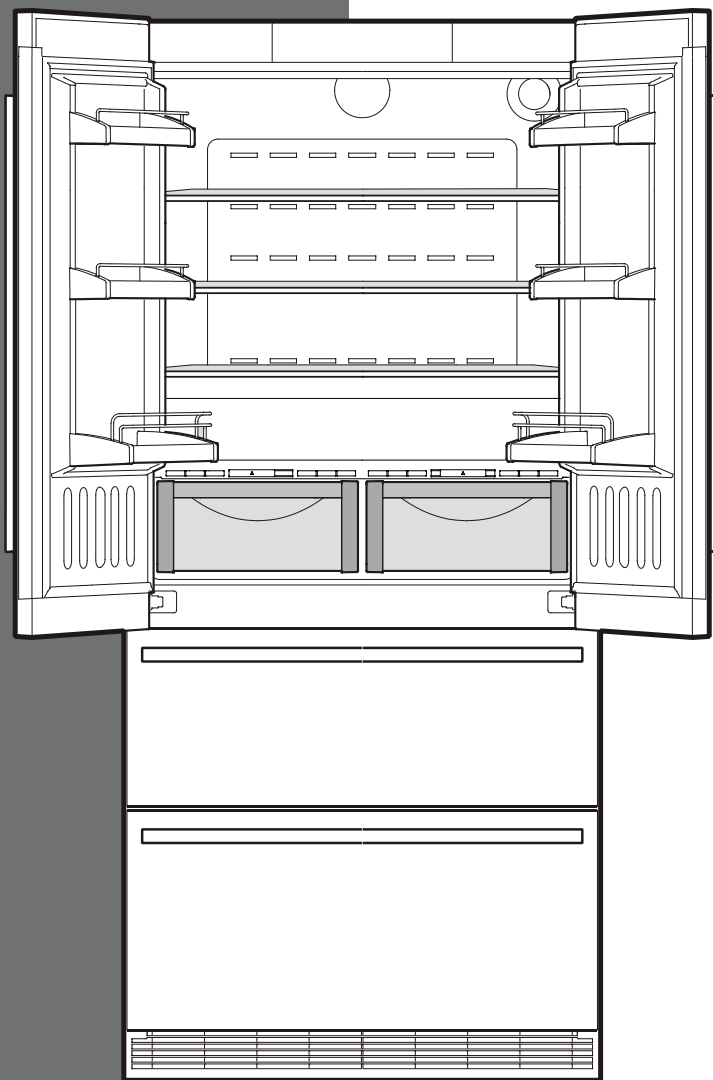


LIEBHERR

Installation Instructions

For Fully Integrated NoFrost
Combined Refrigerator-Freezers



CS/CBS 20
7084 437-00

IMPORTANT

Please read and follow these instructions

These instructions contain Danger, Warning and Caution statements. This information is important for safe and efficient installation and operation.

Always read and follow all Danger, Warning and Caution statements!



DANGER!

Danger indicates a hazard which will cause serious injury or death if precautions are not followed.



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.

To the installer

It is very important that the guidelines and instructions are followed in the manual 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 in Installation Guidelines and in this manual before the unit is installed.

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R600a refrigerant

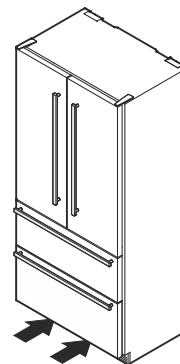


WARNING!

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

To prevent possible ignition follow the warnings below:

- **Keep ventilation openings, in the appliance enclosure or in the built-in structure, clear of obstruction.** →
- **Do not damage the refrigerant circuit.**
- **Any repairs and work on the appliance should only be performed by the customer service department.**



Disposal of old appliance



DANGER!

Risk of child entrapment.

Child entrapment and suffocation are not problems of the past.

Junked or abandoned refrigerators are still dangerous – even if they will sit for “just a few days.”

If you are getting rid of your old refrigerator, please follow these instructions to help prevent accidents.

Before you discard old appliances:

- Remove the doors.
- Leave the shelves in place so that children may not easily climb inside.
- Cut off the power cable from the discarded refrigerator. Discard separately from the refrigerator.
- Be sure to follow your local requirements for disposal of appliances.

Contact the trash collection agency in your area for additional information.

Disposal of carton

The packaging is designed to protect the appliance and individual components during moving and is made of recyclable materials.



WARNING!

Keep packaging materials away from children. Polythene sheets and bags can cause suffocation!

Please recycle packaging material where facilities are available.

Electrical safety

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

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

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

Where a two-prong wall receptacle is encountered, contact a qualified electrician and have it replaced with a properly grounded three-prong receptacle in accordance with all local codes and ordinances.

