# Installation Instructions

If you have questions, call 800.GE.CARES or visit our website at: www.monogram.com

## **Downdraft Vent Systems**

36" Wide Models: ZVB36

30" Wide Models: ZVB30



## **Safety Information**



# BEFORE YOU BEGIN Read these instructions completely

and carefully.

**IMPORTANT** – Save these instructions for local inspector's use.

#### **IMPORTANT** – Observe all governing codes and ordinances.

Note to Installer - Be sure to leave these instructions with the Consumer.

**Note to Consumer** – Keep these instructions for future reference.

**Skill Level** – Installation of these vents require basic mechanical and electrical skills.

#### **Completion Time –** 1 to 3 hours.

• Proper installation is the responsibility of the installer. Product failure due to improper installation is not covered under the Warranty.

If you received a damaged vent, you should immediately contact your dealer or builder.

For Monogram local service in your area, 1.800.444.1845.

For Monogram service in Canada, 1.888.880.3030.

For Monogram Parts and Accessories, call 1.800.626.2002.



### WARNING

This appliance must be properly arounded.



### **AVERTISSEMENT**

Cet appareil doit être correctement mis à la terre.



### WARNING

TO REDUCE THE RISK OF FIRE, USE ONLY METAL DUCTWORK.



### **AVERTISSEMENT**

UTILISER DES CONDUITS MÉTALLIQUES POUR RÉDUIRE LES RISQUES D'INCENDIE.

### **WARNING**

To reduce the risk of fire, electric shock or injury to persons, observe the following.

- A. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
- B. Before service or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.

### **AVERTISSEMENT** Il faut observer les précautions

suivantes pour réduire les risques d'incendie, de choc électrique ou de blessures.

- A. Utiliser cet appareil uniquement de la manière prévue par le constructeur. Contacter le constructeur pour toute question concernant cet appareil.
- B. Avant une intervention ou le nettoyage de l'appareil, couper l'alimentation électrique au panneau électrique et verrouiller le coupe-circuit pour empêcher la remise accidentelle sous tension. Quand il n'est pas possible de verrouiller le coupecircuit, mettre fermement en place un dispositif d'avertissement, une pancarte par exemple, sur le panneau électrique.
- Do not attempt to repair or replace any part of the downdraft system unless it is specifically recommended in this book. All other servicing should be performed by a qualified technician.
- For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.
- Installation work and electrical wiring must be done by a qualified person(s). In accordance with all applicable codes and standards including fire-rated construction.

To reduce the risk of fire and to properly exhaust air. be sure to duct air outdoors. Do not vent exhaust air into spaces within walls or ceilings or into attics. crawl spaces or garages.

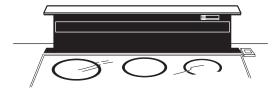
## **Design Information**

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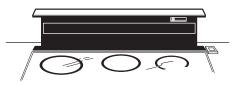
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#### **MODELS AVAILABLE**



#### ZVB36

36" Wide Downdraft Vent in white, black and stainless steel



#### ZVB30

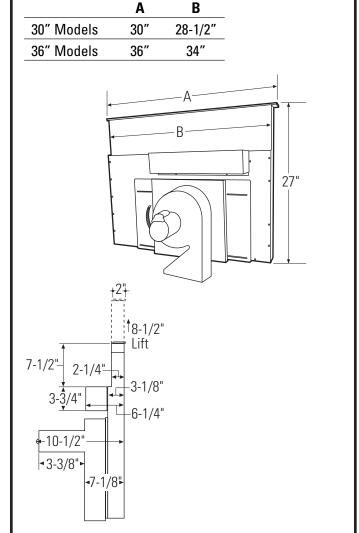
30" Wide Downdraft Vent in white, black and stainless steel

#### **ACCESSORIES**

**JXRB67** - Optional accessory for indoor remote location of the blower/motor assembly. Use this kit when the blower and motor assembly will be located outside of the cabinet, such as below the cabinet floor.

