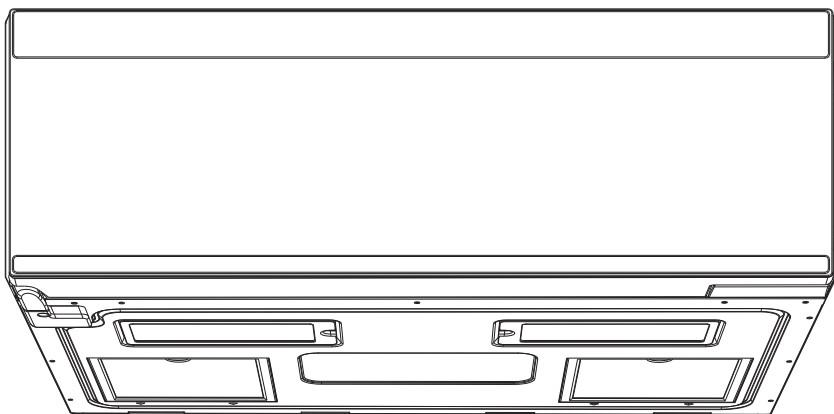




MICROWAVE OVEN

COS-3012ORLP1SS



OVER-THE-RANGE LOW PROFILE MICROWAVE HOOD COMBINATION

INSTALLATION INSTRUCTIONS

IMPORTANT: READ AND SAVE THESE INSTRUCTIONS.
FOR RESIDENTIAL USE ONLY.

INSTALLER: PLEASE LEAVE THESE INSTRUCTIONS WITH THIS UNIT FOR
THE OWNER.

OWNER: PLEASE RETAIN THESE INSTRUCTIONS FOR FUTURE
REFERENCE.

THANK YOU FOR YOUR PURCHASE

Thank you for your purchase. We know that you have many brands and products to choose from and we are honored to know that you have decided to take one of our products into your home and hope that you enjoy it.

COSMO Appliances are designed according to the strictest safety and performance standard for the North American market. We follow the most advanced manufacturing philosophy. Each appliance leaves the factory after thorough quality inspection and testing. Our distributors and our service partners are ready to answer any questions you may have regarding how to install, use and care for your products. We hope that this manual will help you learn to use the product in the safest and most effective manner.

Before using this product, please read through this manual carefully. Keep this user manual in a safe place for future reference. Please ensure that other persons using this product are familiar with these instructions as well.

If you have any questions or concerns, please contact the dealer from whom you purchased the product, or contact our Customer Support at:

1-888-784-3108

Reach us online at:

www.cosmoappliances.com

TABLE OF CONTENTS

MICROWAVE OVEN SAFETY.....	5
INSTALLATION REQUIREMENTS	6
Tools and Parts	6
Location Requirements	8
Product Dimensions	9
Installation Dimensions	10
Electrical Requirements.....	11
INSTALLATION INSTRUCTIONS.....	13
Unpack Microwave Oven	14
Prepare Location	16
Locate Wall Stud(s)	16
Determine Wall Mounting Plate Location	17
Drill Wall Mounting Plate Screw Holes.....	20
Install Microwave Oven	22
For Recirculating (Ductless, Non-Vented) Only	22
Attach Wall Mounting Plate	22
Prepare Top Cabinet	24
Adjust Microwave Oven Blower	26
Install the Microwave Oven.....	26
Replace Charcoal Filters.....	29
For Top Venting (Ducted, Roof/Vertical Venting) Only	30
Attach Wall Mounting Plate.....	30
Prepare Top Cabinet	31
Adjust Microwave Oven Blower	34
Install the Microwave Oven.....	36
Connect Ductwork.....	39

For Rear Venting (Ducted, Wall/Horizontal Venting) Only 40

 Attach Wall Mounting Plate..... 40

 Prepare Top Cabinet 42

 Adjust Microwave Oven Blower 44

 Install the Microwave Oven..... 47

Complete Installation..... 50

VENTING DESIGN SPECIFICATIONS..... 52

MICROWAVE OVEN SAFETY

READ ALL INSTRUCTIONS BEFORE USING THE APPLIANCE

Your safety and the safety of others are very important.

We have provided many important safety messages in this manual and on your appliance. Always read and obey all safety messages.



This is the safety alert symbol.

This symbol alerts you to potential hazards that can kill or hurt you and others.

All safety messages will follow the safety alert symbol and either the word "WARNING" or "CAUTION." These words mean:



You can be killed or seriously injured if you don't follow instructions.



A potentially hazardous situation which, if not avoided, could result in minor or moderate injury.

All safety messages will tell you what the potential hazard is, tell you how to reduce the chance of injury, and tell you what can happen if the instructions are not followed.

California Proposition 65 Warning



Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

This device complies with Part 18 of the FCC Rules.

INSTALLATION REQUIREMENTS

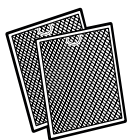
TOOLS AND PARTS

Gather the required tools and parts before starting installation. Read and follow the instructions provided with any tools listed here.

Tools Needed

- Measuring tape
- Pencil
- Masking tape or thumbtacks
- Scissors
- #1 Phillips screwdriver
- Drill
- Drill bits
- Hole saw
- Diagonal wire cutting pliers
- Stud finder
- Socket wrench
- Hole drill bit for cabinet
- Keyhole saw
- Caulking gun and weatherproof caulking compound
- Duct tape

Parts Supplied



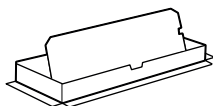
Grease filters (2)



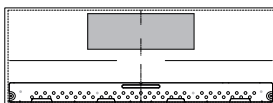
Glass turntable (1)



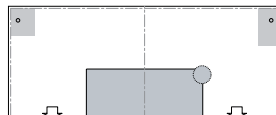
Turntable rollers (1)



Exhaust adapter (1)



Rear wall mounting template
(1)



Top cabinet mounting template
(1)

Hardware Supplied



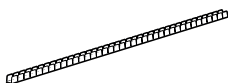
$\frac{1}{4}$ " x 2" wood screws (2)



$\frac{3}{16}$ " x 3" toggle bolts with wing nuts (2)



$\frac{1}{4}$ "-28 x $\frac{3}{4}$ " self-aligning screws (3)



Nylon grommet (1)
-for metal cabinets-

NOTE:

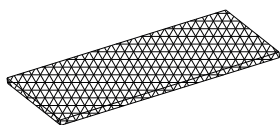
- Some extra parts may be included.

Materials Needed

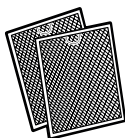
- Standard fittings for wall or roof venting. See the "Venting Design Specifications" section.

Optional Parts

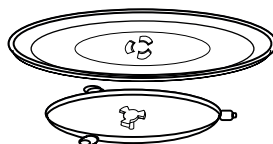
To purchase these or any other accessories or replacement parts, please visit www.cosmoappliances.com or reference the contact information at the end of this manual.



Replacement charcoal filters (2)



Replacement grease filters (2)



Replacement glass turntable and rollers (1 set)

LOCATION REQUIREMENTS

IMPORTANT: Check the opening where the microwave oven will be installed. The location must provide:

- The unit must be mounted to both a top cabinet and a wall. It cannot be installed in cabinet arrangements such as an island or a peninsula.
- Minimum installation dimensions. See the "Installation Dimensions" illustration.
- Minimum one 2" x 4" (50.8 x 101.6 mm) wood wall stud and minimum 3/8" (10 mm) thickness drywall or plaster/lath within cabinet opening.
- Support for weight of 150 lbs (68 kg) which includes microwave oven and items placed inside the microwave oven and upper cabinet.
- Grounded electrical outlet inside upper cabinet. See the "Electrical Requirements" section.

NOTES:

- If installing the microwave oven near a left sidewall, make sure there is at least 6" (15.2 cm) of clearance between the wall and the microwave oven so that the door can open fully.
- Some cabinet and building materials are not designed to withstand the heat produced by the microwave oven for cooking. Check with your builder or cabinet supplier to make sure that the materials used will not discolor, delaminate, or sustain other damages.

SPECIAL REQUIREMENTS

For Wall Venting Installation Only:

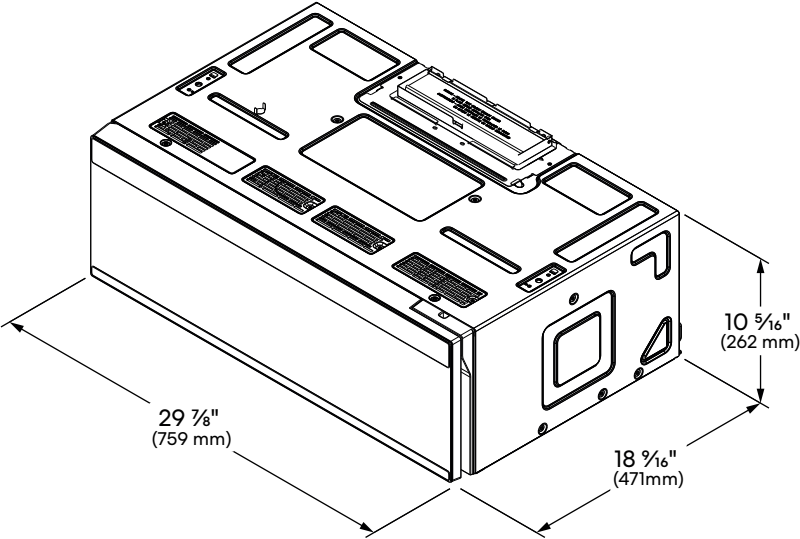
- Cutout must be free of any obstructions so that the vent fits properly and the damper blade opens freely and fully.

For Roof Venting Installation Only:

- If you are using a rectangular-to-round transition piece, the 3" (7.6 cm) clearance needs to exist above the microwave oven so that the damper blade can open freely and fully.

PRODUCT DIMENSIONS

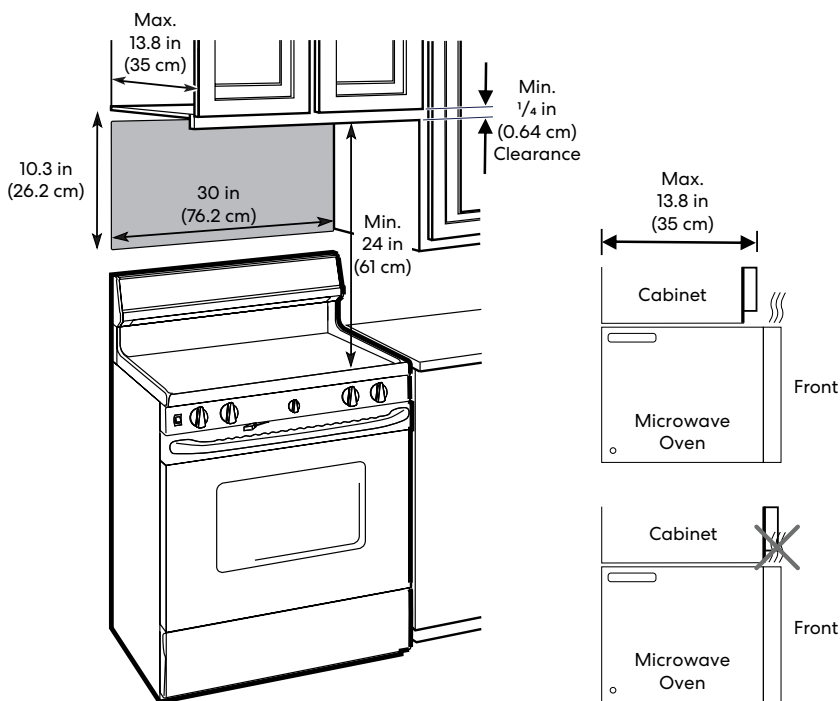
COS-3012ORLP1SS



INSTALLATION DIMENSIONS

NOTE:

- The grounded 3 prong outlet must be inside the upper cabinet. See the "Electrical Requirements" section.



