

Installation Instructions

For Built-In NoFrost Combined Refrigerator-Freezers

and IceMaker

Instructions de montage

Pour les réfrigérateurs-congélateurs encastrés et combinés sans givre avec lceMaker

Instrucciones de instalación

Para frigoríficos-congeladores combinados NoFrost empotrables con IceMaker

> R1400 / KEes 4240 RB1400 / EKBes 4250 7082 378-01 3005

PLEASE READ AND FOLLOW THESE INSTRUCTIONS

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

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 of product damage may occur if you do not follow instructions.

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, 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 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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Area Requirements

Verify the following:

- Floors can support refrigerator's weight plus approximately 1200 pounds (544 kg) of food weight.
- Finish kitchen floor height is level. Refrigerator must be shimmed to the floor level if the floor heights are not equal to make sure air vents are not obstructed.
- Remove anything attached to 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-byside 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.

Electrical Requirement

If codes require a separate grounding circuit to be used, have a qualified electrician install the circuit.



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.



ELECTRICAL SHOCK HAZARD

- Electrically ground refrigerator.
- Do not use an extension cord.
- Failure to follow these instructions could result in fire or electrical shock.



ELECTROCUTION HAZARD

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

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



Customer's Responsibility

A 115 Volt, 60 Hz, 15 Amp (20 Amp for side-byside installation) fused electrical supply is required. We recommend using a dedicated circuit for this appliance to prevent electrical overload. Follow the National Electrical Code and local codes and ordinances when installing the receptacle.

Blocking For Safety

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

Unit Venting

DO NOT restrict the air flow. Air flow must be provided for the unit to operate. The factory air vents provide 31 square inches (200 cm²) of air flow per unit. If you are replacing the factory air vents with an overlay, the air flow must be the same or greater than the factory air vents.



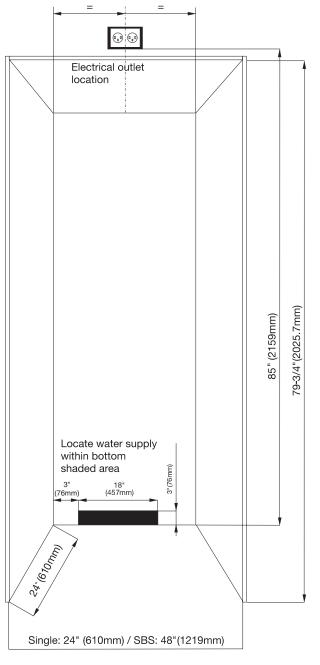


Figure 1

Cabinet Opening Dimensions -

Figure 1

Allow units to open a minimum of 90° to prevent problems removing drawers. With the door opening 90°, you may have to move drawers slightly to clear the door interior.

Refer to the minimum door clearances in the Pre-Installation Specifications chart.

Allow for a minimum 3-3/4" (95 mm) filler, for corner installations, so the door can open to 90°. If you are using raised panels, consider using a wider filler.

IMPORTANT

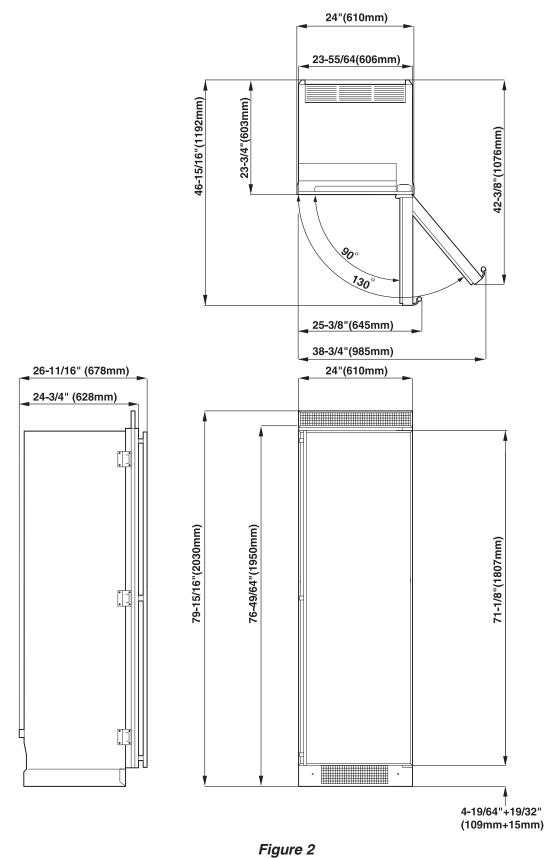
Refer to the scaled illustrations at the end of this section for specifics on door openings and filler size alternatives.