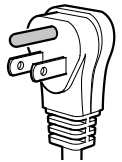


WARNING!

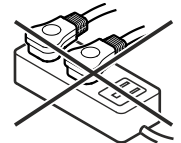
Electrocution hazard.

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.

Blocking for Safety



WARNING!

To avoid a hazard due to instability of the appliance, it must be fixed in accordance with the instructions.

PLANNING INFORMATION

Unit Dimensions - Figure 1

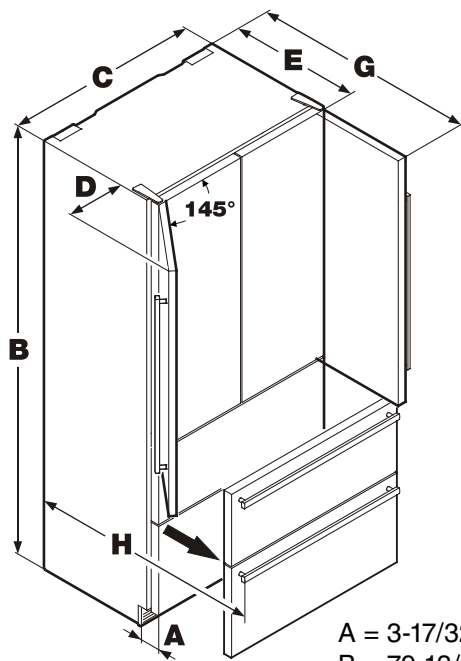


Figure 1

- A = 3-17/32" (90 mm)
- B = 79-13/16" (2027 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)

Door swing clearance - Figure 2

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

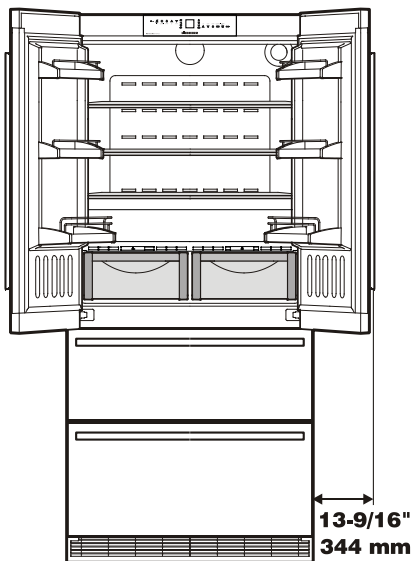


Figure 2

Unit Venting - Figure 3

CS 20 appliances do not require any ventilation openings in the cabinet. The required airflow is directed through the toe kick area.

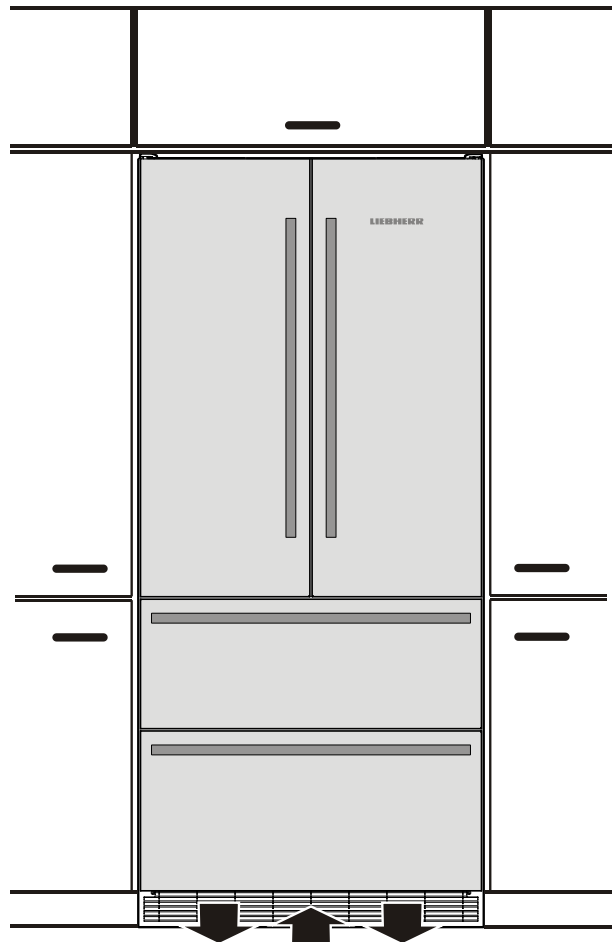


Figure 3

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

Cabinet Opening Dimensions - Figure 4

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

If semi built-in, please consider the cabinet opening dimensions as shown in **Figure 4**.