NOTE:

- 24" (61 cm) top cabinet clearance is typical for 60" (152.4 cm) installation height from the floor. Exact dimensions may vary depending on type of range/cooktop below.
- To ensure good performance, do not obstruct top vent airflow. If top cabinets are deeper than 13.8" (35 cm), the unit must be spaced out from the wall using adequate materials supporting 150 lbs.

ELECTRICAL REQUIREMENTS

WARNING



ELECTRIC SHOCK HAZARD

- Plug into a grounded 3 prong outlet.
- Do not remove ground prong.
- Do not use an adapter.
- Do not use an extension cord.
- Failure to following these instructions can result in death, fire, or electrical shock.

Observe all governing codes and ordinances.

Product rating:

- A 120 V AC, 60 Hz, 15 A, 1550 W.

Required:

- A 120 V, 60 Hz, AC only, 15 or 20 A electrical supply with a fuse or circuit breaker.

Recommended:

- A time-delay fuse or time-delay circuit breaker.
- A separate circuit serving only this microwave oven.

This product must be connected to a separate and dedicated supply circuit of the proper voltage and frequency. Wire size must conform to the requirements of the National Electrical Code or the prevailing local code for this kilowatt rating.

The power supply cord and plug should be brought to a separate and dedicated 15- to 20- ampere branch circuit single grounded outlet. The outlet box should be located in the cabinet above the microwave oven.

The outlet box and supply circuit should be installed by a qualified electrician and conform to the National Electrical Code or the prevailing local code.

The installer must perform a ground continuity check on the power outlet box before beginning the installation to ensure that the outlet box is properly grounded. A qualified electrician should be employed to correct any deficiencies.

GROUNDING INSTRUCTIONS

For all cord connected appliances:

- The microwave oven must be grounded. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current.
- The microwave oven is equipped with a cord having a grounding wire with a grounding plug. The plug must be plugged into an outlet that is properly installed and grounded.
- Where a standard two-prong wall receptacle is encountered, have it replaced with a properly grounded three-prong wall receptacle by a qualified electrician.

WARNING:

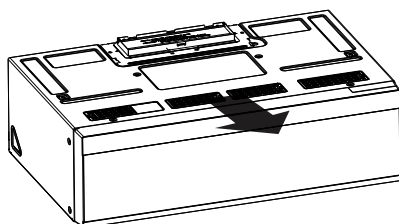
- Do not, under any circumstances, cut, deform, or remove any of the prongs from the power cord.
- Improper use of the grounding plug can result in a risk of electric shock. Consult a qualified electrician or serviceman if the grounding instructions are not completely understood, or if doubt exists as to whether the microwave oven is properly grounded.
- Do not use an extension cord. If the power supply cord is too short, have a qualified electrician or serviceman install an outlet near the microwave oven.

INSTALLATION INSTRUCTIONS

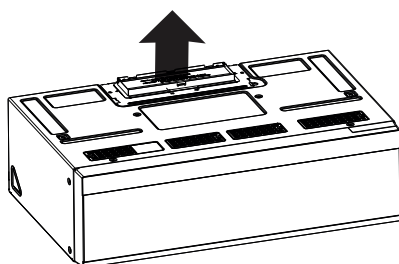
IMPORTANT: This appliance shall be installed only by authorized persons and in accordance with the manufacturer's installation instructions, local gas fitting regulations, municipal building codes, electrical wiring regulations, local water supply regulations.

This microwave oven is designed for adaptation to the following types of ventilation:

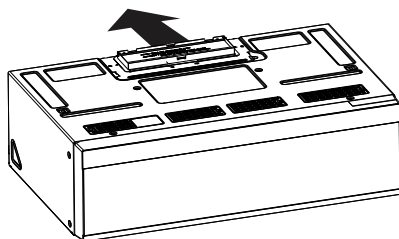
- **Recirculating**
(Ductless, Non-Vented)



- **Top Venting**
(Ducted, Roof/Vertical Venting)



- **Rear Venting**
(Ducted, Wall/Horizontal Venting)



Please follow the instructions provided for your type of ventilation.

UNPACK MICROWAVE OVEN



WARNING EXCESSIVE WEIGHT HAZARD

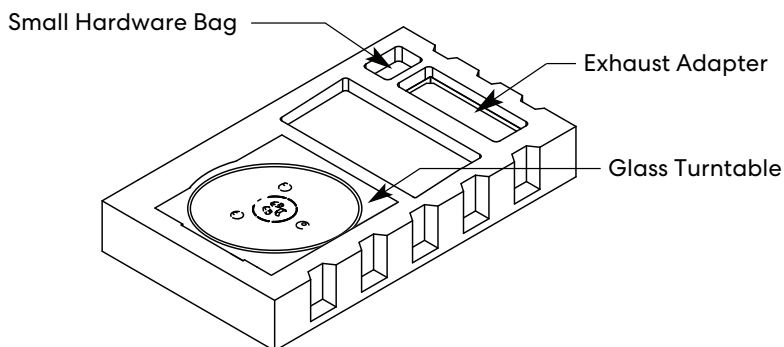
- Use two or more people to move and install microwave oven.
- Failure to do so can result in back or other injury.

IMPORTANT: To avoid damage to the microwave oven, do not grip or use the door or door handle while the microwave oven is being handled.

1. Open the top of the carton, and remove all the parts stored in the top Styrofoam.

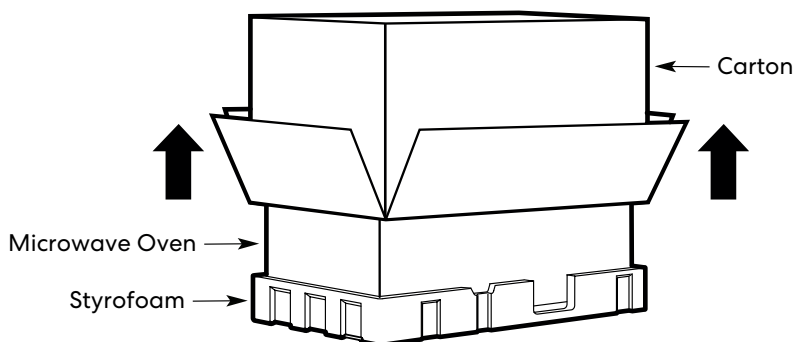
NOTE:

- Keep the plastic protective plug cover on until hanging the unit.

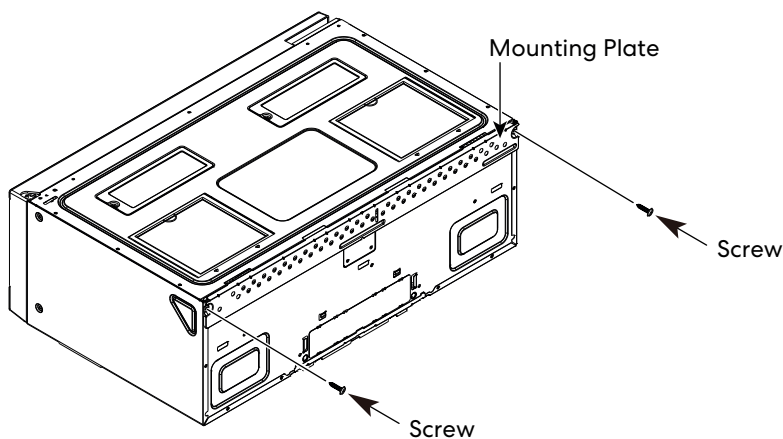


2. With the top Styrofoam still in place, fully fold back all carton flaps and carefully roll the microwave oven and carton over onto the top side.

- 3.** Lift up and remove the carton from the microwave oven.



- 4.** Remove the bottom Styrofoam that is now on the top of the microwave oven, then remove or cut open the protective plastic bag.
- 5.** Detach the rear wall mounting plate by removing the screws from each end of the plate, then reinstall the screws back.



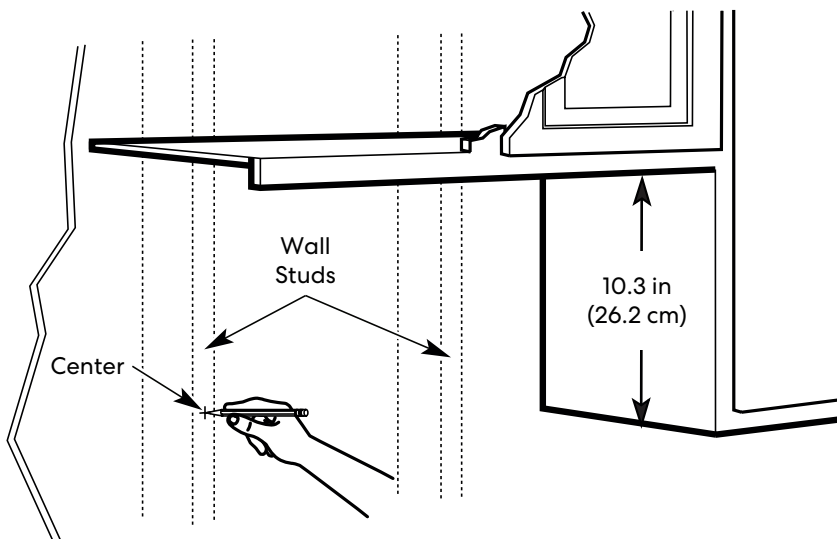
- 6.** Carefully roll the microwave oven right-side up, then remove the top Styrofoam.
- 7.** Open the microwave door and remove all the contents stored inside the microwave oven.

PREPARE LOCATION

LOCATE THE WALL STUDS

IMPORTANT:

- The microwave oven must be mounted on at least one wall stud.
- If no wall studs exist within the 30" installation space in the cabinet opening, do not install the microwave oven.



1. Using a stud finder, locate the edges of the wall stud(s) within the 30" installation space.

NOTE:

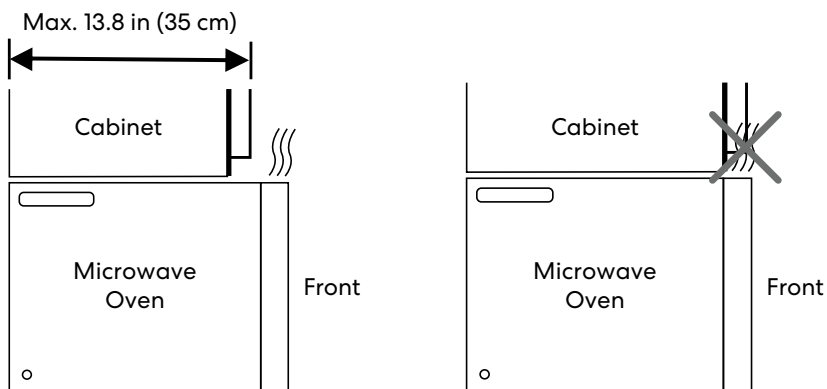
- The center of any adjacent wall studs should be 16" (40.6 cm) or 24" (61 cm) from another.

2. Mark the center of each stud near the bottom of the installation space and draw a plumb line down each stud center.

DETERMINE WALL MOUNTING PLATE LOCATION

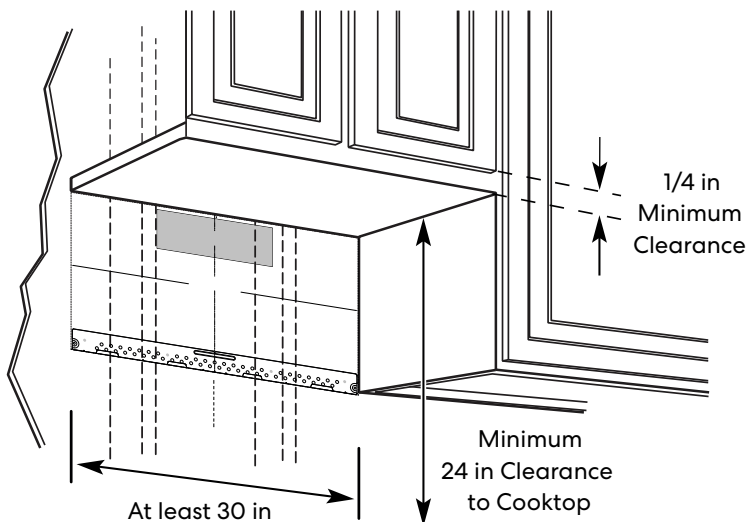
IMPORTANT:

- If top cabinets are deeper than 13.8" (35 cm), the unit must be spaced out from the wall using adequate materials supporting 150 lbs to allow top vent airflow in the front. These materials are not provided.