INSTALLATION GUIDELINES

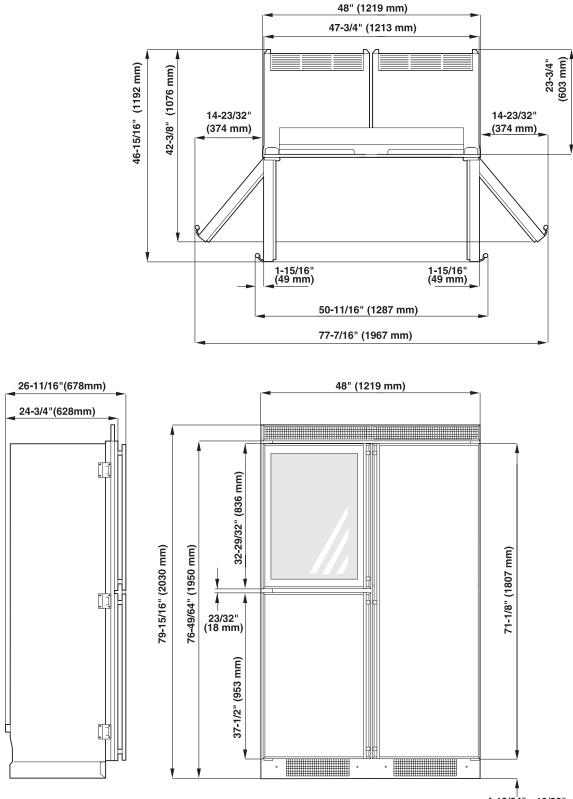
RB/R1400





PLANNING INFORMATION

Side-by-Side BF/WF1051 and RB/R1400



4-19/64" +19/32" (109 mm +15mm)

EBHERR

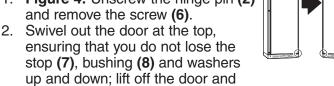
Figure 3 A delight in freshness

Reversing door hinges

The door hinges can be changed from one side to the other if required.

First empty the door bins and remove them from the door.

1. Figure 4: Unscrew the hinge pin (2) and remove the screw (6).



Moving the vegetable bins:

place it on the floor.

- Pull each bin out, grip at back and lift out.
- Place the bin on the fully extended guide rails so that it is offset towards the new handle side - the rails must be aligned with the front of the bin - and slide in.
- Moving the BioFresh drawers:
 - Pull each drawer out, grip at back and lift out,
 - Pull the drawer cover out towards you and replace in the grooves so that it is offset towards the new handle side. Slide in until the support pins snap into place.
 - Replace the drawers by placing on the fully extended guide rails - the rails must be aligned with the front of the drawer- and then slide in.

The drawer and the cover must be flush with one another vertically.

- 3. Unscrew the door fittings (14, 17) and mark them top and bottom.
- 4. Figure 5. On the door:
 - Carefully remove the cover caps (16) and place them in the holes on the other side.
 - Reinstall the top door fitting (14) on the bottom side and the bottom door fitting (17) on the topside, at the opposite side of the door.
 - Carefully remove the cover caps (18) from the opposite side of the door handle (19).
 - Unscrew the door handle (19).
 - Secure the holes with the removed cover caps (18) from the other side.
 - Turn the door handle (19) 180° and screw it on the other side.
 - Locate the door in a save place.
- 5. Unscrew the lower hinge (13).
 - Remove the two washers (9), stop (7) and bushing (8).
 - Remove the screw (6).
 - Transfer hinge pin (2) to the opposite side and fasten it.