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.

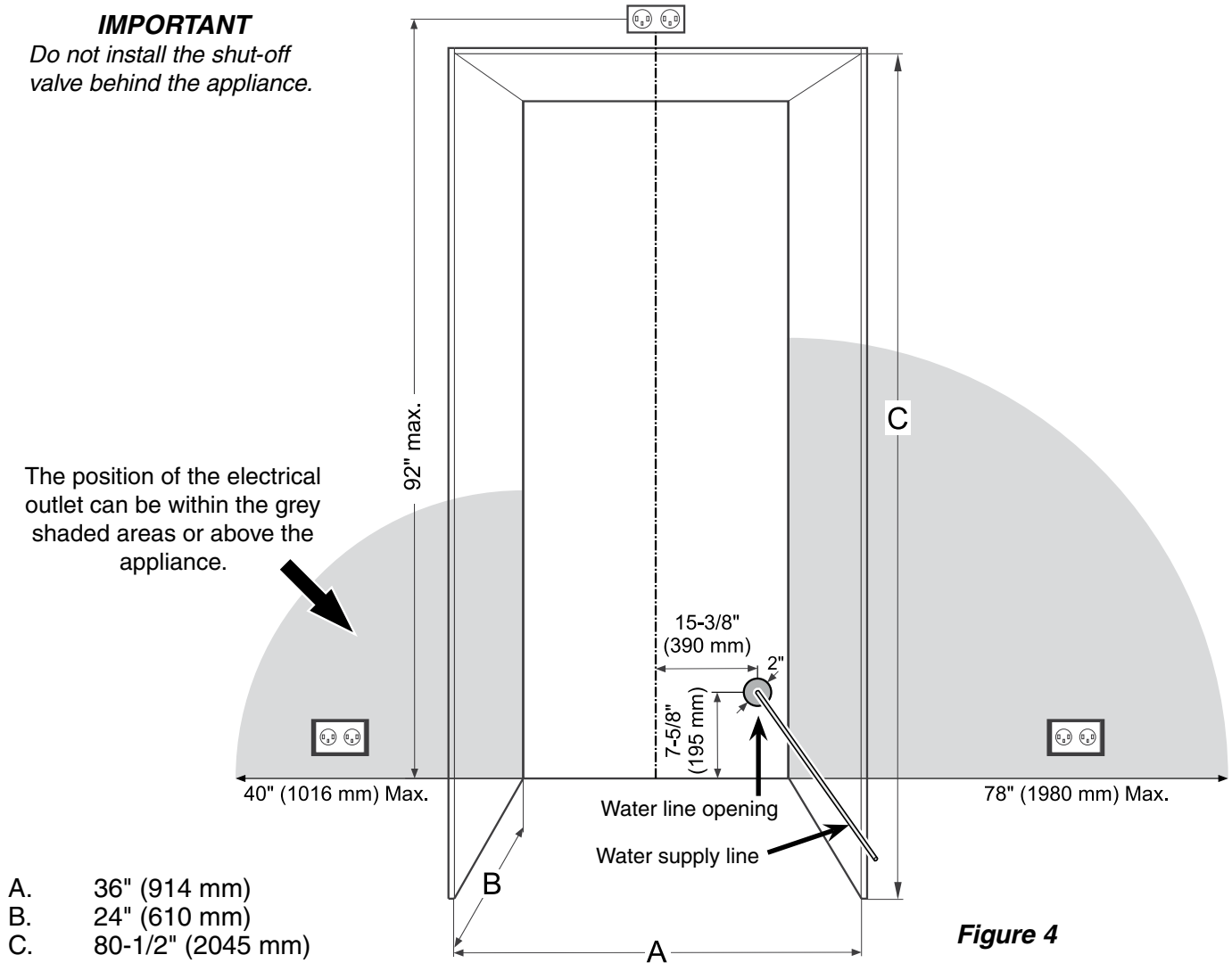


Figure 4

IMPORTANT

*With 24" cabinets, the water line opening must be in the location as shown in **Figure 4**.*

With 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.

BLOCKING FOR SAFETY

Mounting the anti tipping device on concrete floors - Figure 5 - 6

Secure the appliance in place so it does not tip forward when the fully stocked door is opened. The anti tipping bracket is provided with the appliance.

1. Mark the center line of the appliance on the back wall. Align the anti tipping bracket center to this line.



WARNING

Be sure that there is no plumbing or electrical wiring located in this area which screws or drills could damage.