**JXBC67** - Optional outdoor cover accessory for remote installation of blower and motor assembly on an outside wall.

### **PRODUCT DIMENSIONS**



## **Design Information**

#### ADVANCE PLANNING

#### **Remote Switch**

The downdraft vent has a separate raise/lower switch. Plan to install the switch in a convenient location outside of the vent/cooktop cutout.

#### **Downdraft Vent and Cooktop Cutout**

The installation of these downdraft vents with any Monogram cooktop requires careful consideration. For accurate planning, this book provides individual dimension drawings for the vent and the Monogram cooktop combined installation.

#### **Countertop Requirements:**

The countertop must have a deep flat surface to accommodate the cooktop and the vent. Countertops with a rolled front edge and backsplash may not provide the flat surface area required.

#### **Base Cabinet Requirements:**

The base cabinet must be deep enough to accommodate the minimum clearance to the front of the countertop, the cooktop burner box and the vent.

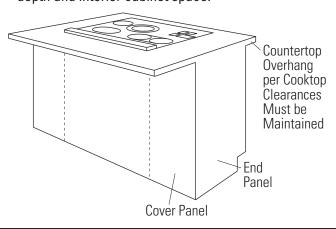
#### Before you begin, you must:

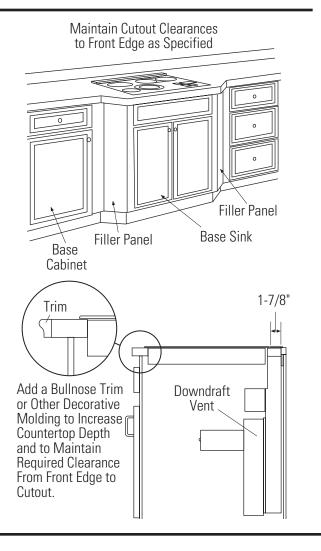
- 1. Review countertop dimension illustrations to be sure you will have enough flat countertop surface.
- 2. Check to be sure that the total countertop depth required (including minimum cutout to front edge depth) allows enough space for a backsplash.
- 3. Review the cabinet illustration. Check to be sure the interior cabinet depth will house the cooktop burner box, the vent and the cutout clearance from the front.
- **4.** When countertop and cabinet depth present a problem, review *Creative Solutions*.
- **5.** Read this book completely to accurately plan the installation location, clearances and ductwork requirements.

With careful planning, you can achieve a custom look with minimal adjustments.

#### **Creative Solutions**

- When the kitchen design calls for an against the wall installation, move the base cabinet forward, 3" to 5". Filler panels or complementary moldings can be added to exposed cabinet sides.
- In an island or peninsula, use an extra deep countertop. The countertop overhang at the front can be adjusted to meet setback to cutout requirements.
- When the cutout to front edge of the countertop requirement is more than 2", add a bullnose trim to the front edge of the countertop. Include the trim thickness when measuring front edge to cutout requirement. By adding the trim, the cooktop can be moved forward, providing additional countertop depth and interior cabinet space.





## **Design Information**

#### Clearances

- The downdraft system with blower, motor and duct work will occupy the cabinet below the countertop and cooktop.
- The blower/motor assembly can be located below the cabinet floor. The assembly will fit between 16" floor joists. Order JXRB67 for indoor remote locations.
- The blower motor assembly can also be installed outdoors. Order JXBC67 for remote blower installations outdoors.
- Refer to "Cooktop Clearances" for information on appropriate placement and necessary clearances when planning installation.
- Refer to your specific cooktop installation instruction for other appropriate clearances.
- Avoid placing cabinetry directly above the cooking surface when possible.

If cabinetry is used above the cooking surface:

- Use cabinets no more than 13" deep.
- Maintain 30" minimum clearance between cooktop and unprotected cabinets directly above cooktop.
- If clearance is less than 30", protect cabinet bottoms with flame-retardant millboard at least 1/4" thick or gypsum board at least 3/16" thick covered with 28 gauge sheet steel or .02" thick copper.
- Clearance between cooktop and protected cabinetry must not be less than 24."