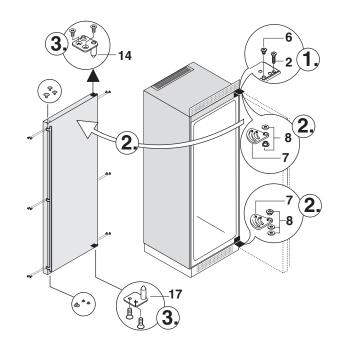


Figure 4

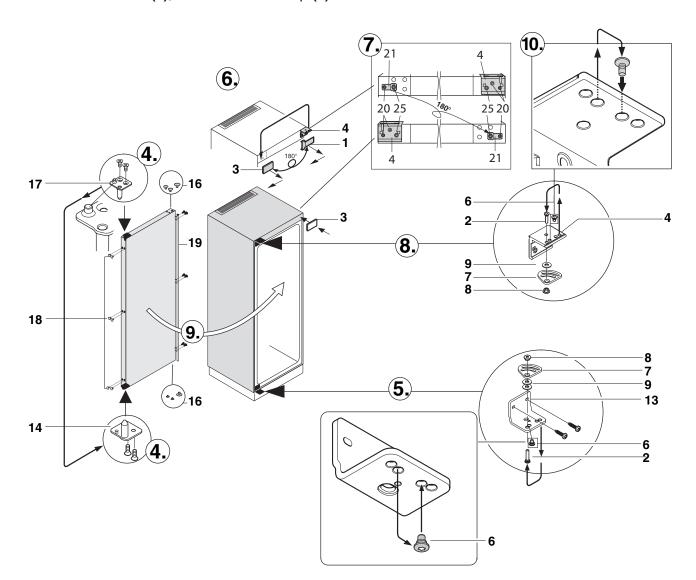
- Place the screw (6) as shown in detailed drawing and fasten it.
- Turn the stop (7) 180° and position the bushing (8), the stop (7) and the washer (9) as shown in the drawing. The flat side of the stop (7) must face forward.
- Screw on hinge (13) on the new hinge side.
- 6. Lift up the cover (3) on handle side, push outward; lift up the cover (1) on hinge side and pull off.
- 7. Unscrew mounting plate (21): first the mounting screw (20), then the inner retaining screw (25).
 - Unscrew hinge (4): first remove mounting screw (20) and then the retaining screws (25). Fit hinge (4) to opposite side: for easy assembly, fit the hinge from above and first tighten it with the upper retaining screw M5 (25), then the screw (25) and finally the mounting screw M4 (20).
 - Turn mounting plate (21) 180° and tighten screw on the new handle side: first the retaining screw (25), and then the mounting screw (20).
- 8. Transfer the hinge pin (2) and the screw (6) to the respective opposite site of the hinge (4), but do not insert them in the holes or fasten them by now.



Place the door on the lower hinge (13), fit the bushing (8), the stop (7) and the two washers (9) on the door, swivel in the door at the top and insert and secure the hinge pin (2) from above through the hinge (4) and stop (7). Note that the flat side of the stop (7) must face forward.

10. Fasten the screw (6), take care of the stop (7).

Check for proper alignment of the door. Adjust it, if necessary, using the slots at the hinge (4).





R1400 / KEes 4240 RB1400 / EKBes 4250



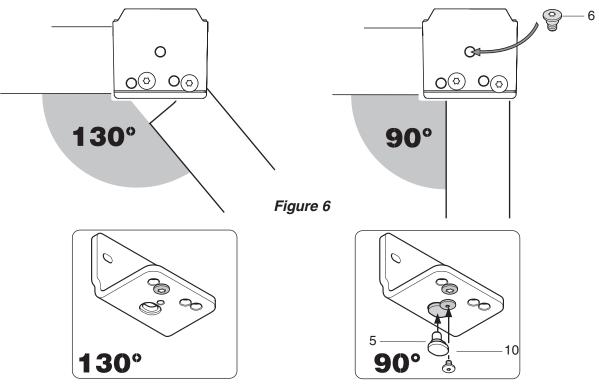
Reversing Door Hinges

Door Opening Angle - Figure 6

The appliance is delivered with a door opening angle of 130°.

If the angle is to be decreased to 90° , proceed as follows:

- Insert the attached screw (6) in the **upper** hinge as shown in *Figure 6*.
- Insert the attached eccentric (5) in the lower hinge as shown in *Figure 7* and secure it with the attached screw (10). The eccentric pin must point away from the hinge pin.







Single Unit Installation

Only install the refrigerator/freezer in a stable kitchen cabinet that has been properly aligned.

- Mount and fix the handles, depending on your model and choice.

Unpacking

Unpack the installation kit and check with the provided parts list if all parts are included. The part numbers given in the parts list are identical to the numbers in the respective figures.

For installation you will need the following tools:

Included:

- Star Key Torx® 15
- Star Key Torx® 20
- Star Key Torx® 25
- Socket Wrench 8 mm
- Open-end Wrench 10 mm

Not in package:

- Phillips (star) screwdriver
- Level
- Ruler

Figure 16: Installation with Ventilation Grille Set:

- 1. Screw the installation frame (1) to the top of the appliance with screws (2).
- 2. Place the ventilation grille **(3)** on the installation frame, align it in the center and secure at the front from underneath.
- 3. Slide brackets (4) onto the side installation frames (5) from above and below.
- 4. Using the frame **(5)**, screw the brackets onto the side wall*.
- 5. Slide the side installation frames (5) upwards until they are in contact with the underside of the ventilation grille.
- Secure the side frames with the adhesive section (7) to prevent them from sliding down. Remove the protective film and affix the adhesive sections over the upper brackets on the handle and hinge sides.
- 7. Install anti-tip brackets. Refer to "Blocking For Safety."