2. Drill a 3/8" diameter hole in any position as shown in **Figure 5** using a carbide drill bit.
The depth of the holes must exceed the overall length of the anchors provided.
Clean the holes after drilling.
3. Attach washer and screw on hex nut to the end of each anchor.
Drive in all 3 anchors.
Align the bracket center to the center line on the back wall again.
Fasten the anchors by turning the hex nut.
4. Fasten bracket with 3 screws (1/4" x 2-1/8") into the wall plate (**Figure 6**).

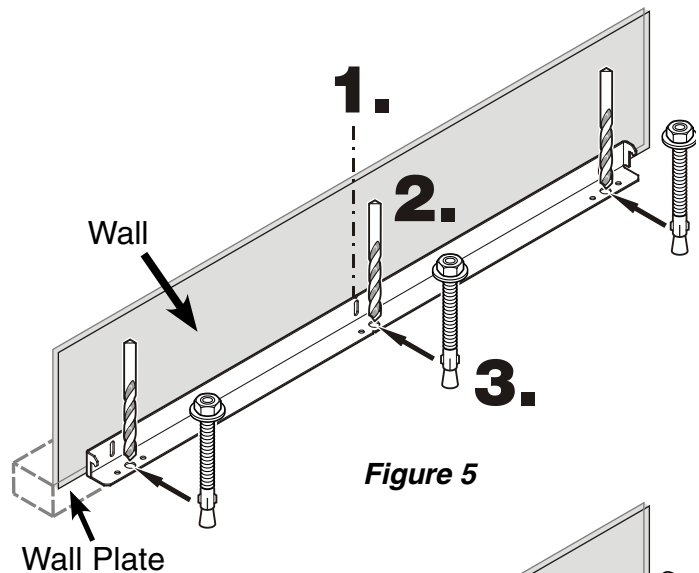


Figure 5

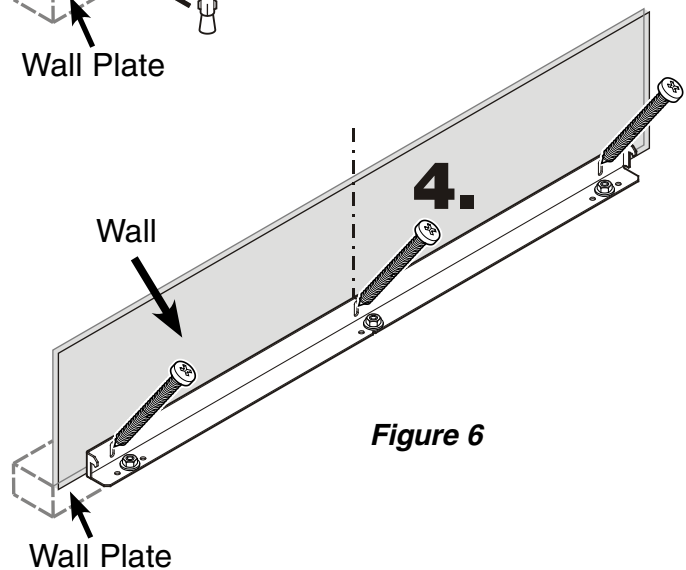


Figure 6

Mounting the anti tipping device on wooden floors - Figure 7

1. Mark the center line of the appliance on the back wall. Align the anti tipping bracket center to this line.



WARNING

Be sure that there is no plumbing or electrical wiring located in this area which screws or drills could damage.

2. Fasten bracket to the wooden floor using 5 screws (1/4" x 2-1/8"). Drill pilot holes if necessary.
3. Fasten bracket with 3 screws (1/4" x 2-1/8") into the wall plate.

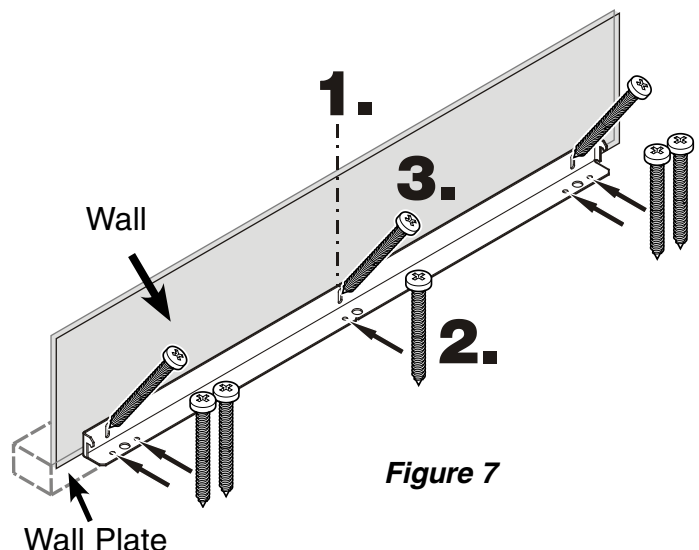


Figure 7

Mounting the anti tipping device in cabinets deeper than 24" -

Figure 8

To ensure the compressor mounting plate reaches the anti tipping bracket at cabinets deeper than 24", a wooden spacer must be mounted between the appliance back and the wall. The anti tipping bracket will be fastened to the floor downwards and to the spacer backwards.