- Before positioning the Rear Wall Mounting Template, use a level to make sure the cabinet bottom is level.

For Cabinet with Flat Bottom:

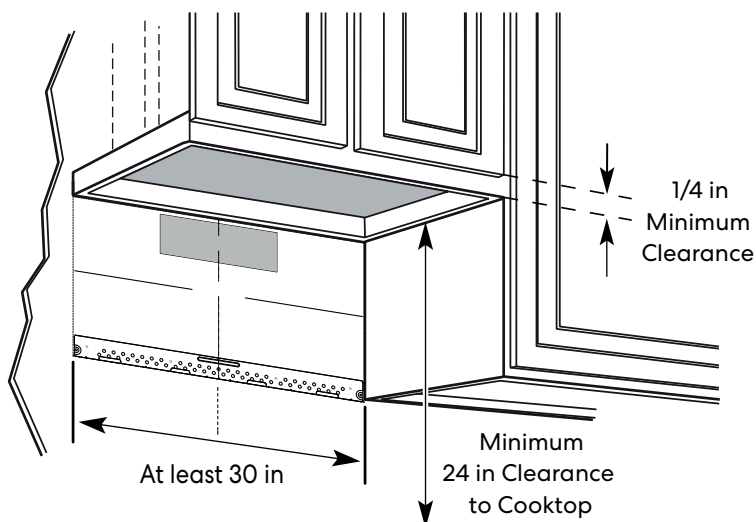


1. Draw a vertical line on the wall at the center of the 30" installation space.
2. Position and tape the Rear Wall Mounting Template on the wall with the vertical center line on the template and the vertical center line on the wall aligned and the template in contact and level with the bottom of the cabinet.

NOTE:

- Make sure the plumb line of the each stud center is visible just below the template before taping the template to the wall.

For Cabinet with Recessed Bottom:



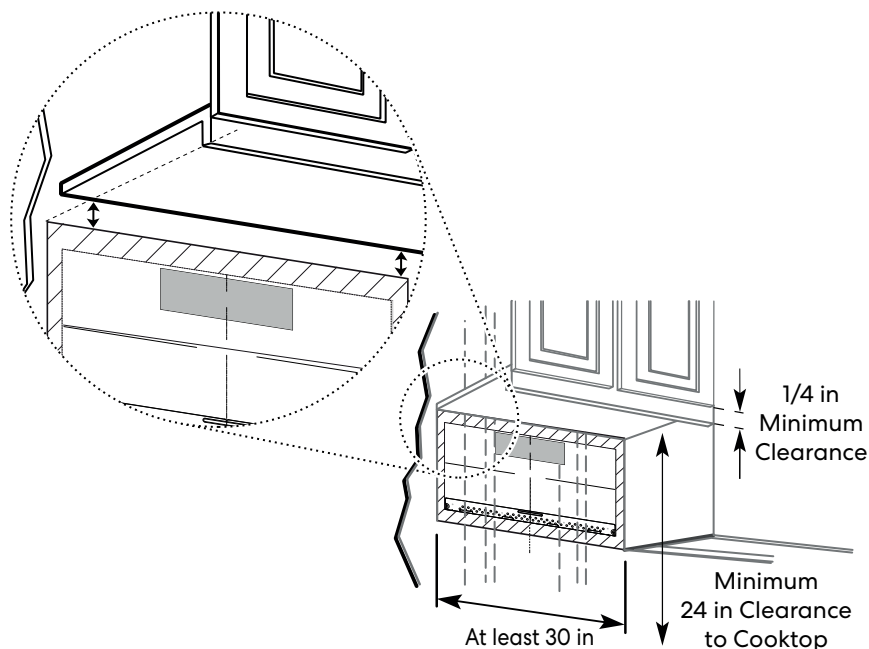
1. Draw a vertical line on the wall at the center of the 30" installation space.
2. Position and tape the Rear Wall Mounting Template on the wall with the vertical center line on the template and the vertical center line on the wall aligned and the template in contact and level with the bottom of the cabinet.

NOTE:

- Make sure the plumb line of the each stud center is visible below the template before taping the template to the wall.

For Cabinet with Front Overhang or Decorative Trim:

Some cabinets may have decorative trim that interferes with the microwave oven installation. Remove the decorative trim to level and install the microwave oven properly.

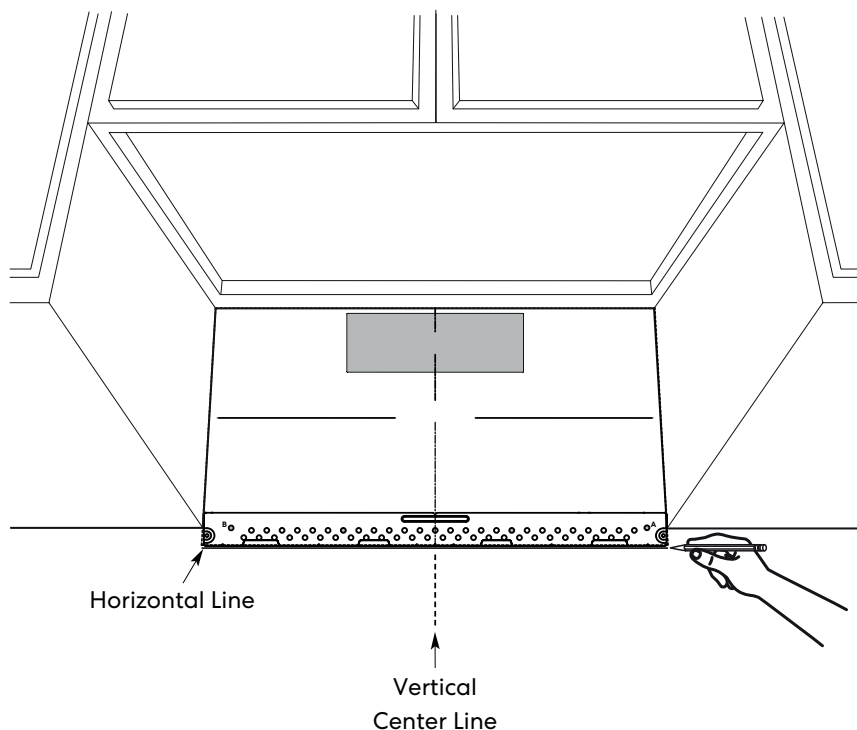


1. Draw a vertical line on the wall at the center of the 30" installation space.
2. Measure the inside depth of the front overhang.
3. Draw a horizontal line on the back wall at equal distance as the inside depth of the front overhang below the cabinet bottom.
4. Position and tape the Rear Wall Mounting Template on the wall with the vertical center line on the template and the vertical center line on the wall aligned and the top edge of the template in contact and level with the horizontal line drawn.

NOTE:

- Make sure the plumb line of the each stud center is visible below the template before taping the template to the wall.

DRILL WALL MOUNTING PLATE SCREW HOLES

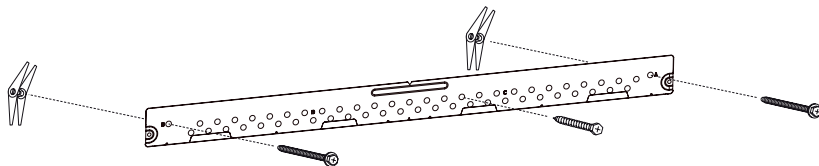


1. Draw a horizontal line on the wall at the bottom edge of Rear Wall Mounting Template.
2. Using the plumb line of each stud center drawn earlier, find and mark the hole closest to each stud center at the bottom of the template.

NOTE:

- At least one wood screw must be mounted firmly in a stud to support the weight of the microwave oven.

3. If only one wall stud hole exists within the template, mark 2 additional toggle bolt holes that are evenly spaced from the center line of the template. For examples, mark holes labelled A and B on the template for toggle bolts if none of them is in a stud.



4. Drill a 3/16" screw hole for holes marked in a wood stud, and drill a 5/8" screw hole for toggle bolt holes marked outside a wood stud.

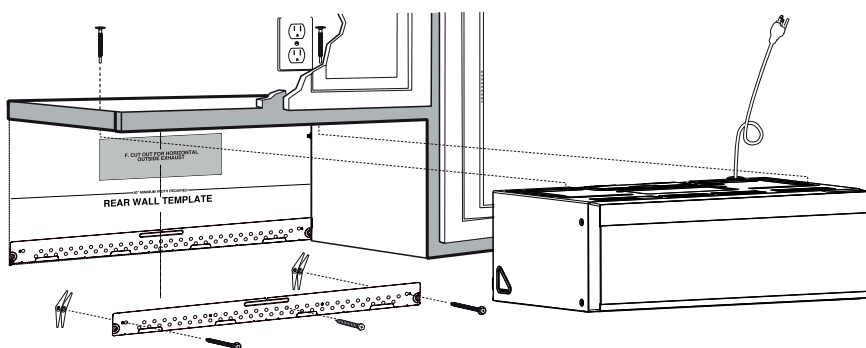
NOTE:

- Do not mount the wall mounting plate at this time.

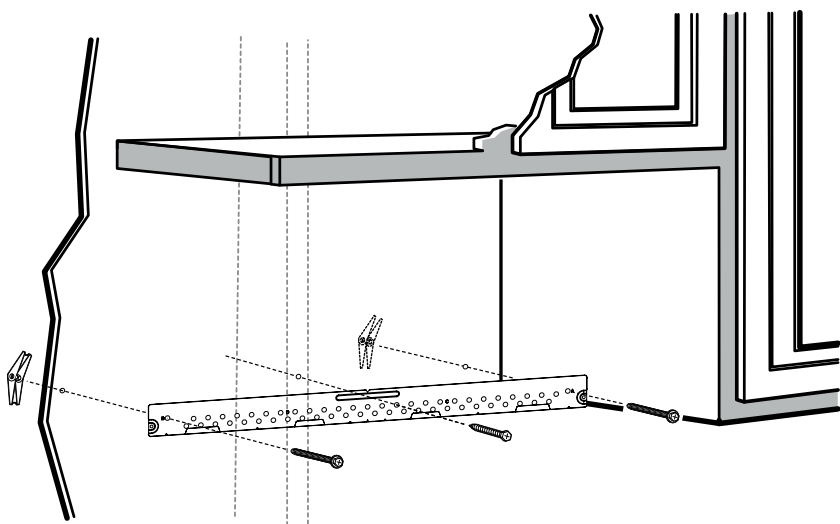
INSTALL MICROWAVE OVEN

⚠ WARNING EXCESSIVE WEIGHT HAZARD

- Use two or more people to move and install microwave oven.
- Failure to do so can result in back or other injury.



FOR RECIRCULATING (DUCTLESS, NON-VENTED) ONLY **ATTACH WALL MOUNTING PLATE – RECIRCULATING**



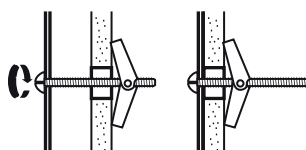
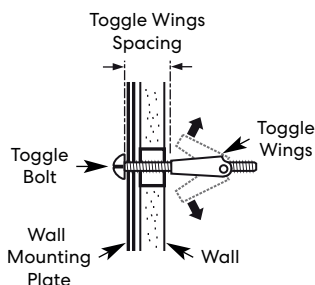
NOTE:

- If top cabinets are deeper than 13.8" (35 cm), the unit must be spaced out from the wall using adequate materials supporting 150 lbs to allow top vent airflow in the front. These materials are not provided.