* Depending on model and options

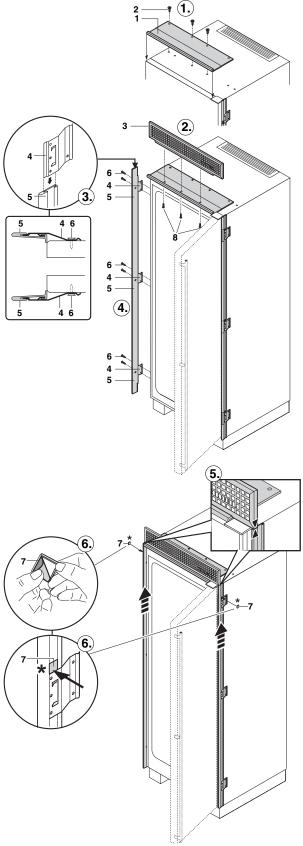


Figure 16



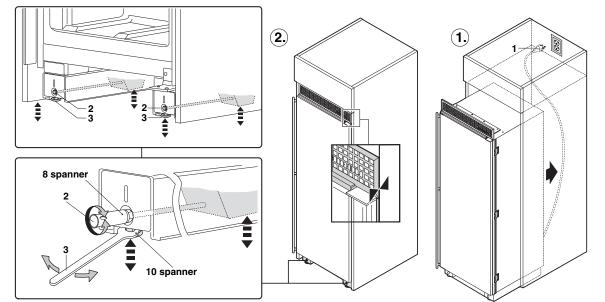


SINGLE UNIT INSTALLATION

Figure 17: Connect the appliance to the main power supply.

- 1. Carefully slide the appliance into the cabinet until the ventilation grille touches the surround-ing kitchen cabinet.
- 2. Align the appliance until it is parallel with the surrounding kitchen cabinet. Use the openend wrench 10 mm (3) to adjust the feet at the front. Turn clockwise for up and counterclockwise for down. For the rear use the adjusting bolt (2). Turn clockwise for down and counterclockwise for up.

Maximum adjustment: 19/64" (15 mm).





- Figure 18: Align the appliance at the side with the cabinet side panel and attach it with screws (1).
 Cover the screws with cover caps (2).
- 4. Fit the ventilation grille at the bottom [(3) if the door is hinged on the left, (4) if it is on the right]: Secure the ventilation grille so it touches the floor and then adjust it using the slots.

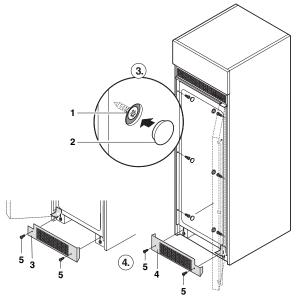


Figure 18



SINGLE UNIT INSTALLATION

The following ventilation cross-section and distances must be observed:

- There must be a ventilation space of at least 31 square inches (200 cm²) per appliance in the cabinet plinth and under the cabinet top panel.
- The depth of the ventilation duct at the rear of the cabinet must be at least 1-1/2" (38 mm).

Alternatively:

1. For built-in appliances without ventilation grilles and only with an installation frame, ventilation must take place through the ventilation duct at the rear of the cabinet.

Built-in appliances with an **installation** frame:

- Figure 19: Screw the complete installation frame (2) to the appliance.
- 2. Built-in appliances with a wooden ventilation grille: Figure 20: Cut out the wooden trim

for use as a ventilation grille using the enclosed template.

- The required ventilation cross-section must be at least 31 square inches (200 cm²) when a single appliance is installed, which corresponds to template "small." (If you install two appliances side-byside, the cross-section must be at least 62 square inches, 400 cm², which corresponds to template "doublesize;" for more information see "Side-by-Side Installation").
- Remove the attachment bracket (2) from the installation frame and screw it to the appliance (1) from underneath. Place the wooden ventilation grille (5) on the appliance, align it in the center and secure it from the rear using the attachment bracket (2).

