cabinet box for easy access. Free length of the power cord is 7.2 ft. (2.2m). The toe kick area of the Dedicated Cabinet Box can be recessed like the rest of the kitchen cabinets.

3” of the cabinet needs to be surface finished as it is visible when the door is open.

The appliance water connection and inlet solenoid valve are suitable for a water pressure of up to 1Mpa (10bar). The solenoid valve is 2 1/8”(55mm) at the bottom on the back of the appliances. Water inlet recommended maximum distance is 4 ft (1200mm).

Door Panel Dimensions



This is a door-on-door model, which means the custom panels are installed on the appliance doors.

Custom panels should be at least 5/8”(16mm) and a maximum of 3/4”(19mm) thick and they should cover the front of the dedicated cabinet box.

For the exact size and design method, please refer to pages 48-51.

Panel and handle max weight is:
Refrigerator door: 39.5 lbs / 18 kg
Freezer door: 26.5 lbs / 12 kg

If using a “shaker style” panel that undershoots the minimum panel thickness, please be aware that you will need to use shorter screws than those supplied in the accessory pack.

ICB5160IM



Available Accessories:

- Door opening limitation (hinge pin)
- FreshAir activated charcoal filter
- Water filter

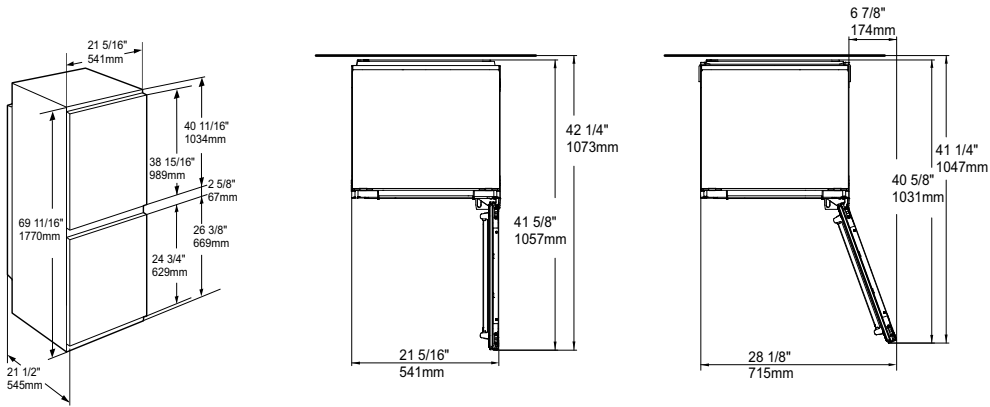


Energy consumption (kWh / y)	382
Estimated Yearly Energy Cost in US \$	53
Sound rating dB(A)	34
Total capacity cu.ft. (l)	8.8
Refrigerator capacity cu.ft. (l)	3.7
BioFresh compartment cu.ft. (l)	2.5
Freezer capacity cu.ft. (l)	2.5
Electronic control	Touch & swipe display
Defrost type	Automatic
Interior light	LED light column on both sides
Number of shelves	4 / 3 adjustable
Number of door racks	2 + VarioBox
Number of freezer drawers	3
Refrigerator Temperature range °F (°C)	+36°F to +48°F (+2°C to +9°C)
Freezer Temperature range °F (°C)	+5°F to -15°F (-15°C to -26°C)
Internal Water Dispenser	Yes
Ice maker	Fixed water connection
Ice cube output lbs. (kg.)	2.6 (1.2)
Ice cube stock lbs. (kg.)	11 (5)
Door hinges	right, reversible
Door installation	Door on door
Product dimensions	
in inch (H / W / D)	69 11/16 21 5/16 21 1/2
in cm (H / W / D)	177.0/54.1/54.5
Cut out dimensions	
in inch (H / W / D)	69 13/16-70 7/16 22 1/16-22 1/2 21 11/16
in cm (H / W / D)	177,2 - 178,8/56 - 57/55,0
Net weight lbs. (kg)	165.3 (75)
Voltage V / Hz	115/60

* Estimated energy cost will depend on utility rates and use. Estimated energy cost based on a national average electricity cost of 14 cents per KWh.

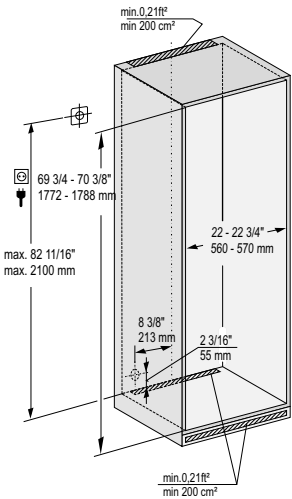
** Noise output – according to EN 60704-3.

Product Dimensions



Important:
Stated product height dimensions consider leveled feet are fully inserted.

Frameless Dedicated Cabinet Box Dimensions



This is a fully integrated refrigerator-freezer appliance designed to be completely enclosed in a dedicated kitchen cabinet. This dedicated cabinet box must be constructed in accordance with the specified dimensions and must allow for sufficient air circulation to ensure proper operation. For more details about ventilation requirements, please refer to page 44.

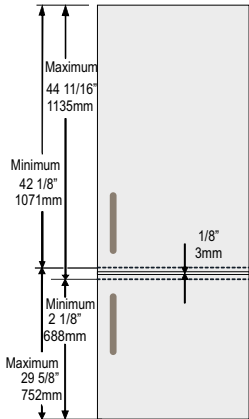
A ventilation grill (included with the appliance) must be installed in the base of the dedicated box, for dimensions of the toe kick ventilation grill, please refer to page 45.

We recommend that the power outlet be located outside the dedicated cabinet box for easy access. Free length of the power cord is 7.2 ft. (2.2m). The toe kick area of the Dedicated Cabinet Box can be recessed like the rest of the kitchen cabinets.

3” of the cabinet needs to be surface finished as it is visible when the door is open.

The appliance water connection and inlet solenoid valve are suitable for a water pressure of up to 1Mpa (10bar). The solenoid valve is 2 1/8”(55mm) at the bottom on the back of the appliances. Water inlet recommended maximum distance is 4 ft (1200mm).

Door Panel Dimensions



This is a door-on-door model, which means the custom panels are installed on the appliance doors.

Custom panels should be at least 5/8”(16mm) and a maximum of 3/4”(19mm) thick and they should cover the front of the dedicated cabinet box.

For the exact size and design method, please refer to pages 48-51.

Panel and handle max weight is:
Refrigerator door: 39.5 lbs / 18 kg
Freezer door: 26.5 lbs / 12 kg

If using a “shaker style” panel that undershoots the minimum panel thickness, please be aware that you will need to use shorter screws than those supplied in the accessory pack.

IRB5160



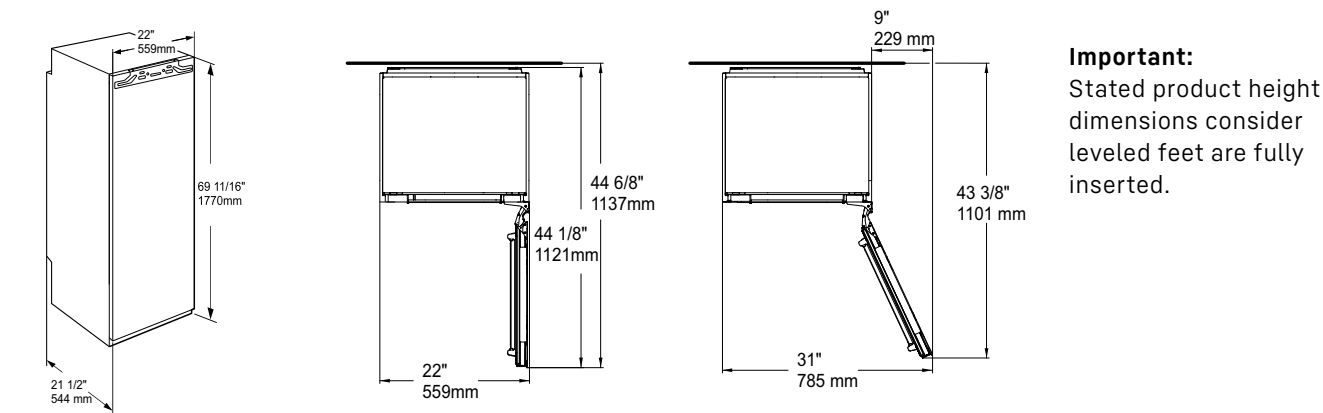
Bio Fresh Telescopic Rails Super Cool Super Silent Soft System Infinity Spring Light Tower 	
Energy consumption (kWh / y)	280
Estimated Yearly Energy Cost in US \$	39
Sound rating dB(A)	32
Total capacity cu.ft. (l)	10.5 (296)
Refrigerator capacity cu.ft. (l)	7.0 (198)
BioFresh compartment cu.ft. (l)	3.5 (98)
Electronic control	Touch & swipe
Defrost type	Automatic
Interior light	LightTower
Number of shelves	8 / 7 adjustable
Number of door racks	4 + 2 VarioBoxes
Refrigerator Temperature range °F (°C)	+37°F to +48°F (+3°C to +9°C)
Internal Water Dispenser	Yes
Door hinges	right, reversible
Door installation	Door on door
Product dimensions	
in inch (H/W/D)	69 11/16"+11/16"/22 1/16/21 7/16
in cm (H/W/D)	177.2-178.88/56-57.8/55
Cut out dimensions	
in inch (H/W/D)	69 13/16-70 7/16 22 1/16-22 1/2 21 11/16
in cm (H/W/D)	177,2 - 178,8/56 - 57/55,0
Net weight lbs. (kg)	161.2 (73.1)
Voltage V / Hz	115/60

Available Accessories:

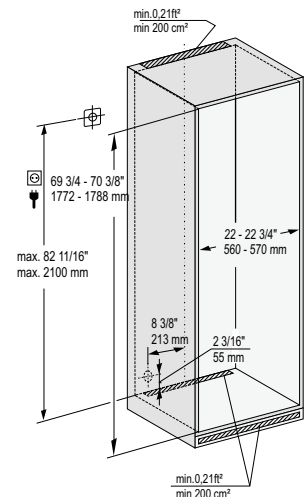
- Door opening limitation (hinge pin)
- Stainless-steel panel for 1 door appliances
- FreshAir activated charcoal filter
- Water filter

* Estimated energy cost will depend on utility rates and use. Estimated energy cost based on a national average electricity cost of 14 cents per KWh.
** Noise output – according to EN 60704-3.