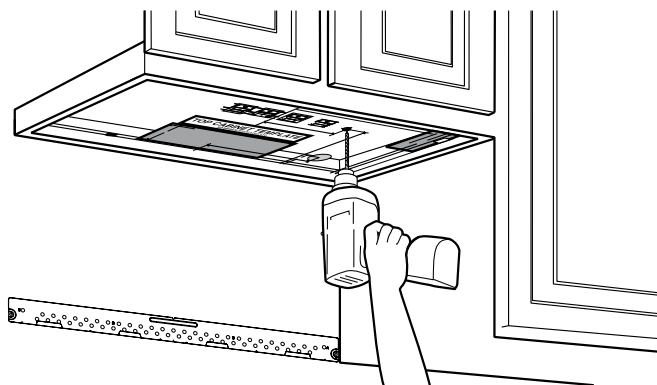
1. Review the wood stud screw holes and, if any, toggle bolt holes on the wall, and remove the rear wall mounting template.
2. Attach the wall mounting plate to the wall with at least one wood screw on a wall stud, and toggle bolts on drywall without wall stud if applicable.

To Use Toggle Bolts

- a. Remove the toggle wings from the bolts.
- b. Insert the bolts into the wall mounting plate through the holes designated to go into drywall.
- c. Reattach the toggle wings to $\frac{3}{4}$ " (19 mm) onto each bolt.
- d. Place the wall mounting plate against the wall and insert the toggle wings through the holes into the wall.
- e. Carefully pull the wall mounting plate away from the wall and finger tighten the bolts to make sure the toggle wings have opened against the wall.
- f. Tighten the bolts.

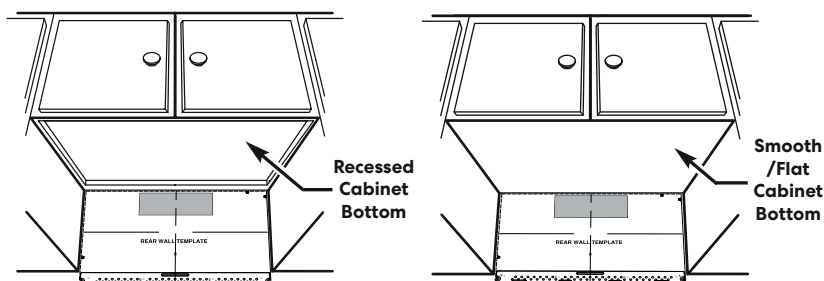


PREPARE TOP CABINET – RECIRCULATING



IMPORTANT: Read the instructions on the Top Cabinet Mounting Template.

1. Determine the type of the cabinet bottom. If it is recessed, cut the edges of the Top Cabinet Mounting Template to fit in the recessed cabinet bottom accordingly.



2. Position and tape the Top Cabinet Mounting Template underneath the top cabinet.

NOTE:

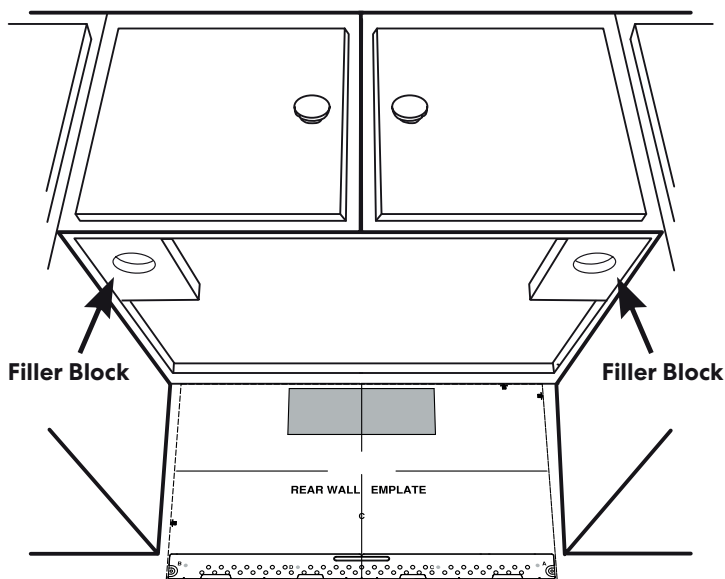
- On some cabinets a small bracket or glue block is used between the overhang and the underside of the cabinet bottom. Cut the Top Cabinet Mounting Template to fit around the bracket or glue block so that the template will lie flat against the cabinet bottom.
- Adjust the Top Cabinet Mounting Template accordingly if the microwave oven is being spaced out from the wall due to oversized cabinet depth.

3. Follow the instructions on the Top Cabinet Mounting Template to drill the $\frac{3}{8}$ " diameter screw holes labelled A and B.

CAUTION:

- Wear safety goggles when drilling holes in the cabinet bottom.

4. Follow the instructions on the Top Cabinet Mounting Template to cut out the 2" diameter power cord hole labelled D. If cabinet bottom material is metal, use the nylon grommet provided to surround the cutout opening and protect the power cord from sharp cutout edges.
5. Remove the Top Cabinet Mounting Template.
6. For recessed cabinets:
 - Make 2 filler blocks out of scrap wood the size of the shaded rectangles labelled F and G. The filler blocks must have a thickness equal to the depth of the cabinet recess.
 - Drill a $\frac{1}{2}$ " diameter hole in the filler blocks to line up with screw holes A and B.
 - The filler blocks should be placed in later steps so that the hole in each block lines up with the corresponding screw hole in the cabinet.

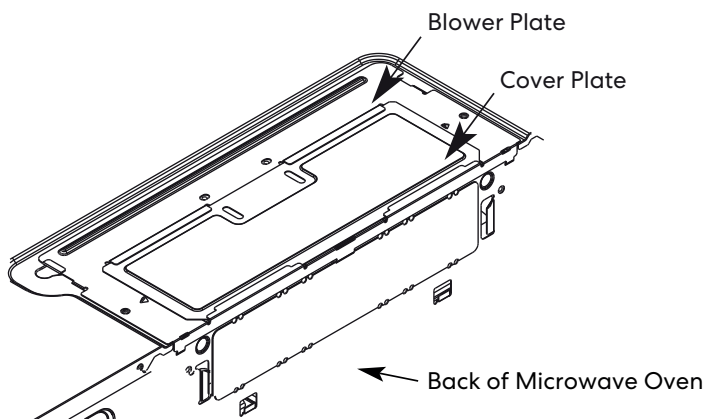


ADJUST MICROWAVE OVEN BLOWER – RECIRCULATING

This microwave oven is factory set and shipped for recirculating ventilation. No adjustment is required for new installation.

NOTE:

- If converting from the top or rear ventilation, refer to the corresponding blower adjustment instructions to reverse the blower adjustment accordingly. The exhaust adapter is not required for recirculating ventilation.

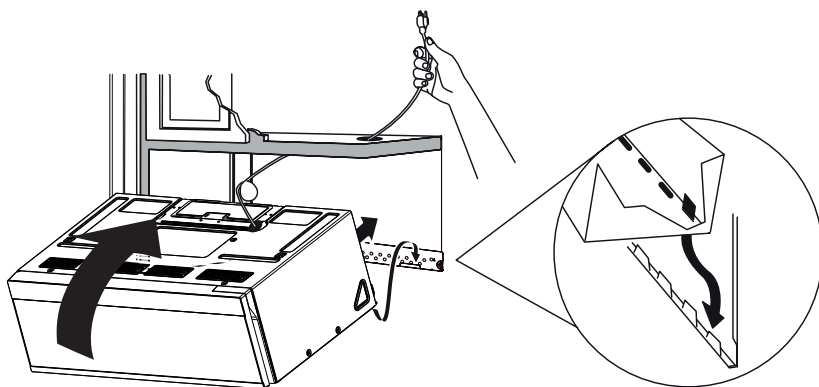


INSTALL THE MICROWAVE OVEN – RECIRCULATING

1. Make sure the microwave oven door is closed.
2. Using 2 or more people, lift and tilt forward the microwave oven and hang it on support tabs at the bottom of the wall mounting plate.

NOTE:

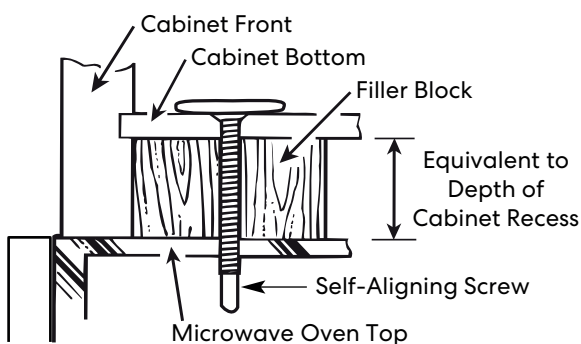
- To avoid damage to the microwave oven, do not grip or use the door or door handle while the microwave oven is being handled.



3. With front of microwave oven still tilted, thread power supply cord through the power supply cord hole in the bottom of the upper cabinet.
4. For recessed cabinets, insert and place the filler blocks on the microwave oven below the cabinet screw holes.

NOTE:

- If filler blocks are not used, case damage may occur from overtightening screws.

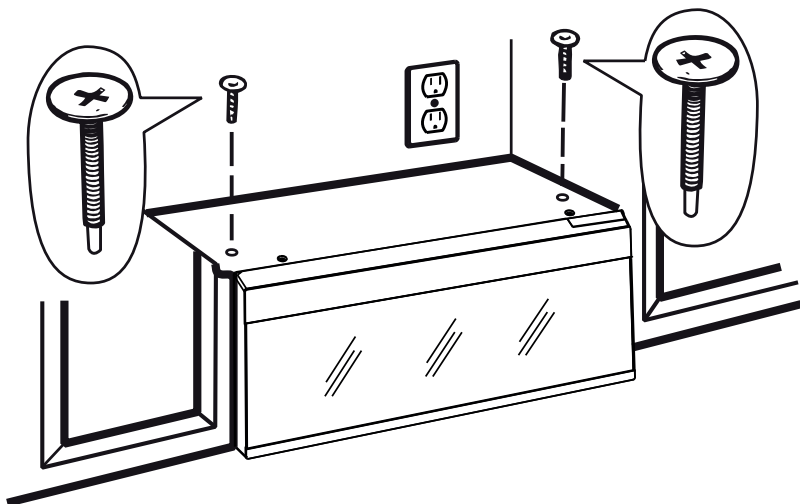


6. Push microwave oven against mounting plate and hold in place.

NOTE:

- If adjustment is required, rotate microwave oven downward. Using 2 or more people, lift microwave oven off of mounting plate and set aside on a covered surface. Loosen wall mounting plate screws, adjust wall mounting plate, and re-tighten screws. Then repeat the steps above.

7. With the microwave oven centered, and with at least one person holding it in place, insert 2 self-aligning screws through upper cabinet into microwave oven. Turn screws until there is no gap between upper cabinet and microwave oven.



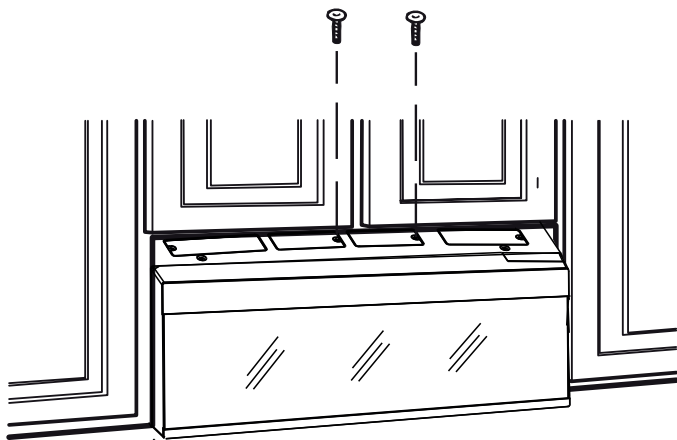
REPLACE CHARCOAL FILTERS – RECIRCULATING (FOR SOME MODELS)

This microwave oven is factory set and shipped with new charcoal filters installed for recirculating ventilation. Replacement is not necessary for new installation.