EXCEPTION: Installation of a listed microwave oven or cooking appliance over the cooktop shall conform to the installation instructions packed with that appliance.

- Working areas adjacent to the cooktop should have 18" minimum clearance between countertop and cabinet bottom.
- Installation must conform with local codes.

#### **Ductwork**

Prepare ductwork to vent to the outdoors.

- Use the shortest and straightest duct run possible.
- The maximum permissible length for duct run is 150 feet.
- Refer to "Duct Fittings" chart to calculate equivalent length for various duct configurations.
- The downdraft blower system is designed to use 3-1/4" x 10" ductwork. It can be transitioned to 6" round.
- Ductwork MUST be vented to the outside—never into a crawl space, attic or other enclosed space.
- Determine the need for a wall cap or roof cap. Order the cap in advance.

#### **Electrical and Gas Locations**

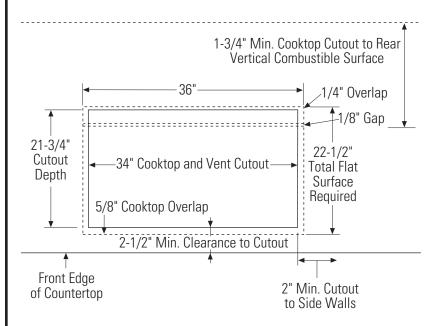
Plan the placement of the electrical outlet and gas (if used) carefully. Gas or electrical outlets cannot be placed on the back wall of the cabinet because it may interfere with the downdraft plenum.

- Install a standard electrical outlet within reach of the vents' two foot long power cord.
- The vent and a Monogram gas cooktop combination can operate from the same 120 volt standard duplex outlet.
- Electric cooktops must operate from a separate 240 volt junction box.

#### **CUTOUTS AND CLEARANCES**

- Measure carefully when cutting the countertop.
   Make sure sides of the opening are parallel and rear and front cuts are exactly perpendicular to sides.
- Measure to be sure there is room for clearances to the front edge of the countertop.
- Refer to cooktop installation instructions to be sure that models fit into the base cabinets being used.
- Identify the cutout illustration for the cooktop model you are installing.
- Draw lines on the countertop to follow as a cutting guide. Measure and mark cooktop and vent overlaps to be sure there is enough flat countertop depth.

#### **ZEU36K ELECTRIC COOKTOPS WITH 36" VENT**



2-1/2" to Cutout 1-7/8"

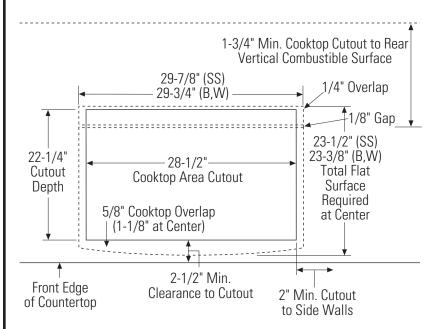
ZEU36 3/4" Thick Support Rail

22-3/4" Inside 22" to Support Rail

**Countertop Cutout:** Requires 22-1/2" min. flat countertop surface and 25" min. total countertop depth.

**Cabinet**: Requires 22-1/2" min. inside cabinet depth. Remove rear support rail.

#### **ZEU30R DIGITAL COOKTOPS WITH 30" VENT**



22-3/4" Inside

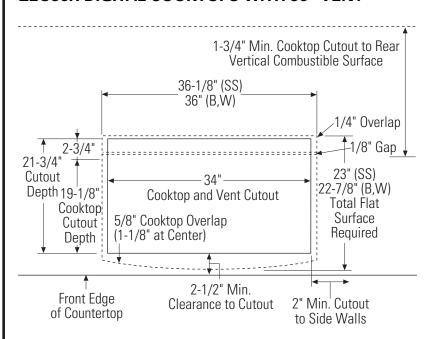
22-3/4" Inside

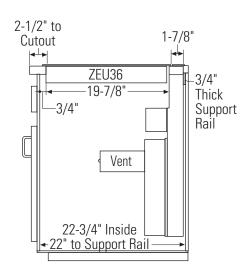
22-3/4" Inside

**Countertop Cutout:** Requires 23-1/2" min. flat countertop surface. Requires 25" min. total countertop depth.

**Cabinet:** Requires 23" min. inside cabinet depth. See Creative Solutions, install in an island or move cabinet base forward.

