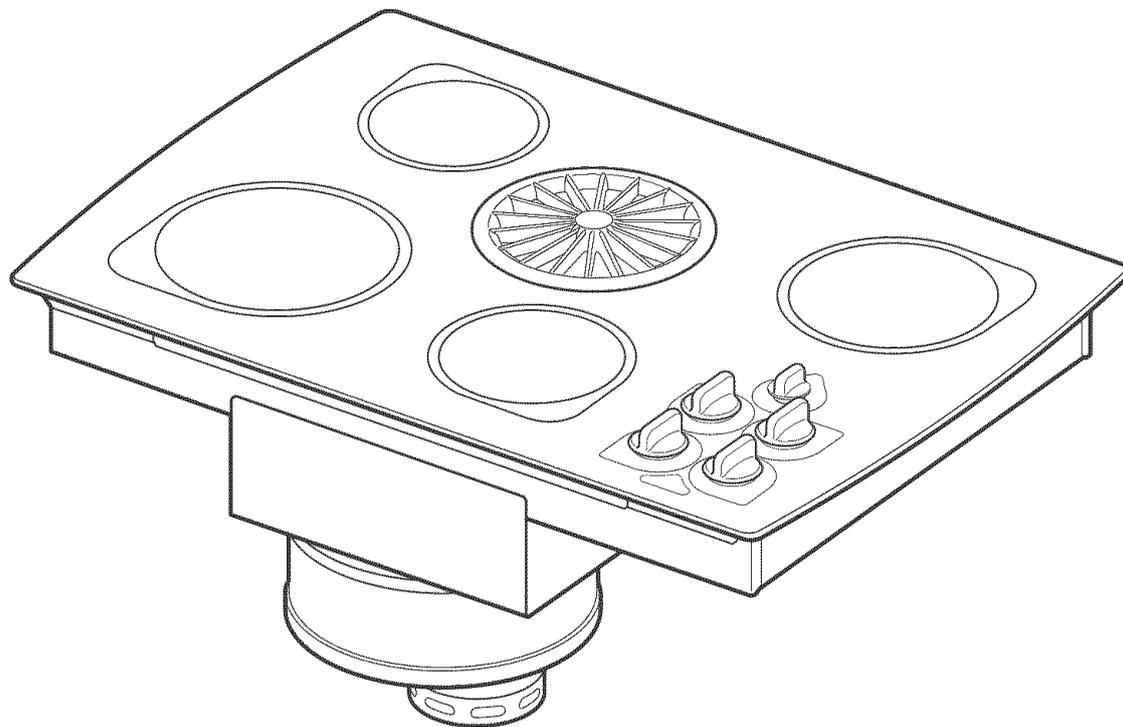


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# Installation Instructions

## 30" (76.2 cm) and 36" (91.4 cm) ELECTRIC Built-in Ceramic Downdraft Cooktop



**KitchenAid**<sup>®</sup>  
FOR THE WAY IT'S MADE<sup>®</sup>

Questions regarding features, operation, performance, parts or service? Call 1-800-422-1230 or visit our web site at [www.kitchenaid.com](http://www.kitchenaid.com)

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**IMPORTANT:**  
Read and save these  
instructions.

**IMPORTANT:**

**Installer:** Leave Installation Instructions with the homeowner.

**Homeowner:** Keep Installation Instructions for future reference. Save Installation Instructions for local electrical inspector's use.

Write down the model and serial numbers before installing cooktop.

Both numbers are on the model/serial rating plate, located on the bottom of the cooktop.

Model # \_\_\_\_\_

Serial # \_\_\_\_\_

Part No. 3192516

# Before you start...

**Your safety and the safety of others is 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 hazards that can kill or hurt you and others. All safety messages will be preceded by the safety alert symbol and the word "DANGER" or "WARNING". These words mean:

## **! DANGER**

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

## **! WARNING**

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

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

**Important: Observe all governing codes and ordinances. Failure to meet codes and ordinances could lead to fire or electrical shock.**

Proper installation is your responsibility.

- Make sure you have everything necessary for correct installation.
- **Have a qualified technician install this cooktop.**
- Comply with the electrical specifications on the model/serial rating plate. Model/serial rating plate is located on the bottom of the cooktop. Write both numbers down on the front cover now before installing cooktop.