Product Dimensions



Frameless Dedicated Cabinet Box Dimensions



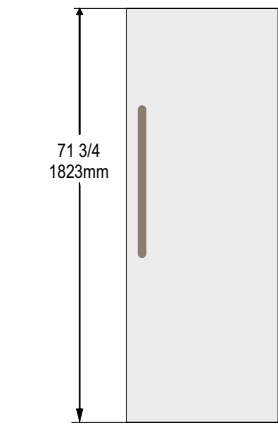
This is a fully integrated refrigerator appliance designed to be completely enclosed in a dedicated kitchen cabinet. This dedicated cabinet box must be constructed in accordance with the specified dimensions and must allow for sufficient air circulation to ensure proper operation. For more details about ventilation requirements, please refer to page 44.

A ventilation grill (included with the appliance) must be installed in the base of the dedicated box, for dimensions of the toe kick ventilation grill, please refer to page 45. The toe kick area of the Dedicated Cabinet Box can be recessed like the rest of the kitchen cabinets.

We recommend that the power outlet be located outside the dedicated cabinet box for easy access. Free length of the power cord is 6.9 ft. (2.1m).

3" of the cabinet needs to be surface finished as it is visible when the door is open.

Door Panel Dimensions



Custom panels should be at least 5/8"(16mm) and a maximum of 3/4"(19mm) thick and they should cover the front of the dedicated cabinet box.

For the exact size and design method, please refer to pages 52.

Panel and handle max weight is 57 lbs. (26kg).

If using a "shaker style" panel that undershoots the minimum panel thickness, please be aware that you will need to use shorter screws than those supplied in the accessory pack.

IRBP5170



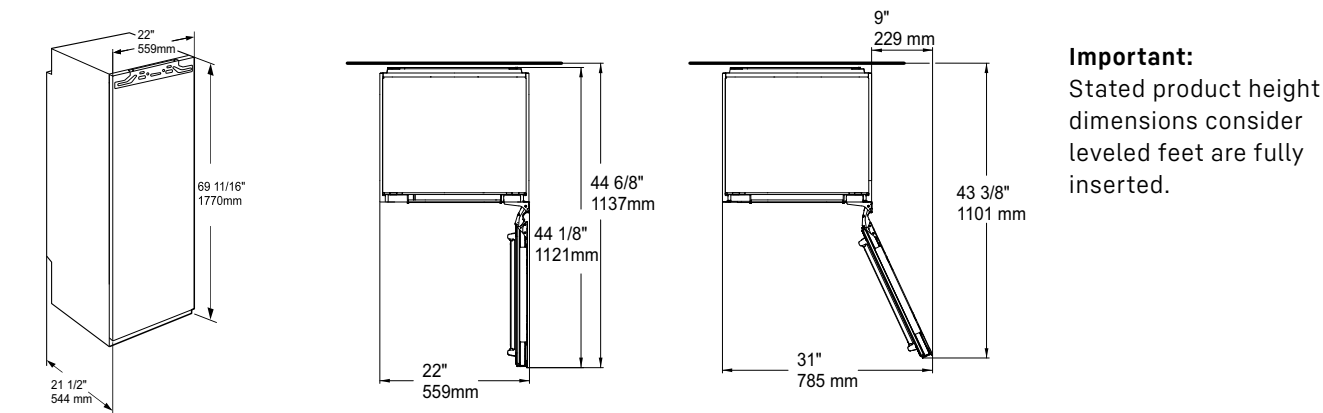
Energy Star Ice Maker Telescopic Rails Super Frost Super Silent Soft System Light Tower	
Energy consumption (kWh/y)	
Estimated Yearly Energy Cost in US \$	
Sound rating dB(A)	34
Total capacity cu.ft. (l)	10.5 (296)
Refrigerator capacity cu.ft. (l)	7.0 (198)
BioFresh compartment cu.ft. (l)	3.5 (98)
Electronic control	Touch & swipe
Defrost type	Automatic
Interior light	LightTower
Number of shelves / drawers	5 adjustable
Number of door racks	0 + 2 VarioBoxes
Refrigerator Temperature range °F (°C)	+37°F to +48°F (+3°C to +9°C)
Internal Water Dispenser	No
Door hinges	right, reversible
Door installation	Door on door
Product dimensions	
in inch (H/W/D)	69 11/16"+11/16"/22 1/16/21 7/16
in cm (H/W/D)	177.2-178.88/56-57.8/55
Cut out dimensions	
in inch (H/W/D)	69 13/16-70 7/16 22 1/16-22 1/2 21 11/16
in cm (H/W/D)	177,2 - 178,8/56 - 57/55,0
Net weight lbs. (kg)	161.2 (73.1)
Voltage V/Hz	203.5 (92.3)

Available Accessories:

- Door opening limitation (hinge pin)
- Stainless-steel panel for 1 door appliances
- FreshAir activated charcoal filter

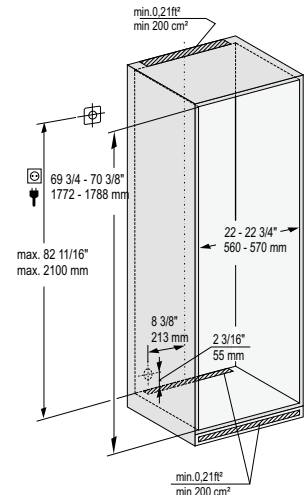
* Estimated energy cost will depend on utility rates and use. Estimated energy cost based on a national average electricity cost of 14 cents per KWh.
** Noise output – according to EN 60704-3.

Product Dimensions



Important:
Stated product height dimensions consider leveled feet are fully inserted.

Frameless Dedicated Cabinet Box Dimensions



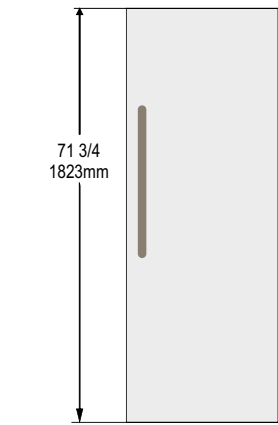
This is a fully integrated refrigerator appliance designed to be completely enclosed in a dedicated kitchen cabinet. This dedicated cabinet box must be constructed in accordance with the specified dimensions and must allow for sufficient air circulation to ensure proper operation. For more details about ventilation requirements, please refer to page 44.

A ventilation grill (included with the appliance) must be installed in the base of the dedicated box, for dimensions of the toe kick ventilation grill, please refer to page 45. The toe kick area of the Dedicated Cabinet Box can be recessed like the rest of the kitchen cabinets.

We recommend that the power outlet be located outside the dedicated cabinet box for easy access. Free length of the power cord is 6.9 ft. (2.1m).

3” of the cabinet needs to be surface finished as it is visible when the door is open.

Door Panel Dimensions



Custom panels should be at least 5/8”(16mm) and a maximum of 3/4”(19mm) thick and they should cover the front of the dedicated cabinet box.

For the exact size and design method, please refer to pages 52.

Panel and handle max weight is 57 lbs. (26kg).

If using a “shaker style” panel that undershoots the minimum panel thickness, please be aware that you will need to use shorter screws than those supplied in the accessory pack.

SIF5181



Ice Tower Super Frost Soft System  	
Energy consumption (kWh / y)	350
Estimated Yearly Energy Cost in US \$	49
Sound rating dB(A)	34
Total capacity cu.ft. (l)	7.5 (213)
Freezer capacity cu.ft. (l)	7.5 (213)
Electronic control	Touch & swipe
Defrost type	Automatic
Interior light	LED light
Number of freezer drawers	8
Freezer Temperature range °F (°C)	+7°F to -18°F (-14°C to -28°C)
Ice maker	Fixed water connection
Ice cube output lbs. (kg.)	2.6 (1.2)
Ice cube stock lbs. (kg.)	12.5 (5.7)
Door hinges	left, reversible
Door installation	Door on door
Product dimensions	
in inch (H / W / D)	69 11/16" + 11/16" / 22 1/16" / 21 7/16"
in cm (H / W / D)	177 + 1.6 / 55.9 / 54.4
Cut out dimensions	
in inch (H / W / D)	69 13/16" - 70 7/16" / 22 1/16" - 22 13/16" / 21 11/16"
in cm (H / W / D)	177.2 - 178.8 / 56 - 57.8 / 55
Net weight lbs. (kg)	166.2 (75.4)
Voltage V / Hz	115 / 60

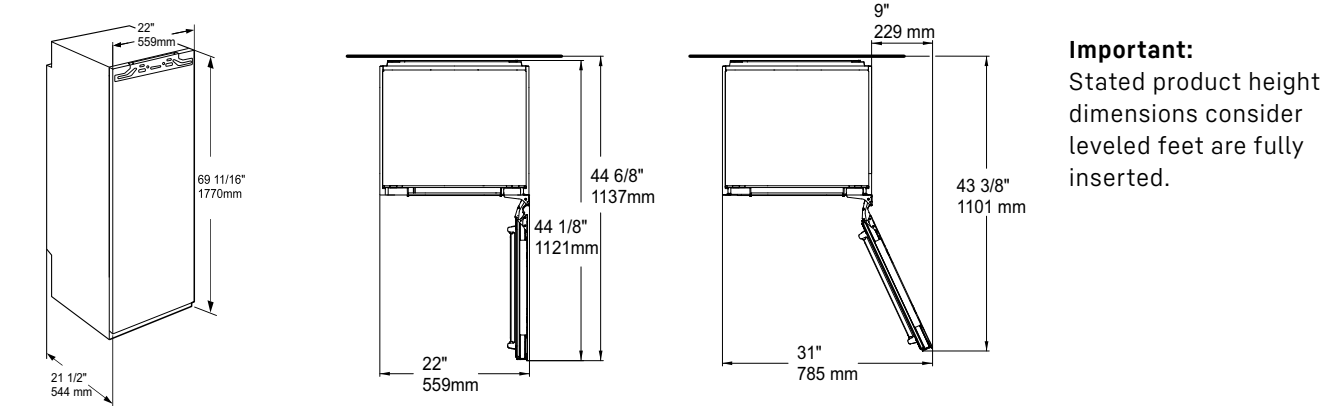
* Estimated energy cost will depend on utility rates and use. Estimated energy cost based on a national average electricity cost of 14 cents per KWh.