#### **ZEU36R DIGITAL COOKTOPS WITH 36" VENT**

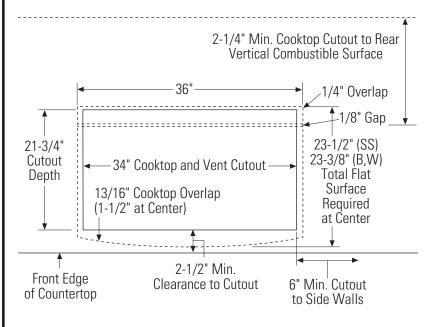


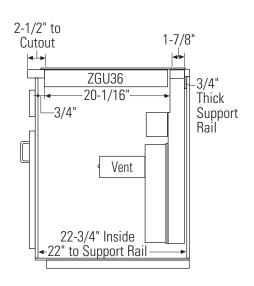


**Countertop Cutout:** Requires 23" min. flat countertop surface. Requires 25" min. total countertop depth.

**Cabinet:** Requires 22-1/2" min. inside cabinet depth. Remove rear support rail.

#### **ZGU36K GAS COOKTOPS WITH 36" VENT**

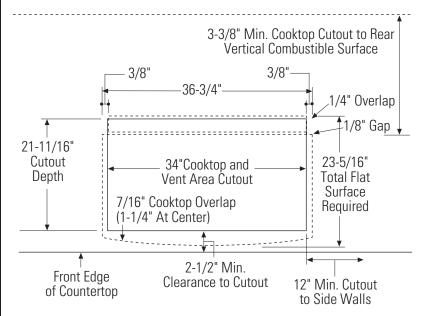


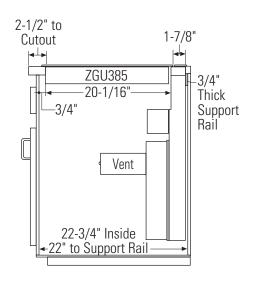


**Countertop Cutout:** Requires 23-1/2" min. flat countertop surface. Requires 25" min. total countertop depth.

**Cabinet:** Requires 22-11/16" min. inside cabinet depth. Remove rear support rail.

#### **ZGU385 GAS COOKTOPS WITH 36" VENT**

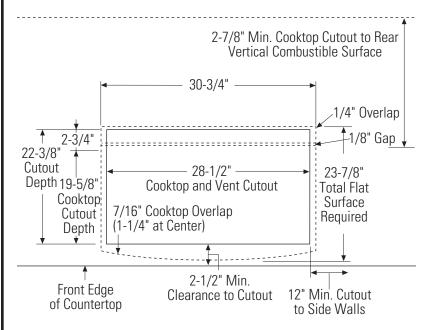




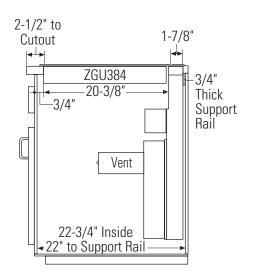
**Countertop Cutout:** Requires 23-5/16" min. flat countertop surface and 25" min. total countertop depth.