**Downdraft cooktop location** should be away from strong draft areas, such as windows, doors and strong heating vents or fans. Locate cooktop for convenient use in kitchen.

**Grounded electrical system** is required. See "Electrical requirements," Page 6.

**Venting system** must terminate outdoors.

**All openings in the wall or floor where cooktop is to be installed must be sealed.**

It is the customer's responsibility to contact a qualified electrical installer, to make sure that the electrical installation is correct, and to make sure the electrical installation follows the National Electrical Code, ANSI/NFPA 70 — latest edition\*, or CSA Standards C22.1-94, Canadian Electrical Code, Part 1 and C22.2 No. 0-M91 - latest edition\*\*, and all local codes and ordinances.

**WARNING:** To reduce the risk of fire, electric shock, or injury to persons, observe the following:

Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.

Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent back drafting. Follow the heating equipment manufacturer's guideline and safety standards such as those published by the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the local code authorities.

When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.

Ducted fans must always be vented to the outdoors.

**WARNING:** To reduce the risk of fire, use only metal ductwork.

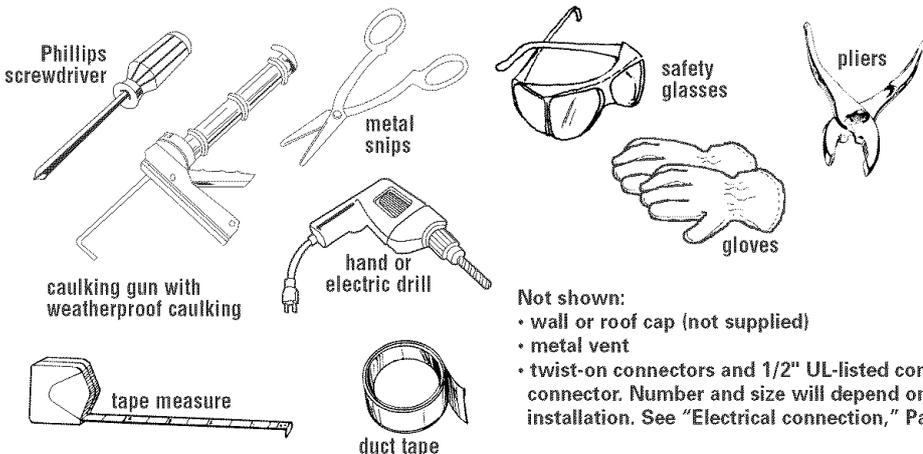
**This downdraft cooktop is Not approved for use in mobile homes.**

Copies of the standards listed may be obtained from:

\* National Fire Protection Association  
Batterymarch Park  
Quincy, Massachusetts 02269

\*\* Canadian Standard Association  
178 Rexdale Boulevard  
Etobicoke, (Toronto), Ontario M9W 1R3

## Tools and materials needed for installation:



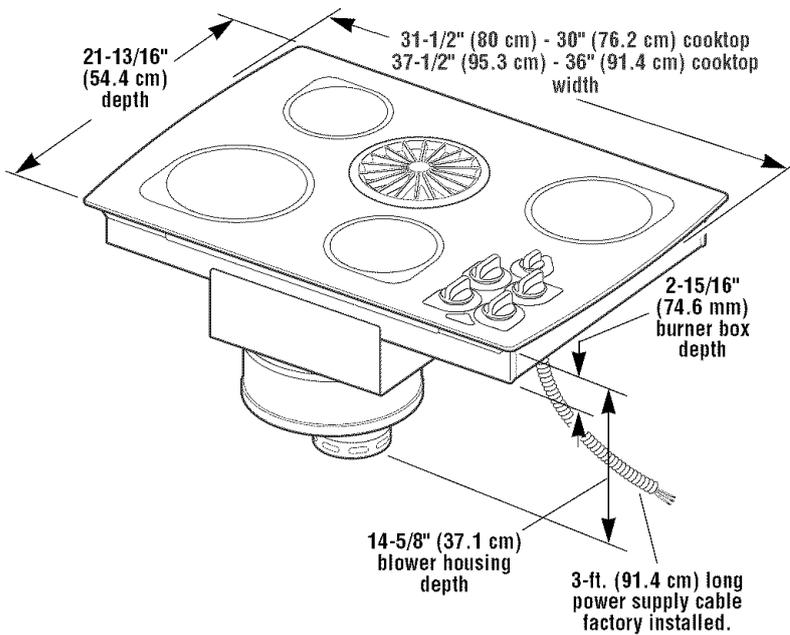
Not shown:

- wall or roof cap (not supplied)
- metal vent
- twist-on connectors and 1/2" UL-listed conduit connector. Number and size will depend on your installation. See "Electrical connection," Page 7.