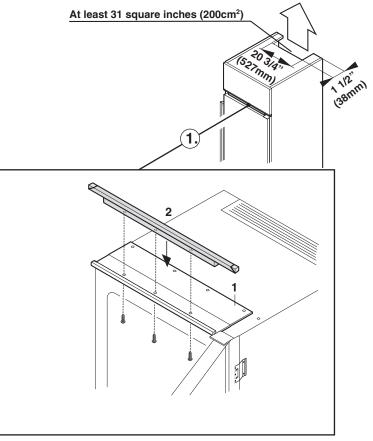
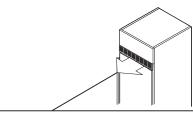


Figure 19



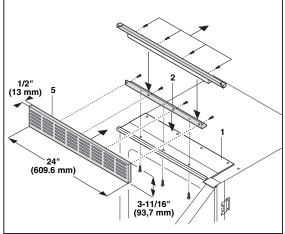


Figure 20



SINGLE UNIT INSTALLATION

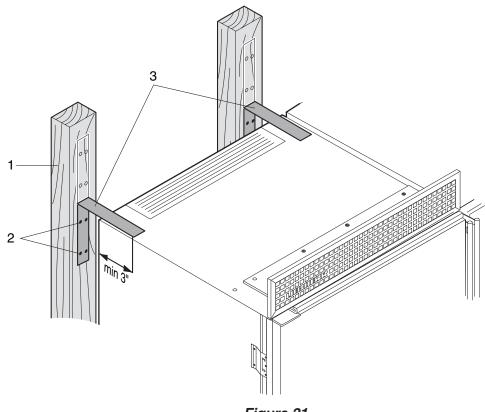
- 1. **Figure 21:** Secure the refrigerator in place so it does not tip forward when the fully stocked door is opened.
- 2. Measure the distance from the floor to the upper edge of the unit.
- Locate and mark two wall studs against the wall where the refrigerator will be located. The space between the unit top and the bottom of the brackets must not be more than 1/4" (6.4 mm).
- 4. Make sure the screws extend a minimum of 1" (25.4 mm) into each of the wall studs.
- 5. Make sure the anti-tip brackets extend at least 3" (76.2 mm) over the unit and are securely in place.

IMPORTANT

The anti-tip brackets can be installed in either direction or closer together. Always position the anti-tip brackets as wide apart as possible, but make sure they are anchored to two studs. 6. Using the front and rear levelers, raise the unit until it makes contact with the brackets. Make sure the front levelers are firmly on the floor to prevent appliance from tipping forward.

IMPORTANT

If your unit is positioned in between the wall studs, a board can be secured to the wall. Make sure the board is secured to the studs with screws that will penetrate into the studs a minimum of 1" (25.4 mm). The board should be a minimum of 1" x 6" (25.4 mm x 152.4mm) and long enough to secure both ends to the wall studs.







(Only for side-by-side-Installation, with BF/WF1051)

Water Supply

Please read the first three points of the safety instructions and warnings before connecting the appliance to the main water supply.

- The water pressure must be between 21.8-87.0 psi (1.5-6 bar).
- Use a 1/4" OD copper line to connect the water supply to the solenoid valve. Allow extra length to the water supply line to provide slack for easy removal and to prevent the line from kinking. *This is not supplied with the appliance* (*Figure 22*).
- A shut-off valve, such as the saddle valve illustration here, must be installed between the hose line and the main water supply so the water supply can be stopped if necessary.

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

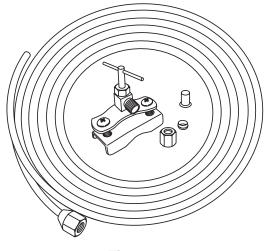


Figure 22

- 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.



Connection to the Water Supply

1. Install the shut-off valve, water filter and automatic shut-off device as required.

Note

The solenoid valve is located at the rear of your unit.

2. Place a 1/4" OD copper tubing between the shut-off valve and solenoid valve. Make sure there is approximately 30" (70 cm) of excess tubing behind the unit for easy connection.

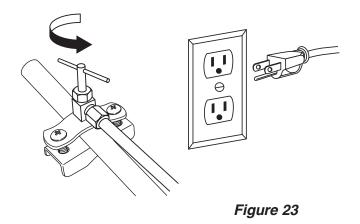
IMPORTANT

The solenoid valve has a Metric R3/4 male connection .