** Noise output – according to EN 60704-3.

Available Accessories:

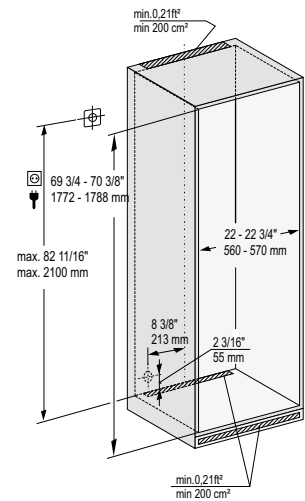
- Door opening limitation (hinge pin)
- Stainless-steel panel for 1 door appliances

Product Dimensions



Important:
Stated product height dimensions consider leveled feet are fully inserted.

Frameless Dedicated Cabinet Box Dimensions



This is a fully integrated refrigerator-freezer appliance designed to be completely enclosed in a dedicated kitchen cabinet. This dedicated cabinet box must be constructed in accordance with the specified dimensions and must allow for sufficient air circulation to ensure proper operation. For more details about ventilation requirements, please refer to page 44.

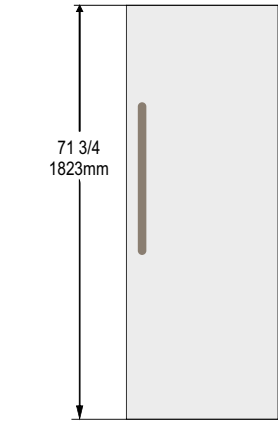
A ventilation grill (included with the appliance) must be installed in the base of the dedicated box, for dimensions of the toe kick ventilation grill, please refer to page 45.

We recommend that the power outlet be located outside the dedicated cabinet box for easy access. Free length of the power cord is 7.2 ft. (2.2m). The toe kick area of the Dedicated Cabinet Box can be recessed like the rest of the kitchen cabinets.

3" of the cabinet needs to be surface finished as it is visible when the door is open.

The appliance water connection and inlet solenoid valve are suitable for a water pressure of up to 1Mpa (10bar). The solenoid valve is 2 1/8" (55mm) at the bottom on the back of the appliances. Water inlet recommended maximum distance is 4 ft (1200mm).

Door Panel Dimensions

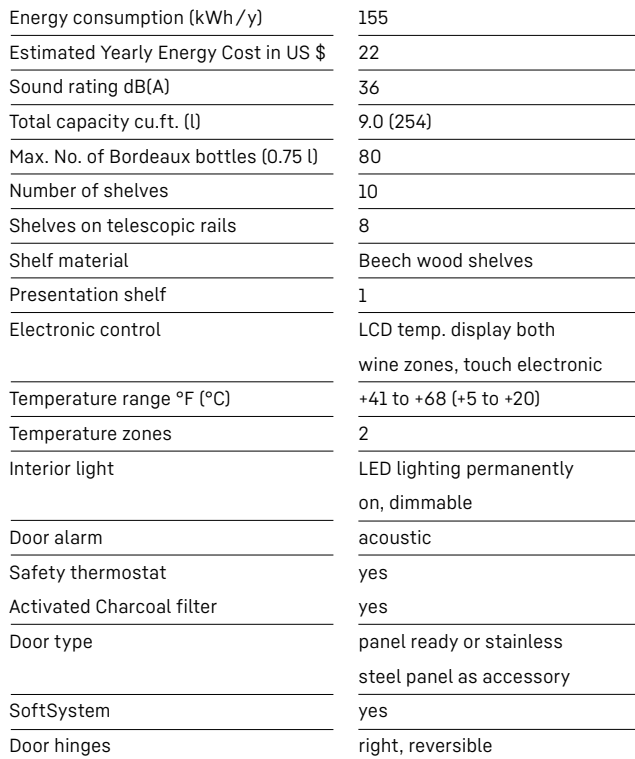
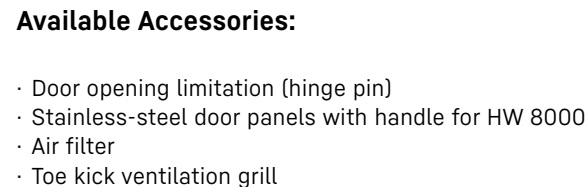


Custom panels should be at least 5/8" (16mm) and a maximum of 3/4" (19mm) thick and they should cover the front of the dedicated cabinet box.

For the exact size and design method, please refer to pages 52.

Panel and handle max weight is 57 lbs. (26kg).

If using a "shaker style" panel that undershoots the minimum panel thickness, please be aware that you will need to use shorter screws than those supplied in the accessory pack.



in inch (H/W/D)	69 11/16"/21 15/16"/21 13.16"
in cm (H/W/D)	177/55.7/55.3
Cut out dimensions	
in inch (H/W/D)	69 13/16"-70 1/8"/22 1/16"- 22 1/2"/21 11/16"
in cm (H/W/D)	177.2-178/56-57/55
Net weight lbs. (kg)	200.6 (91)
Voltage V/Hz	115/60

** Noise output – according to EN 60704-3.

Technical drawings of the 100 Series door showing front, side, and detail views with dimensions in inches and millimeters.

- Front View:**
 - Overall height: 48-9/16" (1233 mm)
 - Overall width: 23-7/16" (595 mm)
- Side View:**
 - Overall height: 48" (1218 mm)
 - Top and bottom thickness: 5/16" (7.5 mm)
- Detail View:**
 - Top panel width: 21-1/5" (537 mm)
 - Top panel height: 20-1/16" (510 mm)
 - Top panel thickness: 10" (254 mm)
 - Bottom panel width: 2-7/16" (62 mm)
 - Bottom panel height: 43-5/16" (1100 mm)
 - Angle: 115°

inserted.

Technical drawing of a rectangular box with dimensions in inches and millimeters:

- Top surface: min. 0.21ft², min 200 cm²
- Height: 69 3/4 - 70 3/8" (1772 - 1788 mm)
- Front face height: max. 82 11/16" (max. 2100 mm)
- Depth: 22 - 22 3/4" (560 - 570 mm)
- Front face width: 8 3/8" (213 mm)
- Front face height: 23 1/16" (55 mm)
- Bottom surface: min. 0.21ft², min 200 cm²

requirements, please refer to page 44.

kitchen cabinets.

box for easy access. Free length of the power cord is 7.9 ft. (2.4m).

3" of the cabinet needs to be surface finished as it is visible when the door is open.

Technical drawing of a rectangular plate with the following dimensions:

- Overall width: 23-7/16" (595mm)
- Inner width: 15-1/16" max. (383mm max.)
- Inner width offset: 4-3/16" (106mm)
- Inner width offset: 6-5/16" (160mm)
- Overall height: 71-1/2" (1816mm)
- Inner height: 58-1/4" max. (1496mm max.)

thick and they should cover the front of the dedicated cabinet box.

Maximum weight of the custom panel door is 44 lbs. (20 kg) including handle.