WARNING

Be sure the wooden spacer is fastened securely to the floor.

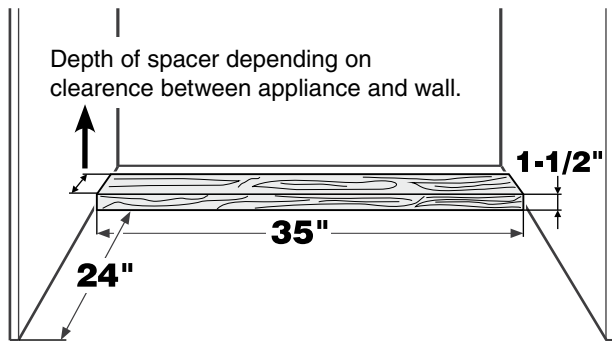


Figure 8

Mounting the top anti-tipping bracket

1. Mount the anti-tipping bracket provided on the wall using 6 x 60 screws (**Figure 9**).

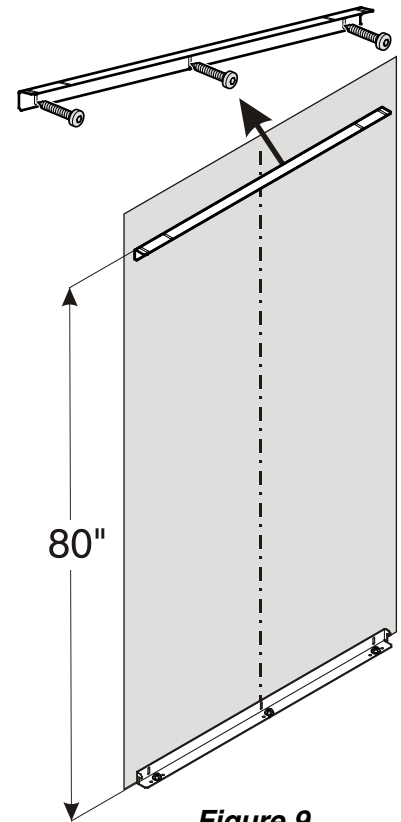


Figure 9

2. Clip both attachment brackets into the transport grips of the appliance (**Figure 10**).

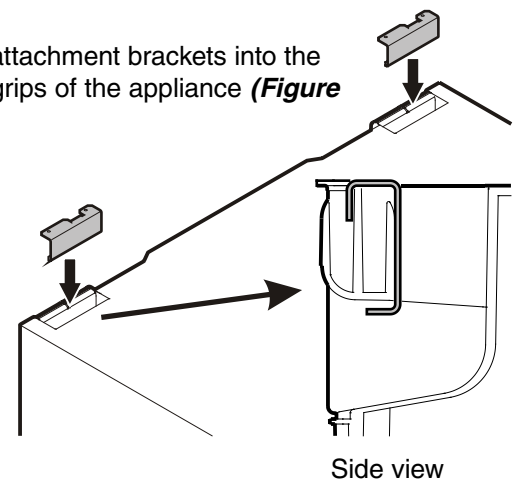


Figure 10

Safety Instructions and Warnings

- Do not install the water connection while the combined refrigerator-freezer is connected to an electrical outlet.
- The connection to the water supply may only be made by a trained and licensed plumber.
- All equipment and devices used to supply the water to the appliance must comply with the current regulations for your geographical area.



WARNING!

Connect to potable water supply only.

Water Connection

- 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). Failure to meet these requirements will likely result in ice maker malfunction and possibly cause a water leakage that can damage flooring and surrounding furniture.

- Use a 1/4" OD copper line to connect the water supply to the solenoid valve.

This is not supplied with the appliance (Figure 11).

- A shut-off valve, such as the saddle valve illustrated here, must be installed between the hose line and the main water supply so the water supply can be stopped if necessary.

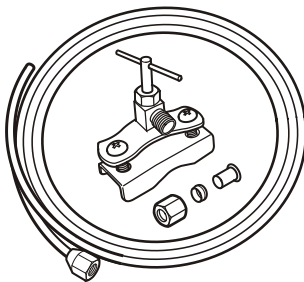
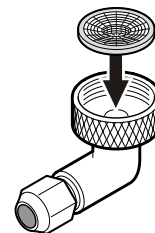


Figure 11

Do not install the shut-off valve behind the refrigeration unit.