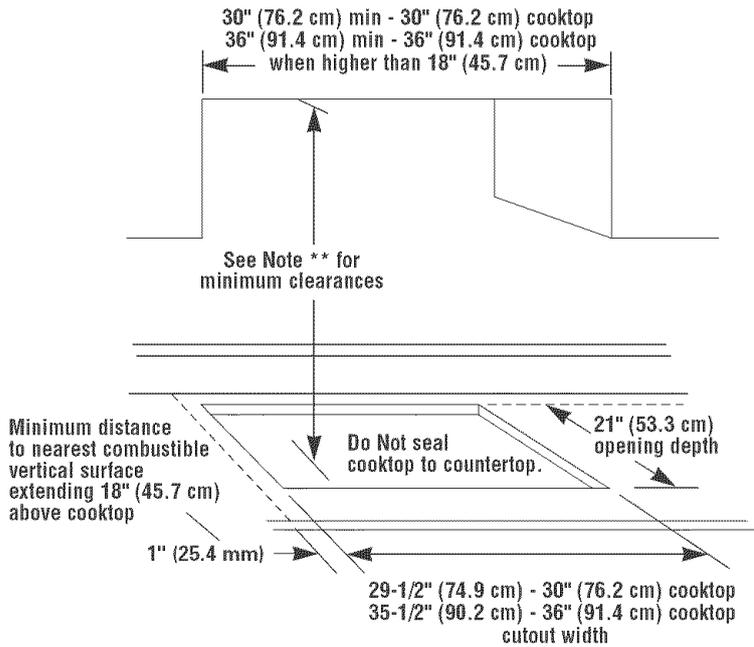
## Parts supplied:

- literature pack
- vent cover
- glass cleaner

# Product Dimensions



# Clearance Dimensions



**Side clearance** — 6" (15.2 cm) minimum clearance between side of cooktop and side wall is recommended for maximum ventilation performance.

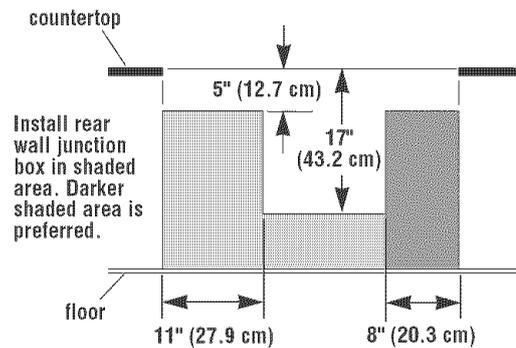
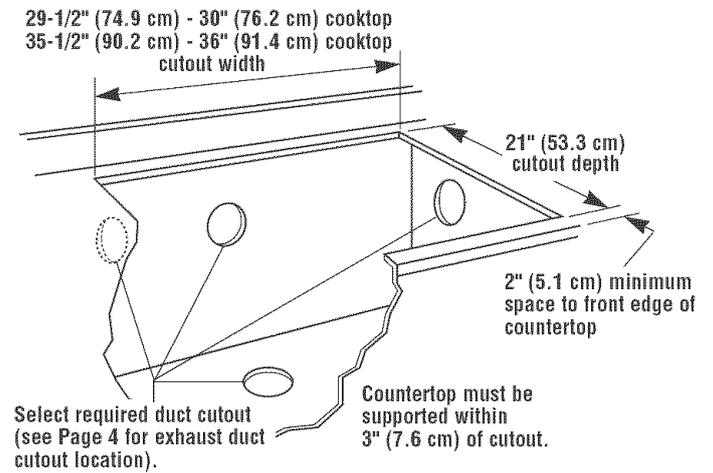
**Rear clearance** — 3/4" (19.1 mm) clearance between rear edge of cooktop and rear wall is recommended.