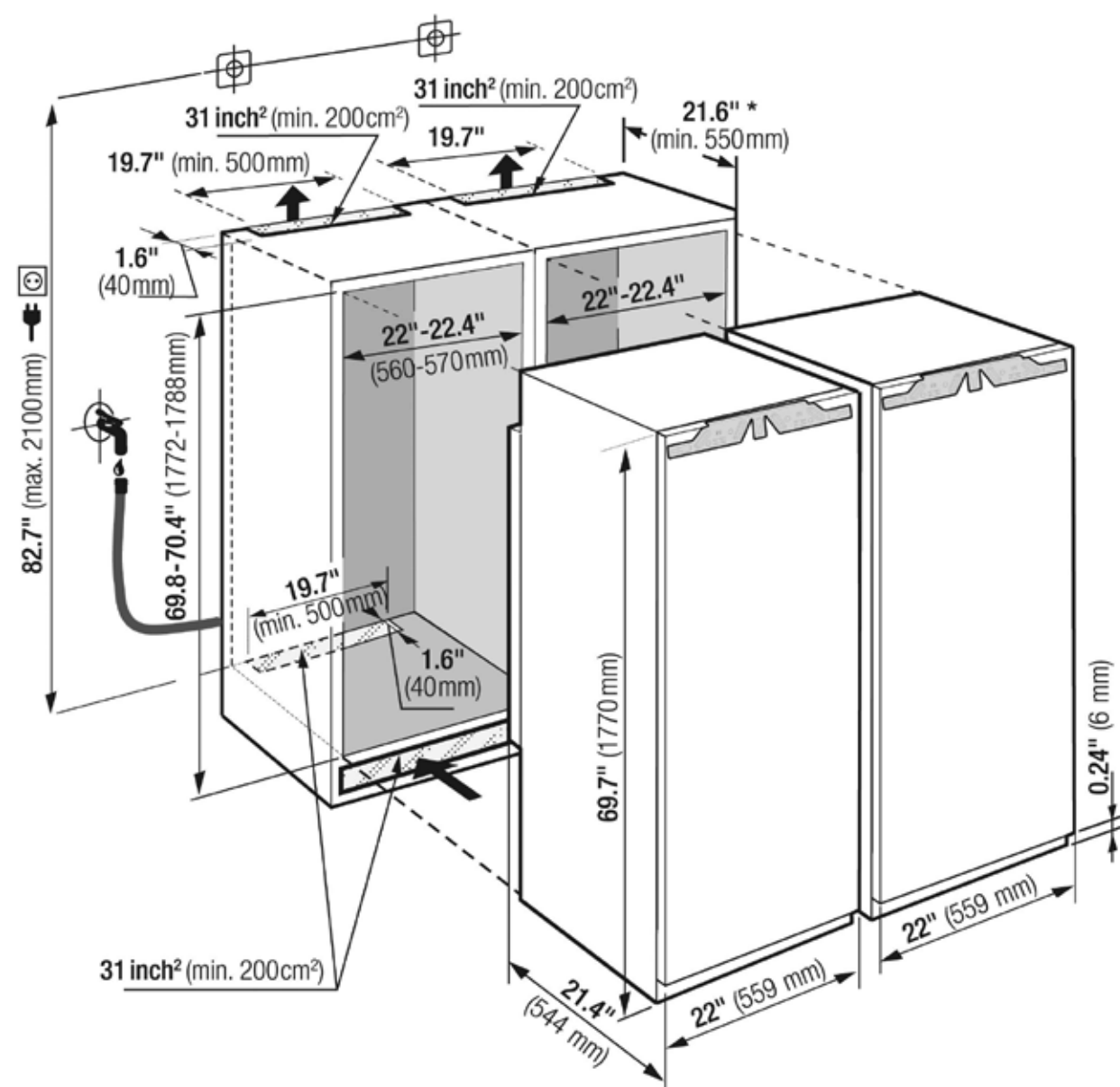
the accessory pack.

SBS Refrigerator & Freezer



HF 861 & HRB 1120

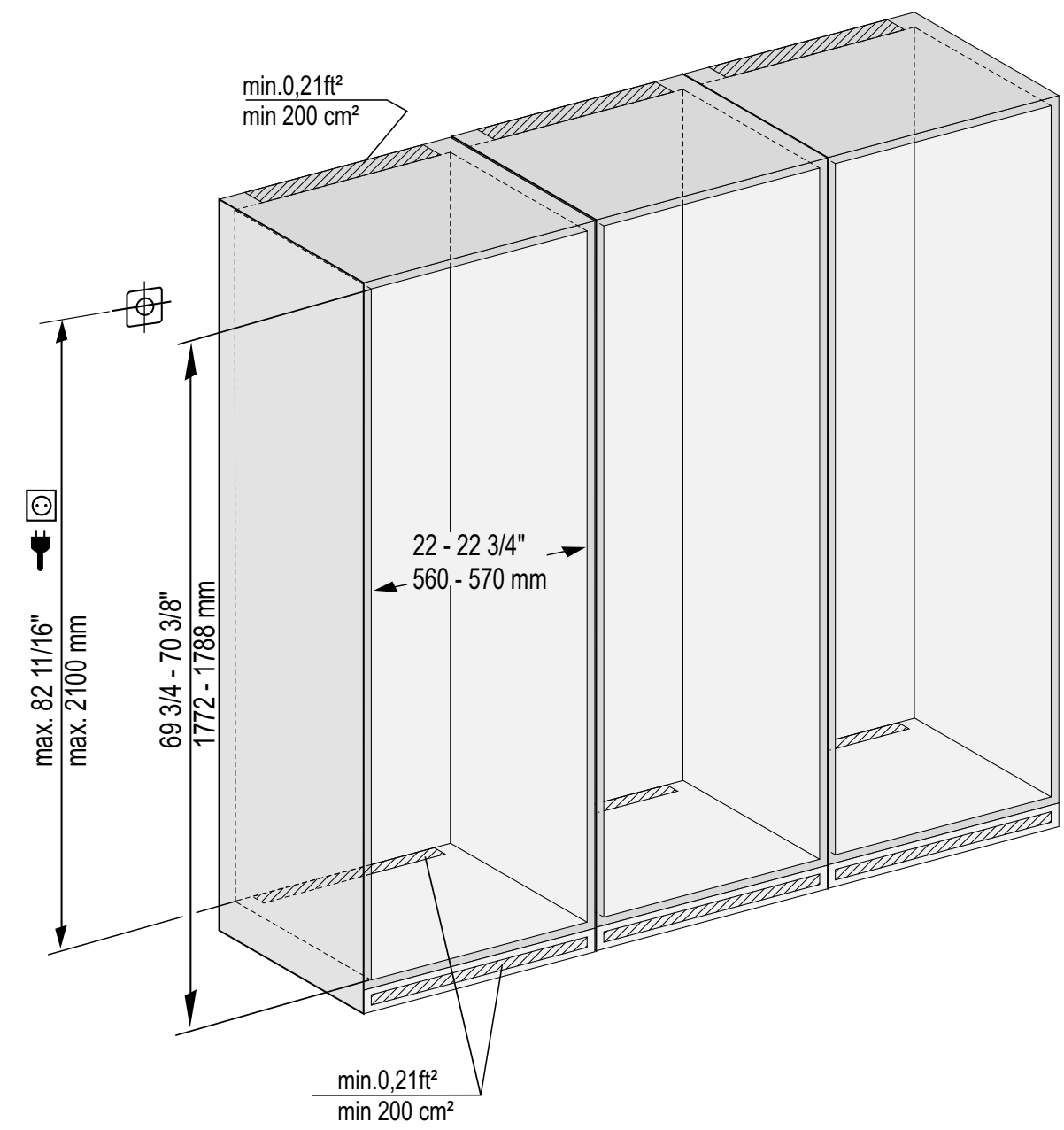
Two combinations or wine units can be combined together as a side-by-side installation.
Please always consider two separate dedicated cabinet boxes like the image shown below.



Triple SBS



Any combination of appliances is possible, just consider a dedicated cabinet box for each appliance.



Accessories

01 FreshAir activated carbon filter

Pack 1 Air filter for combinations and all refrigerator	9096989
Pack 1 Air filter for wine	9193906



02 Fitting parts

Welt for appliance door niche 70" / 178 cm	7643083
Covers for screw holes	9086484
Door limiter pins for ICS5100, ICS5101, IC5100PC, IC5110IMPC, IC5110IM, ICB5160IM	9096 214
Door limiter pin for SIF5181, IRB5160 , IRBP5170, HW 8000	9096 212



03 Connectivity

SmartDevice Box	6125265
-----------------	---------



04 Ventilation grill

Toe kick ventilation grill	9097348
----------------------------	---------



05 Water & Ice

Water filter	9880980
--------------	---------



06 Stainless steel door panel w/ handle

Stainless steel panel for 1 door 70"	9902007
Stainless steel panel for wine 70"	9901573



07 Handle

23" Square aluminum handle	9901561
----------------------------	---------



Planning Information

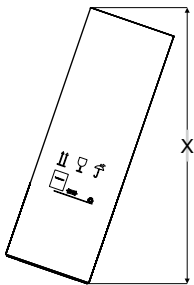
Area Requirements

Verify the following:

- Floors can support appliance’s weight plus approximately 1200 pounds (544 kg) of food weight.
- Finished kitchen floor height is level. Refrigerator must be shimmed to the floor level or leveled to make sure air vents are not obstructed.
- Remove anything attached to the rear or side walls that can obstruct appliance opening.
- Cut out dimensions are accurate.
- Electrical outlet is in correct location.

Max height

X = 76.4" / 1950 mm



Do not install this unit next to any other refrigerator, freezer or wine column except another Liebherr model. Liebherr models are designed to allow for 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, freezer or wine column can cause condensation or cause damage to the Liebherr unit.

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 lubrication system to reach equilibrium.

Safety Regulations

- The appliances are designed to cool, freeze, store food as well as make ice (if equipped).
- 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 all bottom freezers, refrigerators and freezers is SN-T, for wine it is SN-ST.

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 complies with current safety regulations.

CAN/CSA C22.2 No.60335-1-11
UL 60335-1 Fifth Edition
CAN/CSA C22.2 No. 60335-2-24-17
UL 60335-2-24 Second Edition

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.

The power plug must be easily accessible so that the appliance can be disconnected quickly in an emergency. It should not be behind the appliance.

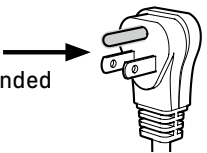
Comply with the National Electrical Code as well as local codes and ordinances when installing the receptacle.

WARNING!

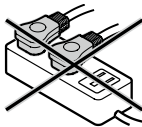
Electrocution hazard.

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!

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

To prevent possible ignition, designed ventilation is required.

InfinitySpring (Internal Water Dispenser) and IceMaker (if equipped)

Appliances that are equipped with an InfinitySpring or an IceMaker must be connected to drinking water supply.

The water pressure must be in the range of 40-90 psi (2.8-6.2 bar).

Use a braided style IceMaker hose with 1/4" compression end or a 1/4" OD copper line to connect the water supply with the solenoid valve of the appliance. 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 appliance.
- 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.

Ventilation Requirements

This is a fully integrated cabinet refrigerator-freezer which means that it is fully enclosed by a kitchen cabinet. This type of cabinet must be carefully constructed using the correct dimensions and it must provide suitable ventilation to ensure proper appliance operation.