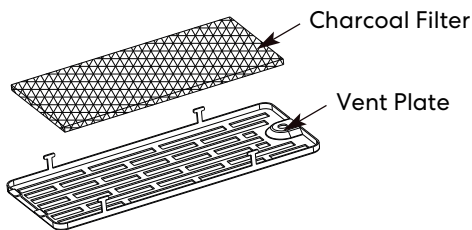
For models without the recirculation filter access door, follow the steps below to replace or install the charcoal filters.

To Replace Charcoal Filters:

1. Make sure microwave oven is unplugged or power is disconnected.
2. Remove the two vent plate screws located on top of the microwave oven, and remove the vent plates.



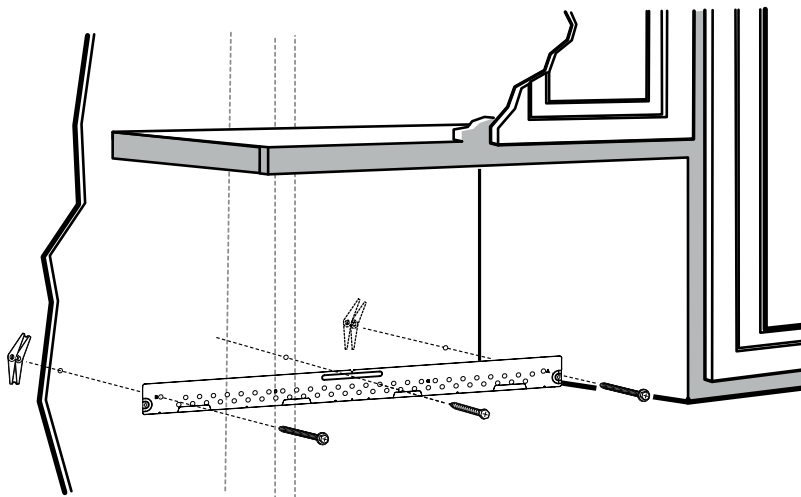
3. Replace the charcoal filter from the vent plates.



4. Replace the vent plates on the microwave oven and tighten the screws.

FOR TOP VENTING (DUCTED, ROOF/VERTICAL VENTING) ONLY

ATTACH WALL MOUNTING PLATE – TOP VENTING



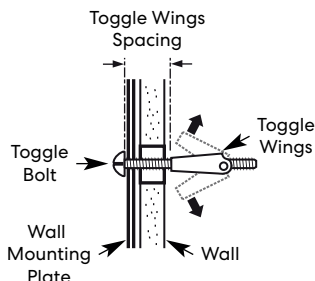
NOTE:

- If top cabinets are deeper than 13.8" (35 cm), the unit must be spaced out from the wall using adequate materials supporting 150 lbs to allow top vent airflow in the front. These materials are not provided.

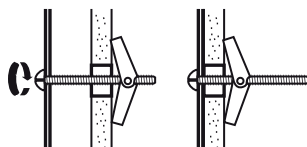
1. Review the wood stud screw holes and, if any, toggle bolt holes on the wall, and remove the rear wall mounting template.
2. Attach the wall mounting plate to the wall with at least one wood screw on a wall stud, and toggle bolts on drywall without wall stud if applicable.

To Use Toggle Bolts

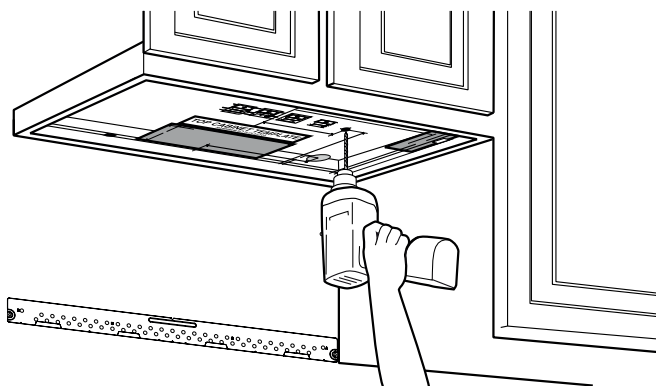
- a. Remove the toggle wings from the bolts.
- b. Insert the bolts into the wall mounting plate through the holes designated to go into drywall.
- c. Reattach the toggle wings to $\frac{3}{4}$ " (19 mm) onto each bolt.



- d. Place the wall mounting plate against the wall and insert the toggle wings through the holes into the wall.
- e. Carefully pull the wall mounting plate away from the wall and finger tighten the bolts to make sure the toggle wings have opened against the wall.
- f. Tighten the bolts.

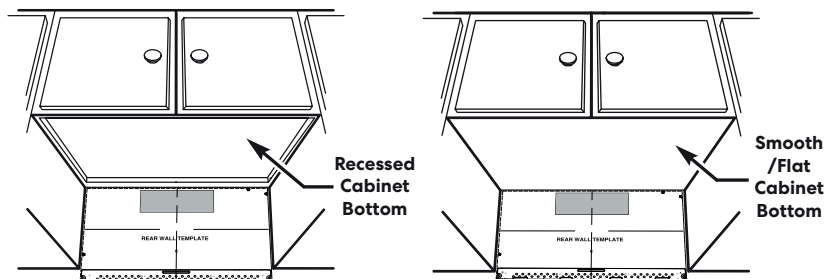


PREPARE TOP CABINET – TOP VENTING



IMPORTANT: Read the instructions on the Top Cabinet Mounting Template.

1. Determine the type of the cabinet bottom. If it is recessed, cut the edges of the Top Cabinet Mounting Template to fit in the recessed cabinet bottom accordingly.



2. Position and tape the Top Cabinet Mounting Template underneath the top cabinet.

NOTE:

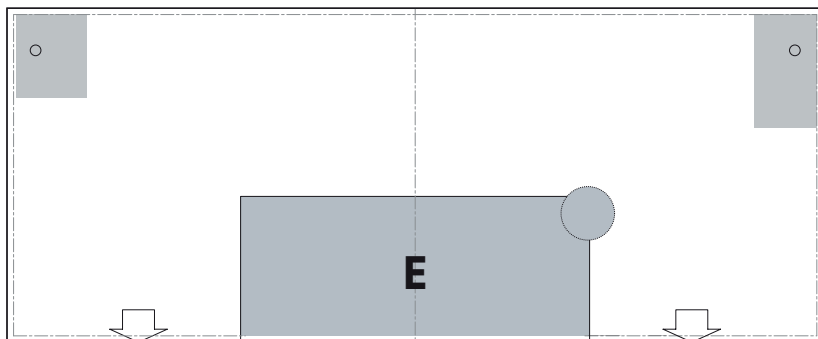
- On some cabinets a small bracket or glue block is used between the overhang and the underside of the cabinet bottom. Cut the Top Cabinet Mounting Template to fit around the bracket or glue block so that the template will lie flat against the cabinet bottom.
- Adjust the Top Cabinet Mounting Template accordingly if the microwave oven is being spaced out from the wall due to oversized cabinet depth.

3. Follow the instructions on the Top Cabinet Mounting Template to drill the $\frac{3}{8}$ " diameter screw holes labelled A and B.

CAUTION:

- Wear safety goggles when drilling holes in the cabinet bottom.

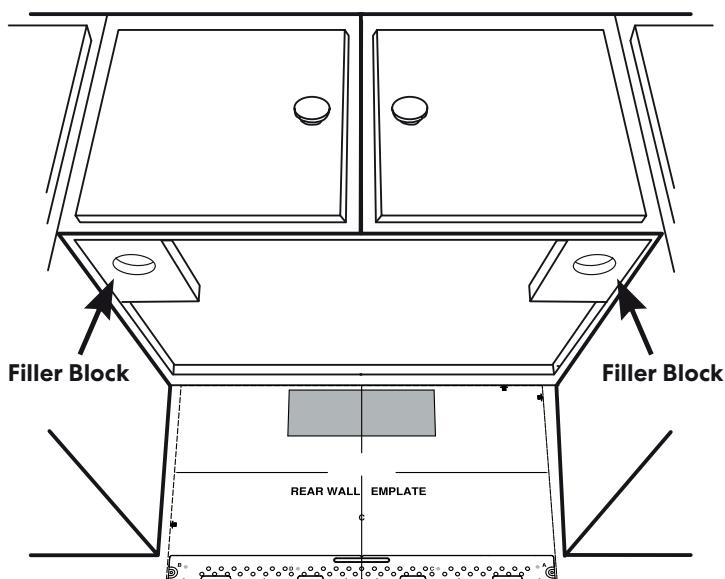
4. Follow the instructions on the Top Cabinet Mounting Template to cut out the 2" diameter power cord hole labelled D. If cabinet bottom material is metal, use the nylon grommet provided to surround the cutout opening and protect the power cord from sharp cutout edges.
5. Cut out through the cabinet the rectangular top venting area labelled E on the Top Cabinet Mounting Template.



6. Remove the Top Cabinet Mounting Template.

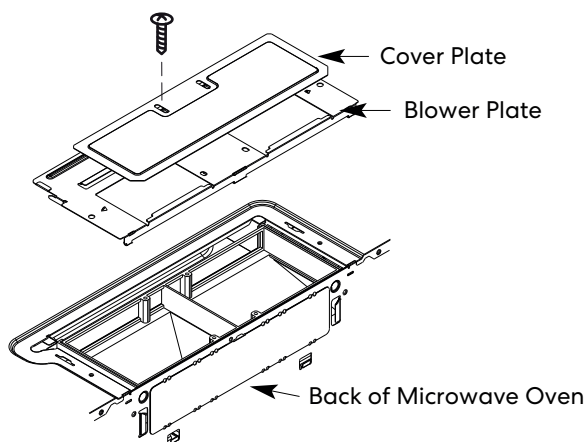
7. For recessed cabinets:

- Make 2 filler blocks out of scrap wood the size of the shaded rectangles labelled F and G. The filler blocks must have a thickness equal to the depth of the cabinet recess.
- Drill a $\frac{1}{2}$ " diameter hole in the filler blocks to line up with screw holes A and B.
- The filler blocks should be placed in later steps so that the hole in each block lines up with the corresponding screw hole in the cabinet.

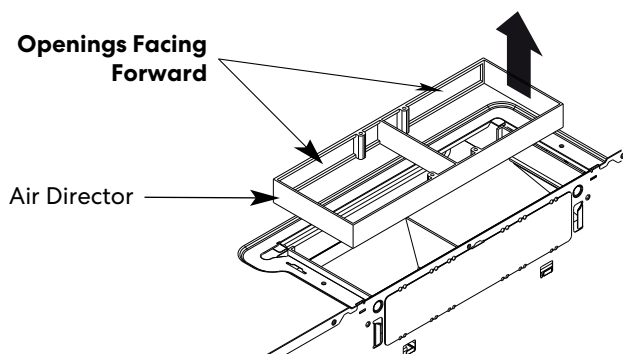


ADJUST MICROWAVE OVEN BLOWER – TOP VENTING

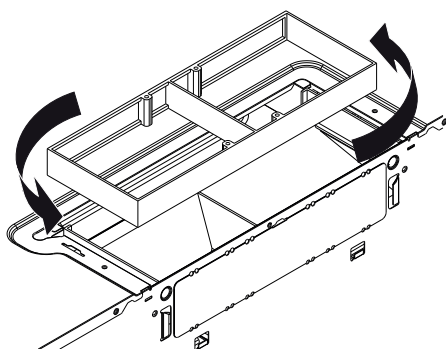
1. Remove the screw that holds the blower plate to the microwave, and remove the blower plate and the cover plate.