**Cabinet:** Requires 22-11/16" min. inside cabinet depth. Remove rear support rail.

#### **ZGU384 GAS COOKTOPS WITH 30" VENT**

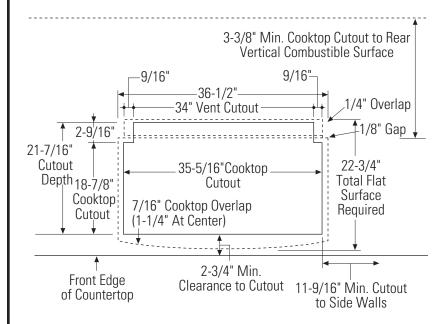


**Countertop Cutout:** Requires 23-7/8" min. flat countertop surface and 25" min. total countertop depth.

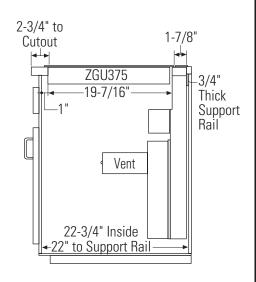


**Cabinet:** Requires 23" min. inside cabinet depth. See Creative Solutions, install in an island or move cabinet base forward.

#### **ZGU375 GAS COOKTOPS WITH 36" VENT**



**Countertop Cutout:** Requires 22-3/4" min. flat countertop surface and 25" min. total countertop depth.



**Cabinet:** Requires 22-5/16" min. inside cabinet depth. Remove rear support rail.

#### **CLEARANCES**



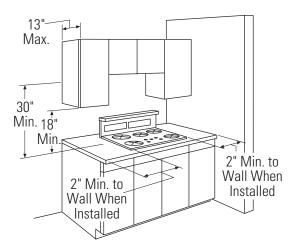
### **CAUTION**

Wall coverings, countertops and cabinets should withstand 200° heat generated by any cooktop.

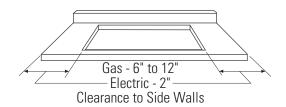


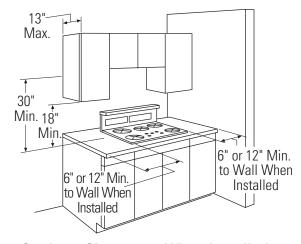
## **PRUDENCE**

Les revêtements muraux, les dessus de comptoir et les armoires de cuisine doivent résister à la température de 95 °C (200 °F) créée par toute table de cuisson.



**Electric Cooktop Clearances When Installed** 



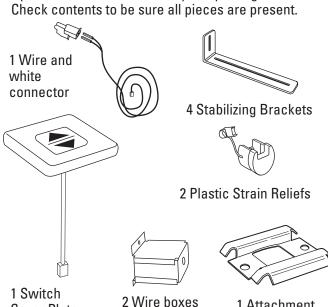


#### **Gas Cooktop Clearances When Installed**

#### PARTS SUPPLIED

Cover Plate

Open the carton and remove parts package.



and screws

#### TOOLS AND MATERIALS REQUIRED

- · Large flat-blade screwdriver
- Jig saw
- Carpenter's square
- Ductwork to suit the installation

#### REMOVE PACKAGING

 Remove the shipping materials and the carton, set carton aside. The carton can be used as a pad when changing or adjusting vent direction.

1 Attachment

Bracket

#### **POWER SUPPLY**



### WARNING FOR PERSONAL SAFETY:

Remove house fuse or open circuit breaker before beginning installation.

Do not use an extension cord or adapter plug with this appliance. Follow National Electrical Code or prevailing local codes and ordinances.



## AVERTISSEMENT SÉCURITÉ

Enlever le fusible ou déclencher le disjoncteur du panneau de la maison avant de commencer l'installation.

Ne pas utiliser de rallonge ni d'adaptateur de prise de courant avec cet appareil. Il faut respecter les codes nationaux de l'électricité et les réglementations ou codes locaux.

This downdraft vent must be supplied with 120V, 60Hz., and connected to an individual, properly grounded branch circuit, protected by a 15 or 20 ampere circuit breaker or time delay fuse.

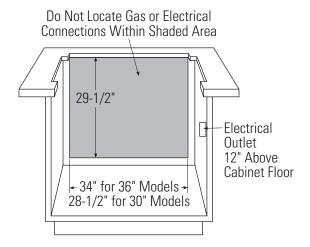
#### **Gas Cooktops**

If this vent is installed in combination with a Monogram gas cooktop, it may operate from the same duplex outlet.