NOTICE
If the following ventilation dimensions are not observed the compressor will be damaged.

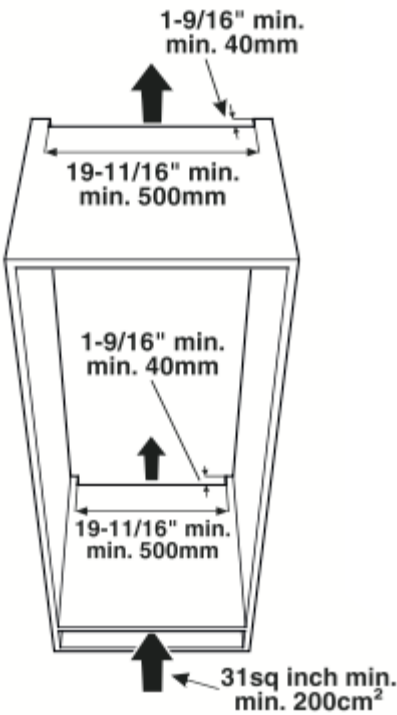
Kitchen Cabinet Airflow

1. The following ventilation dimensions must be observed:

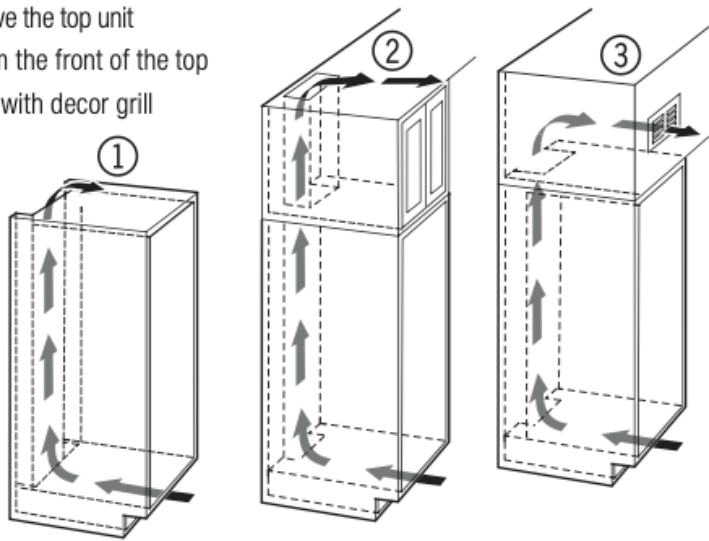
There must be a ventilation space at least 31 in.2 (200 cm2) at the airflow inlet (1) and at the airflow outlet (2).

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

- A) Directly over the appliance (2) with either an optional factory air vent or custom made one.
- B) Above the cabinet and below the ceiling (3).
- C) Through a vent installed in a soffit (4).



- ① Directly above the appliance
- ② Above the top unit
- ③ From the front of the top unit with decor grill

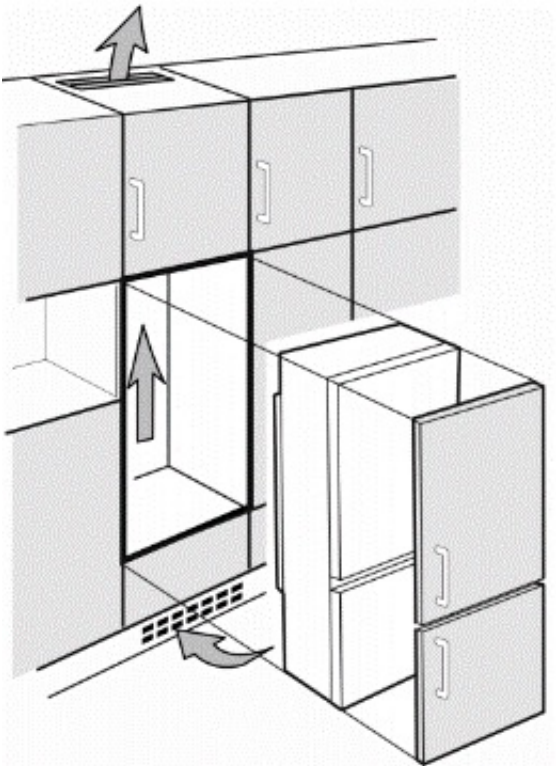
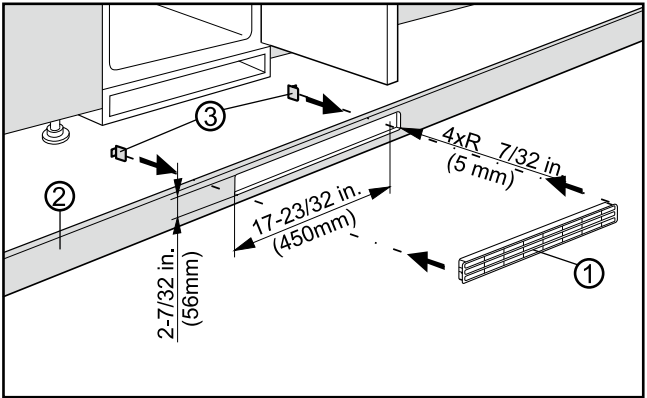


Toe Kick Requirements

Ventilation through the cabinet base at the bottom can be achieved by installing the provided ventilation grille (3) or via a ventilation opening of at least 31 in.2 (200 cm2).

When using the provided ventilation grille (3), please proceed as follows:

- In the cabinet base, cut out a ventilation opening that is 17 23/32 in. (450 mm) in width and 2 7/32 in. (56mm) in height.
- Insert ventilation (3) grille into the cabinet base cut-out (1).
- From the back side, slide the snap-fits (2) into the grille until the hooks make contact with the cabinet base.
- Completely mount cabinet base (with ventilation grille and snap-fits) to kitchen cabinet.
- The toe kick area, in the dedicated cabinet box, can be recessed as per the rest of the kitchen cabinets.

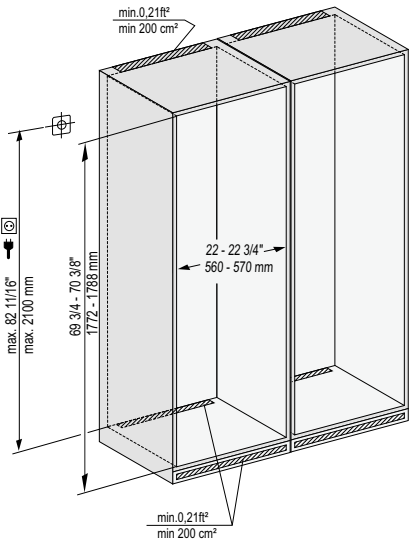


Installation Dimensions

Pantries cannot be installed directly on the floor, they must be installed into dedicated frameless cabinet boxes.

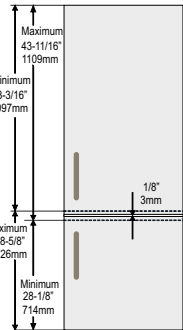
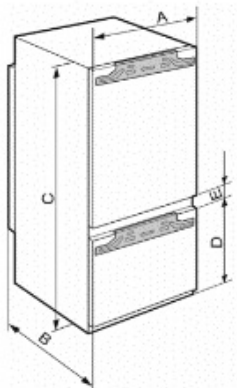
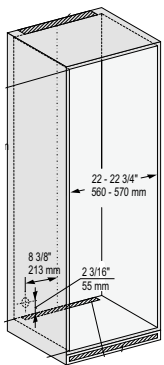
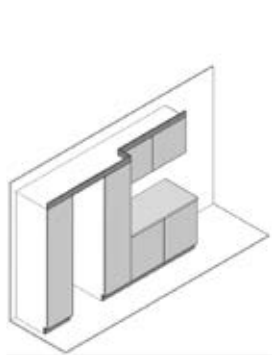
When planning your kitchen, you must consider 4 different dimensions: cut out niche dimension to accommodate the box where the appliances will be installed, dedicated cabinet box should accommodate the appliance, appliance dimensions and door panel dimensions.

When installing 2 or 3 appliances side by side, please consider that each appliance has to be installed in its own frameless dedicated cabinet box.



Cut Out Niche

When planning the cut out niche, it is essential to consider that the appliance must be installed in its own dedicated cabinet box, which will fit into the cut out niche.