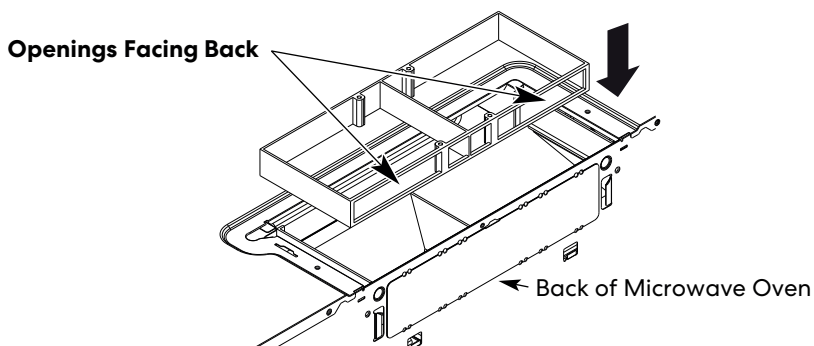
2. Carefully pull out the air director.



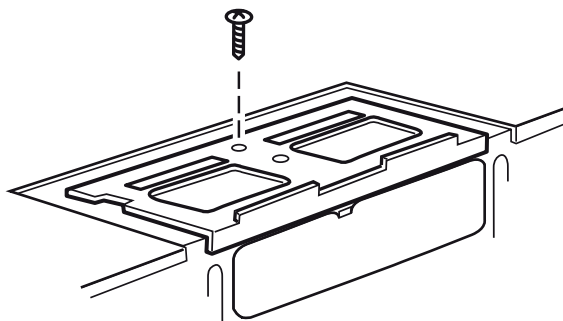
3. Rotate the air director 180°.



4. Place the air director back into the opening.



5. Replace blower plate with the screw removed earlier, and make sure the screw is securely tightened to prevent excessive vibration.



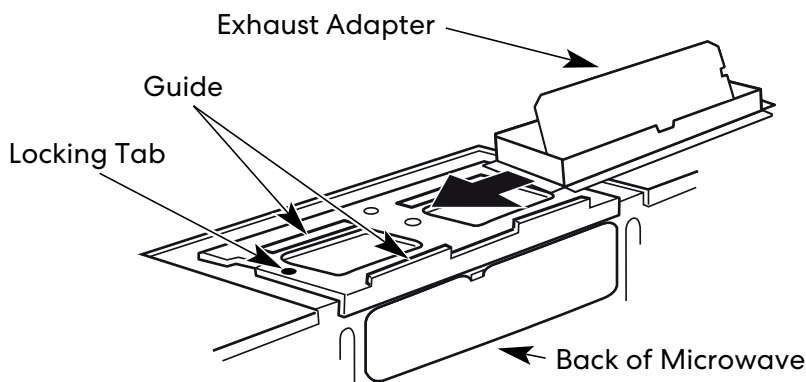
NOTE:

- Keep and store the cover plate in case of re-installation with other ventilation types.

6. Attach the exhaust adapter to the top of the blower plate by sliding it into the guides and the locking tabs of the blower plate. Make sure any tape securing damper is removed and the damper swings freely.

NOTE:

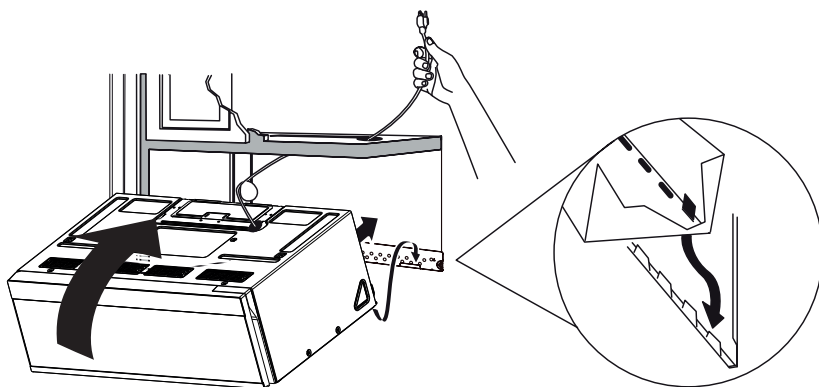
- Appropriate adjustments may be needed to assure proper alignment with existing duct system after the microwave oven is installed.

**INSTALL THE MICROWAVE OVEN – TOP VENTING**

1. Make sure the microwave oven door is closed and the microwave oven is in its upright position.
2. Using 2 or more people, lift and tilt forward the microwave oven and hang it on support tabs at the bottom of the wall mounting plate.

NOTE:

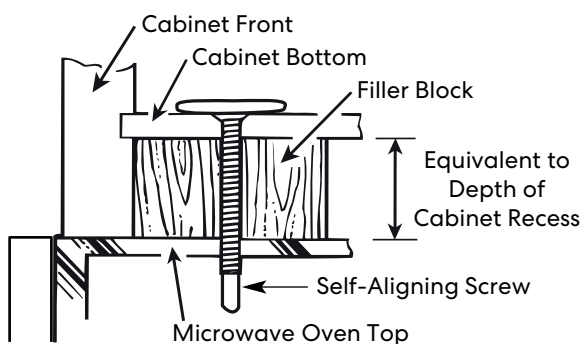
- To avoid damage to the microwave oven, do not grip or use the door or door handle while the microwave oven is being handled.



3. With front of microwave oven still tilted, thread power supply cord through the power supply cord hole in the bottom of the upper cabinet.
4. For recessed cabinets, insert and place the filler blocks on the microwave oven below the cabinet screw holes.

NOTE:

- If filler blocks are not used, case damage may occur from overtightening screws.



5. Rotate microwave oven up toward upper cabinet.

NOTE:

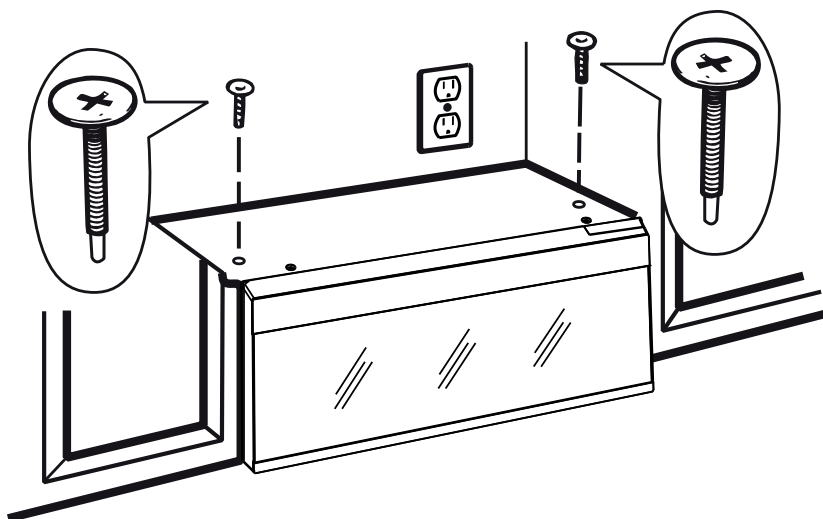
- Do not pinch the power supply cord to lift oven by pulling the power supply cord.

6. Push microwave oven against mounting plate and hold in place.

NOTE:

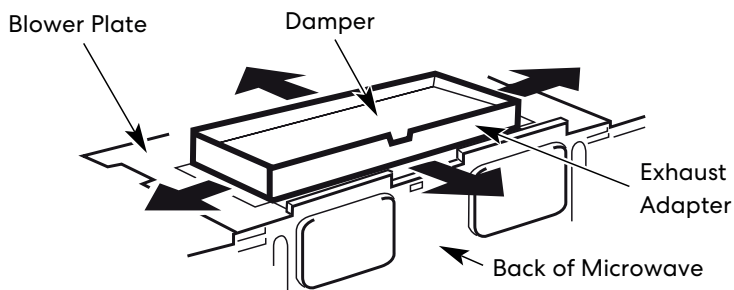
- If adjustment is required, rotate microwave oven downward. Using 2 or more people, lift microwave oven off of mounting plate and set aside on a covered surface. Loosen wall mounting plate screws, adjust wall mounting plate, and re-tighten screws. Then repeat the steps above.

7. With the microwave oven centered, and with at least one person holding it in place, insert 2 self-aligning screws through upper cabinet into microwave oven. Turn screws until there is no gap between upper cabinet and microwave oven.

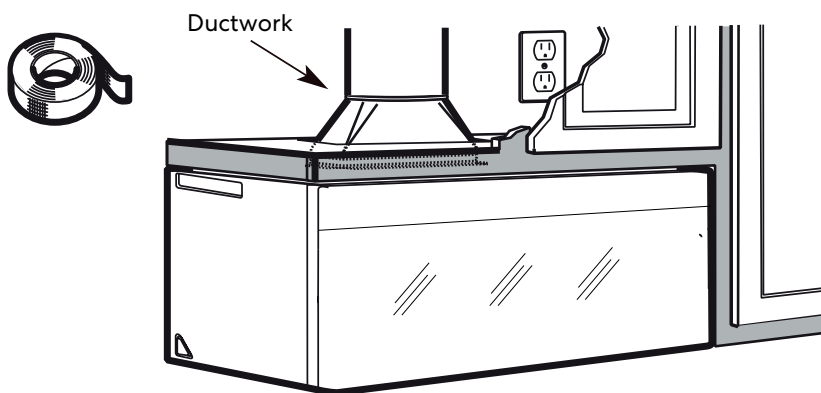


CONNECT DUCTWORK – TOP VENTING

1. Slide and adjust the exhaust adapter within the cabinet opening as needed to connect to the existing duct system.

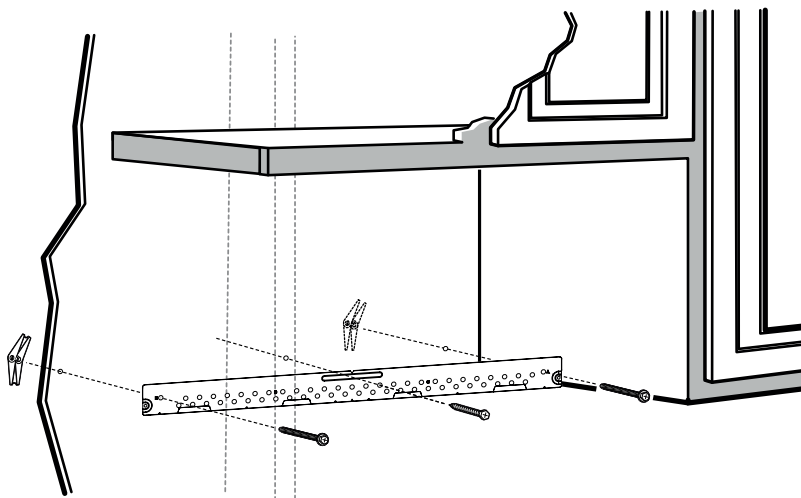


2. Extend the duct system down to connect to the exhaust adapter.
3. Seal all joints in the duct system using duct tape.



FOR REAR VENTING (DUCTED, WALL/HORIZONTAL VENTING) ONLY

ATTACH WALL MOUNTING PLATE – REAR VENTING

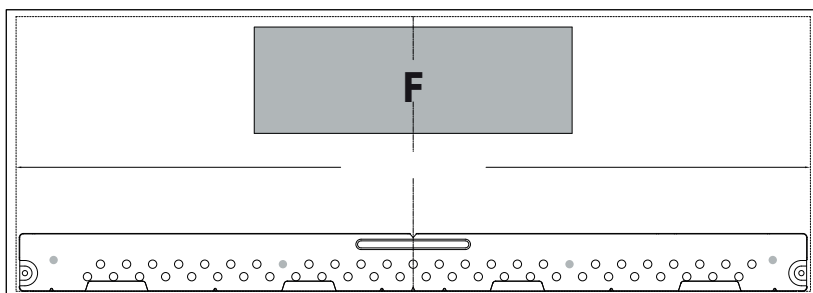


NOTE:

- If top cabinets are deeper than 13.8" (35 cm), the unit must be spaced out from the wall using adequate materials supporting 150 lbs to allow for top vent airflow in the front. These materials are not provided.