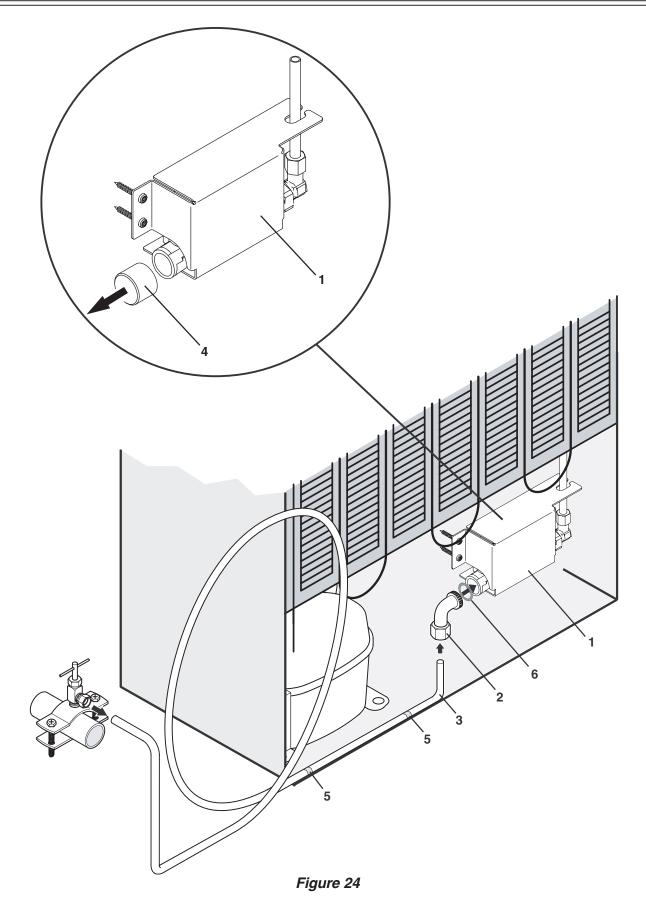
A R3/4(metric) to a 1/4" OD adapter and cable clip are supplied with the icemaker.

Figure 24: Remove the cover cap **(4)** from the solenoid valve **(1)**. Install the connection bracket **(2)** with sealing ring **(6)** on the solenoid valve **(1)**. Attach the copper tube to the connection bracket **(2)**. Secure the copper tube **(3)** to the appliance using the cable clip **(5)**.

- 3. Open the shut-off valve for the water supply and check the entire water system for leaks. Before the appliance is used for the first time a licensed plumber should bleed air from the system *(Figure 23)*.
- 4. Insert the electrical plug for the appliance into the electrical outlet *(Figure 23)*.
- 5. Move the appliance into final position in the room.









Unpacking

Unpack the side by side installation kit and check with the provided parts list if all parts are included. The part numbers given in the parts list are identical to the numbers in the respective figures.

For installation you will need the following tools:

Included:

- Star Key Torx® 15
- Star Key Torx® 20
- Star Key Torx® 25
- Socket Wrench 8 mm
- Open-end Wrench 10 mm

Not in package:

- Phillips (star) screwdriver
- Level
- Ruler

To install the BF/WF1051 and R/RB1400 appliances side-by-side, proceed as follows:

- Always place the BF/WF1051 with the hinges on the left on the left-hand side and the R/RB1400 with the hinges on the right on the right-hand side (looking from the front).

Installation with SBS Ventilation Grille Set:

- Affix the spacer (1) on the side wall of the R/RB1400 appliance (*Figure 25*) – remove the protective film.
- Push the appliances together,
 align them *parallel* to each other.
- 3. Use a level on the top to align them *to the same height*:
- 4. Use the open-end wrench 10 mm (3) to adjust the feet at the front of the roller base. Turn

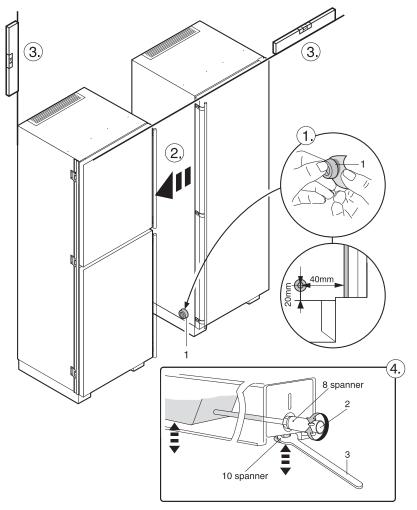


Figure 25



clockwise for up and counterclockwise for down. For the rear, turn the adjusting bolt (2) clockwise down and counterclockwise up.

- 5. **Figure 26:** Secure the installation frame **(3)** at the top to the appliances with screws **(2)**.
 - Align the appliance at the front bottom.
 - Use the predrilled holes to align the installation frame (2).
 - First mount the installation (3) frame with 4 screws (2) to one appliance, then align the other appliance with the predrilled holes to the installation frame (3) and secure it with the screws (2).
- 6. Position the attachment brackets (6) at the rear of the appliances at the top and bottom. Slide the upper attachment bracket upwards as far as possible. Secure it at the side using the screws provided (5). Do not overtighten!