**Motor/blower clearance** — 2" (51 mm) minimum clearance between motor and cabinet is required for proper cooling. 6" (15.2 cm) clearance is recommended for servicing access.

\*\* Note: 24" (61 cm) minimum when bottom of wood or metal cabinet is protected by not less than 1/4" (6.4 mm) flame retardant millboard covered with not less than No. 28 MSG sheet steel, 0.015" (0.4 mm) stainless steel, 0.024" (0.6 mm) aluminum or 0.020" (0.5 mm) copper.

30" (76.2 cm) minimum clearance between the top of the cooking platform and bottom of unprotected wood or sheet metal.

# Cutout Dimensions



## Minimum base cabinet dimensions —

- 30" (76.2 cm) base cabinet width
- 24" (61 cm) base cabinet depth
- 25" (63.5 cm) countertop depth

**Countertop opening dimensions** that are shown must be used. Given dimensions are minimum clearances and provide required 0" (0 cm) clearance.

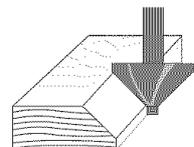
**New installations** — Follow minimum dimensions given.

**Replacement installation** — Be sure that front edge of cooktop is at least 1-1/2" (38.1 mm) back from front edge of countertop.

**If cabinet has drawers**, drawers will need to be removed and drawer fronts installed on front of cabinet.

## Cutout preparation:

- Decorative laminate — Chamfer all exposed edges to prevent chipping laminate. Cut radius corners and file to smooth edges and to prevent cracking.



# Venting system requirements

Venting system must terminate to the outside.

Do Not terminate the vent system in an attic or other enclosed space.

Do Not use 4-inch (10 cm) laundry-type wall caps.

Use metal vent only. Exception: See "optional venting under a concrete slab", in "Venting methods" below. Rigid metal vent is recommended. Do not use plastic or metal foil vent.

To reduce risk of fire and to properly exhaust air, be sure to vent air outside.

Do Not vent exhaust air into spaces within walls or ceilings or into attics, crawl spaces or garages.

Before making cutouts, make sure there is proper clearance within the wall or floor for the exhaust vent.

Do Not cut a joist or stud unless absolutely necessary. If a joist or stud must be cut, then a supporting frame must be constructed.

Vent materials needed for installation are not supplied.

Determine which venting method to use. See "Venting methods," below. Next, determine the equivalent vent length using chart on Page 5. The maximum equivalent vent length is 60 feet (18.3 m).

The blower housing is set to vent straight out the back from the cooktop. To vent down, left or right, see "Installation," Step 2, Page 6.

This downdraft cooktop is rated at 60 feet (18.3 m) of straight vent or the equivalent.

- If vent length is 10 feet (3 m) or less, 6" (15.2 cm) diameter round vent may be used.
- If vent length is more than 10 feet (3 m), use 6" (15.2 cm) diameter round or 3-1/4" x 10" (8.3 x 25.4 cm) rectangular vent.

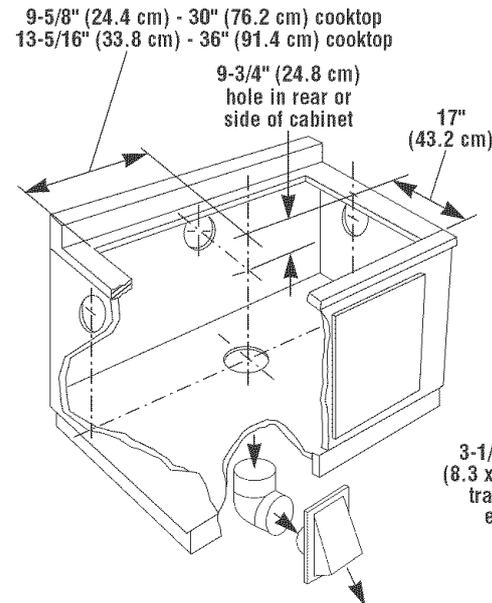
**Thermal breaks:** In areas of extreme cold weather, it may be necessary to provide a short length of nonmetallic duct as close to the wall as possible to prevent thermal conduction along the metal vent.

For altitudes above 4,500 ft (1372 m), reduce recommended vent run by 20%.