#### **Electric Cooktops**

If this vent is installed in combination with a Monogram electric cooktop, the vent must operate from a separate 120V outlet.

- A properly grounded 3-prong receptacle should be located within reach of the vents' two foot power cord
- Locate the receptacle inside the cabinet on the right side wall. The receptacle cannot be placed on the back of the cabinet wall where it may interfere with the downdraft plenum. See illustration.



### **IMPORTANT**

#### (Please read carefully).

The power cord of this appliance is equipped with a three-prong (grounding) plug which mates with a standard three-prong grounding wall receptacle to minimize the possibility of electric shock. The customer should have the wall receptacle and circuit checked by a qualified electrician to make sure the receptacle is properly grounded and has correct polarity.

 Where a standard two-prong wall receptacle is encountered, it is the personal responsibility and obligation of the customer to have it replaced with a properly grounded three-prong wall receptacle.

Do not, under any circumstances, cut or remove the third (ground) prong from the power cord.

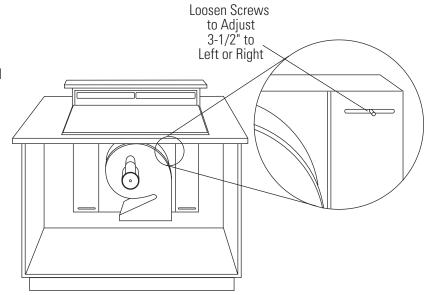
DO NOT USE AN EXTENSION CORD.

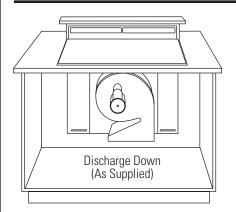
#### **VENTING OPTIONS**

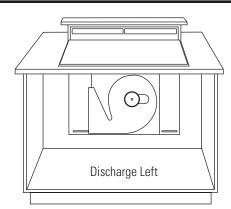
- The downdraft vent is shipped with the discharge outlet pointing straight down and can be changed to the left or right side.
- The blower outlet is sized for 3-1/4" x 10" and can be transitioned to 6" round.

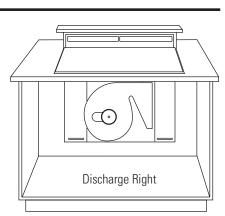
#### Side to side adjustments:

The entire blower mounting plate can be adjusted 3-1/2" to the left or right. This will help to align vent discharge to house ductwork.









#### Discharge direction

The blower assembly may be removed and turned 90° for a left or right side discharge.

- A left or right 90° direction adjustment should be performed before dropping into the countertop opening.
- Flatten the shipping box to use as a pad.
- Lay the vent on its back and onto the pad.

#### To change to a left or right discharge:

- Remove the 4 screws holding the blower to the mounting plate assembly. Retain screws.
- Remove blower assembly, turn it over to access the 4 nuts holding the blower to the mounting plate.
   Remove the nuts.

#### **IMPORTANT:** Do not lift motor by power cable.

- Turn the blower to left or right discharge direction and reinstall the 4 nuts.
- Reinstall blower and mounting plate with original screws.

## To locate the ductwork holes in the cabinet floor or side walls:

- Temporarily, place vent into the countertop opening.
- Push the vent all the way to the back of the opening.
- If you are transitioning to 6" round (obtained locally), place transition piece over the discharge outlet.
- Mark the location and remove the assembly.
- Cut holes and install ductwork connections.
- Order JXRB67 for installation of the blower and motor below the floor.
- Order JXBC67 for installation of the blower and motor outdoors.

## **Ductwork**

# **Duct** Fittings

Use 3-1/4" x 10" duct. It can transition to 6" round.

Use this form to compute maximum permissible lengths for duct runs to outdoors.

**Note:** Do not exceed maximum permissible equivalent lengths!

#### Flexible ducting:

If flexible metal ducting is used, all the equivalent feet values in the table should be doubled. The flexible metal duct should be straight and smooth and extended as much as possible.

Do NOT use flexible plastic ducting.