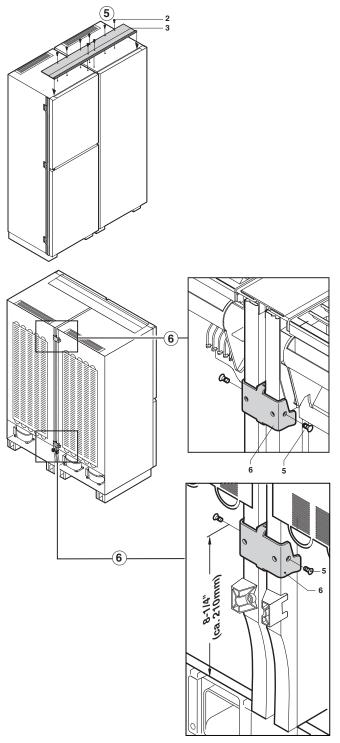


Figure 26



- Figure 27: Push the long carriage bolt M5x260 (7) through the leveling wheels as shown. Fit in a washer (8). Screw on the wing nut (9) and tighten it *manually*. Do not overtighten.
- 8. *Turn the adjustable roller base up*. Otherwise you will damage the floor when you push in the appliances.
- 9. Secure the ventilation grille (10) to the appliance with screws (11).

Push in the sealing strip (4) as shown.

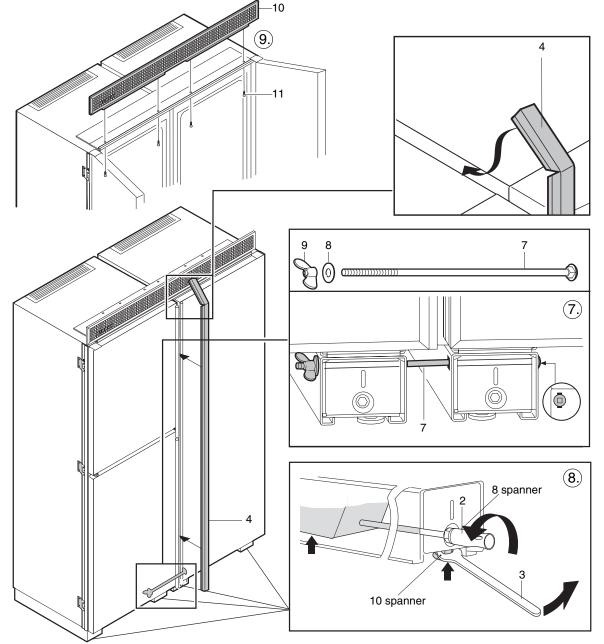


Figure 27



- 10. **Figure 28:** Slide the side installation frames **(15)** upwards until they are in contact with the underside of the ventilation grille.
- Secure the side frames with the adhesive section (17) to prevent them from sliding down. Remove the protective film and affix the adhesive sections over the upper brackets.
- 12. Figure 29: Install the anti-tip brackets for each appliance. Refer To "Blocking for Safety."

2

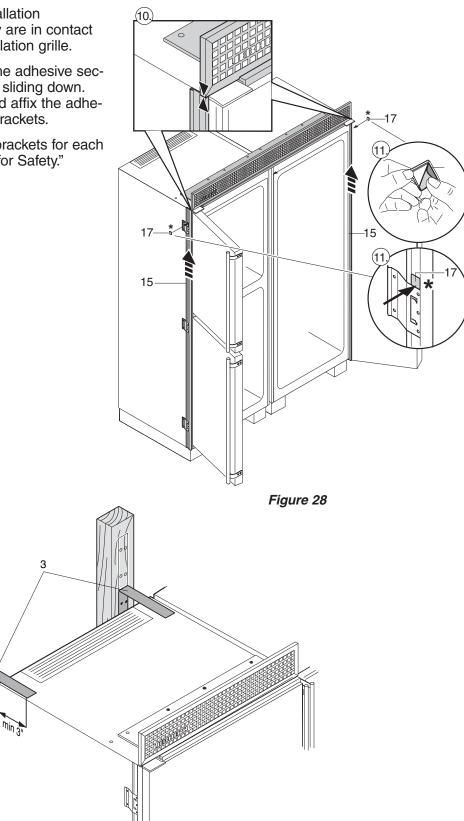


Figure 29

13. Figure 30: Connect the appliances:

- to the main power supply and
- to the water supply if the appliance is equipped with an IceMaker. See "IceMaker, Water Connection."
- 14. **Figure 31:** Carefully slide the connected appliances into the recess until the ventilation grille touches the top.
- 15. Align the appliances by using only the outer leveling wheels at the front (3) and rear (2).