## For the most efficient and quietest operation:

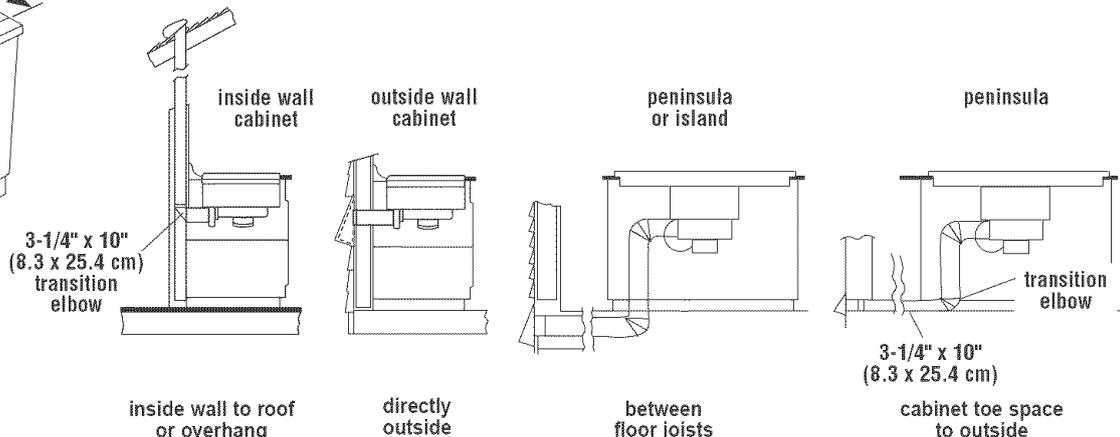
- Use 26-gauge minimum galvanized or 25-gauge minimum aluminum metal vent. Poor-quality pipe fittings can reduce air flow. (Note: Local codes may require a heavier-gauge material.) Flexible metal vent is Not recommended.
- Do Not exhaust more than one downdraft cooktop into a single vent system.
- The length of vent and number of elbows should be kept to a minimum to provide efficient performance.
- The size of the vent should be uniform.
- Use the fewest number of 90° elbows.
- Do Not install two elbows together.
- Make sure there is a minimum of 18" (45.7 cm) of straight vent between the elbows if more than one elbow is used. (Elbows too close together cause excess turbulence that reduces airflow.)
- Do Not use a 5" (12.7 cm) elbow in a 6" (15.2 cm) or 3-1/4" x 10" (8.3 x 25.4 cm) system.
- Do Not reduce back to 5" (12.7 cm) system after using 6" (15.2 cm) or 3-1/4" x 10" (8.3 x 25.4 cm) fittings.
- Avoid forming handmade crimps. Handmade crimps may restrict airflow.
- Use the recommended vent caps for proper performance. If an alternate wall or roof cap is used, be certain cap size is not reduced and that it has a backdraft damper.
- Use duct tape to seal all joints in the vent system.
- Use caulking to seal exterior wall or roof opening around the cap.

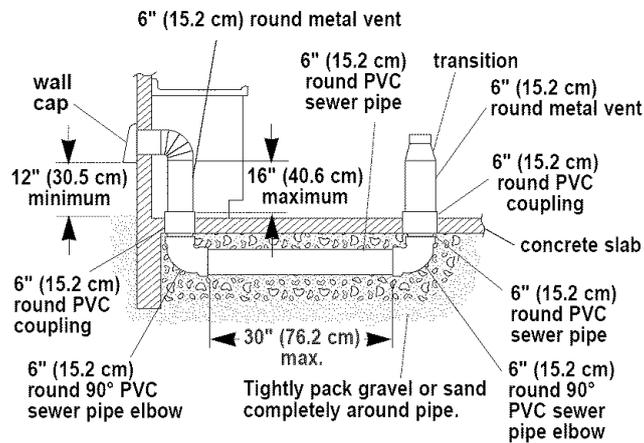
## Venting methods



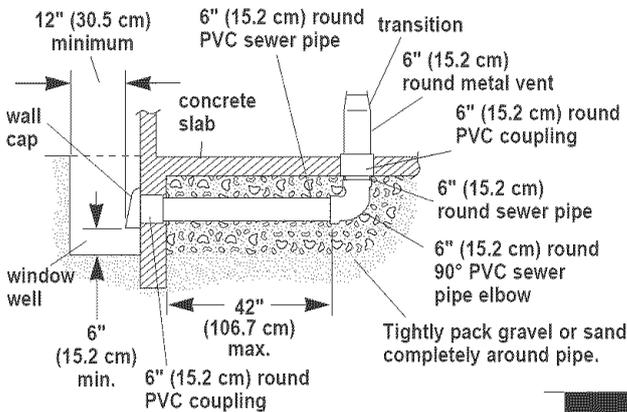
The cooktop may be vented through the wall or floor. Common venting methods and the types of materials needed are shown.