#### **Downdraft Vent**

150' maximum equivalent length

Note: Any home ventilation system, such as a cooktop with a downdraft exhaust mechanism, may interrupt the proper flow of combustion air and exhaust required by fireplaces, gas furnaces, gas water heaters and other naturally vented systems. To minimize the chance of interruption of such naturally vented systems, follow the heating equipment manufacturer's guidelines and safety standards such as those published by NFPA and ASHRAE.

Duct Piece	Dimensions	Equivalent Length*	Quantity Used	Total Equivalent Length
	6" round, straight	1 ft. (per foot length)		
	3-1/4" x 10" straight	1 ft. (per foot length)		
	6" 90° elbow	12 ft.		
	6" 45° elbow	7 ft.		
	3-1/4" x 10" 90° elbow	14 ft.		
	3-1/4" x 10" 45° elbow	8 ft.		
	3-1/4" x 10" 90° flat elbow	33 ft.		
	6" round to 3-1/4" x 10" transition	2 ft.		
	3-1/4" x 10" round to 6" transition	2 ft.		
	6" round to 3-1/4" x 10" transition 90° elbow	4 ft.		
	3-1/4" x 10" to 6" round transition 90° elbow	4 ft.		
	6" round wall cap with damper	24 ft.		
	3-1/4" x 10" wall cap with damper	24 ft.		
	6" round roof cap	33 ft.		

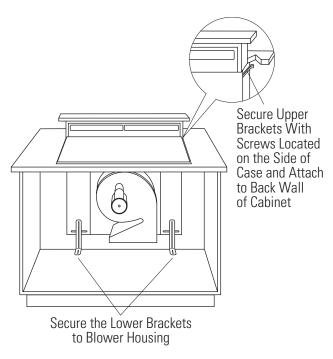
<sup>\*</sup> Actual length of straight duct plus duct fitting equivalent. Equivalent length of duct pieces are based on actual tests conducted by GE Evaluation Engineering and reflect requirements for good venting performance with any downdraft cooktop.

Total Duct Run \_\_\_\_\_

## **Installation Instructions**

### STEP 1 INSTALL DOWNDRAFT VENT

Place the downdraft vent into the countertop cutout, against the back side.

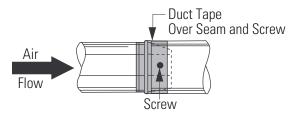


- Secure the downdraft to the countertop supplied brackets. See illustration.
- Fasten two brackets to vent sides and secure to cabinet back wall.
- Install two brackets on the bottom of the vent.
   Attach brackets to slide screws on the vent and to the floor using wood screws (not supplied).
- When installing in a tile countertop surface, it may be necessary to apply a locally approved caulking to cover any gaps.

#### STEP 2 INSTALL THE DUCTWORK

- The downdraft blower system is designed for use with 3-1/4" x 10" ductwork. It can be transitioned to 6" round.
- Ductwork MUST be vented to the outside never in a crawl space, attic or other enclosed space.
- 6" PVC duct should be used when installing under a concrete slab.

**Note:** Local building code must be followed for installation in specifying approved type and schedule of PVC duct used.



- DO NOT USE flexible plastic ducting.
- Always use appropriate roof or wall cap with damper.
   Laundry type wall caps should never be used.
- Use the straightest duct run possible.
- For satisfactory performance the duct run should not exceed 150 ft. or its equivalent length when bends or various fittings are used. Refer to the table of equivalent lengths to calculate your installation.
- Install ductwork so the piece of duct nearest the downdraft unit slots INTO the next piece of the duct.
   Secure the joints with self-tapping screws and apply duct tape around the joints to ensure an airtight seal.

## **Installation Instructions**

### STEP 3 INSTALL RAISE/LOWER SWITCH



### **WARNING:**

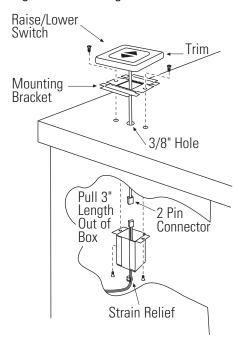
Disconnect electrical power from unit before beginning switch installation. Failure to do so could result in personal injury or damage to the electrical controls.