IMPORTANT: Read the instructions on the Rear Wall Mounting Template.

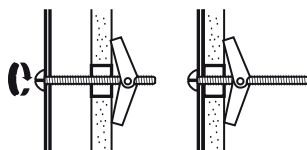
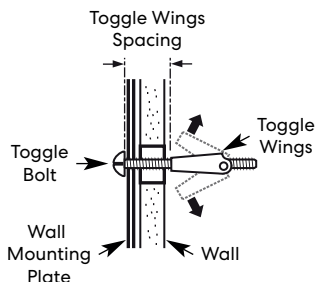
1. Cut out the rear venting area labelled F on the Rear Wall Mounting Template in the wall.



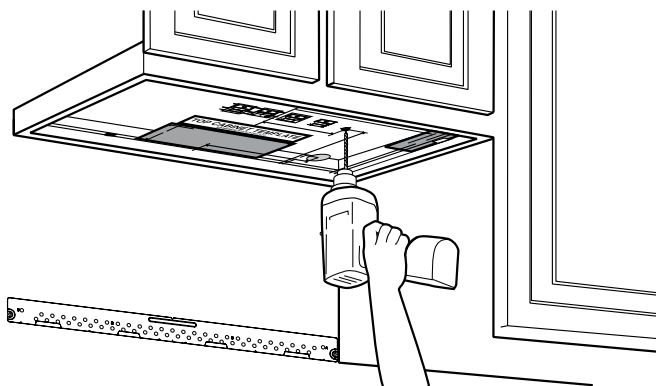
2. Review the wood stud screw holes and, if any, toggle bolt holes on the wall, and remove the rear wall mounting template.
3. Attach the wall mounting plate to the wall with at least one wood screw on a wall stud, and toggle bolts on drywall without wall stud if applicable.

To Use Toggle Bolts

- a. Remove the toggle wings from the bolts.
- b. Insert the bolts into the wall mounting plate through the holes designated to go into drywall.
- c. Reattach the toggle wings to $\frac{3}{4}$ " (19 mm) onto each bolt.
- d. Place the wall mounting plate against the wall and insert the toggle wings through the holes into the wall.
- e. Carefully pull the wall mounting plate away from the wall and finger tighten the bolts to make sure the toggle wings have opened against the wall.
- f. Tighten the bolts.

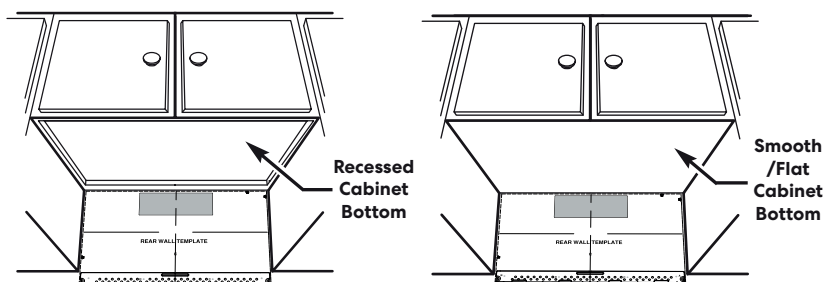


PREPARE TOP CABINET – REAR VENTING



IMPORTANT: Read the instructions on the Top Cabinet Mounting Template.

1. Determine the type of the cabinet bottom. If it is recessed, cut the edges of the Top Cabinet Mounting Template to fit in the recessed cabinet bottom accordingly.



2. Position and tape the Top Cabinet Mounting Template underneath the top cabinet.

NOTE:

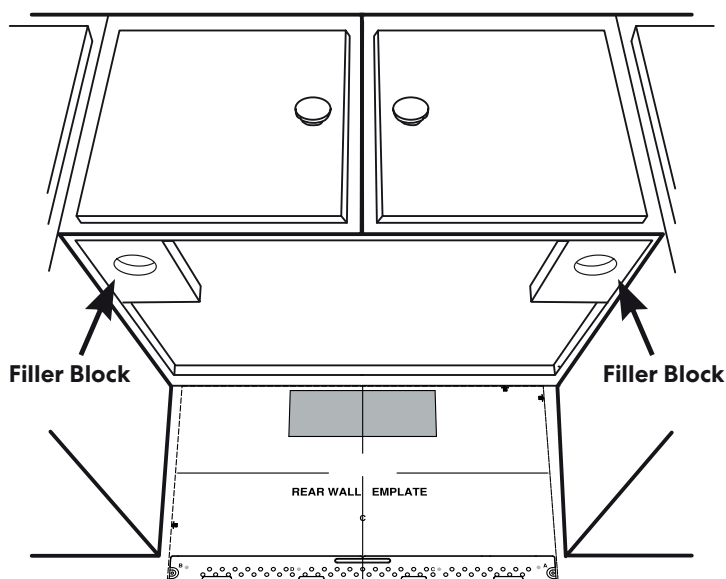
- On some cabinets a small bracket or glue block is used between the overhang and the underside of the cabinet bottom. Cut the Top Cabinet Mounting Template to fit around the bracket or glue block so that the template will lie flat against the cabinet bottom.
- Adjust the Top Cabinet Mounting Template accordingly if the microwave oven is being spaced out from the wall due to oversized cabinet depth.

3. Follow the instructions on the Top Cabinet Mounting Template to drill the $\frac{3}{8}$ " diameter screw holes labelled A and B.

CAUTION:

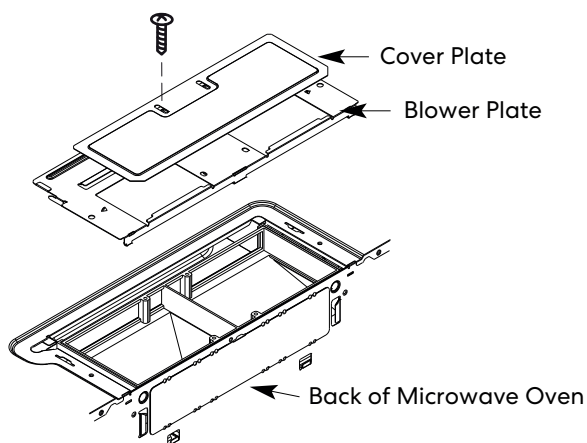
- Wear safety goggles when drilling holes in the cabinet bottom.

4. Follow the instructions on the Top Cabinet Mounting Template to cut out the 2" diameter power cord hole labelled D. If cabinet bottom material is metal, use the nylon grommet provided to surround the cutout opening and protect the power cord from sharp cutout edges.
5. Remove the Top Cabinet Mounting Template.
6. For recessed cabinets:
 - Make 2 filler blocks out of scrap wood the size of the shaded rectangles labelled F and G. The filler blocks must have a thickness equal to the depth of the cabinet recess.
 - Drill a $\frac{1}{2}$ " diameter hole in the filler blocks to line up with screw holes A and B.
 - The filler blocks should be placed in later steps so that the hole in each block lines up with the corresponding screw hole in the cabinet.

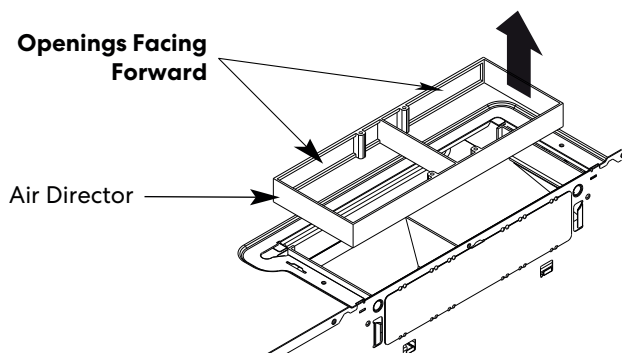


ADJUST MICROWAVE OVEN BLOWER – REAR VENTING

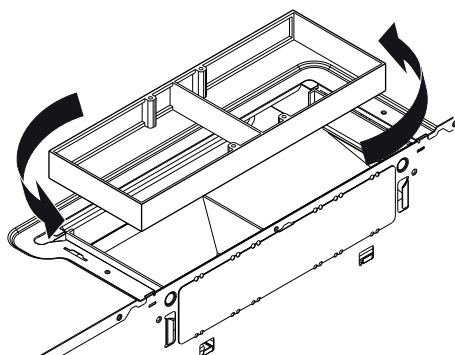
1. Remove the screw that holds the blower plate to the microwave. Lift off the blower plate and keep the cover plate together.



2. Carefully pull out the air director.

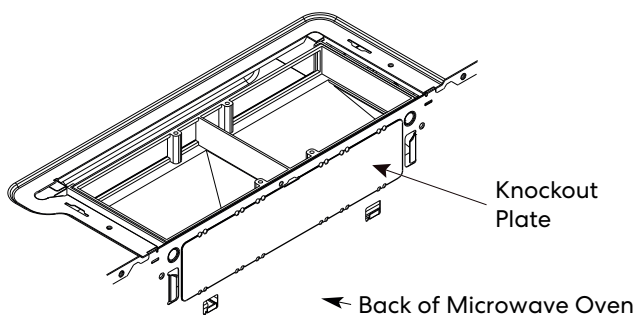


- 3. Rotate the air director 180°.**



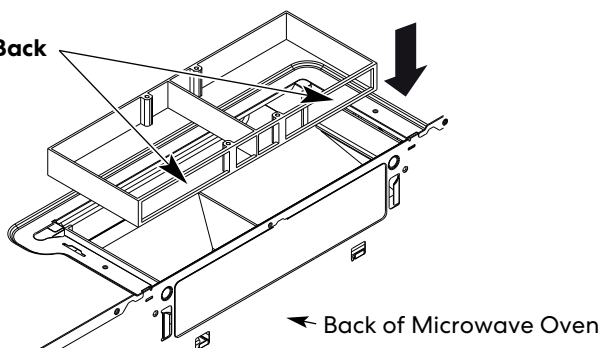
- 4. Remove the knockout plate in the back of the unit with snips. (For some units)**

Carefully snip all webs on the knockout panel and remove the knockout plate for rear airflow. Check and remove any sharp edges created from removing the knockout plate.

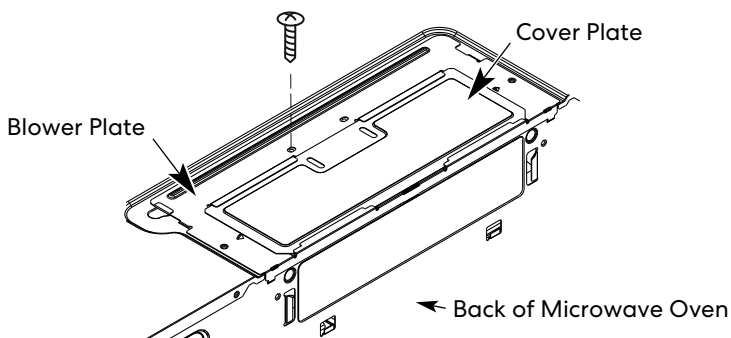


5. Place the air director back into the opening.

Openings Facing Back



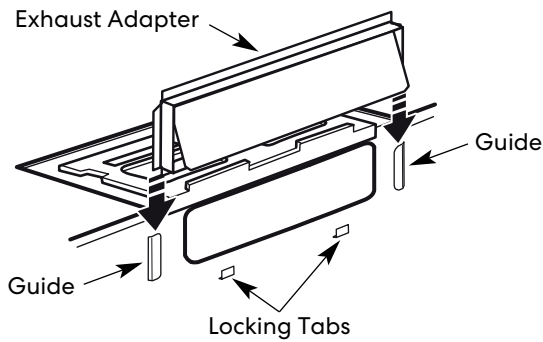
6. Replace blower plate and cover plate with the screw removed earlier, and make sure the screw is securely tightened to prevent excessive vibration.