Make sure there is proper clearance within the wall or floor for exhaust vent before making cutouts.

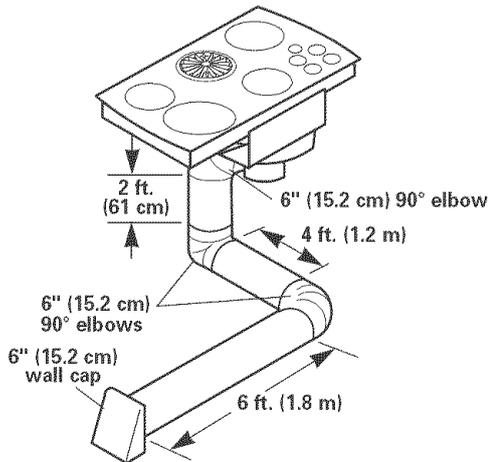




optional vent arrangement under concrete slab



optional vent arrangement through window well under concrete slab



90° elbows (3) = 15 ft. (4.6 m)  
 12 feet (3.7 m) straight = 12 ft. (3.7 m)  
 Wall cap = 0 ft. (0 m)

Equivalent length of 6" (15.2 cm) round system = 27ft. (8.3 m)

### Determine equivalent length of vent. Maximum equivalent length of vent is 60 ft (18.3 m).

List the number of each piece and length of straight vent you will use. Multiply the equivalent length by the number of pieces. Add the totals to get the total equivalent length of your system.

Vent Piece	Equivalent Length	No. of Pieces/Length	Total Equivalent Length
<b>straight vent per lineal foot</b>			
3-1/4" x 10" (8.3 x 25.4 cm)	1 ft. (30.5 cm)		
6" (15.2 cm) round	1 ft. (30.5 cm)		
6" (15.2 cm) flexible	2 ft. (61 cm)		
<b>elbow</b>			
6" (15.2 cm) round 45° elbow	2.5 ft. (76.2 m)		
6" (15.2 cm) round 90° elbow	5 ft. (1.5 m)		
3-1/4" x 10" (8.3 x 25.4 cm) flat elbow	12 ft. (3.7 m)		
3-1/4" x 10" (8.3 x 25.4 cm) 90° elbow	5 ft. (1.5 m)		
<b>transition to round</b>			
3-1/4" x 10" (8.3 x 25.4 cm) to 6" (15.2 cm) 90° elbow	9 ft. (2.7 m)		
3-1/4" x 10" (8.3 x 25.4 cm) to 6" (15.2 cm)	4.5 ft. (1.4 m)		
<b>transition to flat</b>			
6" (15.2 cm) to 3-1/4" x 10" (8.3 x 25.4 cm) 90° elbow	5 ft. (1.5 m)		
6" (15.2 cm) to 3-1/4" x 10" (8.3 x 25.4 cm)	1 ft. (30.5 cm)		
<b>wall cap*</b>			
3-1/4" x 10" (8.3 x 25.4 cm)	0 ft. (0 cm)		
6" (15.2 cm) round	0 ft. (0 cm)		
<b>roof cap*</b>			
10" x 10" (25.4 X 25.4 cm)	0 ft. (0 cm)		
<b>thermal break</b>			
6" (15.2 cm) round	2 ft. (61 cm)		
<b>Total equivalent vent system length</b>			

\* Length for required wall/roof cap has already been incorporated into rating for maximum vent system length. A suitable wall/roof cap must be used.

**Note: Flexible metal vent is Not recommended.** If it is used, calculate each foot (30 cm) of flexible vent as two feet (61 cm) of straight metal vent. Flexible metal elbows count twice as much as standard elbows.