- The solenoid valve has a *metric R3/4* male connector. A R3/4 (metric) to a 1/4" OD adapter is supplied with the ice maker.
- Insert the water strainer provided into the OD adapter with the cavity downwards.



IMPORTANT

Be sure the strainer is inserted with the cavity downwards. Otherwise the strainer could be damaged when mounting the OD adapter onto the solenoid valve.

Connection to the Water Supply

1. Move the appliance towards the final position and leave enough space to work behind.
2. Insert the water supply line into its intended opening at the back of the appliance (**Figure 12**).

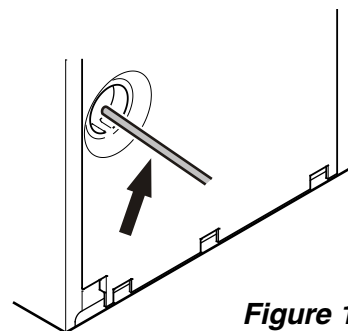


Figure 12

3. Move the power supply line to the area of the electrical outlet.



WARNING

Do not connect to the electrical outlet before the installation is completed and the water line is connected to the solenoid valve.

4. Push the appliance slowly to the back wall until the compressor mounting plate makes contact with the anti tipping bracket (**Figure 13**).

⚠ WARNING

To prevent the appliance from tipping forward the compressor mounting plate must have contact with the anti tipping bracket (**Figure 13**).

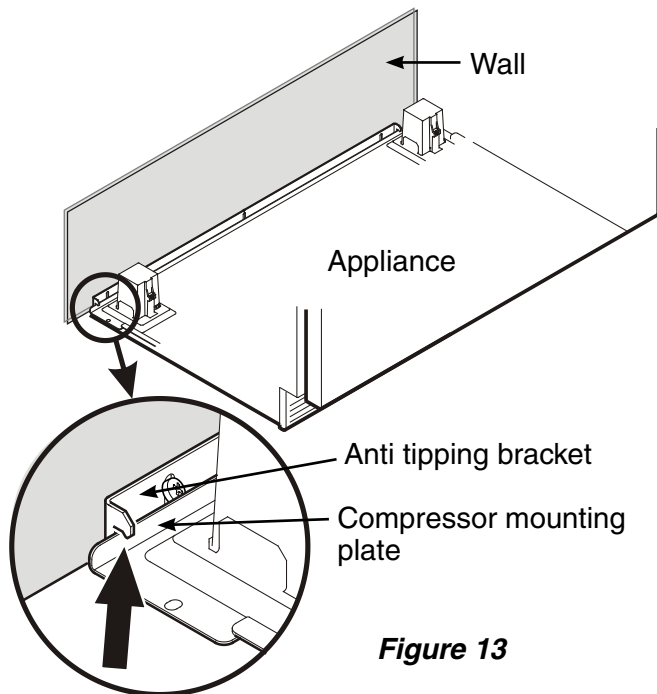


Figure 13

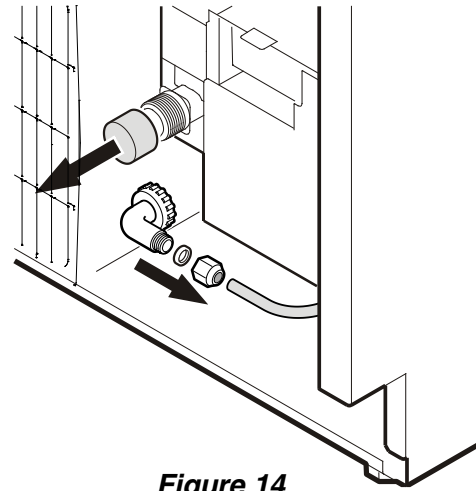


Figure 14

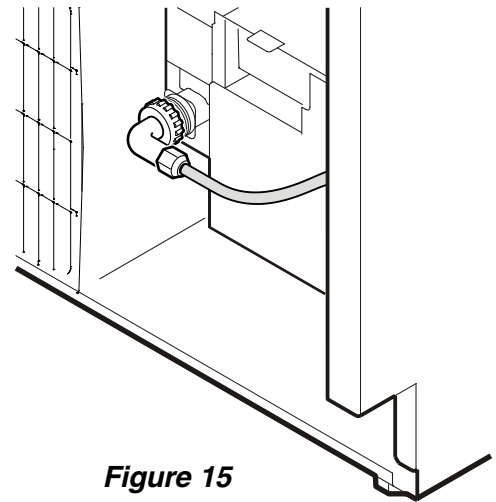


Figure 15

5. Remove the cover from the valve connector (**Figure 14**).
6. The water line is visible at the front of the appliance. Connect the water line with the OD adapter (**Figure 14**).
7. Bleed the air from the water line by opening the water supply temporarily.
8. Screw the OD adapter onto the solenoid valve (**Figure 15**).