Cut out niche to fit dedicated cabinet box

- L: 24"
- M: 23"
- N: 76"

Cut out dedicated cabinet box

- G: 22 1/2"
- H: 21 11/16"
- F: 70 7/16

External appliance dimension

- A: 21 5/16
- B: 21 1/2"
- C: 69 11/16"

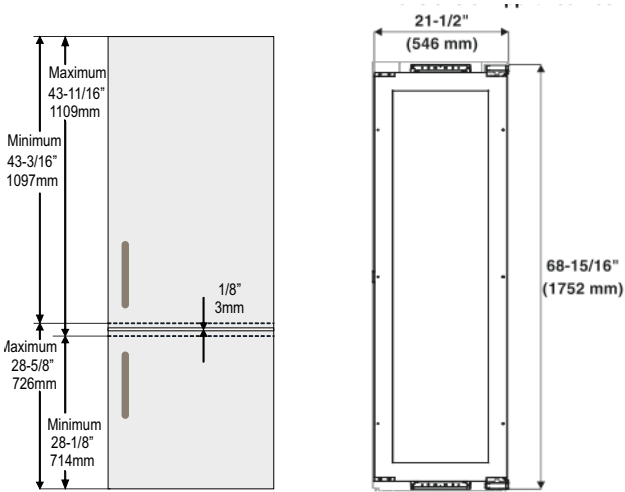
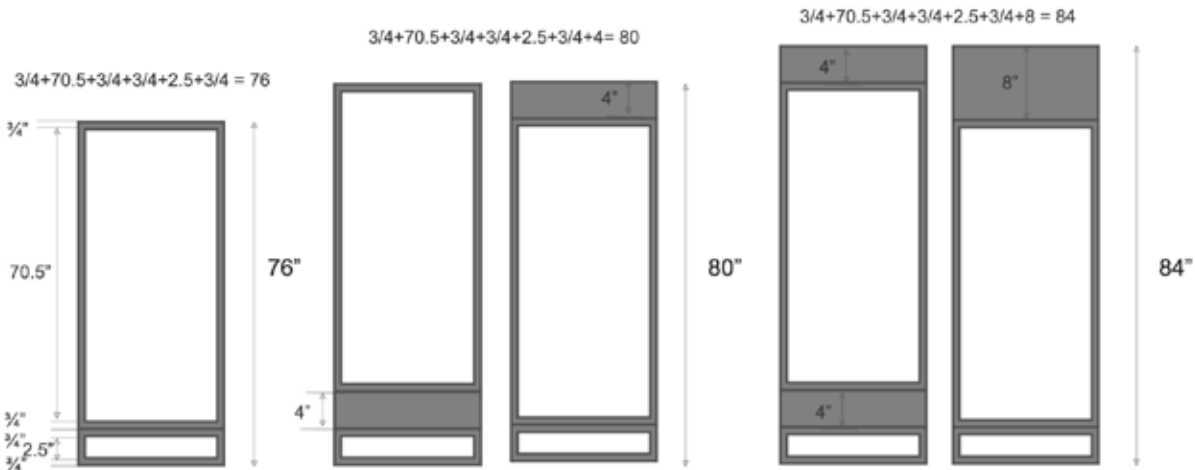
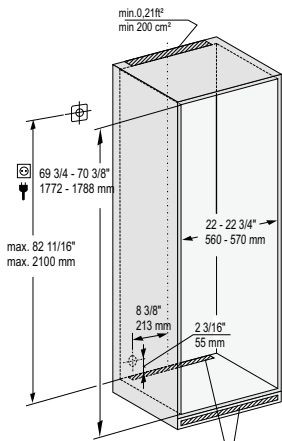
Door Panels

- Refrigerator door
- & freezer door

Frameless Dedicated Cabinet Box

We recommend to use 3/4" thick panels to build the appliance dedicated cabinet box. The dedicated cabinet box internal dimensions must follow dimensions on the table, however height can vary according to the design definition of the kitchen, as some examples below, installation can be on at 76", 80" or 84" niche height.

The dedicated cabinet box must always consider the toe kick bottom niche for proper ventilation.



Door Panels

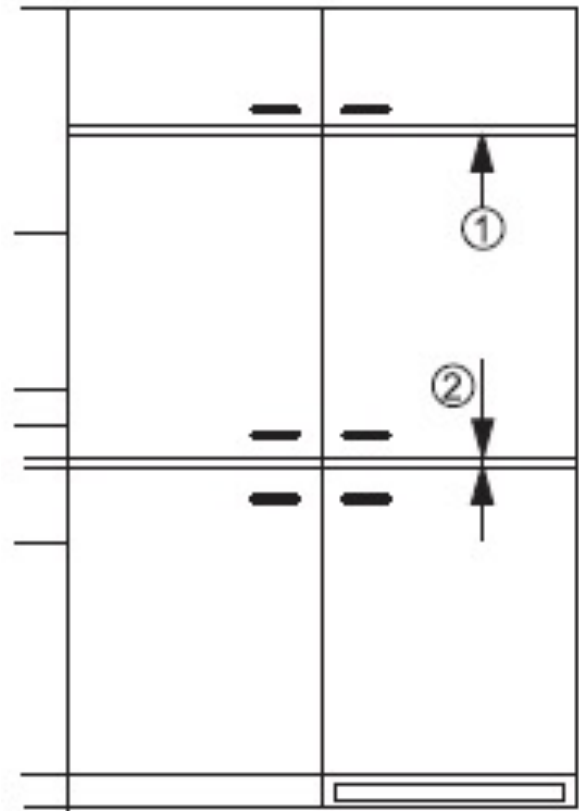
The typical wood panel thickness is 3/4" (19mm), however thicker panels, or other materials, can be used, if the maximum weight limit is observed. When using custom panels, always ensure that the panel reverse is finished to match the exterior, as parts of the panel reverse will be visible when the refrigerator door is open.

Installation Dimensions

Door Panels Dimensions

Designing the Kitchen Cabinet Doors
You will need two doors for the kitchen cabinet, one on top for the refrigerator compartment, and one on the bottom for the freezer compartment. In general, the doors have these characteristics:

- The width of the cabinet doors depends on the kitchen style and the size of the gaps between the door panels of the cabinetry. Generally, a 1/8" vertical gap between the cabinet doors is recommended.
- The doors should be at least 5/8 in. (16 mm) thick to allow the connecting rails to be fastened to them. The maximum thickness of the door panel can be 3/4 in. (19mm).
- With both doors closed, there should be a minimum of 1/8 in. (3 mm) between the upper and lower doors (2). Also, there should be a 1/8 in. (3 mm) clearance between the upper door and the cabinet door (1) above it (if any).
- The top edge of the upper door (1) and lower door (2) should be even with the doors of adjoining cabinet(s), if any.
- The position of the joint between the kitchen cabinet doors must be level with the position of the joint between the appliance doors (2).
- Adjust the door alignment before installing the appliance. It is impossible to adjust the door with the appliance installed.
- Check the installation dimensions according to Section "Product Dimensions."
- Before assembling the unit door, make sure that the permitted weight for each door is not exceeded. If permitted weight is exceeded damage to hinges may occur.



	Maximum weight of unit door
Refrigerator compartment door	39.5 lbs (18 kg)
Freezer compartment door	26.5 lbs (12 kg)

Door-on-Door Type Models

Definition of the Door Panel Heights

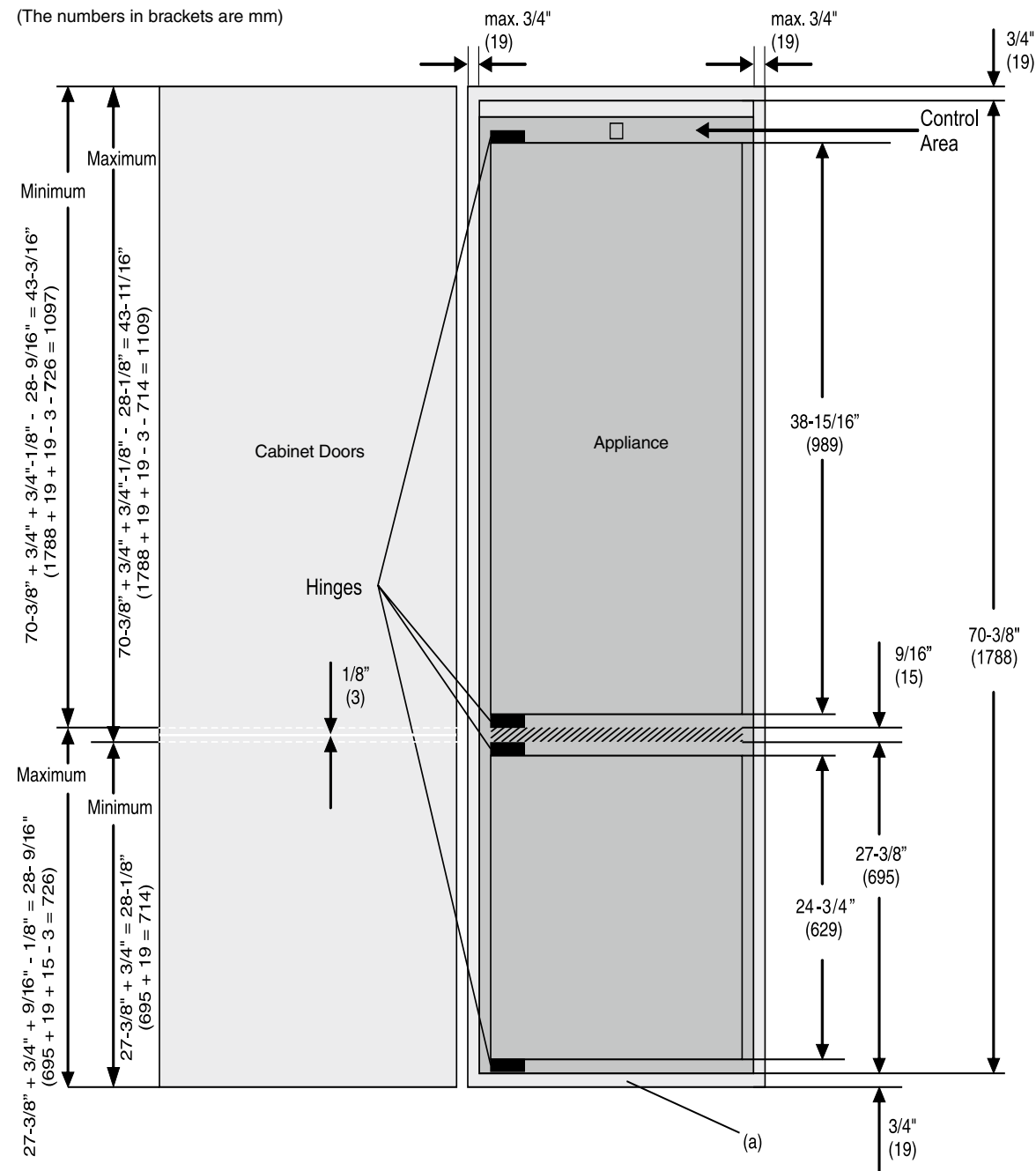
1. Start with the lower door of the freezer compartment:
The freezer door height is 24-24/32" (629 mm). In order to cover the lower part of the appliance, increase the height of the panel to 27-3/8" (695 mm).
2. To cover the face side of the floor board (a) add the thick-ness of the floor board (usually 3/4" (19 mm)).
Thus, the minimum height of the freezer door panel is: 27-3/8" + 3/4" = 28-1/8"
(695 mm + 19 mm = 714 mm)
3. Without door panels on the unit, there is a gap of 19/32" (15mm) between the hinge on the freezer door and the hinge on the refrigerator door.
After the installation of the cabinet doors, the gap between the two doors will only be around 1/8" (3mm).
4. If there is other furniture standing close to the refrigerator cabinet (see previous page) this furniture typically has a gap between two drawers or two doors. Depending on your kitchen, these gaps are approximately 1/8" (3 mm) wide.
5. In this case, the maximum height of the freezer door panel is: 27-3/8" + 3/4" + 19/32" - 1/8" = 28-19/32"
(695 mm + 19 mm + 15 mm - 3 mm = 726 mm)
Whereas the minimum height of the freezer door panel is: 27-3/8" + 3/4" = 28-1/8"
(695 mm + 19 mm = 714 mm)
Of course, the final door height depends on the gap position of the cabinets that stand to the left and right of the refrigerator cabinet.
6. The height of the refrigerator door panel is:
The total opening of the cabinet (i.e. 70-3/8" (1788 mm)) plus the thickness of the top as well as the floor board (usually 3/4" (19 mm)) minus the height of the freezer door panel (xxx" (xxx mm)) and subtract the width of the gap (approximately 1/8" (3 mm)):
 $70\text{-}3/8" + 3/4" + 3/4" - \text{xxx} - 1/8" = 71\text{-}3/4" - \text{xxx}"$
 $(1788\text{ mm} + 19\text{ mm} + 19\text{ mm} - \text{xxx mm} - 3\text{ mm} = 1823\text{mm} - \text{xxx mm})$