7. Attach the exhaust adapter to the rear by sliding it into the guides and the locking tabs at the top of the back of the microwave oven. Check and assure that the exhaust adapter is oriented with its damper hinge at the top and the damper below swings freely.

NOTE:

- Appropriate adjustments may be needed to assure proper alignment with existing duct system after the microwave oven is installed.

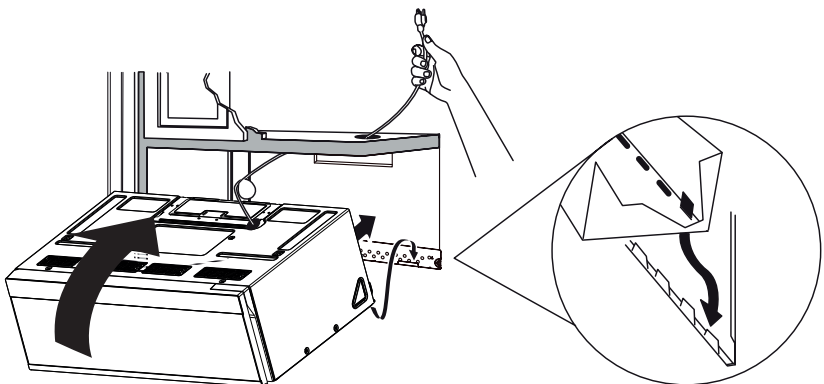


INSTALL THE MICROWAVE OVEN – REAR VENTING

1. Make sure the microwave oven door is closed and the microwave oven is in its upright position.
2. Using 2 or more people, lift and tilt forward the microwave oven and hang it on support tabs at the bottom of the wall mounting plate.

NOTE:

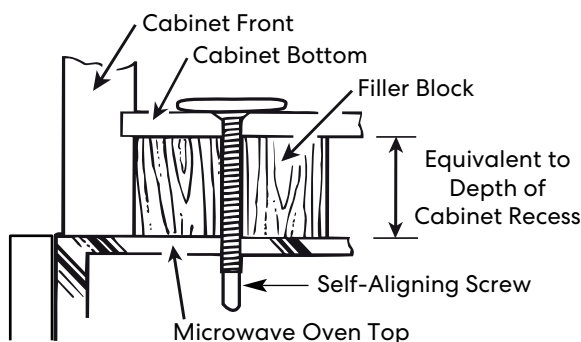
- To avoid damage to the microwave oven, do not grip or use the door or door handle while the microwave oven is being handled.



3. With front of microwave oven still tilted, thread power supply cord through the power supply cord hole in the bottom of the upper cabinet.
4. For recessed cabinets, insert and place the filler blocks on the microwave oven below the cabinet screw holes.

NOTE:

- If filler blocks are not used, case damage may occur from overtightening screws.



5. Rotate microwave oven up toward upper cabinet.

NOTE:

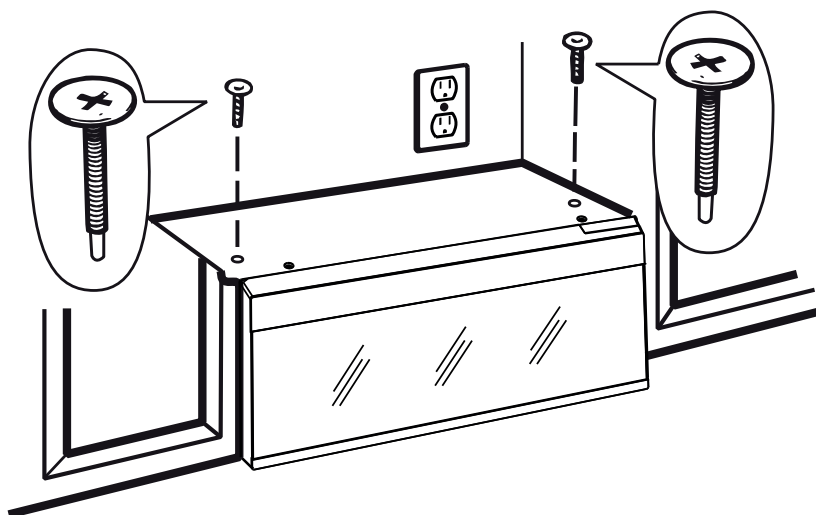
- Do not pinch the power supply cord to lift oven by pulling the power supply cord, and make sure the rear venting assembly easily into the vent in the wall cutout.

6. Push microwave oven against mounting plate and hold in place.

NOTE:

- If adjustment is required, rotate microwave oven downward. Using 2 or more people, lift microwave oven off of mounting plate and set aside on a covered surface. Loosen wall mounting plate screws, adjust wall mounting plate, and re-tighten screws. Then repeat the steps above.

7. With the microwave oven centered, and with at least one person holding it in place, insert 2 self-aligning screws through upper cabinet into microwave oven. Turn screws until there is no gap between upper cabinet and microwave oven.



COMPLETE INSTALLATION

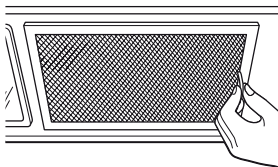
WARNING



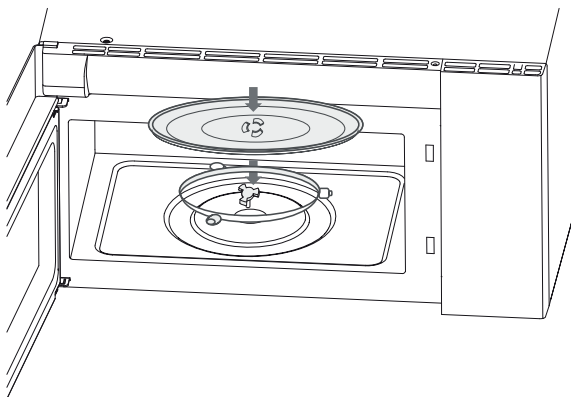
ELECTRIC SHOCK HAZARD

- Plug into a grounded 3 prong outlet.
- Do not remove ground prong.
- Do not use an adapter.
- Do not use an extension cord.
- Failure to following these instructions can result in death, fire, or electrical shock.

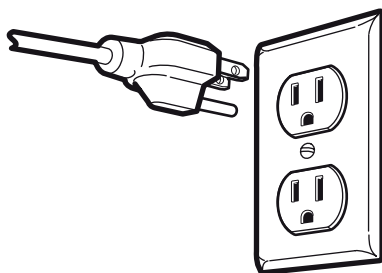
1. Install grease filters.



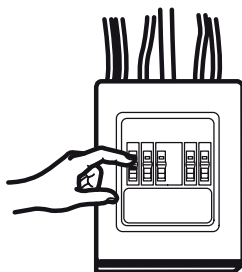
2. Place turntable rollers and glass turntable in cavity.



3. Plug microwave oven into grounded 3 prong outlet.



4. Reconnect power.



5. Test vent fan and exhaust by operating the vent fan.

6. Check the operation of microwave oven by placing 1 cup (250 ml) of water on the turntable and programming a cook time of 1 minute at 100% power.

7. If the microwave oven does not operate:

- Check that a household fuse has not blown, or that a circuit breaker has not tripped. Replace the fuse or reset the circuit breaker. If the problem continues, call an electrician.
- Check that the power supply cord is plugged into a grounded 3 prong outlet.
- See the User Instructions for troubleshooting information.

Installation is now complete. Save Installation Instructions for future use.

DUCTING DESIGN SPECIFICATIONS

This section is intended for architectural designer and builder/contractor reference only.

NOTE:

- Duct materials needed for installation are not provided with microwave oven.
- We do not recommend using a flexible metal Duct.
- To avoid possible product damage, be sure to vent air outside, unless using recirculation installation. Do not vent exhaust air into concealed spaces, such as spaces within walls or ceilings, attics, crawl spaces, or garages.
- The supplied exhaust adapter is designed to work with a standard $\frac{1}{4}$ " x 10" (8.3 x 25.4 cm) rectangular duct. If the existing duct is round, a rectangular-to-round transition piece must be used.
- If venting through the roof, and rectangular-to-round transition is used, be sure there are at least 3" (7.6 cm) of clearance between the top of the microwave oven and the transition piece so that the damper can open freely and fully.
- If venting through the wall, be sure that there is proper clearance within the wall for the damper to open fully.
- For rear wall venting, care should be taken to align exhaust with space between studs, or wall should be prepared at the time it is constructed by leaving enough space between the wall studs to accommodate exhaust.

For optimal venting installation, we recommend:

- Using roof or wall caps that have back draft dampers
- Using a rigid metal duct
- Using the most direct route by minimizing the length of the vent and number of elbows to provide efficient performance
- Using uniformly sized ducts
- Using duct tape to seal all joints in the vent system
- Using caulking compound to seal exterior wall or roof opening around cap
- Not installing 2 elbows together for optimal hood performance

Recommended Vent Length

A 3 1/4" x 10" (8.3 x 25.4 cm) rectangular or 5" (12.7 cm) / 6" (15.2 cm) diameter round duct should be used. The total length of the vent system including straight duct, elbow(s), transitions, and wall or roof caps must not exceed the equivalent of 140 ft (42.7 m) for either type of vent.

For best performance, use no more than three 90° elbows. To calculate the length of the system you need, add the equivalent lengths of each duct piece used in the system.

Top (Roof/Vertical) Venting Example

	DUCT PIECES		EQUIVALENT LENGTH	x	NUMBER USED	=	EQUIVALENT LENGTH
		Roof Cap	24 ft (7.3 m)	x	1	=	24 ft (7.3 m)
		12 ft (3.6 m) Straight Round Duct	12 ft (3.6 m)	x	1	=	12 ft (3.6 m)
		Rectangular-to-Round Transition Adapter	5 ft (1.5 m)	x	1	=	5 ft (1.5 m)
	Total Length						= 41 ft (12.5 m)

Rear (Wall/Horizontal) Venting Example

	DUCT PIECES		EQUIVALENT LENGTH	x	NUMBER USED	=	EQUIVALENT LENGTH
		Wall Cap	40 ft (12.2 m)	x	1	=	40 ft (12.2 m)
		3 ft (0.9 m) Straight Rectangular Duct	3 ft (0.9 m)	x	1	=	3 ft (0.9 m)
		90° Elbow	10 ft (3 m)	x	2	=	20 ft (6.1 m)
	Total Length						= 63 ft (19.2 m)

IMPORTANT

Do Not Return This Product To The Store

If you have a problem with this product, please contact COSMO Customer Support at

+1 (888) 784-3108

DATED PROOF OF PURCHASE, MODEL #, AND SERIAL # REQUIRED FOR WARRANTY SERVICE.

IMPORTANT

Ne pas Réexpédier ce Produit au Magasin

Pour tout problème concernant ce produit, veuillez contacter le service des consommateurs Cosmo Customer Support au

+1 (888) 784-3108

UNE PREUVE D'ACHAT DATEE EST REQUISE POUR BENEFICIER DE LA GARANTIE.

IMPORTANTE

No regrese este producto a la tienda

Si tiene algún problema con este producto, por favor contacte el ayuda al cliente COSMO al

+1 (888) 784-3108

(Válido solo en E.U.A.)

NECESITA UNA PRUEBA DE DE COMPRA FECHADA, NÚMERO DE MODELO Y DE SERIE PARA EL SERVICIO DE LA GARANTÍA.



Correct disposal of this product:

This marking indicates that this appliance should not be disposed with other household wastes. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources.

MEMO

Handwriting practice area with 15 sets of dashed lines.



APPLIANCES

Cosmo is constantly making efforts to improve the quality and performance of our products, so we may make changes to our appliances without updating this manual.

Electronic version of this manual is available at:
www.cosmoappliances.com