9. Open the shut-off valve for the water supply and check the entire water system for leaks.

IMPORTANT

After starting up the appliance, the water pipe system must be purged of any air. Refer to chapter "Bleeding the ice maker" in the operating instructions.

INSTALLATION

Leveling the Appliance - Figure 16

1. The height can be adjusted in front by twisting the leveling feet ① .
2. Twist the adjusting bolt ② to set up the back of the refrigerator.
3. Rotate leveling feet ① until firmly in place against the floor.

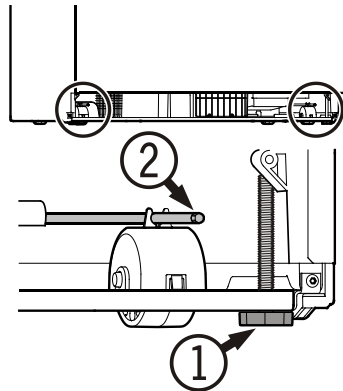


Figure 16



WARNING

To prevent the appliance from tipping forward the leveling feet ① (Figure 16) must have contact with the floor.

Top anti-tipping bracket

4. Secure the appliance with M5 x 7 screws (Figure 17).

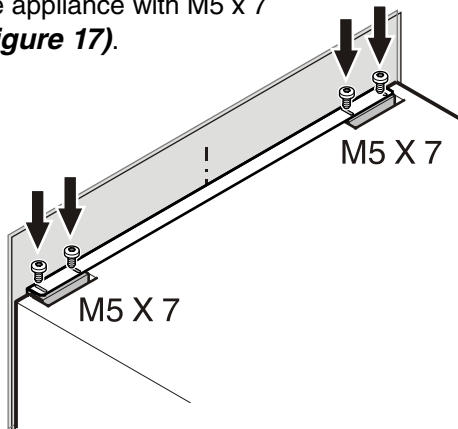


Figure 17

Adjusting the front of the drawer - Figure 18

If required, the front of the freezer drawers can be adjusted.

Transfer the screws shown in the illustration (on the left and right sides of the freezer drawer) individually to the long slots below.

Tighten the screws in the front of the drawer once it is in the right position.

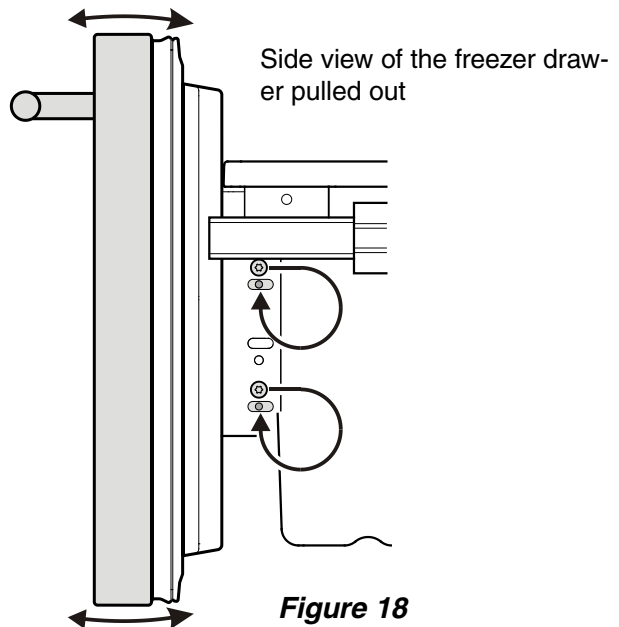


Figure 18

Mounting the Ventilation Grille -

Figure 19, 20

1. Pull out the bottom freezer drawer.
2. Remove the blue protection film from the dust filter provided and insert the filter into its opening in the toe kick area as shown in **Figure 16**. Attach the filter at the bottom, press down the button and click into place.