Sliding Door Type Models

Definition of the Door Panel Heights

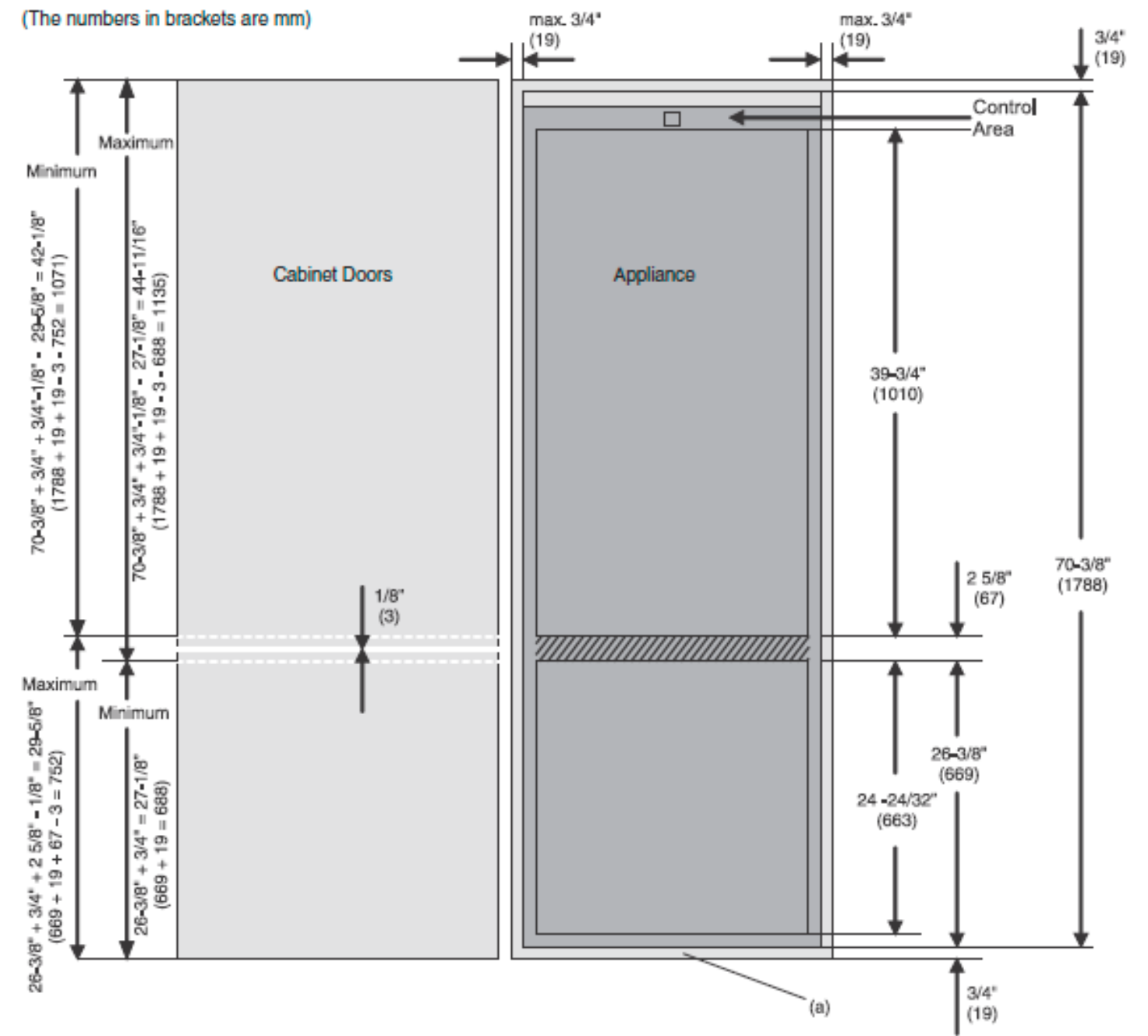
1. Start with the lower door of the freezer compartment:
The freezer door height is 24-24/32" (663 mm). In order to cover the lower part of the appliance, increase the height of the panel to 26-3/8" (669 mm).
2. To cover the face side of the floor board (a) add the thick-ness of the floor board (usually 3/4" (19 mm)).
Thus, the minimum height of the freezer door panel is: 26-3/8" + 3/4" = 27-1/8"
(669 mm + 19 mm = 688 mm)
3. Without door panels on the unit, there is a gap of 2 5/8" (67mm) between the freezer door and the refrigerator door.
After the installation of the cabinet doors, the gap between the two doors will only be around 1/8" (3mm).
4. If there is other furniture standing close to the refrigerator cabinet (see previous page) this furniture typically has a gap between two drawers or two doors. Depending on your kitchen, these gaps are approximately 1/8" (3 mm) wide.
5. In this case, the maximum height of the freezer door panel is: 26-3/8" + 3/4" + 2-5/8" - 1/8" = 29-5/8"
(669 mm + 19 mm + 67 mm - 3 mm = 752 mm)
Whereas the minimum height of the freezer door panel is: 26-3/8" + 3/4" = 27-1/8"
(669 mm + 19 mm = 688 mm)
Of course, the final door height depends on the gap position of the cabinets that stand to the left and right of the refrigerator cabinet.
6. The height of the refrigerator door panel is:
The total opening of the cabinet (i.e. 70-3/8" (1788 mm)) plus the thickness of the top as well as the floor board (usually 3/4" (19 mm)) minus the height of the freezer door panel (xxx" (xxx mm)) and subtract the width of the gap (approximately 1/8" (3 mm)):
 $70\text{-}3/8" + 3/4" + 3/4" - \text{xxx} - 1/8" = 71\text{-}3/4" - \text{xxx}"$
 $(1788\text{ mm} + 19\text{ mm} + 19\text{ mm} - \text{xxx mm} - 3\text{ mm} = 1823\text{mm} - \text{xxx mm})$

Door on Door Type Models



(a) The base of the cabinet can be thickened to raise the the top of the lower door panel to counter height. Lower panel will have to be increased in length by the same amount. The gap between refrigerator and freezer door must lie within the crosshatched area.