# Electrical requirements

If codes permit and a separate ground wire is used, it is recommended that a qualified electrician determine that the ground path is adequate.

**Do Not ground to a gas pipe.**

**Check with a qualified electrician if you are not sure cooktop is properly grounded.**

**Do Not have a fuse in the neutral or grounding circuit.**

The downdraft cooktop must be connected to the proper electrical voltage and frequency as specified on the model/serial rating plate. The model/serial rating plate is located on the bottom of the cooktop.

- A four-wire or three-wire, single-phase, 240-volt, 60-Hz, AC-only electrical supply is required on a separate 30-ampere circuit, fused on both sides of the line.
- A time-delay fuse or circuit breaker is recommended. The fuse size must not exceed the circuit rating of the appliance as specified on the model/serial rating plate.
- CONNECT WITH COPPER WIRE ONLY.**
- Connected directly to the fused disconnect (or circuit breaker box) through flexible, armored or non-metallic sheathed, copper cable (with ground wire).
- Flexible armored cable should connect cooktop directly to the junction box.
- Fuse both sides of the line.

- Locate the junction box to allow as much slack as possible between the junction box and cooktop so that the downdraft cooktop can be moved if servicing is ever necessary.
- A U.L.-listed 1/2" (12.7 mm) conduit connector must be provided at the junction box.

**The recommended minimum copper wire size is No.-10 gauge.** However, wire sizes and connections must conform to the requirements of the National Electrical Code, ANSI/NFPA 70 — latest edition\*, or CSA Standards C22.1-94, Canadian Electrical Code, Part 1 and 22.2 No. 0-M91 - latest edition\*\* and all local codes and ordinances. Wire sizes and connections must conform with the rating of the cooktop.

Copies of the standard listed may be obtained from:

\* **National Fire Protection Association**  
Batterymarch Park  
Quincy, Massachusetts 02269

\*\* **Canadian Standard Association**  
178 Rexdale Boulevard  
Etobicoke, Ontario M9W 1R3

The wiring diagram is located on the bottom of the cooktop.

Twist-on connectors and U.L.-listed 1/2" (12.7 mm) conduit connector are not provided.

## Installation

**1.** Remove shipping materials and tape from cooktop.

**2.** The blower is set to vent straight out the back of the cooktop.

**To vent to the left side, right side or down through the bottom of the cabinet,** add an elbow to the blower assembly exhaust vent.

It may be easier to connect appliance cable to junction box before inserting cooktop into cutout. See "Electrical connections," Page 7.

### **! WARNING**

**Excessive Weight Hazard**  
**Use two or more people to move and install cooktop.**  
**Failure to do so could result in back or other injury.**

Lift entire cooktop up from cutout when positioning cooktop in countertop opening.

**3.** Insert downdraft cooktop into cutout. Check that:

- cooktop is centered in cutout.
- front edge of downdraft cooktop is at least 1-1/2" (38.1 mm) from front edge of countertop and parallel to countertop.
- rear edge of cooktop is at least 3/4" (19.1 mm) from rear wall as recommended.
- side edge of cooktop is at least 6 inches (15.2 cm) from side wall.

**4.** Connect vent system. See "Venting requirements," Pages 4-5. Use duct tape to seal all joints. Vent must end with a wall or roof cap outside the building.

# Electrical connection

## ⚠ WARNING



**Electrical Shock Hazard**  
Turn power supply off before connecting wires.  
Use 10-gauge solid copper wire.  
Electrically ground cooktop.  
Failure to follow these instructions can result in death, fire, or electrical shock.

This cooktop must be connected to a grounded, metallic permanent wiring system or a ground connector should be connected to the ground terminal or wire lead on the cooktop.

This cooktop is manufactured with a frame connected, green or bare ground wire. Connect the cooktop cable to the junction box through the 1/2" (12.7 mm) U.L.-listed conduit connector. Complete electrical connection according to local codes and ordinances.

## 5. Make the electrical connection:

1. **Disconnect the power supply.**
2. Remove the junction box cover from junction box inside cabinet.
3. Connect cooktop power supply cable to junction box using a U.L.-listed conduit connector. Tighten screws on conduit connector.
4. Connect the two black wires together with twist-on connectors.
5. Connect the two red wires together with twist-on connectors.
6. Complete the electrical connection according to local codes and ordinances. (See "Wire connections chart.")