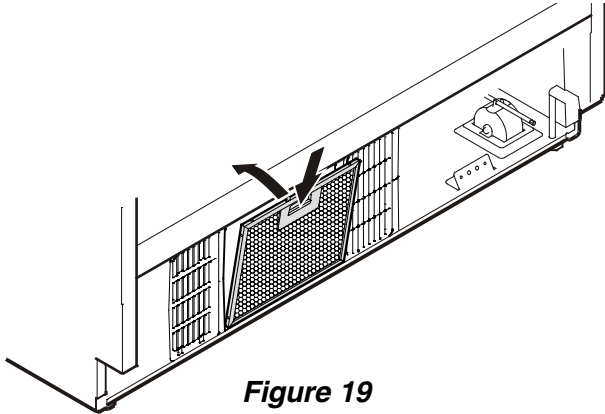


Figure 19

3. Mount the ventilation grille as shown in **Figure 20**.

IMPORTANT

Only use the ventilation grille provided with the appliance. This grille is required for proper operation of the appliance.

The ventilation opening must not be covered with a cabinet base.

Failure to use the supplied grille can result in product failure and will void the warranty.

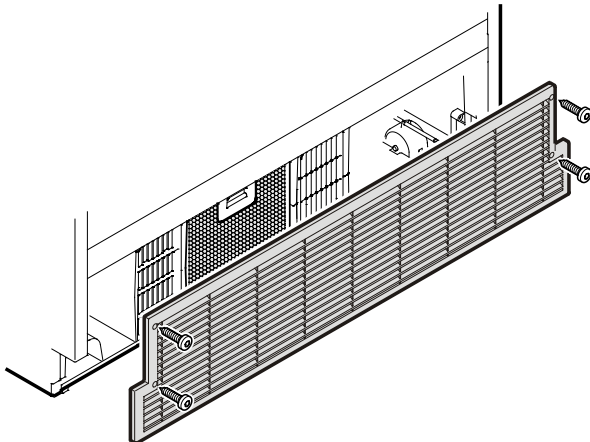


Figure 20

Top Door Hinge Clearance -

Figure 21

When installing CS 20 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.

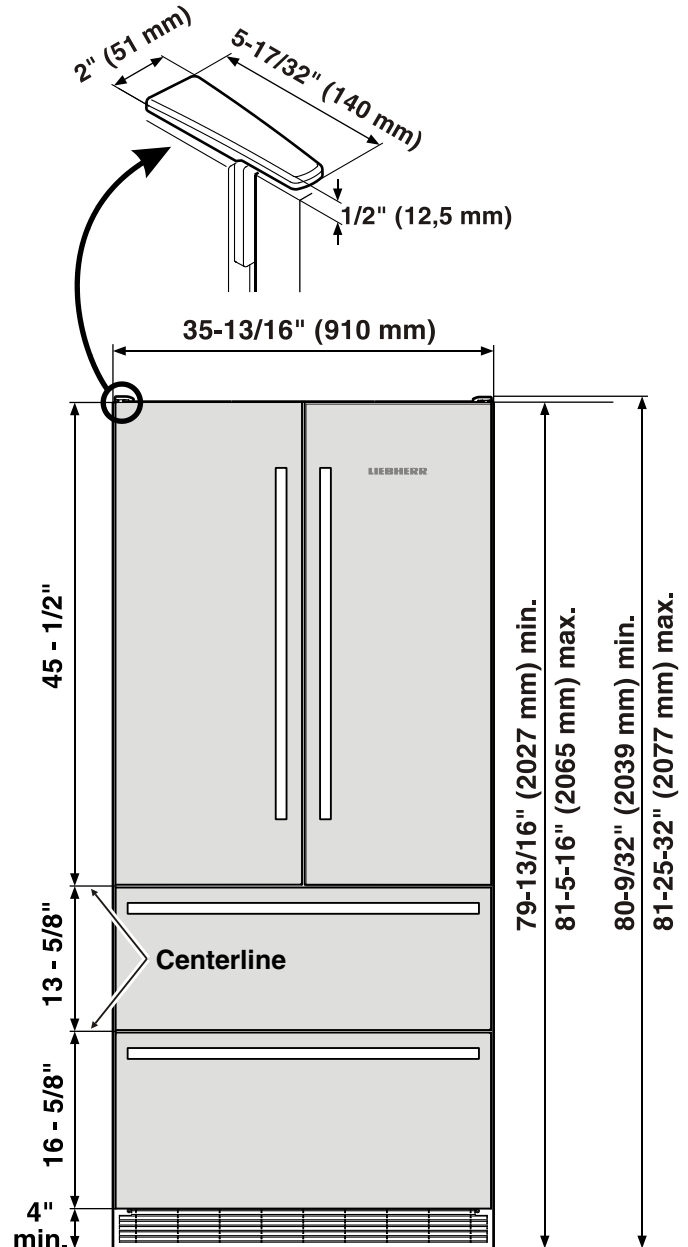


Figure 21