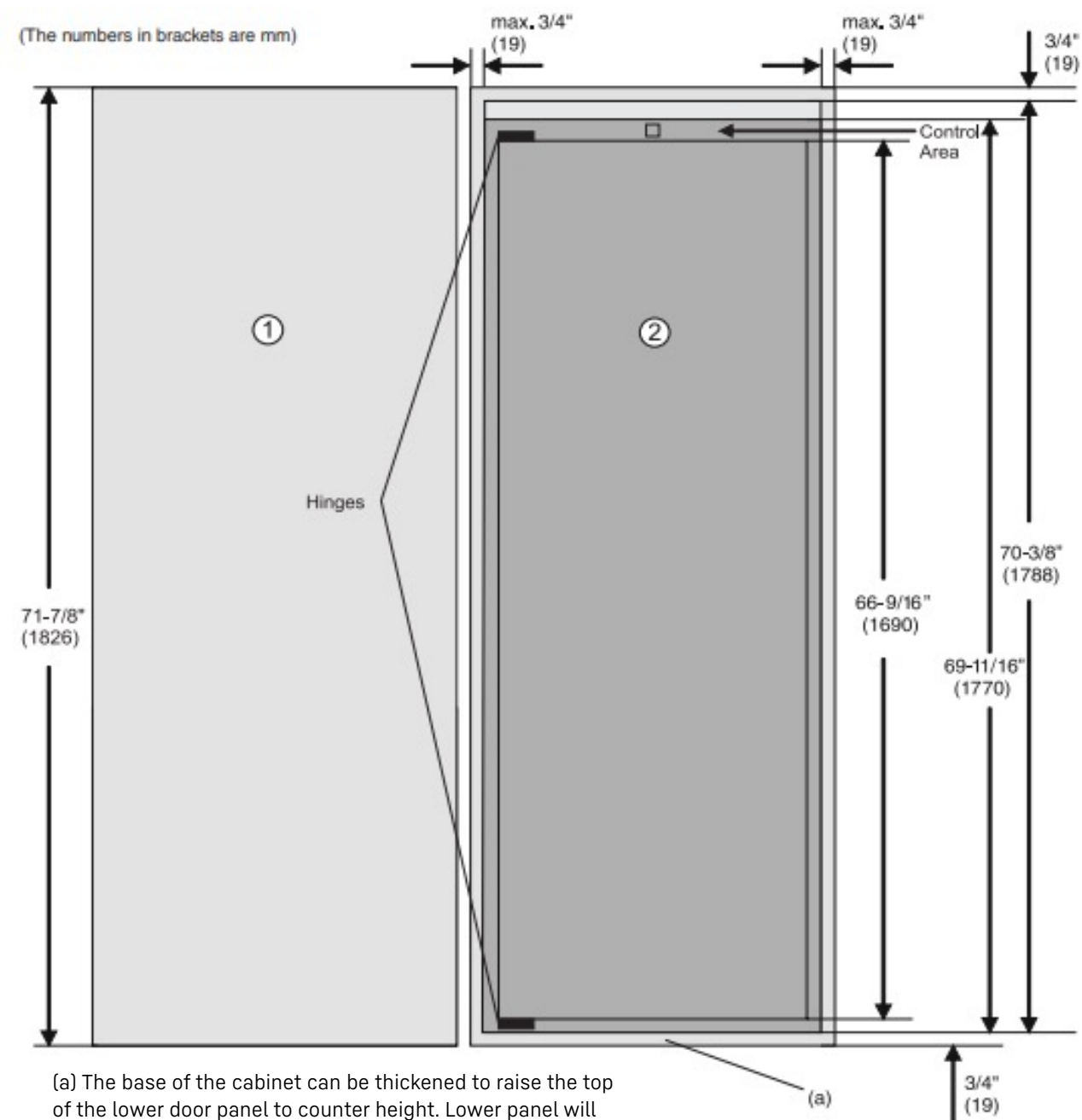
Sliding Door Type Models



(a) The base of the cabinet can be thickened to raise the the top of the lower door panel to counter height. Lower panel will have to be increased in length by the same amount.

The gap between refrigerator and freezer door must lie within the crosshatched area.

Single Door Models



Door Clearance Requirements

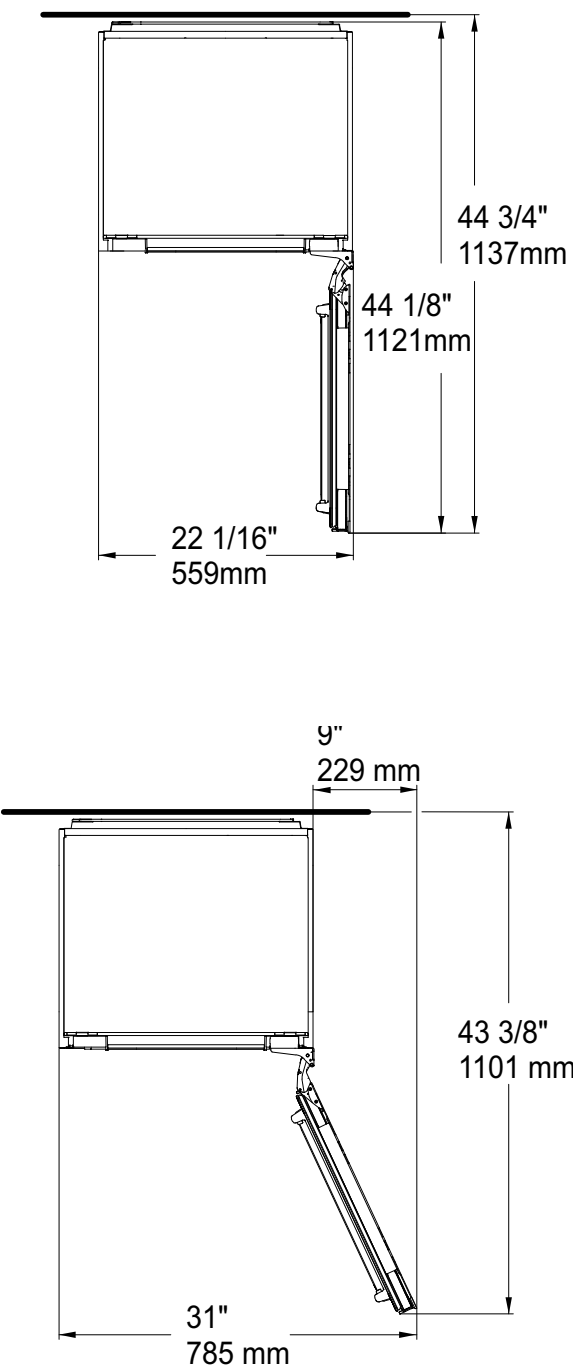
Generally, appliances are installed to ensure that, when opened, their doors (including handles) do not collide with any adjacent cabinets, countertops, walls or other furniture.

If you find yourself in a position where this is not the case, a door limitation of 90° may be used. Please refer to your specific model's user manual for more information on how to limit the door opening.

Additional solutions to door collision include:

- Reducing the door panel thickness if it is larger than 3/4" (19 mm)
- Rearranging or moving the object that is colliding with the appliance
- Using a bumper or stopper to prevent the door from damaging the adjoining wall or cabinet

IMPORTANT: The gap between the appliance's front panel and the surrounding furniture panels must be at least 1/8" (3 mm).

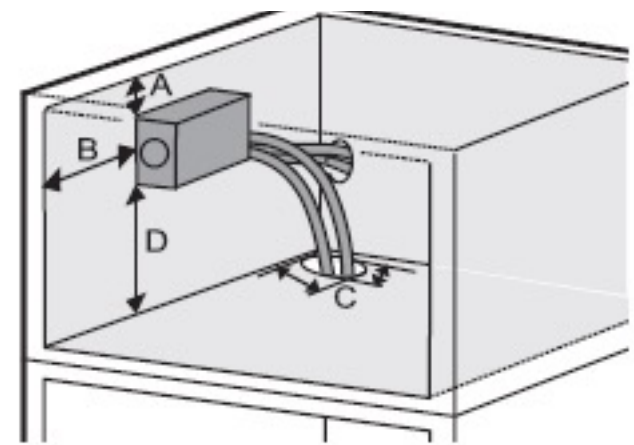


Kitchen Cabinet Setup for the Water Filter

The water filter module is supplied with the appliance (only available for HF 861).

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 installed during the 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 x 10mm)

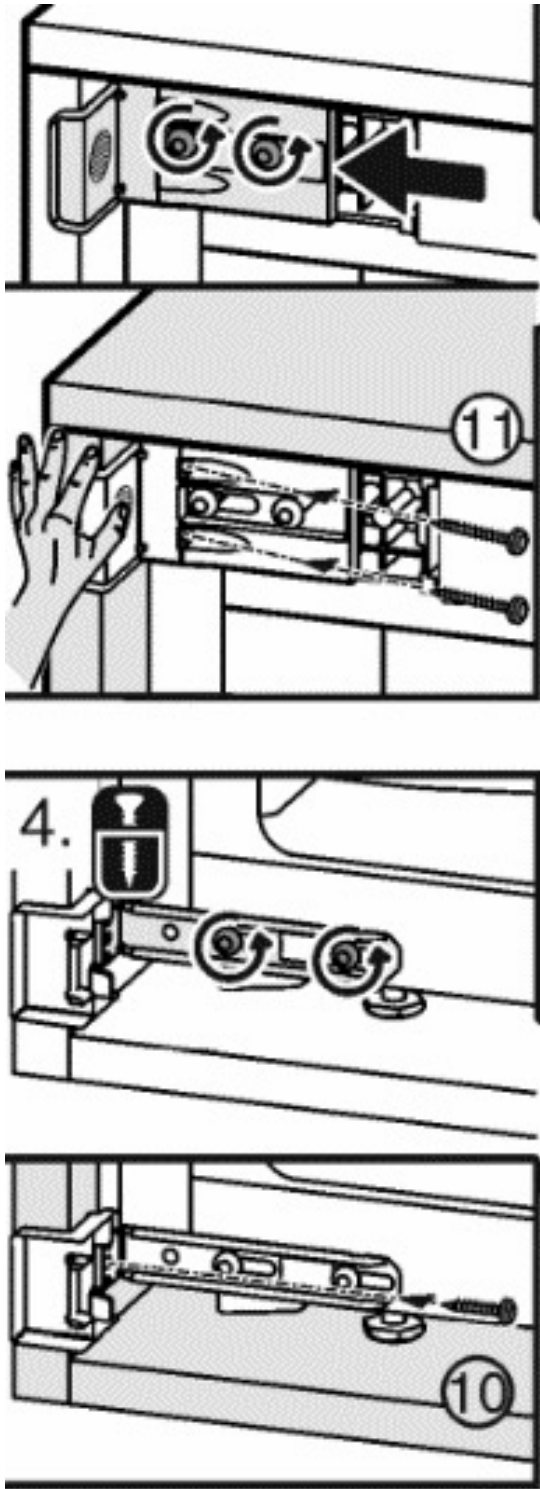
(D) min. 4in (100mm)

Hardware Included

Hardware is included that attaches to the pantry/refrigerator to ensure that the appliance is recessed to the proper distance in the cabinet box.

The attached illustrations are corner shots that show the L hardware brackets that ensure the proper set-back.

This hardware will ensure the appliance door is flush with the cabinet opening so when the panel is attached it will open and close properly and cover the appliance and the cabinet box that it is installed into (side to side and top to bottom).



LIEBHERR