## Wire connections chart

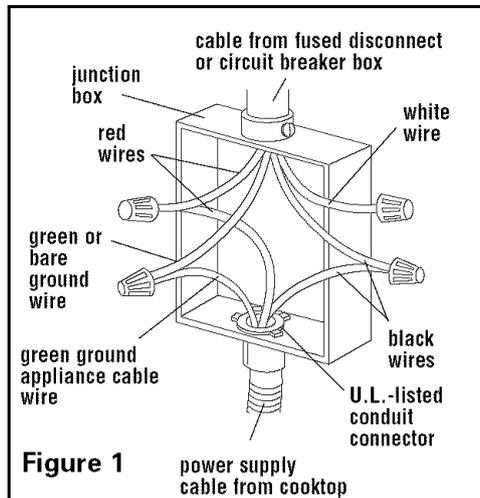


Figure 1

power supply cable from cooktop

**If local codes DO NOT PERMIT connecting cooktop-ground conductor to neutral white wire in junction box: (four-wire system)**

7. Connect the green ground power supply cable wire to the ground wire in junction box or other ground connector with twist-on connector. See Figure 1.
8. Put a twist-on connector on end of white wire.
9. Replace junction box cover.

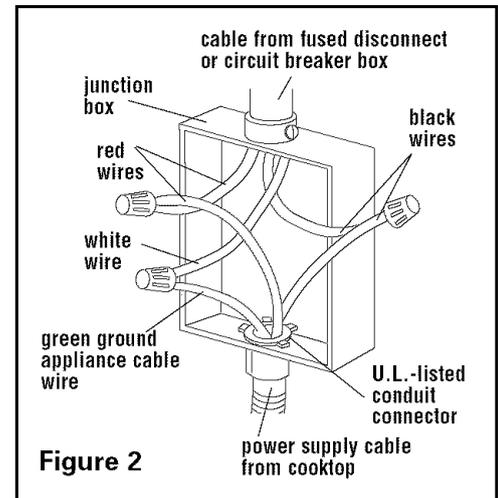


Figure 2

power supply cable from cooktop

**If local codes PERMIT connecting cooktop-ground conductor to neutral junction box wire: (three-wire system)**

7. Connect the green power supply cable wire to the neutral (white) wire in junction box with twist-on connector. See Figure 2.
8. Replace junction box cover.

## Check operation

6. Turn on electrical supply.
7. Check that cooktop surface elements heat and indicator lights are operating correctly.
8. Check that downdraft vent operates. If the cooktop does not operate, disconnect the power supply and check that wire connections have been made correctly.

You have just finished installing your new KitchenAid downdraft cooktop. To get the most efficient use from your new cooktop, read your Use & Care Guide. Keep Installation Instructions and Guide close to cooktop for easy reference.

# Cooktop removal

If removing the cooktop is necessary for cleaning or maintenance:

1. Disconnect electrical supply.
2. Disconnect vent duct system.
3. Lift cooktop out of countertop to complete cleaning or maintenance.

**After cleaning and maintenance:**

1. Reinstall cooktop in cutout.
2. Check that front edge of cooktop is parallel to front edge of countertop.
3. Connect vent duct system.
4. Connect electrical supply.

## If cooktop does not operate:

- Check that circuit breaker is not tripped or the house fuse blown.
- Check that wire connections are intact.
- See Use and Care Guide for troubleshooting list.

## If you need assistance:

The KitchenAid Consumer Assistance Center is open 24 hours a day, 7 days a week. Call 1-(800) 422-1230. The call is free within the continental United States. In Canada, call 1-(800) 461-5681 for English and 1-(800) 461-5703 for French. Or visit our web site at [www.kitchenaid.com](http://www.kitchenaid.com).

When you call, you will need the cooktop model number and serial number. Both numbers can be found on the model/serial rating plate located on the bottom of the cooktop.

## If you need service:

Consult your Use & Care Guide.

In the event that your KitchenAid appliance should need service, call the dealer from whom you purchased the appliance or a KitchenAid-designated service company. A KitchenAid-designated service company is listed in the Yellow Pages of your telephone directory under "Appliances — Household — Major — Service and Repair."