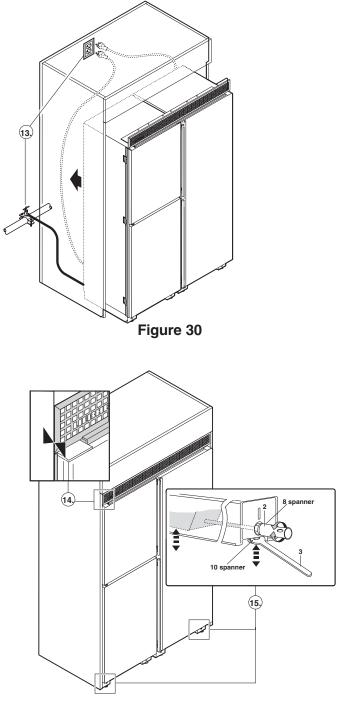
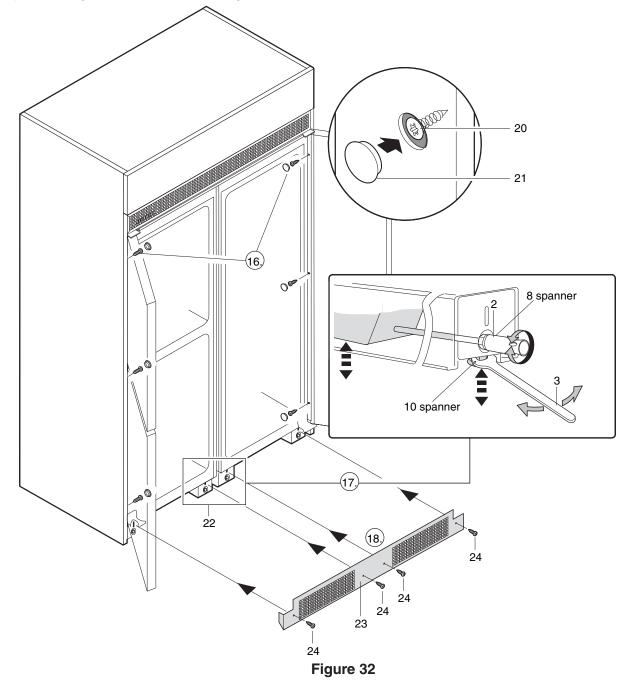


Figure 31



- 16. **Figure 32:** Attach the aligned combination to the surrounding kitchen cabinet. Secure it through the side frames using the screws **(20)** provided.
 - Cover the screws with cover caps (21).
- 17. Now adjust the center leveling wheels (22) so that they make slight contact with the floor.
- 18. Fit the lower ventilation grille **(23)**: Secure the ventilation grille so that it touches the floor and adjust it using the slots. Do not overtighten!



A delight in freshness



Alternatively:

- For built-in appliances without ventilation grilles and only with installation frame (2), ventilation must take place through the ventilation duct at the rear of the cabinet. Ensure that the ventilation cross-section is at least 31 square inches (200 cm²) per appliance. At least 62 square inches (400 cm²) for side-byside installation of two appliances. Built-in appliances with an installation frame:
 - **Figure 33:** Screw the complete installation frame (2) to the appliance through the attachment brackets.

2. Built-in appliances with a wooden ventilation grille:

Figure 34: Cut out the wooden trim for use as a ventilation grille using the attached template.

- The required ventilation cross-section must be at least 62 square inches (400 cm²) for side-by-side installation of two appliances, which corresponds to the attached template "double-size."
- Screw the installation frame (6) to the appliance.
 - Remove the attachment brackets from the installation frame (2) and screw them to the appliance from underneath.
 - Place the wooden ventilation grille (5) on the appliance, align it in the center and secure it from the rear using the attachment brackets.

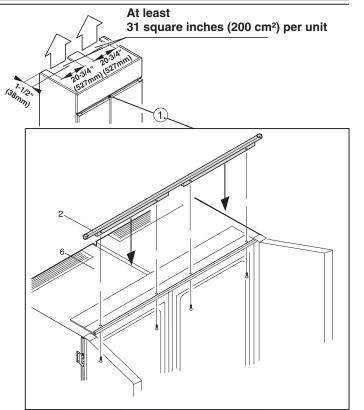
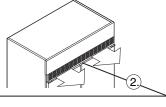


Figure 33



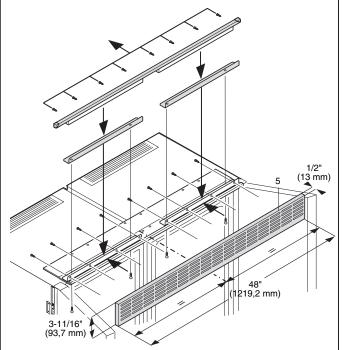


Figure 34