## **AVERTISSEMENT**

Il faut débrancher l'alimentation électrique de l'appareil avant de commencer l'installation de l'interrupteur. Il faut suivre cette directive pour éviter des blessures ou endommager les commandes électriques.

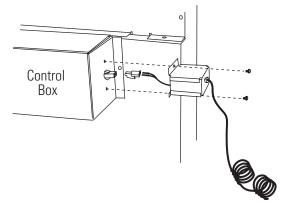
Determine the location for the RAISE/LOWER switch. The wiring lead is 68" long.



- Drill a 3/8" hole into the desired location. Use the mounting bracket as a template to locate the hole accurately. Check for interference between the switch cover, adjacent objects and cooktop/vent overlaps.
- If switch is mounted into a tile surface, drill the hole between tiles. Use locally approved caulking to cover any gaps.
- Center the mounting bracket over the hole and mark pilot holes. Remove and drill holes according to type of countertop.
- Mount the metal switch bracket with screws (not provided). Choose screws for your type of countertop or use locally approved adhesive.
- Remove protective film from the top of the switch trim.
- Peel film from the adhesive strips on the back of the switch trim. Thread the wire lead through the mounting bracket and countertop. Press trim over the mounting bracket to set the adhesive.

#### **Connect Raise/Lower Wire Lead to Wire Box**

- Thread wire end with the connector through the hole on the end of a wire box. Pull approximately 3" additional wire length beyond the open end of the box.
- Connect the mating wire connectors.
- Install the wire box onto the bottom of the countertop or directly behind the switch. Use adhesive or screws appropriate for the type of countertop.
- Place plastic strain relief over the wire, just outside
  of the hole at the end of the wire box. Do not pinch
  or twist the wire. Snap the strain relief closed and
  press into the hole.



#### **Connect Wire Lead to Control Box**

- Thread the long 68" wire lead through the end of the other wire box.
- Push wire leads into the white connector provided.
- Push wire connector into the mating connector on the control box. Install the wire box onto the end of the control box with screws provided.
- Place plastic strain relief over the wire, just outside
  of the hole at the end in the wire box. Do not pinch or
  twist the wire. Snap the strain relief closed and press
  into the hole.
- Coil the excess wire and position away from moving parts and cabinet contents.

## **Installation Instructions**

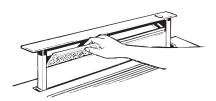
### **STEP 4 CONNECT POWER**

Plug power cord into properly grounded receptacle.

### STEP 5 INSTALL FILTERS, CHECK OPERATION

To raise the vent, press the RAISE/LOWER switch. The switch is installed in a separate location.

- Tip filter into the opening and pull slide straight down so that the filter rests on the inside filter supports.
- Install the opposite filter.
- To turn the fan on, slide control to HIGH. Select desired speed by sliding control between HI and LO settings.



**Note:** It is not necessary to turn the fan OFF before lowering the vent. The fan will automatically turn off when the vent is lowered. When the fan is not turned off before lowering the vent, it will automatically come on at the previously set speed when the vent is fully raised.

To lower the vent, press the RAISE/LOWER switch and hold until the vent begins to lower.

#### **CLEANING**

#### **Cleaning a Stainless Steel Downdraft Vent**

Stainless steel has some unique cleaning characteristics. In order to keep your vent looking like new, we suggest cleaning it with *Stainless Steel Magic* or similar product.

Stainless Steel Magic is available at Ace, True Value, Servistar, HWI and other leading stores. It is also available through GE Parts by calling 1.800.626.2002. Order part number WX10X15.

## Notes

## Notes

## Notes

**Note:** While performing installations described in this book, safety glasses or goggles should be worn.

For Monogram® local service in your area, call 1.800.444.1845.

**Note:** Product improvement is a continuing endeavor at General Electric. Therefore, materials, appearance and specifications are subject to change without notice.



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